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PO Box 407  
Newcastle, NSW, 2300

07/02/2024

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Subject: Mount Pleasant Optimisation Project (SSD 10418) – Environmental Management Strategy

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Dear Miss Lane

I refer to your submission dated September 2023, requesting approval of the Mount Pleasant Optimisation Project - Environmental Management Strategy (SSD- 10418-PA-2). I also acknowledge your response to the Department's review comments and request for additional information.

The Department has carefully reviewed the document and is satisfied that it is consistent with the relevant conditions of consent.

Accordingly, the Planning Secretary has approved the Environmental Management Strategy (Revision 5). Please ensure that the approved plan is placed on the project website at the earliest convenience.

Please ensure you make the document publicly available on the project website at the earliest convenience.

If you wish to discuss the matter further, please contact Keren Halliday on 02 82896444.

Yours sincerely



Stephen O'Donoghue  
Director  
Resource Assessments

As nominee of the Planning Secretary

## MOUNT PLEASANT OPERATION ENVIRONMENTAL MANAGEMENT STRATEGY

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<b>Company:</b>	MACH Energy Australia Pty Ltd		
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<b>Approved By:</b>	Andrew Reid	<b>Revision Number:</b>	05

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## 1 INTRODUCTION

The Mount Pleasant Operation (MPO) is located in the Upper Hunter Valley of New South Wales (NSW), approximately 3 kilometres (km) north-west of Muswellbrook and approximately 50 km north-west of Singleton (Figure 1). The village of Aberdeen and locality of Kayuga are also located approximately 5 km north-northeast and 1 km north of the MPO boundary, respectively (Figure 1). MACH Energy Australia Pty Ltd (MACH Energy) purchased the MPO from Coal & Allied Operations Pty Ltd (Coal & Allied) in 2016.

MACH Mount Pleasant Operations Pty Ltd is the manager of the MPO as an agent for, and on behalf of, the unincorporated Mount Pleasant Joint Venture between MACH Energy (95 per cent [%] owner) and J.C.D. Australia Pty Ltd (5% owner). This Environmental Management Strategy (EMS) is implemented at the MPO by MACH Energy.

The initial development application for the MPO was made in 1997. This was supported by an Environmental Impact Statement (EIS) prepared by Environmental Resources Management (ERM) Mitchell McCotter (ERM Mitchell McCotter, 1997). On 22 December 1999, the then Minister for Urban Affairs and Planning granted Development Consent DA 92/97 to Coal & Allied. This allowed for the “Construction and operation of an open cut coal mine, coal preparation plant, transport and rail loading facilities and associated facilities” at the MPO. The consent allowed for operations 24 hours per day seven days per week and the extraction of 197 million tonnes (Mt) of run-of-mine (ROM) coal over a 21 year period, at a rate of up to 10.5 Mt of ROM coal per year.

The Mount Pleasant Project Modification (MOD 1) was submitted on 19 May 2010 with a supporting Environmental Assessment (EA) prepared by EMGA Mitchell McLennan (EMGA Mitchell McLennan, 2010). MOD 1 included the provision of an infrastructure envelope for siting the mine infrastructure, the provision of an optional conveyor/service corridor linking the MPO facilities with the Muswellbrook-Ulan Rail Line and modification of the existing Development Consent DA 92/97 boundaries to accommodate the optional conveyor/service corridor and minor administrative changes. MOD 1 was approved on 19 September 2011.

The MPO South Pit Haul Road Modification (MOD 2) was submitted on 30 January 2017 with a supporting EA prepared by MACH Energy (MACH Energy, 2017a). MOD 2 proposed to realign an internal haul road to enable more efficient access to the South Pit open cut, with no other material changes to the approved MPO. MOD 2 was approved on 29 March 2017.

The MPO Mine Optimisation Modification (MOD 3) was submitted on 31 May 2017 with a supporting EA prepared by MACH Energy (MACH Energy, 2017b). MOD 3 comprised an extension to the time limit on mining operations (to 22 December 2026) and extensions to the South Pit Eastern Out of Pit Emplacement to facilitate development of an improved final landform. MOD 3 was approved on 24 August 2018.

The MPO Rail Modification (MOD 4) was submitted on 18 December 2017 with a supporting EA prepared by MACH Energy (MACH Energy, 2017c). MOD 4 proposed the following changes:

- duplication of the approved rail spur, rail loop, conveyor and rail load-out facility and associated services;
- duplication of the Hunter River water supply pump station, water pipeline and associated electricity supply that followed the original rail spur alignment; and
- demolition and removal of the redundant approved infrastructure within the extent of the Bengalla Mine, once the new rail, product loading and water supply infrastructure has been commissioned and is fully operational.

MOD 4 was approved on 16 November 2018 by the Planning Secretary of the Department of Planning and Environment (DPE) (under Delegation). Appendix 2 of the modified Development Consent DA 92/97 (Appendix E) illustrates the Conceptual Project Layout Plan of the approved MPO at 2021 and 2025, Approved Surface Disturbance Plan and Conceptual Final Landform incorporating the MOD 4 infrastructure relocations.

Modification 5 (MOD 5) was submitted to rectify an administrative error in Development Consent DA 92/97 and was approved by DPE on 29 June 2022.

On 22 January 2021, MACH Energy submitted the Mount Pleasant Optimisation Project (the Project) EIS in support of State Significant Development (SSD) 10418 under Part 4 of the NSW *Environmental Planning and Assessment Act, 1979* (EP&A Act). Key aspects of the Project generally involve (among other things):

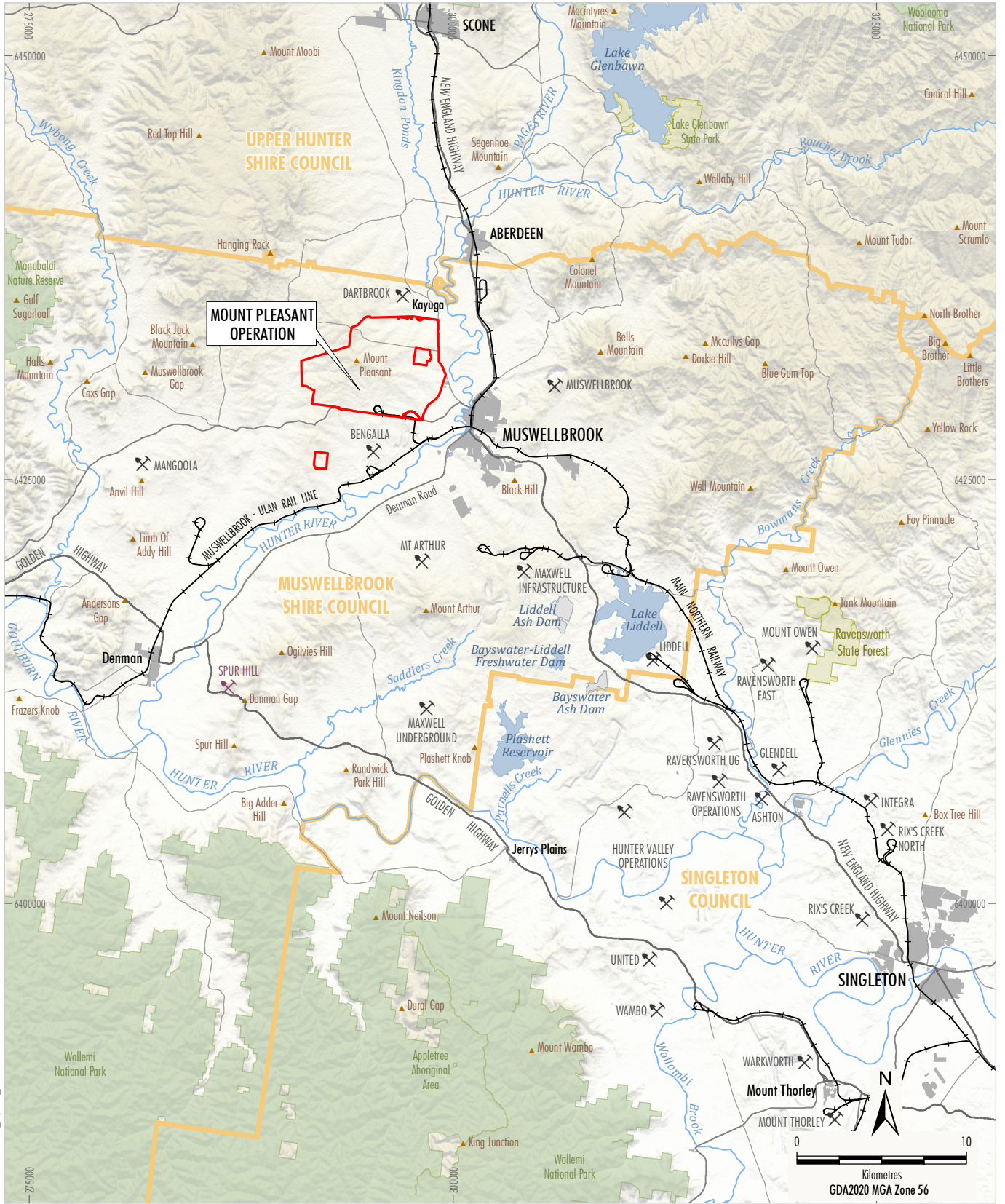
- increased open cut extraction within the MPO's existing Mining Leases (MLs);
- a staged increase in extraction, handling and processing of ROM coal up to 21 million tonnes per annum (Mtpa);
- upgrades to existing infrastructure and new infrastructure to support mining of the proposed Project; and
- an extension to the time limit on mining operations to 22 December 2048.

The Project was approved by the NSW Independent Planning Commission on 6 September 2022. Part A, Condition A14 of Development Consent SSD 10418 requires the surrender of Development Consent DA 92/97 within 12 months of the date of commencement of development under Development Consent SSD 10418, or an alternative timeframe agreed with the Planning Secretary of the DPE.

Following the commencement of development under Development Consent SSD 10418 (Appendix D) and prior to the surrender of Development Consent DA 92/97, MACH Energy will comply with the requirements of both consents (Section 4.3).

This EMS has been prepared to satisfy the relevant conditions of both Development Consent SSD 10418 and Development Consent DA 92/97 (prior to its surrender). Where relevant, this EMS builds on the components of the existing/approved EMS, including previous feedback from government stakeholders and recommendations.

Figure 2 shows the indicative Project general arrangement and existing/approved surface development areas that would continue to comprise as part of the Project and the areas that would be relinquished.



MACH 18-03A\_MP2023\_Figure 1\_Rev B

Source: NSW Spatial Services (2023)



- LEGEND**
- Mining Operation
  - Proposed Mining Operation (Application Lodged)
  - Railway
  - Local Government Boundary
  - State Forest/Reserve
  - National Parks and Wildlife Estate
  - Mining Lease Boundary (Mount Pleasant Operation)

**MACH Energy**  
 MOUNT PLEASANT OPERATION  
 Regional Location

Figure 1



## 1.1 SITE CONTACTS

The relevant site contacts for the MPO are provided in Table 1.

**Table 1**  
**Site Contacts**

Position	Contact Name – At February 2023*
General Manager Operations	Michael Redman
Environmental Superintendent	Andrew Reid
External Relations Manager	Ngairé Baker
Community Hotline / Contact Number	1800 886 889

\* Personnel and/or contact numbers may change over time.

## 1.2 PREVIOUS VERSION

A previously approved version of the EMS under Development Consent DA 92/97 (Version 4) was prepared to reflect the approval of MOD 3 and MOD 4. Version 4 of the EMS was approved on 20 May 2021.

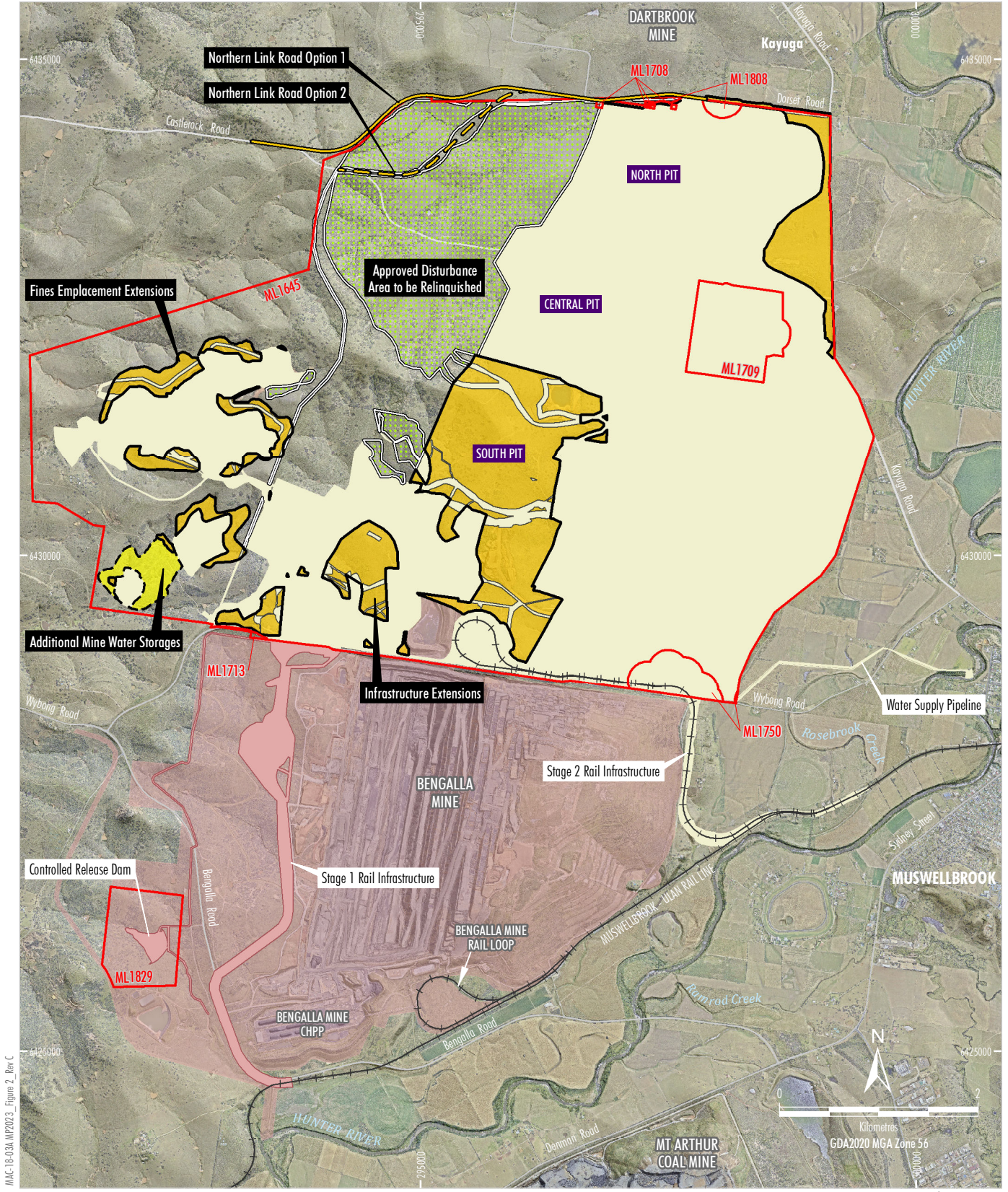
This version updated the MPO environmental monitoring locations to reflect the approval of site-wide Environmental Management Plans (EMPs) (updated following the approval of MOD 4), and to update the complaints management procedure.

## 1.3 CURRENT VERSION

This version (Version 5) of the EMS has been prepared following the grant of the Project under Development Consent SSD 10418. This EMS has been prepared to satisfy the relevant conditions of both Development Consent SSD 10418 and Development Consent DA 92/97 (prior to its surrender).

All conditions and statutory requirements under Development Consent DA 92/97 will become null and void after its surrender where the MPO will operate under Development Consent SSD 10418 and other relevant legislation listed in Part A, Condition A2 of Development Consent SSD 10418. Section 4.3 details the process of commencing under Development Consent SSD 10418 and the surrender of Development Consent DA 92/97.

The interactions between the two consents are described in Section 4.3.



MACH 18-038.MP2023 - Figure 2 - Rev C

- LEGEND**
- Railway
  - Mining Lease Boundary (Mount Pleasant Operation)
  - Project Continuation of Existing/Approved Surface Development (DA92/97) <sup>1</sup>
  - Bengalla Mine Approved Disturbance Boundary (SSD-5170)
  - Existing/Approved Mount Pleasant Operation Infrastructure within Bengalla Mine Approved Disturbance Boundary (SSD-5170) <sup>1</sup>
  - Development Footprint 1 (Stage 1) - General Extension Areas <sup>1</sup>
  - Development Footprint 1 (Stage 2) - Mine Water Dam <sup>3</sup>
  - Relinquishment Area
  - Northern Link Road Option 1 Centrelines
  - Northern Link Road Option 2 Centrelines

**NOTES**

1. Excludes some incidental Project components such as water management infrastructure, access tracks, topsoil stockpiles, power supply, temporary offices, other ancillary works and construction disturbance.

Source: MACH (2023); NSW Spatial Services (2023); Department of Planning and Environment (2016) Orthophoto: MACH (Dec 2022)

**MACHEnergy**  
**MOUNT PLEASANT OPERATION**  
 General Arrangement  
 of the Project

**Figure 2**

## 2 PURPOSE AND SCOPE

This EMS has been prepared by MACH Energy to satisfy the requirements of Part D, Condition D1 under Development Consent SSD 10418. It also satisfies the requirements of Condition 1, Schedule 5 under Development Consent DA 92/97 prior to its surrender.

The objectives of the EMS are to fulfil the relevant conditions in Development Consents SSD 10418 and DA 92/97 by providing a strategic framework for environmental management of the MPO including all EMPs, strategies and programs prepared for the MPO. The EMS establishes the overarching framework for the monitoring and environmental management of activities undertaken at the MPO. The EMS incorporates the principles of continuous improvement and is consistent with the five pillars of *ISO 14001: Environmental Management Systems*, represented on Figure 3.

In accordance with Part A, Condition A23 of Development Consent SSD 10418, the existing approved EMS, EMPs, strategies and programs under Development Consent DA 92/97 will continue to be applied at the MPO until the EMS, EMPs, strategies and programs under Development Consent SSD 10418 are approved by the Planning Secretary.

The key EMPs, strategies and programs required at the MPO as described in Development Consents DA 92/97 and SSD 10418 are:

- This EMS;
- Noise Management Plan (NMP);
- Blast Management Plan (BMP);
- Air Quality and Greenhouse Gas Management Plan (AQGGMP);
- Water Management Plan (WMP), incorporating:
  - Site Water Balance (SWB);
  - Erosion and Sediment Control Plan (ESCP);
  - Surface Water Management and Monitoring Plan (SWMMP);
  - Groundwater Management Plan (GWMP); and
  - Surface and Groundwater Response Plan (SGWRP)<sup>1</sup>;
- Biodiversity Management Plan (BioMP);
- Aboriginal Cultural Heritage Management Plan (ACHMP);
- Aboriginal Heritage Conservation Strategy;
- Historic Heritage Management Plan (HHMP);
- Visual Impact Management Plan (VIMP);
- Waste Management Plan (WasteMP);
- Rehabilitation Strategy;
- Bushfire Management Plan (BushfireMP);
- Traffic Management Plan;
- Road Maintenance Management Plan;
- Rehabilitation Management Plan (RMP);

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<sup>1</sup> Required under Development Consent DA 92/97 however in Development Consent SSD 10418, trigger action response plans are separately incorporated in the SWMMP and GWMP.

- Pollution Incident Response Management Plan (PIRMP)<sup>2</sup>;
- Annual Rehabilitation Report and Forward Program; and
- Construction Noise Protocol (incorporating any Out of Hours Work Protocol for Development Consent DA 92/97 MOD 4).

An overview of the interaction of the plans required under Development Consents DA 92/97 and SSD 10418 and other relevant licences and leases is illustrated on Figure 4.

This EMS has been prepared to assist those undertaking the works on-site to apply appropriate environmental management measures. Where there is any conflict between the provisions of the EMS and the contractual obligations of any mining contractor, the contractor shall first request clarification from MACH Energy prior to implementing that element of the EMS over which the ambiguity is identified. In the case of any real or perceived ambiguity between elements of the EMS and statutory requirements, the statutory requirements are to take precedence.

All works (including construction, operations and maintenance) and other related activities (e.g. monitoring and biodiversity offset activities) consistent with Development Consent SSD 10418 are covered by the EMS. The EMS does not cover exploration activities outside of the Schedule of Land in Appendix 1 of Development Consent SSD 10418 (Appendix D) and ML boundaries. Such exploration is subject to separate regulatory requirements.

Upon the commencement of development under Development Consent SSD 10418, and before the surrender of Development Consent DA 92/97, in accordance with Part A, Condition A15 of Development Consent SSD 10418, the conditions of Development Consent SSD 10418 prevail to the extent of any inconsistency with the conditions of those consents.

This EMS is a public document providing information for operations personnel, contractors, and community and government stakeholders. The document is available on the MACH Energy website (<http://www.machenergyaustralia.com.au>).

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<sup>2</sup> Required under the *Protection of the Environment Operations Act, 1997*.

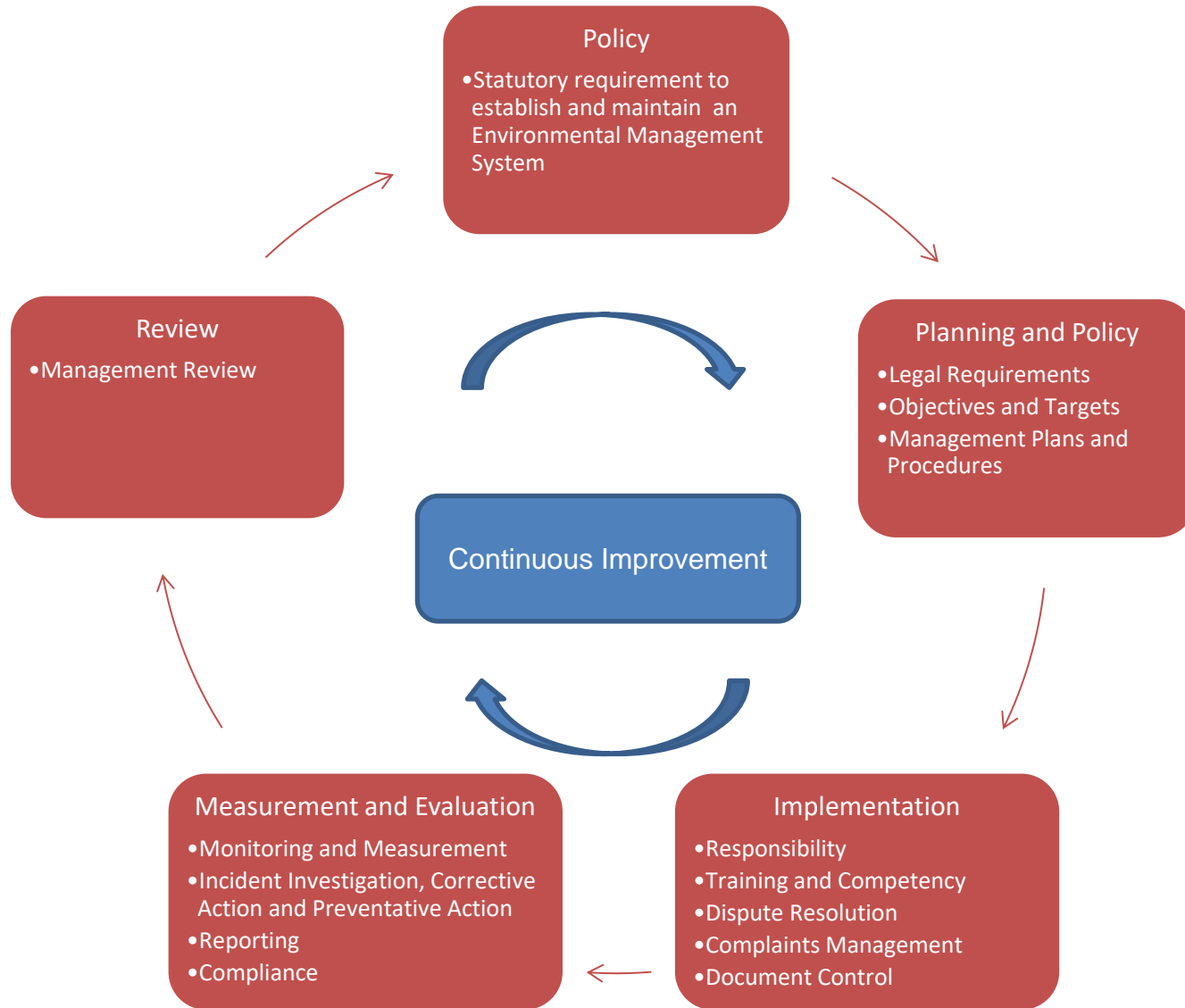
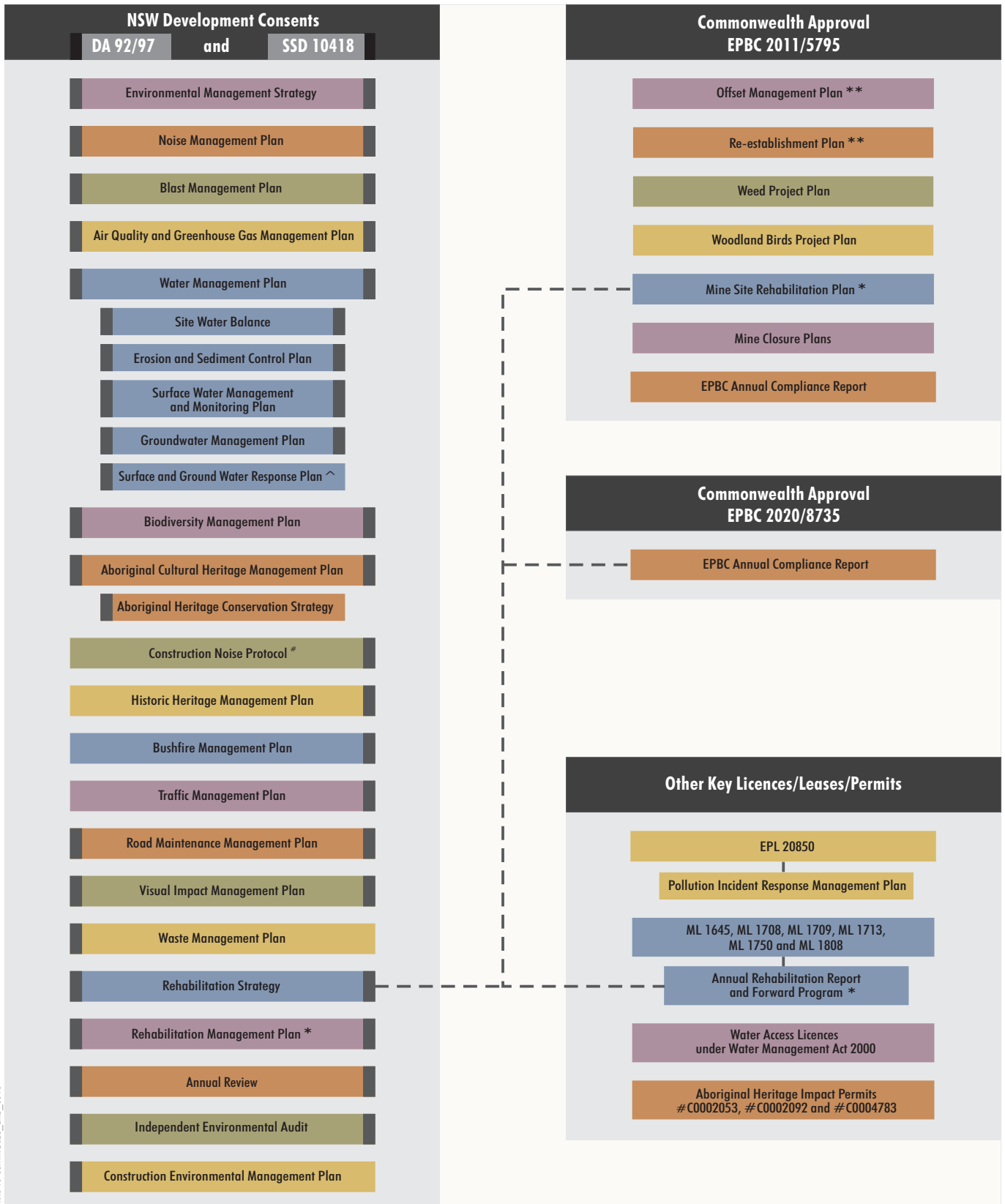


Figure 3: MACH Energy Environmental Management Principles



Source: MACH (2023)

Figure 4

### **3 COMMITMENT AND LEADERSHIP**

Environmental management is an integral part of MACH Energy. Achieving effective environmental and community management requires responsible and proactive leadership. MACH Energy's Environmental Policy (ENV Policy) provides the governing principles for environmental and community management. The ENV Policy is provided in Appendix A.

Managers at the MPO will demonstrate commitment by:

- implementing the principles outlined in the ENV Policy;
- endorsing and implementing the EMS;
- making personnel aware of their responsibilities in relation to the policy;
- ensuring the ENV Policy is readily accessible and is displayed in prominent locations; and
- appropriately resourcing implementation and review of the EMS.

Management at the MPO must demonstrate visible and proactive leadership through their commitment to achieving the EMS objectives and goals of the ENV Policy.

The prevention and management of the potential and actual impacts from MPO activities will be achieved through:

- taking a systematic approach;
- taking preventive action in preference to reactive correction;
- proactive attention to environmental issues by all people in the organisation; and
- innovative changes to the way MACH Energy works in order to continually improve its environmental performance.

This EMS has been approved by the MACH Energy management team.

## 4 PLANNING AND POLICY

MACH Energy's statutory obligations are contained in:

- the conditions of Development Consent SSD 10418;
- the conditions of Development Consent DA 92/97 (prior to its surrender);
- the conditions of Commonwealth Approval EPBC 2020/8735 (once granted);
- the conditions of Commonwealth Approval EPBC 2011/5795;
- relevant licences (including Environment Protection Licence [EPL] 20850), permits and MLs (ML 1645, ML 1708, ML 1709, ML 1713, ML 1750, ML 1808 and ML 1829); and
- other relevant legislation.

Obligations relevant to this EMS are described in Sections 4.1 to 4.6.

### 4.1 DEVELOPMENT CONSENT SSD 10418

This EMS provides a strategic overview of environmental management at the MPO and has been prepared by MACH Energy in compliance with the requirements of Part D, Condition D1 of Development Consent SSD 10418.

Table 2 presents these requirements and indicates where they are addressed within this EMS.

**Table 2**  
**Specific Development Consent SSD 10418 Conditions**

Part D, Condition D1 and D2	Section
<i>D1. The Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary. This strategy must:</i>	This document.
<i>(a) be submitted for approval within six months of the commencement of development under this consent;</i>	
<i>(b) provide the strategic framework for environmental management of the development;</i>	Sections 3 and 4
<i>(c) identify the statutory approvals that apply to the development;</i>	Section 4
<i>(d) set out the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;</i>	Section 5.1 and Appendix B
<i>(e) set out the procedures to be implemented to:</i>	
<i>(i) keep the local community and relevant agencies informed about the operation and environmental performance of the development;</i>	Section 5.6
<i>(ii) receive record, handle and respond to complaints;</i>	Section 5.7
<i>(iii) resolve any disputes that may arise during the course of the development;</i>	Section 5.9
<i>(iv) respond to any non-compliance and any incident;</i>	Section 6.2
<i>(v) respond to emergencies; and</i>	Section 5.5
<i>(f) include:</i>	
<i>(vi) references to any strategies, plans and programs approved under the conditions of this consent; and</i>	Refer to EMPs (Appendix C) and Section 2
<i>(vii) a clear plan depicting all the monitoring to be carried out under the conditions of this consent.</i>	Figure 5



**Table 2 (Continued)**  
**Specific Development Consent SSD 10418 Conditions**

Part D, Condition D1 and D2	Section
D2. <i>The Applicant must not commence construction of the Northern Link Road or extract more than 10.5 Mt of ROM coal in a calendar year until the Environmental Management Strategy is approved by the Planning Secretary.</i>	Noted
D3. <i>The Applicant must implement the Environmental Management Strategy as approved by the Planning Secretary.</i>	Noted.

#### 4.1.1 Administrative Conditions from Development Consent SSD 10418

In addition to the specific EMS requirements from Development Consent SSD 10418 listed above, the following conditions in Table 3 are required to be addressed in this EMS.

**Table 3**  
**Administrative Conditions from Development Consent SSD 10418**

Relevant Conditions from Part A of Development Consent SSD 10418	Section
<b>TERMS OF CONSENT</b>	
A2. <i>The development may only be carried out:</i> (a) <i>in compliance with the conditions of this consent;</i> (b) <i>in accordance with all written directions of the Planning Secretary;</i> (c) <i>generally in accordance with the EIS and EAs; and</i> (d) <i>generally in accordance with the Development Layout in Appendix 2.</i>	Section 7
<b>NOTIFICATION OF COMMENCEMENT</b>	
A12. <i>The date of commencement of each of the following phases of the development must be notified to the Department in writing, at least two weeks before that date:</i> (a) <i>commencement of development under this consent;</i> (b) <i>commencement of construction of the Northern Link Road;</i> (c) <i>extraction of more than 10.5 million tonnes of ROM coal from the site in any calendar year;</i> (d) <i>cessation of mining operations (i.e. mine closure); and</i> (e) <i>any period of suspension of mining operations (i.e. care and maintenance).</i>	Section 4.3
A13. <i>If the phases of the development are to be further staged, the Department must be notified in writing at least two weeks prior to the commencement of each stage, of the date of commencement and the development to be carried out in that stage.</i>	Section 4.3
<b>SURRENDER OF EXISTING CONSENTS</b>	
A14. <i>Within 12 months of the date of commencement of development under this consent, or other timeframe agreed by the Planning Secretary, the Applicant must surrender the existing development consent for the Mount Pleasant Open Cut Coal Mine (DA 92/97) in accordance with the EP&amp;A Regulation.</i>	Sections 1 and 4.3
A15. <i>Upon the commencement of development under this consent, and before the surrender of existing development consents required under condition A14, the conditions of this consent prevail to the extent of any inconsistency with the conditions of those consents.</i>	Sections 1 and 4.3
<b>Note:</b> <i>This requirement does not extend to the surrender of construction and occupation certificates for existing and proposed building works under the former Part 4A of the EP&amp;A Act or Part 6 of the EP&amp;A Act as applies from 1 September 2018. The surrender should not be understood as implying that works legally constructed under a valid consent or approval can no longer be legally maintained or used.</i>	

**Table 3 (Continued)**  
**Administrative Conditions from Development Consent SSD 10418**

Relevant Conditions from Part A of Development Consent SSD 10418	Section
<b>PLANNING AGREEMENTS</b>	
<p>A16. Within six months of the date of commencement of development under this consent, or other timeframe agreed by the Planning Secretary, the Applicant must enter into a PA with Council in accordance with:</p> <p>(a) Division 7.1 of Part 7 of the EP&amp;A Act; and</p> <p>(b) the terms of the offer in Appendix 7.</p>	Sections 5.9 and 5.13
<p>A17. If the Applicant and Council do not enter into a PA within the timeframe under condition A16, then within a further three months, the Applicant must make a Section 7.12 of the EP&amp;A Act contribution to Council of \$9.52 million which is to be paid in equal annual instalments over a period of 10 years. The amount to be paid is to be adjusted at the time of the actual payment, in accordance with the provisions of the Muswellbrook Shire Council Section 94A Development Contributions Plan 2010.</p>	Sections 5.9 and 5.13
<p>A18. Further to conditions A16 and A17, within six months of the date of commencement of development under this consent, or other timeframe agreed by the Planning Secretary, the Applicant must also enter into a PA with Upper Hunter Shire Council in accordance with:</p> <p>(a) Division 7.1 of Part 7 of the EP&amp;A Act; and</p> <p>(b) the terms of the offer in Appendix 8.</p>	Sections 5.9 and 5.13
<p>A19. If there is any dispute between the Applicant, Council and/or Upper Hunter Shire Council in regards to conditions A16, A17 and A18 then either party may refer the matter to the Planning Secretary for resolution.</p>	Section 5.9
<b>COMMUNITY CONSULTATIVE COMMITTEE</b>	
<p>A20. Within six months of the commencement of development under this consent, a Community Consultative Committee (CCC) must be established for the development in accordance with the Department's Community Consultative Committee Guidelines: State Significant Projects (2019). The CCC must continue to operate during the life of the development, or other timeframe agreed by the Planning Secretary.</p>	Section 5.6
<b>Notes:</b>	
<ul style="list-style-type: none"> <li>• The CCC is an advisory committee only.</li> <li>• In accordance with the Guidelines, the Committee should comprise an independent chair and appropriate representation from the Applicant, Council, affected stakeholder groups and the local community.</li> </ul>	
<p>A21. With the approval of the Planning Secretary, the Applicant may combine the CCC required by this consent with any similar CCC required by a consent or approval for any adjoining mine subject to common, shared or related ownership or management.</p>	Section 5.6
<b>EVIDENCE OF CONSULTATION</b>	
<p>A22. Where conditions of this consent require consultation with an identified party, the Applicant must:</p> <p>(a) consult with the relevant party prior to submitting the subject document; and</p> <p>(b) provide details of the consultation undertaken, including:</p> <p>(i) the outcome of that consultation, matters resolved and unresolved; and</p> <p>(ii) details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has or proposes to address the matters not resolved.</p>	Section 6.1
<p><b>Note:</b> The details required to be provided under A22(b) can be provided as separate correspondence and do not need to be included in the management plan document itself.</p>	

**Table 3 (Continued)**  
**Administrative Conditions from Development Consent SSD 10418**

Relevant Conditions from Part A of Development Consent SSD 10418	Section
<p><b>APPLICATION OF EXISTING STRATEGIES, PLANS OR PROGRAMS</b></p> <p>A23. <i>Prior to the approval of management plans under this consent, the Applicant must continue to implement any equivalent or similar management plan/s required under DA 92/97, to the satisfaction of the Planning Secretary.</i></p> <p><b>STAGING, COMBINING AND UPDATING STRATEGIES, PLANS OR PROGRAMS</b></p> <p>A24. <i>With the approval of the Planning Secretary, the Applicant may:</i></p> <ul style="list-style-type: none"> <li>(a) <i>prepare and submit any strategy, plan or program required by this consent on a staged basis (if a clear description is provided as to the specific stage and scope of the development to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program);</i></li> <li>(b) <i>combine any strategy, plan or program required by this consent (if a clear relationship is demonstrated between the strategies, plans or programs that are proposed to be combined); and</i></li> <li>(c) <i>update any strategy, plan or program required by this consent (to ensure the strategies, plans and programs required under this consent are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the development).</i></li> </ul> <p>A25. <i>If the Planning Secretary agrees, a strategy, plan or program may be staged or updated without consultation being undertaken with all parties required to be consulted in the relevant condition in this consent.</i></p> <p>A26. <i>If the Planning Secretary agrees, a strategy, plan or program may be staged without addressing particular requirements of the relevant condition of this consent if those requirements are not applicable to the particular stage.</i></p>	<p align="center">Section 2</p> <p align="center">No staging of this EMS or any other EMPs is proposed.</p>
<p><b>OPERATION OF PLANT AND EQUIPMENT</b></p> <p>A32. <i>All plant and equipment used on site, or to monitor the performance of the development must be:</i></p> <ul style="list-style-type: none"> <li>(a) <i>maintained in a proper and efficient condition; and</i></li> <li>(b) <i>operated in a proper and efficient manner.</i></li> </ul>	<p align="center">Section 5.2</p>
<p><b>COMPLIANCE</b></p> <p>A33. <i>The Applicant must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.</i></p>	<p align="center">Section 5.10</p>
<p><b>APPLICABILITY OF GUIDELINES</b></p> <p>A34. <i>References in the conditions of this consent to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of inclusion in the condition.</i></p>	<p align="center">Noted.</p>

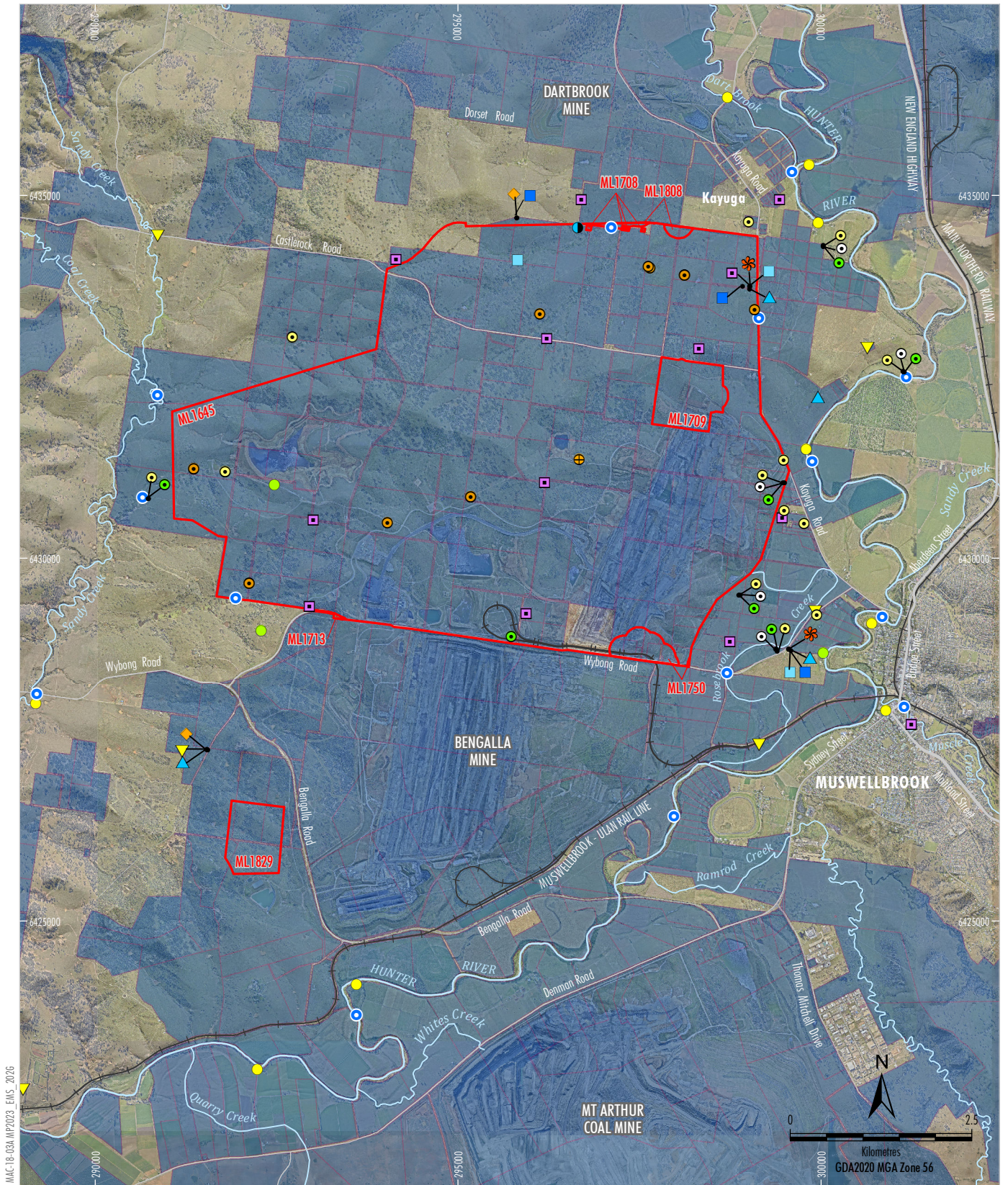
**4.2 DEVELOPMENT CONSENT DA 92/97**

Table 4 presents the requirements of Condition 1, Schedule 5 of Development Consent DA 92/97 and where they are addressed in the EMS.

**Table 4  
Specific Development Consent DA 92/97 Conditions**

<b>Condition 1, Schedule 5</b>	<b>Section</b>
<p>1. <i>If the Secretary requires, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:</i></p> <p>(a) <i>be submitted to the Secretary for approval prior to carrying out any development on site;</i></p> <p>(b) <i>provide the strategic framework for environmental management of the development;</i></p> <p>(c) <i>identify the statutory approvals that apply to the development;</i></p> <p>(d) <i>describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;</i></p> <p>(e) <i>describe the procedures that would be implemented to:</i></p> <ul style="list-style-type: none"> <li>• <i>keep the local community and relevant agencies informed about the operation and environmental performance of the development;</i></li> <li>• <i>receive, handle, respond to, and record complaints;</i></li> <li>• <i>resolve any disputes that may arise during the course of the development;</i></li> <li>• <i>respond to any non-compliance;</i></li> <li>• <i>respond to emergencies; and</i></li> </ul> <p>(f) <i>include:</i></p> <ul style="list-style-type: none"> <li>• <i>copies of any strategies, plans and programs approved under the conditions of this consent; and</i></li> <li>• <i>a clear plan depicting all the monitoring to be carried out in relation to the development.</i></li> </ul> <p><i>The Applicant must implement the approved strategy as approved from time to time by the Secretary.</i></p>	<p>-</p> <p>Sections 3 and 4</p> <p>Section 4</p> <p>Section 5.1 and Appendix B</p> <p>Section 5.6</p> <p>Section 5.7</p> <p>Section 5.9</p> <p>Section 6.2</p> <p>Section 5.5</p> <p>Refer to EMPs (Appendix C)</p> <p>Figure 5</p>

Note: MACH Energy received written direction from the Secretary’s nominee (dated 10 July 2017) to prepare the EMS by 31 July 2017.



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Source: MACH (2023); NSW Spatial Services (2023)  
 Orthophoto: MACH (Dec 2022)

- LEGEND**
- Mining Lease Boundary
  - Mine-owned Land
  - Environmental Monitoring Sites
  - GDE Bore
  - ⊕ Vibrating Wire Piezometer
  - Standpipe
  - Standpipe - Alluvium
  - Standpipe - Coal Seam
  - ⊖ Standpipe - Interburden
  - Surface Water Monitoring Site
  - Stream Health Monitoring Site
  - Blasting (Vibration/Overpressure)
  - ▼ Attended Noise
  - ▲ Real-time Noise Monitoring Site
  - ◆ Weather Mast
  - ✿ Weather Station
  - Air Quality - High Volume Sampler
  - Air Quality - Palas Fidas
  - Dust Deposition Gauge

**MACHEnergy**  
 MOUNT PLEASANT OPERATION  
 Indicative Environmental  
 Monitoring Locations

Figure 5

#### **4.3 SURRENDER OF EXISTING CONSENTS AND NOTIFICATION OF COMMENCEMENT OF DEVELOPMENT CONSENT SSD 10418**

Upon the commencement of development under Development Consent SSD 10418, and before the surrender of Development Consent DA 92/97, MACH Energy will be required to comply with the requirements of both consents. In accordance with Part A, Condition A15 of Development Consent SSD 10418, the conditions of Development Consent SSD 10418 prevail to the extent of any inconsistency with the conditions of those consents.

All EMPs have been prepared to outline the relevant requirements under both consents. MACH Energy's compliance system will comply with the requirements of both consents.

MACH Energy will notify DPE at least two weeks before the date of commencement of Development Consent SSD 10418, in accordance with Part A, Condition A12 of Development Consent SSD 10418 (Section 4.1.1).

In addition to the above, in accordance with Part A, Condition A13 of Development Consent SSD 10418, if the phases of development are to be further staged, MACH Energy will notify DPE in writing at least two weeks prior to the commencement of each stage, of the date of commencement and the development to be carried out in that stage.

In accordance with Part D, Condition D2 of Development Consent SSD 10418, MACH Energy will not commence construction of the Northern Link Road or extract more than 10.5 Mt of ROM coal in a calendar year until the EMS is approved by the Planning Secretary.

In accordance with Part A, Condition A14 of Development Consent SSD 10418 (Section 4.1.1), MACH Energy will surrender the existing Development Consent DA 92/97 within 12 months of the date of commencement under Development Consent SSD 10418, or other timeframe agreed by the Planning Secretary.

Development Consent DA 92/97 will be surrendered in accordance with clause 67 of the NSW *Environment Planning and Assessment Regulation, 2021*. This will include written notification to the Planning Secretary of DPE.

Within 6 months of the surrender of Development Consent DA 92/97, MACH Energy will amend all EMPs to remove reference to conditions under Development Consent DA 92/97.

#### 4.4 COMMONWEALTH GOVERNMENT APPROVALS

The Commonwealth Approvals relevant to the MPO are:

- EPBC 2011/5795 granted 29 February 2012 (and variations dated 21 February 2013, 22 May 2014, 18 June 2015, 12 May 2016, 22 February 2017, 1 June 2018, 28 November 2019, and 24 January 2023); and
- EPBC 2020/8735 (pending approval).

#### 4.5 LICENCES, PERMITS AND LEASES

In addition to Development Consent SSD 10418, DA 92/97, Commonwealth Approval EPBC 2011/5795 and EPBC 2020/8735, activities at the MPO are conducted in accordance with a number of licences, permits and leases which have been issued or are pending issue.

Key licences, permits and leases pertaining to the MPO include:

- ML 1645, ML 1708, ML 1709, ML 1713, ML 1750, ML 1808 and ML 1829 issued under Part 5 of the NSW *Mining Act, 1992*.
- Various Water Access Licences issued under the NSW *Water Management Act, 2000*.
- Discharge credits held under the NSW *Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation, 2002*.
- EPL 20850 issued under Part 3 of the NSW *Protection of the Environment Operations Act, 1997* by the NSW Environment Protection Authority (EPA).
- Annual Rehabilitation Report and Forward Program, as required under Schedule 8A of the NSW *Mining Regulations, 2016* and approved by the NSW Resources Regulator.

ML 1645, ML 1708, ML 1709, ML 1713, ML 1750, ML 1808 and ML 1829 do not contain any conditions requiring the preparation of the EMS. Notwithstanding, they do contain conditions relevant to environmental management and reporting at the MPO.

#### 4.6 OTHER LEGISLATION

Obligations from relevant guidelines, protocols, Australian Standards, codes or policies will be addressed in each strategy, plan or program in accordance with Part A, Condition A34 of Development Consent SSD 10418 and Schedule 2, Condition 13 of Development Consent DA 92/97 (prior to its surrender).

Other legislation that may be applicable to the MPO includes, but is not limited to, the:

- *Biodiversity Conservation Act, 2016;*
- *Coal Mine Subsidence Compensation Act, 2017;*
- *Crown Land Management Act, 2016;*
- *Dams Safety Act, 2015;*
- *Fisheries Management Act, 1994;*
- *Heritage Act, 1977;*
- *Mining Act, 1992;*
- *National Parks and Wildlife Act, 1974;*
- *Protection of the Environment Operations Act, 1997;*
- *Roads Act, 1993;*
- *Water Management Act, 2000;*
- *Work Health and Safety Act, 2011;* and
- *Work Health and Safety (Mines) Act, 2013.*



## **5 IMPLEMENTATION – MOUNT PLEASANT OPERATION ENVIRONMENTAL MANAGEMENT STRUCTURE**

An overview of the environmental management structure at the MPO is provided on Figure 4.

### **5.1 ROLES AND RESPONSIBILITIES**

A combination of MACH Energy employees and mining contractor staff are responsible for environmental management at the MPO. The roles and responsibilities of members of the site, including the environmental management team, are provided in Appendix B.

All employees and contractors working at the MPO are accountable for:

- complying with relevant legislation;
- complying with the EMS;
- communicating any information they become aware of in relation to environmental management; and
- taking actions to prevent and mitigate environmental impacts.

Accountabilities for environmental management are defined in the EMS to ensure personnel and contractors at the MPO are aware of their roles and responsibilities.

### **5.2 OPERATION OF PLANT AND EQUIPMENT**

In accordance with Part A, Condition A32 of Development Consent SSD 10418 and Schedule 2, Condition 2 of Development Consent DA 92/97 (prior to its surrender), MACH Energy will ensure that all plant and equipment used on site, or to monitor the performance at the MPO is:

- maintained in a proper and efficient condition; and
- operated in a proper and efficient manner.

### **5.3 COOPERATION WITH ADJACENT MINES**

In accordance with Schedule 4, Condition 5 of Development Consent DA 92/97 (prior to its surrender), MACH Energy will continue to work cooperatively with adjacent mines (including the Bengalla Mine) to use its best endeavours to minimise the cumulative impacts of the development on the surrounding area to the satisfaction of the Planning Secretary.

As the condition above is not included in Development Consent SSD 10418, the following management plans include cooperative commitments that MACH Energy will adhere to in relation to managing cumulative impacts and communication with adjacent mines:

- BMP;
- AQGGMP; and
- Traffic Management Plan.

## 5.4 MONITORING PROGRAMS

Monitoring will be conducted for a range of parameters to satisfy the requirements of Development Consent SSD 10418, Development Consent DA 92/97 (prior to its surrender), and EPL 20850. Details of the specific monitoring programs developed for the MPO are included in each EMP and are summarised in Table 5. Monitoring will be conducted in accordance with relevant statutory requirements and undertaken by a suitably qualified and experienced person/s.

**Table 5  
Summary of Environmental Monitoring Programs**

EMP	Monitoring Program	Parameter
Air Quality and Greenhouse Gas Management Plan	Air quality monitoring program	<ul style="list-style-type: none"> <li>• Air quality (PM<sub>2.5</sub>, PM<sub>10</sub>, TSP, dust deposition)</li> <li>• Meteorological conditions</li> </ul>
Biodiversity Management Plan	Biodiversity monitoring program	<ul style="list-style-type: none"> <li>• Vegetation management including visual, photo, vegetation and habitat</li> <li>• Vegetation clearance</li> <li>• Weeds</li> <li>• Feral animals</li> </ul>
Noise Management Plan	Noise monitoring program	<ul style="list-style-type: none"> <li>• Noise</li> <li>• Meteorological conditions</li> </ul>
Blast Management Plan	Blast monitoring program	<ul style="list-style-type: none"> <li>• Blast fumes and visual</li> <li>• Vibration and overpressure</li> <li>• Meteorological conditions</li> </ul>
Surface Water Management Plan	Surface water management and monitoring program	<ul style="list-style-type: none"> <li>• Surface water quality</li> <li>• Surface water flows</li> <li>• Water storage volumes</li> <li>• Meteorological conditions including rainfall</li> <li>• Stream and riparian vegetation health</li> <li>• Channel stability (geomorphology)</li> <li>• Water supply</li> </ul>
Groundwater Management Plan	Groundwater monitoring program	<ul style="list-style-type: none"> <li>• Groundwater flows (water loss/seepage) and storage volumes</li> <li>• Groundwater levels</li> <li>• Groundwater quality</li> <li>• Groundwater Dependent Ecosystems impacts (including stygofauna)</li> <li>• Groundwater supply of other water users</li> </ul>
Rehabilitation Management Plan	Rehabilitation monitoring program	<ul style="list-style-type: none"> <li>• Rehabilitation including: <ul style="list-style-type: none"> <li>– Analogue site baselines</li> <li>– Ecosystem Function Analysis</li> <li>– Visual inspections</li> <li>– Low intensity agricultural land</li> </ul> </li> <li>• Stream health</li> </ul>

Data and results obtained from management programs will be routinely reviewed and assessed against the relevant criteria from Development Consent SSD 10418, Development Consent DA 92/97 (prior to its surrender), EPL 20850 limits and any established performance criteria. The purpose of routine data review is to identify any non-compliances or trends as early as possible to allow prompt investigation and correction (if required). Annual summaries of monitoring data and associated trends will be presented in the MPO Annual Review as per Part D, Condition D11 of Development Consent SSD 10418 and Schedule 5, Condition 3 of Development Consent DA 92/97 (prior to its surrender).

A summary of the MPO environmental monitoring locations is shown on Figure 5.

In accordance with Part B, Condition B38 of Development Consent SSD 10418, MACH Energy will ensure that:

*B38. Within three months of the commencement of development under this consent, the Applicant must ensure that there is a suitable meteorological station operating in the vicinity of the site that:*

- (a) complies with the requirements in the Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales (DEC, 2007); and*
- (b) is capable of measuring meteorological conditions in accordance with the NSW Noise Policy for Industry (EPA, 2017),*

*unless a suitable alternative is approved by the Planning Secretary following consultation with the EPA.*

## **5.5 ENVIRONMENTAL EMERGENCIES**

MACH Energy maintains a PIRMP that relates to its operations. The PIRMP outlines the process for responding to environmental emergencies in a timely and effective manner and adopting appropriate measures for the control and recovery from emergencies. Where appropriate, environmental emergency response procedures will be integrated with on-site emergency response plans.

An Emergency Response Team will coordinate and respond to emergency situations and accidents, and undertake rescues as required. Preparedness for emergencies by staff, personnel, contractors and service providers will be undertaken in accordance with on-site training requirements whereby personnel will be appropriately trained in the use of emergency response equipment and procedures and will be made aware of their responsibilities should such an event occur.

Reporting of incidents will be undertaken in accordance with the protocol outlined in Section 6.3.

## 5.6 INFORMATION DISSEMINATION

### ***Community Consultative Committee***

In accordance with Schedule 5, Condition 6 of Development Consent DA 92/97, a Community Consultative Committee (CCC) has been established. The CCC under Development Consent DA 92/97 is operated in general accordance with the *Community Consultative Committee Guidelines: State Significant Projects* (NSW Government, 2019).

MACH Energy seeks to combine the CCC required from Development Consent DA 92/97 and Development Consent SSD 10418 (under Part A, Condition A20 and A21 of Development Consent SSD 10418). The CCC will comprise of an independent chair and appropriate representation from Muswellbrook Shire Council, affected stakeholder groups and the local community.

The existing CCC which was established for Development Consent DA 92/97 will continue to operate at the MPO once Development Consent SSD 10418 has commenced. In accordance with Part A, Condition A20 of Development Consent SSD 10418, and the *Community Consultative Committee Guidelines: State Significant Projects* (NSW Government, 2023), within 6 months of commencement of development under Development Consent SSD 10418, MACH Energy will notify the existing CCC of the transition to operation under Development Consent SSD 10418.

The existing CCC will prepare and approve the terms of reference in accordance with the *Community Consultative Committee Guidelines: State Significant Projects* (NSW Government, 2023) and all committee members must sign the updated code of conduct.

In accordance with Part A, Condition A20 of Development Consent SSD 10418, the membership of the CCC will continue to be comprised of an independent chair and appropriate representation from MACH Energy, Muswellbrook Shire Council, affected stakeholder groups and the local community. The CCC will meet at least twice a year.

In accordance with Part D, Condition D17 of Development Consent SSD 10418, a copy of the minutes of the CCC meetings will be made available on the MACH Energy website.

### ***MACH Energy Australia Website***

In accordance with Part D, Condition D17 of Development Consent SSD 10418, the MACH Energy website will be maintained as a tool for the provision of information to stakeholders and interested parties about the operation and environmental performance of the MPO. The following information will be available on the MACH Energy website:

- The 1997 EIS, MOD 1 EA, MOD 2 EA, MOD 3 EA, MOD 4 EA, MOD 5 EA, Mount Pleasant Optimisation Project EIS (including MACH Energy's response to submission and additional information provided by the applicant in support of submission), and Project layout plans;
- all current statutory approvals for the development;
- all approved strategies, plans or programs required under the conditions of Development Consent DA 92/97 (prior to its surrender) and SSD 10418;
- the proposed staging plans for the development if the construction, operation, or decommissioning of the development is to be staged;
- regular reporting on the environmental performance of the development in accordance with the reporting requirements in any plans or programs approved under the conditions of Development Consent DA 92/97 (prior to its surrender), Development Consent SSD 10418 or any approved plans and program;

- a summary of the current phase and progress of development;
- a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of Development Consent 92/97, Development Consent SSD 10418 or any approved plans and program;
- a complaints register, which is updated on a monthly basis, in addition to contact details on how to make a complaint;
- minutes of CCC meetings;
- the annual reviews;
- any independent environmental audit, and MACH Energy's response to the recommendations in any audit; and
- any other matter required by the Planning Secretary of the DPE.

Information available on the MACH Energy website will be updated as required by Development Consent SSD 10418.

### ***Internal Communication***

Environmental management documentation developed and retained by MACH Energy will be filed in accordance with the document register and made available to relevant MACH Energy employees and mining contractor staff.

Environmental management and performance will be communicated to staff, contractors and visitors through:

- toolbox training, formal training, memos, weekly/daily planning meetings;
- induction and orientation processes;
- incident or near miss communications;
- site inspections and auditing; and
- communication sessions.

## **5.7 COMPLAINTS MANAGEMENT**

MACH Energy maintains a Community Hotline that is dedicated to the receipt of community complaints, enquiries or information. The Community Hotline is publicly advertised in local newspapers, radio advertising and a variety of MACH Energy's public communication tools, including the MACH Energy website. The Community Hotline is available during all operating hours (i.e. 24 hours a day, seven days a week) to receive any complaints or enquiries from neighbouring residents or other stakeholders.

MACH Energy has developed a procedure that outlines its commitment to receiving, responding to and maintaining a record of phone calls from the community. This procedure is supported by a Community and Stakeholder Engagement Register.

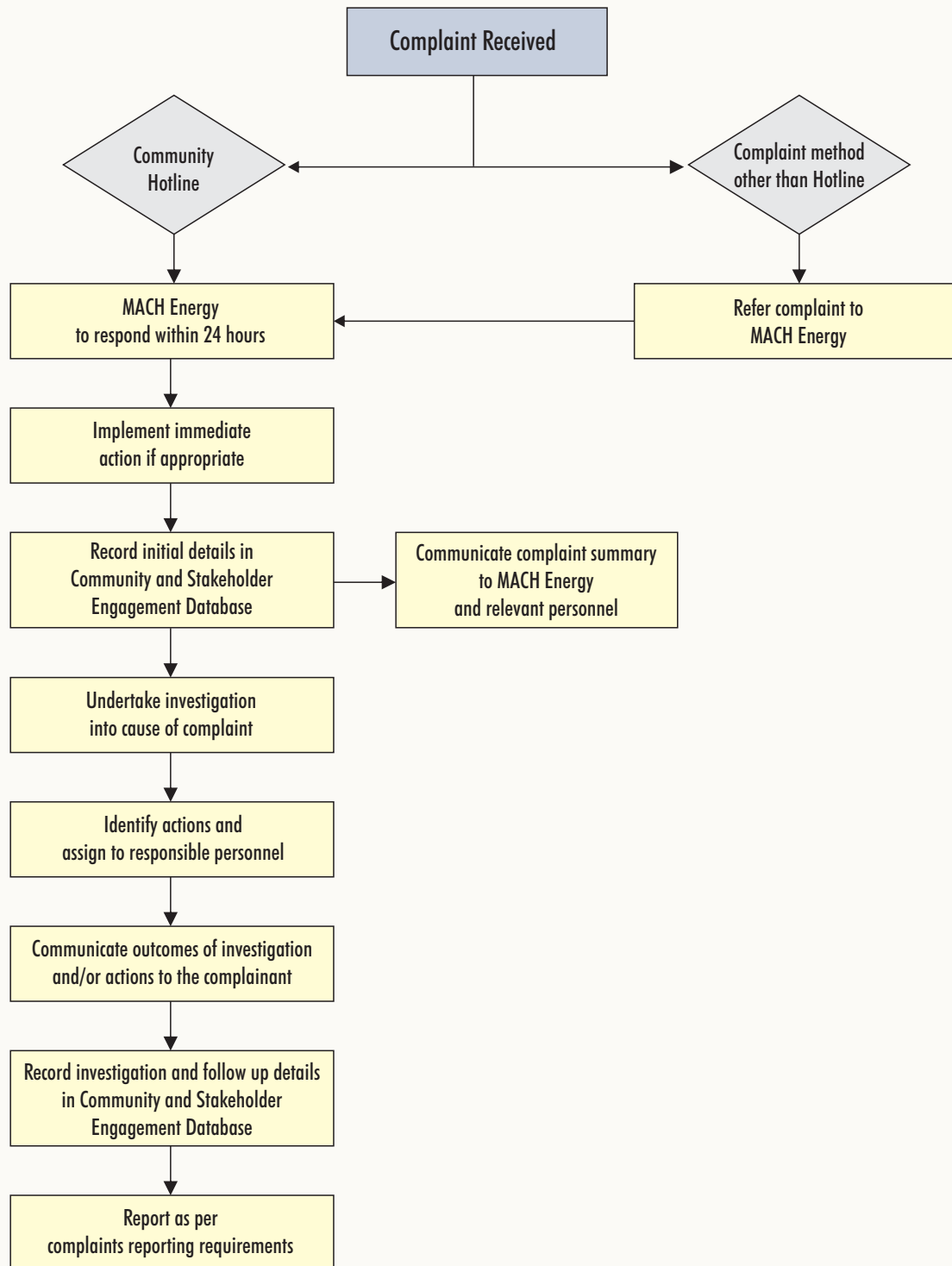
The following details are recorded in the Community and Stakeholder Engagement Register:

- the date and time of the contact;
- the method by which engagement was made;
- any personal details provided or, if no such details were provided, a note to that effect;

- the nature of the contact;
- relevant monitoring results and meteorological data at the time of the contact;
- the actions taken by MACH Energy in relation to the contact, including any follow-up that is required with the person contacting the MPO; and
- if no action was taken by MACH Energy, the reasons why no action was taken.

In the event of a complaint, investigations commence within 24 hours of contact (including contact with the complainant) to ensure the likely cause of the complaint is determined (e.g. considering meteorological conditions and nature of mining activities) and, where possible and/or required, mitigating actions are executed. This investigation is used to develop appropriate mitigation measures which are presented to the party who contacted the MPO. Consideration is also given to how adjustments to existing management/operational approaches could be applied across the MPO. MACH Energy provides a response to the complainant within seven calendar days.

An overview of the community complaint response process is detailed in Figure 6. In accordance with Part D, Condition D17 of Development Consent SSD 10418, the Community and Stakeholder Engagement Register is updated monthly and made available on the MACH Energy website. Complaints are also reported in the MPO Annual Review.



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**Figure 6**

## 5.8 LAND ACQUISITION AND NOTIFICATION

### **Notification**

In accordance with Part C, Condition C5 of Development Consent SSD 10418, within one month of commencement of development under Development Consent SSD 10418, MACH Energy will:

- (a) *notify in writing the owner of:*
  - (i) *the land listed in Table 11 that they have the right to require the Applicant to acquire their land at any stage during the development;*
  - (ii) *the residences on the land listed in Table 11 that they are entitled to ask the Applicant to install additional mitigation measures at the residence; and*
  - (iii) *any privately-owned land within 3 kilometres of the approved open cut mining pit/s that they are entitled to ask the Applicant for an inspection to establish the baseline condition of any buildings or structures on their land, or to have a previous property inspection report updated;*
- (b) *notify the tenants of any mine-owned land of their rights under this consent; and*
- (c) *send a copy of the fact sheet entitled “Mine Dust and You” (NSW Health, 2017) to the owners and/or existing tenants of any land (including mine-owned land) where the predictions in the document/s listed in condition A2(c) identify that dust emissions generated by the development are likely to be greater than the relevant air quality criteria identified in condition B28 at any time during the life of the development.*

In addition to this, prior to entering into any tenancy agreement that is predicted to experience exceedance of the recommended air quality criteria in Table 3 of Development Consent SSD 10418 (Appendix D) and/or noise criteria in Table 1 of Development Consent SSD 10418 (Appendix D), in accordance with Part C, Condition C6 of Development Consent SSD 10418, MACH Energy will:

- (a) *advise the prospective tenants of the potential health and amenity impacts associated with living on the land, and give them a copy of the fact sheet entitled “Mine Dust and You” (NSW Health, 2017); and*
- (b) *the prospective tenants of the rights they would have under this consent,*  
*to the satisfaction of the Planning Secretary.*

### **Acquisition Upon Request**

In accordance with Part C, Condition C1 of Development Consent SSD 10418, upon receiving a written request for acquisition from the owner of the privately-owned land listed in Table 11 of Development Consent SSD 10418 (Appendix D), MACH Energy will acquire the land in accordance with the procedures in Part C, Condition C12 to C19 (inclusive) of Development Consent SSD 10418. These conditions specifically relate to privately-owned land that may be impacted by noise and/or air quality related impacts.

MACH Energy will minimise air quality impacts of the development on air quality-affected land (Appendix D) in accordance with Part C, Condition C1 of Development Consent SSD 10418 and Schedule 3, Condition 1 of Development Consent DA 92/97 (prior to surrender) for as long as the land remains privately-owned (i.e. until it is acquired). The voluntary land acquisition process is summarised in Figure 7 and based on the *Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Development (VLAMP)* (DPE, 2018).



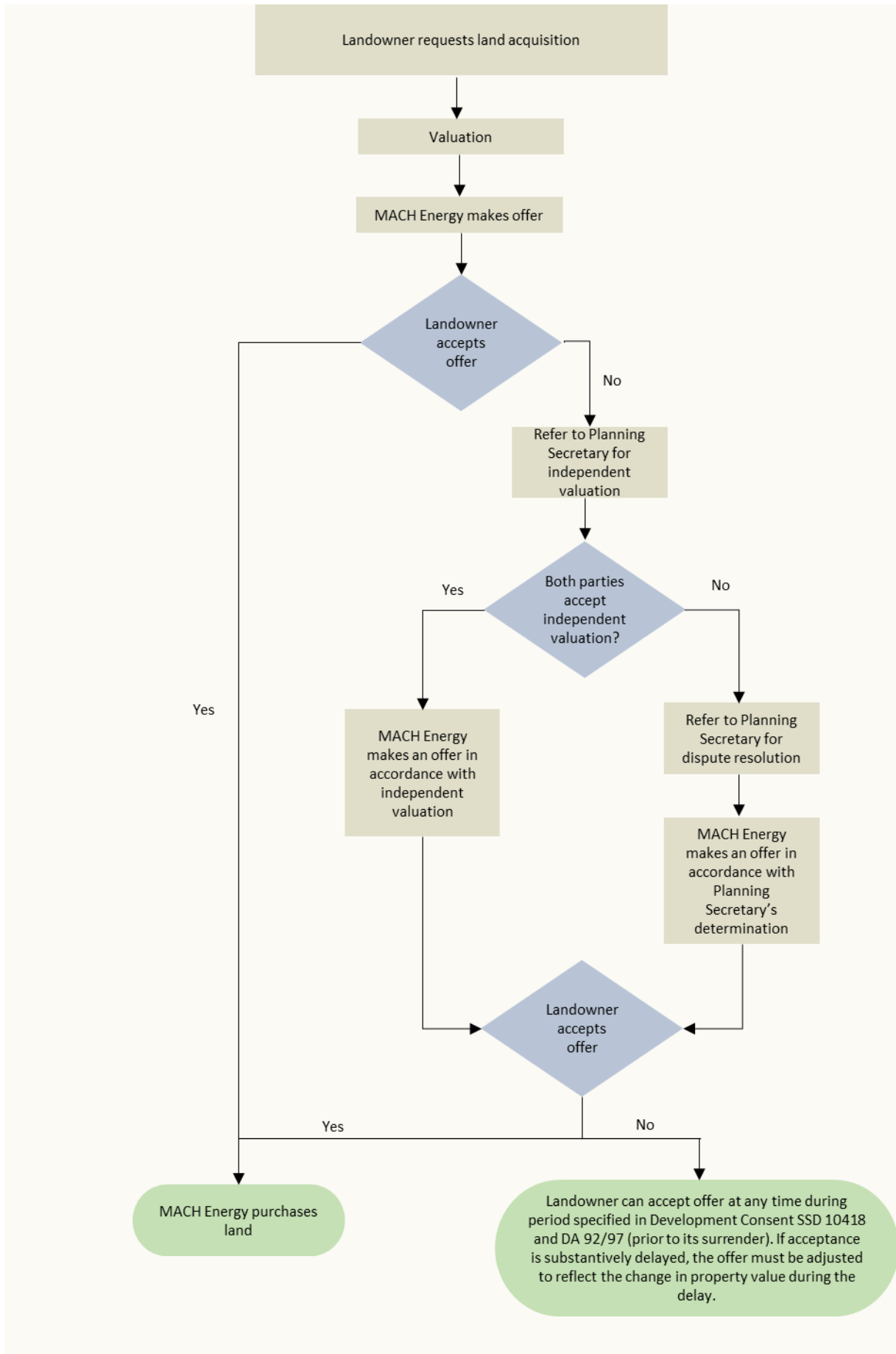


Figure 7: Voluntary Land Acquisition Process

### ***Additional Mitigation Upon Request***

Part C, Condition C2 to C4 (inclusive) of Development Consent SSD 10418 (Appendix D) requires that MACH Energy, upon written request from the owner of any residence on the land listed in Table 11 or Table 12 of Development Consent SSD 10418 (Appendix D), will implement additional mitigation measures outlined in the VLAMP (DPE, 2018). The additional mitigation measures are further discussed in the MPO AQGGMP and NMP. The process for obtaining the additional mitigation measures is summarised in Figure 8, which was adapted from the VLAMP (DPE, 2018).

### ***Notification of Landowners/Tenants***

Within one month of commencement of development under Development Consent SSD 10418, MACH Energy will undertake notification to landowners/tenants listed in Table 11 of Development Consent SSD 10418 (Appendix D) that they have the right to request that MACH Energy acquire their land in accordance with Part C, Conditions C5 and C6 of Development Consent SSD 10418 (Appendix D).

### ***Notification of Exceedances***

In accordance with Part C, Conditions C7 and C8 of Development Consent SSD 10418, as soon as practicable after obtaining monitoring results showing an exceedance of any noise, blasting or air quality criterion (Part B of Development Consent SSD 10418), MACH Energy will provide the details of the exceedance to any affected landowners, tenants and the CCC (Section 6.2).

### ***Independent Review***

Where a landowner considers the MPO to be exceeding any noise, blasting or air quality criteria, the landowner may request an independent review of the impacts in accordance with Part C, Condition C9 to C11 (inclusive) of Development Consent SSD 10418 (Appendix D).

In the event that there is a dispute arising from the additional procedures above, Section 5.7 details the dispute resolution process outlined in Development Consent SSD 10418 (Appendix D).

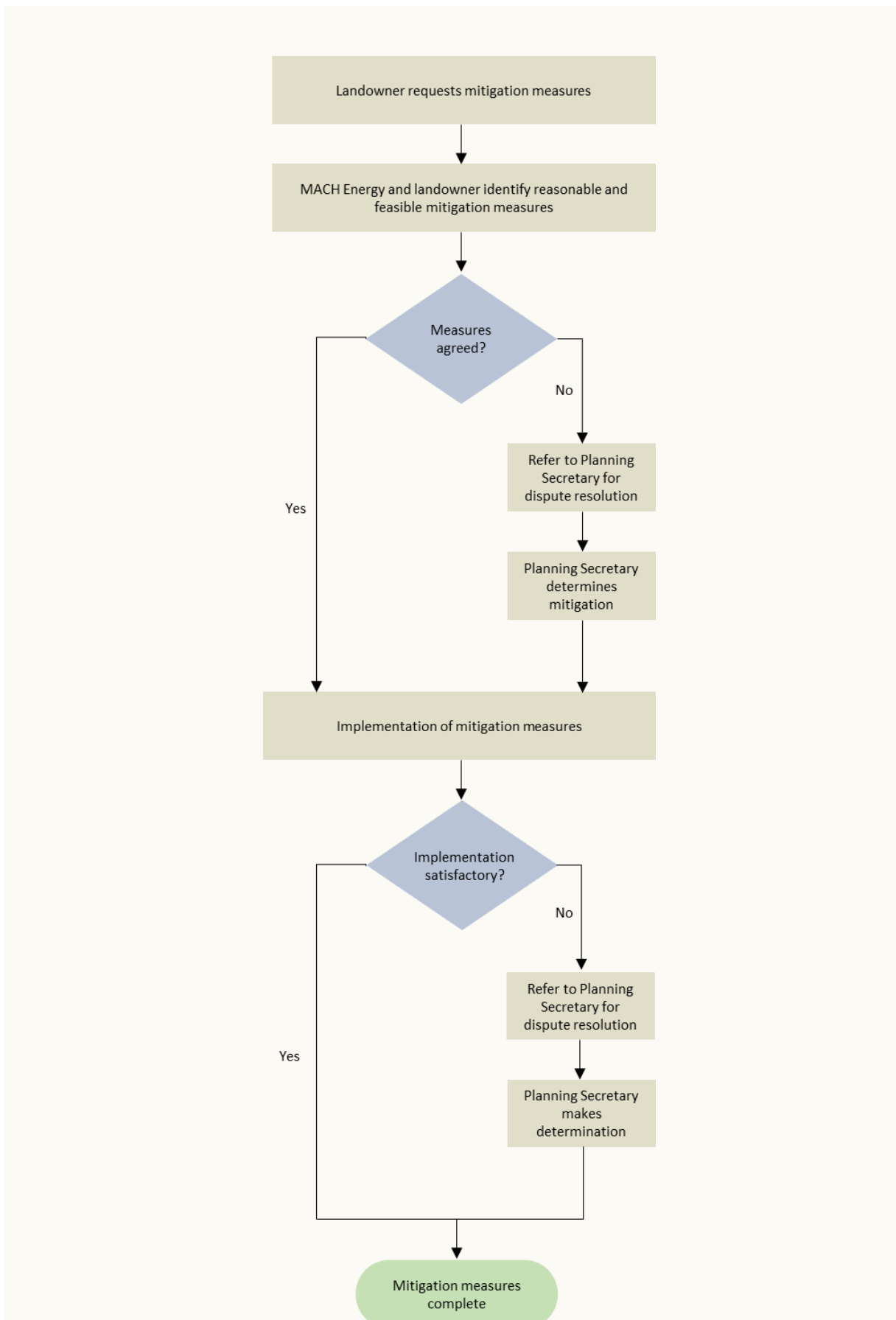


Figure 8: Process for Obtaining Voluntary Mitigation Measures

## 5.9 DISPUTE RESOLUTION

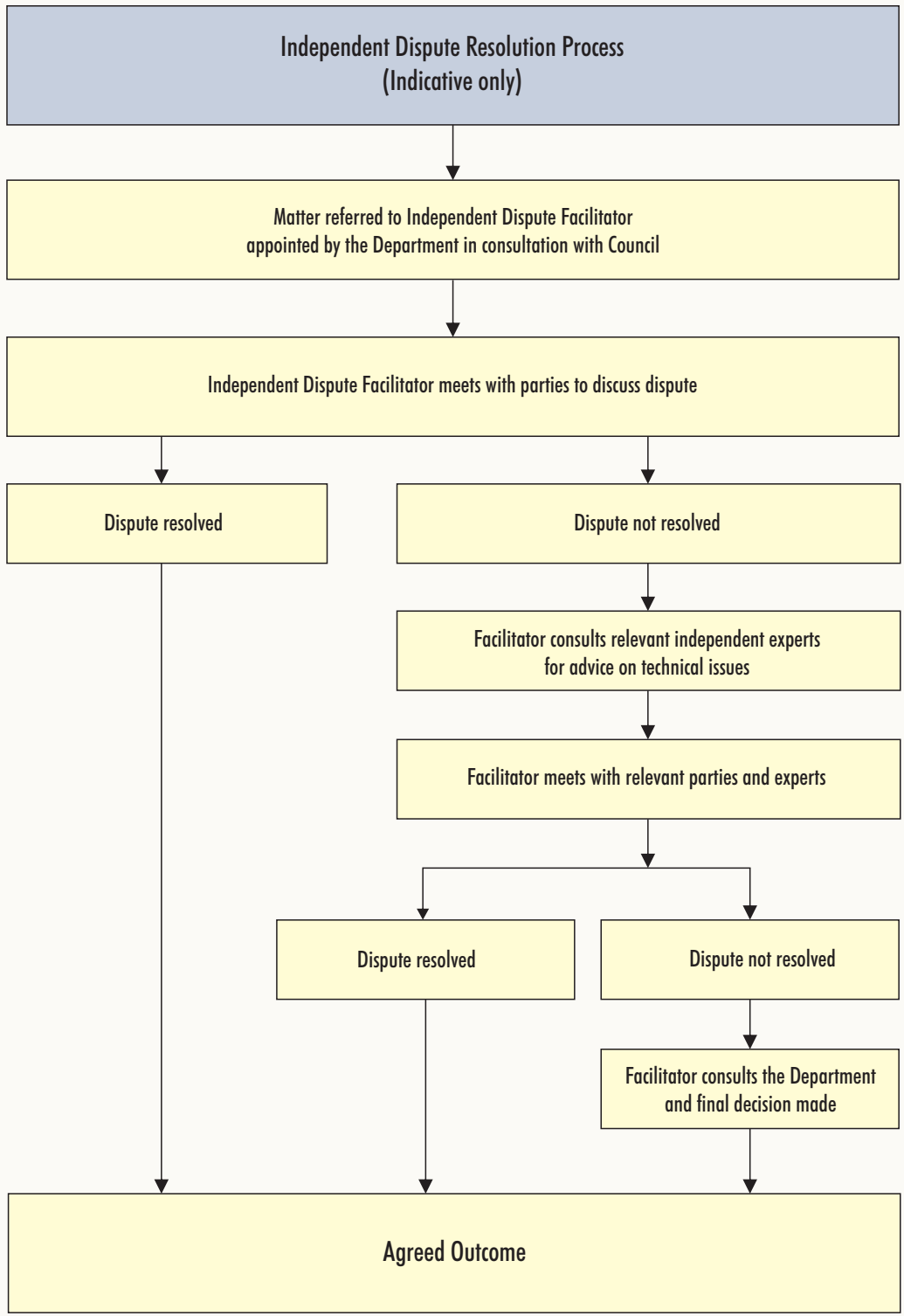
In the event of a disagreement between MACH Energy and a member of the community, MACH Energy will undertake the necessary liaison to reach a resolution. Should resolution of the dispute not be reached through this primary process, either party may refer the matter to the Planning Secretary of the DPE for resolution.

In accordance with Development Consent SSD 10418, the dispute resolution process will be conducted using the Independent Dispute Resolution Process (Figure 9). Where required, disputes may be resolved as per the provisions within Part C – Additional Procedures within Development Consent SSD 10418. This may include processes such as an Independent Review (Part C, Condition C9 to Condition C11 of Development Consent SSD 10418) and Land Acquisition (Part C, Condition C12 to C19 of Development Consent SSD 10418) (Section 5.8).

The Planning Secretary of the DPE, where required, can provide conflict resolution in the following situations:

- Upon receiving a written request from the owner of any residence on the land listed in Table 11 or Table 12 of Part C, Conditions C1 to C4 of Development Consent SSD 10418, MACH Energy is required to implement additional noise and/or dust mitigation measures (such as double-glazing, insulation, air filters, first flush roof water drainage system and/or air conditioning) at the residence in consultation with the landowner. If within three months of receiving this request from the owner, MACH Energy and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.
- In accordance with Part B, Conditions B17 and B18 of Development Consent SSD 10418, if MACH Energy receives a written request from the owner of any privately-owned land within 3 km of any active open cut mining pit on-site, or any other landowner where the Planning Secretary is satisfied an inspection is warranted, for a property inspection to establish the baseline condition of any buildings and structures on their land, or to have a previous property inspection updated, then within two months of receiving this request (or, in the case of a request for an inspection outside the 3 km, within two months of receiving notice that the Planning Secretary is satisfied that an inspection is warranted), MACH Energy shall commission a suitably qualified, experienced and independent person to undertake a property inspection. The property inspection will be conducted in order to establish the baseline condition of the buildings and other structures on the land or update the previous property inspection report and to identify any measures that should be implemented to minimise the potential blasting impacts of the development on these buildings or structures. MACH Energy will also provide the landowner with the new or updated property inspection report. If there is a dispute over the selection of the suitably qualified, experienced and independent person, or MACH Energy or the landowner disagrees with the findings of the property inspection report, either party may refer the matter to the Planning Secretary for resolution.
- In accordance with Part B, Conditions 19, 20 and 21 of Development Consent SSD 10418, if the owner of any privately-owned land within 3 km of any active open cut mining pit on the site or any other landowner where the Planning Secretary is satisfied an investigation is warranted, claims that the buildings or structures on their land have been damaged as a result of blasting on the site, then within two months of receiving this claim (or, in the case of the request for an inspection outside the 3 km, within two months of receiving notice that the Planning Secretary is satisfied that an inspection is warranted), MACH Energy is required to commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties to investigate the claim, and to provide a copy of the property investigation report to the landowner. If there is a dispute over the selection of the suitably qualified, experienced and independent person, or MACH Energy or the landowner disagree with the findings of the property inspection report, either party may refer the matter to the Planning Secretary for resolution.

- In accordance with Part B, Condition 41 of Development Consent SSD 10418, prior to commencing construction of development under the consent, MACH Energy must notify the owner of the bore listed in Table 5 that they may request monitoring of the listed bore to determine the level of drawdown from the development. In the event that drawdown is more than 2 m as a result of development, MACH Energy must provide compensatory water in accordance with Part B, Conditions B42 to B48. Within three months of commencement of development under this consent, MACH Energy must notify owners of licenced privately-owned groundwater bores that are predicted to have a drawdown of greater than 2 m as a result of the development. MACH Energy must provide compensatory water supply to any landowner of privately-owned land whose rightful water supply is adversely and directly impacted (other than an impact that is minor or negligible) as a result of development, in consultation with DPE Water, and to the satisfaction of the Planning Secretary. The compensatory water supply measures must provide an alternative long-term supply of water that is equivalent, in quality and volume, to the loss attributable to development. Equivalent water supply should be provided (at least on an interim basis) as soon as practicable after the loss is identified, unless otherwise agreed with the landowner. If MACH Energy and the landowner cannot agree on whether the loss of water is attributable to the development or the measures implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution. If alternative long-term supply of water is unable to be provided, MACH Energy must provide compensation, to the satisfaction of the Planning Secretary.
- In accordance with Part B, Condition B96 of Development Consent SSD 10418, and if required, MACH Energy shall undertake road works to the satisfaction of Muswellbrook Shire Council. If there is any dispute between MACH Energy and Muswellbrook Shire Council about the implementation of this condition, then any party may refer the matter to the Planning Secretary for resolution.
- In accordance with Part B, Condition B105 of Development Consent SSD 10418, MACH Energy shall contribute to the upgrade and maintenance of Thomas Mitchell Drive, proportionate to its impacts (based on usage) on that infrastructure, in accordance with the Contributions Study prepared by GHD titled, "*Thomas Mitchell Drive Contributions Study, August 2018*" for the upgrade works and the maintenance schedule during the life of the development. If there is a dispute between the relevant parties about the implementation of Condition B105, then any party may refer the matter to the Planning Secretary for resolution.
- In accordance with Part A, Condition A19 of Development Consent SSD 10418, If there is any dispute between MACH Energy, Muswellbrook Shire Council and/or Upper Hunter Shire Council in regard to Part A, Conditions A16, A17 and A18 of Development Consent SSD 10418, then either party may refer the matter to the Planning Secretary for resolution.



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Figure 9

- In accordance with Part B, Condition B80 of Development Consent SSD 10418, upon receiving a written request from the owner of any residence on privately-owned land within 2 km of the mine landforms and has, or would have, significant direct view of the mining operations on-site, MACH Energy shall implement visual mitigation measures (such as landscaping treatments or vegetation screens) on the land in consultation with the landowner. These measures must be reasonable and feasible, and directed toward minimising the visibility of the mining operations from the residence. If within three months of receiving this request from the owner, MACH Energy and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of the measures, then either party may refer the matter to the Planning Secretary for resolution<sup>3</sup>.
- The provision for independent review (Part C, Conditions C9 to C11 of Development Consent SSD 10418) offers dispute resolution. If an owner of privately-owned land considers the development to be exceeding the relevant criteria in Part B of Development Consent SSD 10418, then the landowner may ask the Planning Secretary in writing for an independent review of the impacts of the development on his/her land.
- In accordance with Part C, Conditions C12 to C19 of Development Consent SSD 10418, within three months of receiving a written request from a landowner with acquisition rights, MACH Energy shall make a binding written offer to the landowner. However, if within two months of the written offer being made, MACH Energy and the landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Planning Secretary for resolution.

## 5.10 TRAINING

It is the responsibility of MACH Energy to employ people that are appropriately trained, competent and have an appropriate level of experience and understanding to undertake their work in a manner that minimises impacts on the environment and community. In addition, a component of the site-specific induction is to promote and provide all employees and contractors with general environmental awareness training. In accordance with Part A, Condition A33 of Development Consent SSD 10418, MACH Energy will ensure that any of its employees or contractors are made aware of, and are instructed to comply with, the conditions of Development Consent SSD 10418 relevant to activities they carry out in respect of the development.

A register of training records and competencies is maintained and kept up to date in a MPO Training Register.

### ***Visitors Induction***

Visitors to the MPO undergo a visitor's induction, which outlines the overarching environmental, health and safety requirements. The nominated MACH Energy contact is responsible for the actions and conduct of their visitors and will reinforce the MPO environmental requirements.

At all times, visitors are to be accompanied by the nominated MACH Energy contact unless specific direction is provided, and the visitor is restricted from performing certain work duties on-site.

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<sup>3</sup> Except in exceptional circumstances, the Planning Secretary will not require additional visual impact mitigation to be undertaken for residences that are more than three kilometres from the mining operations.

### **Site Induction**

Prior to commencing any work duties on-site, all personnel undergo a site-specific induction. The site-specific induction includes a detailed summary of the MPO as well as associated health, safety, environment and community requirements.

### **Task Specific Training**

Occasions may arise where employees or contractors are required to undertake training in specific environmental management duties (i.e. use of air quality monitoring equipment, or use of real-time response protocols). A training needs analysis will identify where these instances occur.

## **5.11 DOCUMENT CONTROL**

All MACH Energy documentation will follow a standard document template, including:

- identification of document need;
- assigning author, unique identifier and header/footer requirements;
- document approval; and
- document review.

## **5.12 RECORDS MANAGEMENT**

A copy of any document that includes data or records is kept and maintained by MACH Energy to demonstrate compliance with relevant legislation, leases, licences, approvals, and any other document that governs operations at the MPO. The Environmental Superintendent is responsible for the management of any necessary environmental records.

## **5.13 PLANNING AGREEMENTS**

In 2012, MACH Energy and Muswellbrook Shire Council entered into a Voluntary Planning Agreement in accordance with Schedule 2, Condition 14 of Development Consent DA 92/97 and Division 6 of Part 4 of the EP&A Act and Appendix 4 of Development Consent DA 92/97 (Appendix E). This agreement included monetary contributions for community infrastructure, road maintenance and funding for apprenticeships.

In accordance with Part A, Condition A16 of Development Consent SSD 10418, within six months of date of commencement of Development Consent SSD 10418, or other timeframe agreed by the Planning Secretary, MACH Energy will enter into a Voluntary Planning Agreement with Muswellbrook Shire Council in accordance with Division 7.1 of Part 7 of the EP&A Act and the terms of the offer in Appendix 7 of Development Consent SSD 10418 (Appendix D).

The annual payments for each payment year will be:

- a community contribution;
- a road maintenance contribution;
- an Environmental Officer contribution; and
- a contribution to fund apprenticeships.



In accordance with Part A, Condition A17 of Development Consent SSD 10418, If MACH Energy does not enter into a Voluntary Planning Agreement with Muswellbrook Shire Council within the timeframe under Part A, Condition A16 of Development Consent SSD 10418, then within a further three months, MACH Energy will make a Section 7.12 of the EP&A Act contribution to Muswellbrook Shire Council of \$9.52 million which will be paid in equal annual instalments over a period of 10 years. The amount to be paid is to be adjusted at the time of the actual payment, in accordance with the provisions of the Muswellbrook Shire Council Section 94A *Development Contributions Plan 2010*.

In addition to this, in accordance with Part A, Condition A18 of Development Consent SSD 10418, MACH Energy has entered into a Voluntary Planning Agreement with Upper Hunter Shire Council in accordance with Division 7.1 of Part 7 of the EP&A Act and the terms of the offer in Appendix 8 of Development Consent SSD 10418 (Appendix D).

## 6 MEASUREMENT AND EVALUATION

A list of EMPs required at the MPO under Development Consent DA 92/97 and Development Consent SSD 10418 is provided in Section 2. These plans are reviewed, and if necessary, revised within three months of the submission of an MPO Annual Review, incident report, independent audit or any modification to the Development Consent, in accordance with Part D, Conditions D7 and D8 of Development Consent SSD 10418.

In accordance with Part D, Condition D8 of Development Consent SSD 10418, if necessary, to either improve the environmental performance of the development, cater for a modification or comply with a direction, the strategies, plans and programs required under Development Consent SSD 01418, MACH Energy will ensure that the documents listed under Development Consent SSD 10418 will be revised, to the satisfaction of the Planning Secretary. Where revisions are required, MACH Energy will ensure that the revised document will be submitted to the Planning Secretary for approval within six weeks of the review.

Monitoring for all parameters nominated in Development Consent SSD 10418, Development Consent DA 92/97, Commonwealth Approval EPBC 2011/5795 and Commonwealth Approval EPBC 2020/8735 are comprehensively addressed within the EMPs developed to successfully manage each key issue identified.

The MPO Annual Review and the Rehabilitation Management Plan (along with the supporting Annual Rehabilitation Report and Forward Program) support these plans.

In addition, Part D, Condition D13 of Development Consent SSD 10418 requires MACH Energy to commission, commence and pay the full cost of an Independent Environmental Audit within one year of commencement of development under the consent, and every three years thereafter.

The most recent Independent Environmental Audit under Development Consent 92/97 was completed for the period between 27 February 2020 to 8 March 2023 (inclusive) and submitted to the Planning Secretary on 5 May 2023. The next Independent Environmental Audit under Development Consent DA 92/97 would be due in February 2026 if Development Consent DA 92/97 is still in force.

Required EMPs, strategies and programs are summarised in Table 6 and the requirements of individual EMPs necessary under Development Consent DA 92/97 and SSD 10418 are detailed in Appendix D and E, respectively. The Environmental Superintendent is responsible for implementation of all EMPs in Table 6. In accordance with Part A, Condition A22 of Development Consent SSD 10418, the relevant parties required to be consulted for the EMPs, programs and strategies are also listed in Table 6.

### 6.1 REPORTING

In accordance with Part D, Conditions D5 and D6 of Development Consent SSD 10418, MACH Energy has developed protocols for managing and reporting the following:

- incidents;
- complaints;
- non-compliances with statutory requirements; and
- exceedances of the impact assessment criteria and/or performance criteria.

**Table 6  
Summary of Required Environmental Management Strategies, Plans and Programs**

Plan	EMP Framework	Consultation Requirement
Environmental Management Strategy <sup>^*</sup>	<ul style="list-style-type: none"> <li>The objective of this document is to outline the strategic framework for environmental management at the MPO.</li> </ul>	<ul style="list-style-type: none"> <li>Not Required<sup>^*</sup></li> </ul>
Noise Management Plan <sup>^*</sup>	<ul style="list-style-type: none"> <li>Identification of relevant criteria, monitoring locations, monitoring frequency and operating conditions.</li> <li>Describes the measures that would be implemented to ensure compliance, including a real-time noise management system that employs both reactive and proactive mitigation measures.</li> <li>Includes a noise monitoring program and a protocol for managing cumulative noise impacts.</li> </ul>	<ul style="list-style-type: none"> <li>EPA<sup>^*</sup></li> <li>Nearby Mines<sup>^</sup></li> </ul>
Blast Management Plan <sup>^*</sup>	<ul style="list-style-type: none"> <li>Identification of relevant blasting and vibration criteria, monitoring methods and program, protection of infrastructure and heritage items, property inspections, stakeholder consultation and reporting.</li> <li>Describes the measures that would be implemented to ensure compliance.</li> <li>Includes a road closure management plan, blast monitoring program, blast fume management strategy and a protocol for managing cumulative blasting impacts and interactions with nearby mines.</li> </ul>	<ul style="list-style-type: none"> <li>EPA<sup>^*</sup></li> <li>Muswellbrook Shire Council<sup>^</sup></li> <li>Nearby Mines<sup>^</sup></li> </ul>
Air Quality and Greenhouse Gas Management Plan <sup>^*</sup>	<ul style="list-style-type: none"> <li>Identification of relevant criteria, monitoring methods and programs.</li> <li>Describes the measures that would be implemented to ensure compliance and best practice management, including a real-time air quality management system that employs both reactive and proactive mitigation measures and measures to minimise Scope 1 and Scope 2 greenhouse gas emissions.</li> <li>Describes the methods to evaluate compliance against criteria, operating conditions, effectiveness of the system and defines protocol for identification of incidents and notification of relevant parties of their occurrence.</li> <li>Includes an air quality monitoring program and a protocol for managing cumulative air quality impacts.</li> </ul>	<ul style="list-style-type: none"> <li>CAS<sup>*</sup></li> <li>EPA<sup>*</sup></li> <li>Nearby Mines<sup>^</sup></li> </ul>
Water Management Plan <sup>^*</sup>	<ul style="list-style-type: none"> <li>Includes a site water balance, erosion and sediment control plan, surface water management and monitoring plan and a groundwater management plan.</li> <li>Outlines the performance criteria for compliance with water management performance measures.</li> </ul>	<ul style="list-style-type: none"> <li>DPE Water<sup>^*</sup></li> <li>EPA<sup>^*</sup></li> </ul>
Aboriginal Cultural Heritage Management Plan <sup>^*</sup>	<ul style="list-style-type: none"> <li>Describes the measures that would be implemented for management and protection of known and unknown heritage items, access arrangements to heritage items and ongoing consultation with stakeholders.</li> <li>Includes a detailed plan for implementation of the approved Aboriginal Heritage Conservation Strategy.</li> </ul>	<ul style="list-style-type: none"> <li>Heritage NSW<sup>^*</sup></li> <li>Registered Aboriginal Parties<sup>^*</sup></li> </ul>

**Table 6 (Continued)**  
**Summary of Required Environmental Management Strategies, Plans and Programs**

Plan	EMP Framework	Consultation Requirement
Biodiversity Management Plan <sup>^*</sup>	<ul style="list-style-type: none"> <li>• Identification of relevant criteria, monitoring methods and program.</li> <li>• Describes the vegetation clearance protocol to avoid accidental clearance in vegetation to be retained, including the relinquishment area.</li> <li>• Includes a description of the short-, medium- and long-term measures to be implemented, a detailed description of measures to be implemented over the next 3 years and a program to monitor and report on the effectiveness of these measures.</li> <li>• Describes measures to establish 66.6 hectares (ha) of PCT 1605 and 7 ha of PCT 1602 as part of the rehabilitation program, consistent with the Rehabilitation Management Plan.</li> <li>• Describes the potential risks to successful revegetation and the contingency measures that will be implemented to mitigate these risks.</li> </ul>	<ul style="list-style-type: none"> <li>• Biodiversity Conservation Division<sup>^*</sup><sup>^</sup></li> <li>• Muswellbrook Shire Council<sup>^</sup></li> </ul>
Aboriginal Heritage Conservation Strategy <sup>^</sup>	<ul style="list-style-type: none"> <li>• Provides for the establishment, management and conservation of an Aboriginal cultural heritage conservation area/s that has comparable Aboriginal cultural heritage values (both cultural and archaeological) to the areas that would be developed on-site.</li> </ul>	<ul style="list-style-type: none"> <li>• Heritage NSW<sup>^</sup></li> <li>• Registered Aboriginal Parties<sup>^</sup></li> </ul>
Historic Heritage Management Plan <sup>*</sup>	<ul style="list-style-type: none"> <li>• Describes the measures that would be implemented for management and protection of known and unknown non-Aboriginal heritage items, access arrangements to non-Aboriginal heritage items and ongoing consultation with stakeholders.</li> <li>• Describes how historic heritage values of the site would be recorded, preserved and archived.</li> <li>• Includes a strategy for the care, control and storage of heritage relics salvaged from the site.</li> <li>• Includes a comprehensive conservation management plan for the ongoing management of Rosebrook and Negoa Estate.</li> </ul>	<ul style="list-style-type: none"> <li>• Heritage NSW<sup>*</sup></li> <li>• Muswellbrook Shire Council<sup>*</sup></li> <li>• Relevant landowners<sup>*</sup></li> </ul>
Visual Impact Management Plan <sup>^*</sup>	<ul style="list-style-type: none"> <li>• Provides for the establishment of trees and shrubs and/or the construction of mounding or bunding.</li> <li>• Includes details of the visual appearance of buildings, structures, out-of-pit emplacements, facilities or works, aimed at blending with the surrounding landscape.</li> <li>• Includes details of the measures to minimise the visual impacts of the MOD 4 rail infrastructure.</li> </ul>	<ul style="list-style-type: none"> <li>• Muswellbrook Shire Council<sup>^*</sup></li> </ul>
Rehabilitation Strategy <sup>^*</sup>	<ul style="list-style-type: none"> <li>• Builds upon the rehabilitation objectives defined by Development Consent SSD 10418 and addresses all aspects of rehabilitation including mine closure, final landform (including final void), post-mining land use/s and water management.</li> <li>• Includes details of the species to be established in rehabilitation areas.</li> <li>• Describes how the rehabilitation measures would be integrated with the measures in the Biodiversity Management Plan and Visual Impact Management Plan.</li> <li>• Includes an indicative schedule for the staged rehabilitation of the MPO.</li> </ul>	<ul style="list-style-type: none"> <li>• Biodiversity Conservation Division<sup>*</sup></li> <li>• NSW Resource Regulator<sup>^*</sup><sup>^</sup></li> <li>• Muswellbrook Shire Council<sup>^*</sup><sup>^</sup></li> </ul>

**Table 6 (Continued)**  
**Summary of Required Environmental Management Strategies, Plans and Programs**

Plan	EMP Framework	Consultation Requirement
Waste Management Plan <sup>^</sup>	<ul style="list-style-type: none"> <li>• Describes the measures that would be implemented to avoid, minimise, reuse and recycle all waste streams.</li> <li>• Includes a fines emplacement plan and a program to evaluate the fines emplacement plan and methods.</li> </ul>	<ul style="list-style-type: none"> <li>• DPE Water<sup>^</sup></li> <li>• NSW Resources Regulator<sup>^</sup></li> </ul>
Bushfire Management Plan <sup>*</sup>	<ul style="list-style-type: none"> <li>• Describes the schedule and description of proposed bushfire mitigation works and identification of the location and storage of bulk flammable liquids and materials.</li> <li>• Includes a 'hot works' management plan and an emergency/evacuation plan.</li> </ul>	<ul style="list-style-type: none"> <li>• NSW Rural Fire Service<sup>*</sup></li> </ul>
Traffic Management Plan <sup>^*</sup>	<ul style="list-style-type: none"> <li>• Describes the transport routes and traffic types to be used during development-related traffic and details the measures to be implemented to minimise traffic safety issued and disruption to local road users during construction, operation and decommissioning phases of the development.</li> <li>• Includes a protocol for undertaking pre- and post-dilapidation surveys and repairing any roads identified in the surveys.</li> </ul>	<ul style="list-style-type: none"> <li>• Transport for NSW<sup>*</sup></li> <li>• Muswellbrook Shire Council<sup>*</sup></li> </ul>
Road Maintenance Management Plan <sup>^*</sup>	<ul style="list-style-type: none"> <li>• Describes maintenance works for the roads and intersections between the Bengalla Mine main entrance and the MPO main entrance including part of the Bengalla Link Road and part of the Wybong Road.</li> </ul>	<ul style="list-style-type: none"> <li>• Muswellbrook Shire Council<sup>^*</sup></li> </ul>
Rehabilitation Management Plan <sup>^*</sup>	<ul style="list-style-type: none"> <li>• Describes how the rehabilitation of the site would achieve the rehabilitation objectives in Development Consent SSD 10418.</li> <li>• Includes a detailed plan for reinstatement and review of the proposed agricultural land capability of grassland areas in the final landform and rehabilitated woodland and fauna habitat areas.</li> <li>• Includes detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site.</li> <li>• Describes the rehabilitation measures to address all aspects of rehabilitation.</li> <li>• Includes procedures for the interim stabilisation and temporary vegetation strategies.</li> <li>• Includes detailed scheduling for progressive rehabilitation to be initiated.</li> </ul>	<ul style="list-style-type: none"> <li>• In accordance with the provisions under the <i>NSW Mining Act, 1992</i>.</li> </ul>
Pollution Incident Response Management Plan <sup>#</sup>	<ul style="list-style-type: none"> <li>• Outlines the reporting, management and communication to the general community of pollution incidents.</li> </ul>	<ul style="list-style-type: none"> <li>• In accordance with the provisions under the <i>NSW Protection of the Environment Operations Act, 1997</i>.</li> </ul>

**Table 6 (Continued)**  
**Summary of Required Environmental Management Strategies, Plans and Programs**

Plan	EMP Framework	Consultation Requirement
Annual Rehabilitation Report and Forward Program	<ul style="list-style-type: none"> <li>Describes annual rehabilitation and forward rehabilitation program under the NSW <i>Mining Regulations, 2016</i> and <i>Annual Rehabilitation Report and Forward Program for Large Mines (2021)</i>.</li> </ul>	<ul style="list-style-type: none"> <li>In accordance with the provisions under the NSW <i>Mining Regulations, 2016</i> and <i>Annual Rehabilitation Report and Forward Program for Large Mines (2021)</i></li> </ul>
Out of Hours Work Protocol <sup>1</sup>	<ul style="list-style-type: none"> <li>Describes measures to be implemented to minimise construction related noise, vibration, dust, biodiversity and visual impacts.</li> <li>Describes notification and reporting systems related to construction works.</li> </ul>	<ul style="list-style-type: none"> <li>EPA<sup>^</sup></li> <li>Relevant landowners<sup>**</sup></li> </ul>
Construction Noise Protocol <sup>1</sup>	<ul style="list-style-type: none"> <li>Includes a Construction Traffic Management Plan, Out of Hours Work Protocol for Development Consent DA 92/97, and Unexpected Contamination Protocol.</li> </ul>	

\* Requirement of Development Consent SSD 10418.

<sup>^</sup> Requirement of Development Consent DA 92/97 (prior to its surrender).

<sup>#</sup> Requirement of the NSW *Protection of the Environment Operations Act, 1997*.

<sup>1</sup> Any MOD 4 rail maintenance or rectification works must be approved under a Construction Noise Protocol (under Development Consent SSD 10418) or a Construction Noise Protocol (under Development Consent DA 92/97).

Environmental reporting requirements including timing, submission and distribution method are summarised in Table 7. In accordance with Part D, Condition D17 of Development Consent SSD 10418, MACH Energy will provide regular reporting on the environmental performance of the MPO on the MACH Energy website.

In accordance with Part D, Conditions D15 and D16 of Development Consent SSD 10418, any conditions of Development Consent SSD 10418 that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the NSW EP&A Act. These conditions include incident notification (Part D, Condition D9 of Development Consent SSD 10418); non-compliance notification (Part D, Condition D10 of Development Consent SSD 10418); reporting and response; compliance reporting; and Independent Environmental Audit (Part D, Condition D13 of Development Consent SSD 10418).

## 6.2 COMPLIANCE

Compliance at the MPO is to be achieved via:

- adherence to Development Consent SSD 10418, Development Consent DA 92/97, EPBC Approval 2011/5795 and EPBC Approval 2020/8735, licence and ML conditions, and corporate policies;
- annual compliance reporting in the MPO Annual Review;
- review of the EMPs within three months of an MPO Annual Review, a reported incident, an Independent Environmental Audit or modifications to the conditions of the current approval;
- compliance auditing (both internal and external);
- identification of performance against objectives and targets; and
- implementation of corrective procedures/strategies following complaint or monitoring inspection and identification and approval from necessary authorities and stakeholders.

A protocol for the managing and reporting of non-compliances with statutory requirements has been developed as a component of the EMS and is described below.

Compliance with all approvals, plans and procedures is the responsibility of all personnel (staff and contractors) employed on or in association with the MPO. In accordance with Part A, Condition A2 of Development Consent SSD 10418 and Schedule 2, Condition 2 of Development Consent DA 92/97 (prior to its surrender), MACH Energy will carry out the development in accordance with:

- the conditions of Development Consent SSD 10418 and Development Consent DA 92/97 (prior to its surrender)<sup>4</sup>;
- all written directions of the Planning Secretary;
- Statement of Commitments (Appendix 3 of Development Consent DA 92/97);
- the 1997 EIS, EA (MOD 1), EA (MOD 2), EA (MOD 3), EA (MOD 4), EA (MOD 5), the Project EIS; and
- with the Development Layout in Appendix 2 of Development Consent SSD 10418 (Appendix D).

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<sup>4</sup> In accordance with Part A, Condition A4 of Development Consent SSD 10418, the conditions in Development Consent SSD 10418 and directions of the Planning Secretary prevail to the extent of inconsistency, ambiguity or conflict between them and any document/s listed in condition A2(c). In the event of an inconsistency, ambiguity or conflict between any of the document/s listed in condition A2(c), the most recent document prevails to the extent of the inconsistency, ambiguity or conflict.

The Environmental Superintendent undertakes regular inspections, internal audits and initiates directions identifying any remediation/rectification work required, and areas of actual or potential non-compliance.

As described in Section 6.3, MACH Energy will notify the Planning Secretary of the DPE, and any other relevant agencies of any incident associated with the MPO that causes or threatens to cause material harm to the environment that is not trivial immediately after MACH Energy becomes aware of the incident. In accordance with Part D, Condition D10 of Development Consent SSD 10418, within seven days of becoming aware of a non-compliance, MACH Energy will notify DPE in writing of the non-compliance. The notification will be made via the Major Projects Website and include:

- identification of the MPO (including the Development Application number and name);
- the condition of Development Consent SSD 10418 that the development is non-compliant with and the way in which it does not comply; and
- the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.



**Table 7**  
**Mount Pleasant Operation Reporting Requirements**

Report	Frequency	Distribution	Distribution Method	Responsibility for Data Collection and Preparation	Responsibility for Submission
Incident Report	As required – see Section 6.3	DPE Other relevant agencies	Major Projects Website	Environmental Superintendent	General Manager Operations
MPO Annual Review (incorporating Annual Environmental Management Report)	Annually (by the end of March each year)	DPE Muswellbrook Shire Council	Email and/or DPE Portal and website	Environmental Superintendent	General Manager Operations
Hunter River Salinity Trading Scheme Annual Report <sup>1</sup>	Annually <sup>1</sup>	EPA	Email and/or DPE Portal and website	Environmental Superintendent	General Manager Operations
National Pollutant Inventory Report	Annually (for the period 1 July to 30 June)	DCCEEW	Email and/or DPE Portal	Environmental Superintendent	General Manager Operations
National Greenhouse and Energy Report	Annually (for the period 1 July to 30 June)	DCCEEW	Website	Environmental Superintendent	General Manager Operations
Annual Return	Annually (for the period 1 January to 31 December)	EPA	Email and/or DPE Portal	Environmental Superintendent	General Manager Operations
EPBC Act Compliance Report (EPBC 2011/5795)	Annually (within three months of the anniversary of the date of commencement)	DCCEEW	Email and/or DPE Portal and website	Environmental Superintendent	General Manager Operations
EPBC Act Compliance Report (EPBC 2020/8735)	Annually (within three months of the anniversary of the date of commencement)	DCCEEW	Email and/or DPE Portal and website	Environmental Superintendent	General Manager Operations

DCCEEW – Commonwealth Department of Climate Change, Energy, the Environment and Water, EPA – NSW Environment Protection Authority.

<sup>1</sup> Reporting to be in accordance with EPL 20850.

In addition, as soon as practicable and no longer than seven days after obtaining monitoring results showing an exceedance of the criteria detailed in Development Consent SSD 10418 and completion of the protocol for determining if an exceedance is a non-compliance (as outlined in each management plan), MACH Energy shall, in accordance with Part C, Conditions C7 and C6 of Development Consent SSD 10418:

- notify affected landowners, tenants, and the CCC in writing of the exceedance, and provide regular monitoring results to each of these parties until the MPO is complying with the relevant criteria; and/or
- in the event of an exceedance of the air quality criteria, send a copy of the NSW Health fact sheet entitled “Mine Dust and You” (as may be updated from time to time) to the affected landowners and/or existing tenants of the land (including the tenants of any mine-owned land).

Any non-compliances identified will be reported in the MPO Annual Review. The MPO Annual Review will be made publicly available on the MACH Energy website in accordance with Part D, Condition D17 of Development Consent SSD 10418.

### **6.3 INCIDENTS**

An incident is defined in Development Consent SSD 10418 as an occurrence or set of circumstances that may or may not be or cause a non-compliance and causes or threatens to cause material harm, defined as harm that:

- involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial; or
- results in the actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (such loss includes reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment).

In the event that review of monitoring data indicates that an incident associated with the MPO occurs, which causes or threatens to cause material harm, the incident will be managed in accordance with relevant regulatory approvals and statutory obligations.

The reporting of incidents will be conducted in accordance with Part D, Condition D9 of Development Consent SSD 10418 and in accordance with the protocol for industry notification of pollution incidents under Part 5.7 of the NSW *Protection of the Environment Operations Act, 1997*. MACH Energy will notify the DPE and any other relevant agencies, in accordance with the PIRMP and Part D, Condition D9 of Development Consent SSD 10418, immediately after the authorised person becomes aware of the incident which causes or threatens to cause material harm.

In accordance with Part D, Condition D10 of Development Consent SSD 10418, within seven days of becoming aware of a non-compliance MACH Energy will notify DPE of the non-compliance.

The notification must be made in writing via the [Major Projects Website](#) and will:

- identify the MPO (including the Development Application number and name);
- set out the condition of Development Consent SSD 10418 that the incident is non-compliant with;
- describe the location and nature of the incident;
- the reason for the non-compliance (if known); and
- what actions have been, or will be, undertaken to address the non-compliance.

#### **6.4 ADAPTIVE MANAGEMENT**

In accordance with Part D, Condition D4 of Development Consent SSD 10418, MACH Energy will assess and manage risks to comply with the criteria and/or performance measures outlined in Development Consent SSD 10418.

Where any exceedance of the criteria and/or performance measures occurs, at the earliest opportunity MACH Energy will:

- take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;
- consider all reasonable and feasible options for remediation (where relevant) and submit a report to DPE describing those options and any preferred remediation measures or other course of action; and
- implement reasonable remediation measures as directed by the Planning Secretary.

## 7 REVIEW

The Environmental Superintendent will undertake regular inspections, internal audits and initiate directions identifying any remediation/rectification work required, and areas of actual or potential non-compliance.

### 7.1 ANNUAL REVIEW

In accordance with Part D, Condition D11 of Development Consent SSD 10418 and Condition 3, Schedule 5 of Development Consent DA 92/97 (prior to its surrender), MACH Energy will review and evaluate the environmental performance of the MPO by the end of March each year (for the previous calendar year).

The MPO Annual Review will:

*D11. ...*

- (a) *describe the development (including any rehabilitation) that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year;*
- (b) *include a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, including a comparison of these results against the:*
  - (i) *relevant statutory requirements, limits or performance measures/criteria;*
  - (ii) *requirements of any plan or program under this consent;*
  - (iii) *monitoring results of previous years; and*
  - (iv) *relevant predictions in the document/s listed in condition A2(c);*
- (c) *identify any non-compliances or incident which occurred in the previous calendar year, and describe what actions were (or are being) taken to rectify the non-compliance and avoid reoccurrence;*
- (d) *evaluate and report on:*
  - (i) *the effectiveness of the noise and air quality management systems, including a review of the reactive management measures implemented at the site during the previous year of operations;*
  - (ii) *quantification of the number of hours that reactive management measures were implemented, specifying the trigger for the implementation of these measures; and*
  - (iii) *compliance with the performance measures, criteria and operating conditions of this consent.*
- (e) *include an addendum report on Scope 1 and Scope 2 GHGs, which reports:*
  - (i) *annual methane and annual total CO<sub>2-e</sub> emissions (both categorised by source);*
  - (ii) *overall emissions benchmarked against representative industry sectors and the predictions in the EIS, and performance measures set in condition B36 and/or condition B34; and*
  - (iii) *measures undertaken to minimise Scope 1 and Scope 2 GHGs, including actions taken under condition B34 and estimated reductions in CO<sub>2-e</sub> as a result of measures implemented.*
- (f) *identify any trends in monitoring data over the life of the development;*
- (g) *identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and*
- (h) *describe what measures will be implemented over the next calendar year to improve the environmental performance of the development.*

As mentioned in Part D, Condition D11 of Development Consent SSD 10418 (above) relating to MPO Annual Reviews, MACH Energy will include a comprehensive review of environmental performance at the MPO in accordance with Part A, Condition A2 of Development Consent SSD 10418 requires that:

*A2. The development may only be carried out:*

- (a) in compliance with the conditions of this consent;*
- (b) in accordance with all written directions of the Planning Secretary;*
- (c) generally in accordance with the EIS and EAs;*
- (d) generally in accordance with the Development Layout in Appendix 2.*

The MPO Annual Review will be made publicly available on the MACH Energy website in accordance with Part D, Condition D13 of Development Consent SSD 10418 and copies of the MPO Annual Review will be submitted to Muswellbrook Shire Council and made available to the CCC and any interested person upon request, in accordance with Part D, Condition D12 of Development Consent SSD 10418.

## **7.2 INDEPENDENT ENVIRONMENTAL AUDIT**

MACH Energy commissioned an Independent Environmental Audit in accordance with Schedule 5, Condition 9, 10 and 11 of Development Consent DA 92/97 by 25 November 2017. A copy of the report was submitted to the Planning Secretary on 18 May 2018. A second Independent Environmental Audit was commissioned for the period 26 November 2017 to 27 February 2020 and submitted to the Planning Secretary on 18 June 2020. The most recent Independent Environmental Audit under Development Consent DA 92/97 (prior to its surrender) was completed for the period between 27 February 2020 to 8 March 2023 (inclusive) and submitted to the Planning Secretary on 5 May 2023.

Within one year of commencement of development under Development Consent SSD 10418, and every three years after, an Independent Environmental Audit will be undertaken and submitted as required, in accordance with Part D, Condition D13 of Development Consent SSD 10418.

In accordance with Part D, Condition D14 of Development Consent SSD 10418, within three months of commencing the Independent Environmental Audit, MACH Energy will submit a copy of the audit report to the Planning Secretary, and other NSW agency that requests it, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. MACH Energy will ensure that the recommendations will be implemented and the findings and compliance with the Independent Environmental Audit will be reported in the MPO Annual Reviews.

Once Development Consent DA 92/97 is surrendered, all subsequent Internal Environmental Audits commissioned by MACH Energy will be in accordance with Part D, Condition D13 and D14 of Development Consent SSD 10418.

Subsequent versions of the Independent Environmental Audit will be provided to the Planning Secretary of the DPE and made available on the MACH Energy website. The Independent Environmental Audit will be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Planning Secretary of the DPE.

## 8 REFERENCES

Department of Planning and Environment (2018) *Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Development*.

EMGA Mitchell McLennan (2010) *Mount Pleasant Project Modification Environmental Assessment Report*. Prepared for Coal & Allied Operations Pty Ltd.

Environmental Resources Management Mitchell McCotter (1997) *Mount Pleasant Operation Environmental Impact Statement*.

MACH Energy Australia Pty Ltd (2017a) *Mount Pleasant Operation (DA 92/97) – South Pit Haul Road Modification*.

MACH Energy Australia Pty Ltd (2017b) *Mount Pleasant Operation – Mine Optimisation Modification Environmental Assessment*.

MACH Energy (2017c) *Mount Pleasant Operation – Rail Modification Environmental Assessment*.

NSW Government (2023) *Community Consultative Committee Guidelines: State Significant Projects*.

**APPENDIX A**  
**ENVIRONMENTAL POLICY**

# MACHEnergy

## ENVIRONMENTAL POLICY

MACH Energy Australia Pty Ltd (MACH Energy) is committed to achieving an excellent standard of environmental performance from all its business activities.

MACH Energy commits to:

- Promoting a culture in which everyone takes responsibility for protecting the environment;
- Measuring our performance against objectives and targets to drive continual improvement of our environmental performance;
- Maintaining clear and consistent communication and consultation with our stakeholders with the intent of enhancing environmental outcomes;
- Identifying, assessing, communicating and managing our environment risks;
- Complying with all relevant legislative and regulatory requirements;
- Ensure incidents, including near misses, are reported and investigated in a timely manner to prevent a recurrence;
- Being a learning organisation; and
- Providing the systems, resources and training to meet our commitments.

Finding ways to continually make advances in environmental sustainability is embedded in the way we conduct our business.



**Ferdian Purnamasidi**  
Managing Director  
December 2018



**APPENDIX B**

**SITE ENVIRONMENTAL MANAGEMENT – ROLES AND RESPONSIBILITIES**

### Site Environmental Management – Roles and Responsibilities

Role	Responsibility
General Manager Operations	<ul style="list-style-type: none"> <li>• Perform in an overview role to provide strategic direction.</li> <li>• Provide adequate resources to implement and support the requirements of the Environmental Management Strategy (EMS).</li> <li>• Ensure overall compliance of the Mount Pleasant Operation (MPO) with legislation and approvals.</li> <li>• Provide support for the development of strategies, systems and plans to address all legal requirements associated with the MPO.</li> </ul>
Department Managers	<ul style="list-style-type: none"> <li>• Assess environmental aspects and impacts of the operation during mine planning process and during the risk assessment process.</li> <li>• Coordinate activities under their supervision in accordance with the EMS and related sub-plans, procedures, and programs.</li> <li>• Consider past environmental performance when engaging contractors.</li> <li>• Participate in reviews of the EMS.</li> </ul>
External Relations Manager	<ul style="list-style-type: none"> <li>• Assist with the response to incidents.</li> <li>• Assist with the notification and reporting of incidents.</li> <li>• Manage external government and community consultation.</li> <li>• Manage communications with Bengalla Mine.</li> </ul>
Environmental Superintendent	<ul style="list-style-type: none"> <li>• Manage the implementation of Environmental Management Plans (EMPs), approvals, licences and permits.</li> <li>• Manage internal auditing and regulatory reporting (including the MPO Annual Review).</li> <li>• Manage and drive progressive rehabilitation planning, development and reporting.</li> <li>• Support staff environmental training.</li> <li>• Responsible for obtaining necessary environmental approvals.</li> <li>• Develop corrective action management plans for any non-compliance in consultation with the relevant area manager.</li> <li>• Coordinate the development, communication, implementation and maintenance of management plans and environmental monitoring programs and regularly review environmental monitoring data for compliance with relevant criteria.</li> </ul>
Department Supervisors	<ul style="list-style-type: none"> <li>• Responsible for site environmental monitoring.</li> <li>• Responsible for implementation and compliance with EMPs.</li> <li>• Provide support for Environmental Superintendent's responsibilities.</li> <li>• Provide support and advice to the operation including department managers and general staff and contractors.</li> <li>• Undertake regular site inspections and audits to maintain compliance with the EMPs and legislative requirements relating to the MPO.</li> <li>• Oversee activities undertaken at the MPO to assist in managing environmental aspects in accordance with the MPO management and legislative requirements.</li> <li>• Implementation of corrective actions arising from environmental incidents and audit.</li> <li>• Coordinate the activities of specialist sub-consultants and project personnel for environmental assessment/monitoring/auditing responsibilities in accordance with the MPO Management Systems.</li> </ul>
Safety and Training Department	<ul style="list-style-type: none"> <li>• Maintain the Emergency Response Team.</li> <li>• Maintain records of training.</li> <li>• Maintain Emergency Response Plans.</li> <li>• Maintain chemical registers.</li> </ul>
All Employees and Contractors	<ul style="list-style-type: none"> <li>• All general employees trained in environmental procedures and protocols as part of the induction process and regular site meetings.</li> <li>• All general employees responsible for immediately reporting environmental incidents.</li> <li>• All general employees responsible for undertaking works in an environmentally sound manner and in accordance with EMPs and site commitments.</li> </ul>

**APPENDIX C**

**ENVIRONMENTAL MANAGEMENT PLANS REQUIRED UNDER  
DEVELOPMENT CONSENT SSD 10418 AND  
DEVELOPMENT CONSENT DA 92/97**

*[Available on the MACH Energy Website]*

**<https://machenergyaustralia.com.au/about-us/>**

**APPENDIX D**  
**DEVELOPMENT CONSENT SSD 10418**

# Development Consent

## *Section 4.38 of the Environmental Planning and Assessment Act 1979*

The Independent Planning Commission of NSW (the Commission), as the declared consent authority under clause 2.7 of the *State Environmental Planning Policy (Planning Systems) 2021* and section 4.5(a) of the *Environmental Planning and Assessment Act 1979*, approves the development application referred to in Schedule 1, subject to the conditions in Schedule 2.

These conditions are required to:

- prevent, minimise, or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the development.



Prof. Alice Clark (Chair)  
Member of the Commission



Prof. Chris Fell AO  
Member of the Commission



Mr Terry Bailey  
Member of the Commission

Sydney

6 September 2022

### SCHEDULE 1

<b>Application Number:</b>	SSD 10418
<b>Applicant:</b>	MACH Energy Australia Pty Ltd
<b>Consent Authority:</b>	The Independent Planning Commission NSW
<b>Site:</b>	The land defined in Appendix 1
<b>Development:</b>	Mount Pleasant Optimisation Project

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## DEFINITIONS

<b>Aboriginal object</b>	Has the same meaning as the definition of the term in section 5 of the NP&W Act
<b>Aboriginal place</b>	Has the same meaning as the definition of the term in section 5 of the NP&W Act
<b>Additional Disturbance Area</b>	Means the additional disturbance areas outside the disturbance areas approved under development consent DA 92/97 as described in the EIS and shown in Figure 1 in Appendix 2
<b>AEP</b>	Annual Event Probability
<b>Annual Review</b>	The review required by condition D11
<b>Applicant</b>	MACH Energy Australia Pty Ltd, or any person carrying out any development under this consent
<b>Approved disturbance area</b>	The areas identified as: Project Continuation of Existing/Approved Surface Development; Approximate Additional Disturbance of Project Extensions; and either of the Northern Link Road Options in Figure 1, Appendix 2
<b>BCA</b>	Building Code of Australia
<b>BC Act</b>	<i>Biodiversity Conservation Act 2016</i>
<b>BCD</b>	Biodiversity & Conservation Division within the Department
<b>Blast misfire</b>	The failure of one or more holes in a blast pattern to initiate
<b>Calendar year</b>	A period of 12 months from 1 January to 31 December
<b>CAS</b>	Climate and Science Branch within the NSW Department of Planning and Environment
<b>CCC</b>	Community Consultative Committee required by condition A20
<b>CHPP</b>	Coal handling and preparation plant
<b>CO<sub>2</sub>-e</b>	Carbon dioxide equivalent based on a Global Warming Potential factor of 28 for emissions of methane
<b>Conditions of this consent</b>	Conditions contained in Schedule 2
<b>Construction</b>	All physical works to enable mining operations to be carried out, including demolition and removal of buildings or works, and erection of buildings and other infrastructure permitted by this consent and the associated removal, storage and/or emplacement of vegetation and topsoil, but not including pre-construction activities
<b>Council</b>	Muswellbrook Shire Council
<b>CPI</b>	Consumer Price Index
<b>Date of commencement</b>	The date notified to the Department by the Applicant under condition A12
<b>Day</b>	The period from 7.00 am to 6.00 pm on Monday to Saturday, and 8.00 am to 6.00 pm on Sundays and Public Holidays
<b>Decommissioning</b>	The deconstruction or demolition and removal of works installed as part of the development
<b>Demolition</b>	The deconstruction and removal of buildings, sheds and other structures on the site
<b>Department</b>	NSW Department of Planning and Environment
<b>Development</b>	The development described in the documents listed in condition A2(c), as modified by the conditions of this consent
<b>Development Layout</b>	The plans in Appendix 2 of this consent
<b>DPE-Crown Lands</b>	Crown Lands Group within the Department
<b>DPE Water</b>	Water Group within the Department
<b>EAs</b>	The Environmental Assessments titled: (a) Environmental Impact Statement for the Mt Pleasant Mine, prepared by ERM Mitchell McCotter and dated September 1997, as modified by the Applicant's submission to the Commission of Inquiry into the establishment and operation of the Mt Pleasant Mine

- (b) Environmental Assessment for Mt Pleasant Project Modification prepared by EMGA Mitchell McLennan, dated October 2010; the associated response to submissions, dated December 2010; and the addendum to the environmental assessment, dated 31 August 2011
- (c) Environmental Assessment titled *Mount Pleasant Operations (DA 92/97)-South Pit Haul Road Modification* prepared by MACH Energy Australia Pty Ltd dated 30 January 2017
- (d) Environmental Assessment titled *Mount Pleasant Operation Mine Optimisation Modification* prepared by MACH Energy Australia Pty Ltd, dated 31 May 2017, including the *Response to Submissions* and covering letter, dated 23 November 2017 and additional information, dated 15 February 2018, provided by the Applicant in support of the application
- (e) Environmental Assessment titled *Mount Pleasant Operations Rail Modification* prepared by MACH Energy Australia Pty Ltd, dated 18 December 2017, including the *Response to Submissions*, dated 25 June 2018 and additional information, dated 14 August 2018, 7 September 2018 and 24 September 2018, provided by the Applicant in support of the application.

<b>EEC</b>	Endangered ecological community, as defined under the BC Act and/or EPBC Act
<b>EIS</b>	The Environmental Impact Statement titled <i>Mount Pleasant Optimisation Project Environmental Impact Statement</i> , prepared by MACH Energy Australia Pty Ltd, dated January 2021, submitted with the application for consent for the development, including the Applicant's response to submissions and additional information provided by the Applicant in support of the application
<b>Environment</b>	Includes all aspects of the surroundings of humans, whether affecting any human as an individual or in his or her social groupings
<b>EPA</b>	NSW Environment Protection Authority
<b>EP&amp;A Act</b>	<i>Environmental Planning and Assessment Act 1979</i>
<b>EP&amp;A Regulation</b>	<i>Environmental Planning and Assessment Regulation 2021</i>
<b>EPBC Act</b>	Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i>
<b>EPL</b>	Environment Protection Licence under the POEO Act
<b>Evening</b>	The period from 6.00 pm to 10.00 pm
<b>Feasible</b>	Means what is possible and practical in the circumstances
<b>Fisheries NSW</b>	Fisheries Branch of the Primary Industries Group within the Department
<b>GDE</b>	Groundwater Dependent Ecosystem
<b>GHGEs</b>	Greenhouse gas emissions
<b>Global Warming Potential</b>	Energy that the emissions of 1 tonne of a gas will absorb over a given period of time, relative to the emissions of 1 tonne of CO <sub>2</sub>
<b>Heavy vehicle</b>	A vehicle that has a combined Gross Vehicle Mass or Aggregate Trailer Mass of more than 4.5 tonnes
<b>Heritage NSW</b>	Heritage NSW within the Department of Premier and Cabinet
<b>Heritage item</b>	An Aboriginal object, an Aboriginal place, or a place, building, work, relic, moveable object, tree or precinct of heritage significance, that is listed under any of the following: <ul style="list-style-type: none"> <li>• the State Heritage Register under the <i>Heritage Act 1977</i>;</li> <li>• a state agency heritage and conservation register under section 170 of the <i>Heritage Act 1977</i>;</li> <li>• a Local Environmental Plan under the EP&amp;A Act;</li> <li>• the World Heritage List;</li> <li>• the National Heritage List or Commonwealth Heritage List under the EPBC Act;</li> <li>or</li> <li>• anything identified as a heritage item under the conditions of this consent</li> </ul>
<b>Incident</b>	An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance
<b>Laden trains</b>	Trains transporting mining products or materials to or from the site



<b>Land</b>	Has the same meaning as the definition of the term in section 1.4 the EP&A Act, except for where the term is used in the noise and air quality conditions in PART B of this consent where it is defined to mean the whole of a lot, or contiguous lots owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this consent		
<b>LGA</b>	Local Government Area		
<b>LSC</b>	Land and Soil Capability as defined under <i>The Land and Soil Capability Assessment Scheme – Second Approximation</i> (Office of Environment and Heritage, 2012)		
<b>Material harm</b>	<p>Is harm to the environment that:</p> <ul style="list-style-type: none"> <li>involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial, or</li> <li>results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment)</li> </ul> <p>This definition excludes “harm” that is authorised under either this consent or any other statutory approval</p>		
<b>MEG</b>	Regional NSW – Mining, Exploration and Geoscience		
<b>MIA</b>	Mine Infrastructure Area		
<b>Mine-Owned Land</b>	Land owned by a mining, petroleum or extractive industry company (or its subsidiary or related party)		
<b>Mine closure</b>	Decommissioning and final rehabilitation of the site following the cessation of mining operations		
<b>Mine water</b>	Water that accumulates within, or drains from, active mining and infrastructure areas and any other areas where runoff may have come into contact with carbonaceous or saline material associated with mining operations		
<b>Minimise</b>	Implement all reasonable and feasible mitigation measures to reduce the impacts of the development		
<b>Mining operations</b>	The carrying out of mining, including the extraction, processing, stockpiling and transportation of coal on the site and the associated removal, storage and/or emplacement of vegetation, topsoil, overburden, tailings and reject material		
<b>Minister</b>	NSW Minister for Planning, or delegate		
<b>Minor</b>	Not very large, important or serious		
<b>Mitigation</b>	Activities associated with reducing the impacts of the development		
<b>Negligible</b>	Small and unimportant, such as to be not worth considering		
<b>NGERS</b>	National Greenhouse and Energy Reporting scheme, established under the <i>National Greenhouse and Energy Reporting Act 2007</i>		
<b>Night</b>	The period from 10.00 pm to 7.00 am on Monday to Saturday, and 10.00 pm to 8.00 am on Sundays and Public Holidays		
<b>Noise sensitive areas</b>	Areas where mining operations are being carried out that have potential to lead to increased noise at privately-owned residences, such as elevated areas or areas near the boundary of the site		
<b>Non-compliance</b>	An occurrence, set of circumstances or development that is a breach of this consent		
<b>‘Non-road’ equipment</b>	<b>mobile</b>	<b>diesel</b>	Mobile equipment used in mining operations that is fitted with a diesel engine with a capacity >30 litres and that is self-propelled or transportable and primarily designed for off-road use
<b>NP&amp;W Act</b>	<i>National Parks and Wildlife Act 1974</i>		
<b>NPfl</b>	<i>NSW Noise Policy for Industry 2017</i>		
<b>NRAR</b>	NSW Natural Resources Access Regulator		
<b>Over-dimensional</b>	Over-mass, over-size or over-length vehicles		
<b>PA</b>	Planning agreement within the meaning of the term in section 7.4 of the EP&A Act		
<b>Planning Secretary</b>	Planning Secretary under the EP&A Act, or nominee		

<b>POEO Act</b>	<i>Protection of the Environment Operations Act 1997</i>
<b>Pre-construction activities</b>	Pre-construction works that may be required for the development, including surveys, acquisitions, fencing, investigative or geotechnical drilling and/or excavation, minor clearing, minor access roads, minor adjustments and/or relocation of services/utilities, associated temporary buildings and amenities, and works which allow isolation of the site so that access for construction can be provided.
<b>Privately-owned land</b>	Land that is not owned by a public agency or a mining, petroleum or extractive industry company (or its subsidiary or related party)
<b>Public infrastructure</b>	Linear and related infrastructure that provides services to the general public, such as roads, railways, water supply, drainage, sewerage, gas supply, electricity, telephone, telecommunications, etc.
<b>Reasonable</b>	Means applying judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
<b>Registered Aboriginal Parties</b>	As described in the <i>National Parks and Wildlife Regulation 2019</i>
<b>Rehabilitation</b>	The restoration of land disturbed by the development to a condition which is safe, stable and non-polluting having regard to approved post mining land uses and the rehabilitation objectives and outcomes referenced within this consent
<b>Remediation</b>	Activities associated with partially or fully repairing or rehabilitating the impacts of the development or controlling the environmental consequences of this impact
<b>Residence</b>	Existing or approved dwelling at the date of grant of this consent
<b>Resources Regulator</b>	NSW Resources Regulator
<b>RFS</b>	NSW Rural Fire Service
<b>ROM</b>	Run-of-mine
<b>Stage 2 CHPP</b>	Coal handling and processing plant modules constructed under this consent (i.e. excludes any coal handling and processing infrastructure constructed under previous consents)
<b>Site</b>	The land defined in Appendix 1
<b>TfNSW</b>	Transport for NSW

## SCHEDULE 2

### PART A ADMINISTRATIVE CONDITIONS

#### OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

- A1. In addition to meeting the specific performance measures and criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction and operation of the development, and any rehabilitation required under this consent.

#### TERMS OF CONSENT

- A2. The development may only be carried out:
- (a) in compliance with the conditions of this consent;
  - (b) in accordance with all written directions of the Planning Secretary;
  - (c) generally in accordance with the EIS and EAs; and
  - (d) generally in accordance with the Development Layout in Appendix 2.
- A3. Consistent with the requirements in this consent, the Planning Secretary may make written directions to the Applicant in relation to:
- (a) the content of any strategy, study, system, plan, program, review, audit, notification, report or correspondence submitted under or otherwise made in relation to this consent; and
  - (b) the implementation of any actions or measures contained in any such document referred to in condition A3(a).
- A4. The conditions of this consent and directions of the Planning Secretary prevail to the extent of any inconsistency, ambiguity or conflict between them and any document/s listed in condition A2(c). In the event of an inconsistency, ambiguity or conflict between any of the document/s listed in condition A2(c), the most recent document prevails to the extent of the inconsistency, ambiguity or conflict.

#### LIMITS OF CONSENT

##### Mining operations

- A5. Mining operations may be carried out on the site, within the approved disturbance area, until 22 December 2048.

##### Notes:

- *Under this consent, the Applicant is required to decommission and rehabilitate the site and carry out other requirements in relation to mining operations. Consequently, this consent will continue to apply in all respects other than to permit the carrying out of mining operations until the rehabilitation of the site and other requirements have been carried out to the required standard.*
- *Mining operations and rehabilitation are also regulated under the Mining Act 1992.*

##### Coal Extraction and Transportation

- A6. A maximum of 21 million tonnes of ROM coal may be extracted from the site in any calendar year.
- A7. A maximum of 17 million tonnes of product coal may be transported from the site in any calendar year.
- A8. Product coal may only be transported from the site by rail.
- A9. A maximum of 10 laden trains may leave the site in any 24-hour period.

##### Hours of Operation

- A10. The Applicant may undertake mining operations 24 hours a day, 7 days a week.

*Note: For limitations on blasting operations see condition B14.*

##### Identification of Approved Disturbance Area

- A11. Within three months of commencement of development under this consent, the Applicant must provide to the Department a survey plan (or spatial files in a format agreed by the Planning Secretary) of the boundaries of the approved disturbance areas.

## NOTIFICATION OF COMMENCEMENT

- A12. The date of commencement of each of the following phases of the development must be notified to the Department in writing, at least two weeks before that date:
- commencement of development under this consent;
  - commencement of construction of the Northern Link Road;
  - extraction of more than 10.5 million tonnes of ROM coal from the site in any calendar year;
  - cessation of mining operations (i.e. mine closure); and
  - any period of suspension of mining operations (i.e. care and maintenance).
- A13. If the phases of the development are to be further staged, the Department must be notified in writing at least two weeks prior to the commencement of each stage, of the date of commencement and the development to be carried out in that stage.

## SURRENDER OF EXISTING CONSENTS

- A14. Within 12 months of the date of commencement of development under this consent, or other timeframe agreed by the Planning Secretary, the Applicant must surrender the existing development consent for the Mount Pleasant Open Cut Coal Mine (DA 92/97) in accordance with the EP&A Regulation.
- A15. Upon the commencement of development under this consent, and before the surrender of existing development consents required under condition A14, the conditions of this consent prevail to the extent of any inconsistency with the conditions of those consents.
- Note:** *This requirement does not extend to the surrender of construction and occupation certificates for existing and proposed building works under the former Part 4A of the EP&A Act or Part 6 of the EP&A Act as applies from 1 September 2018. The surrender should not be understood as implying that works legally constructed under a valid consent or approval can no longer be legally maintained or used.*

## PLANNING AGREEMENTS

- A16. Within six months of the date of commencement of development under this consent, or other timeframe agreed by the Planning Secretary, the Applicant must enter into a PA with Council in accordance with:
- Division 7.1 of Part 7 of the EP&A Act; and
  - the terms of the offer in Appendix 7.
- A17. If the Applicant and Council do not enter into a PA within the timeframe under condition A16, then within a further three months, the Applicant must make a Section 7.12 of the EP&A Act contribution to Council of \$9.52 million which is to be paid in equal annual instalments over a period of 10 years. The amount to be paid is to be adjusted at the time of the actual payment, in accordance with the provisions of the *Muswellbrook Shire Council Section 94A Development Contributions Plan 2010*.
- A18. Further to conditions A16 and A17, within six months of the date of commencement of development under this consent, or other timeframe agreed by the Planning Secretary, the Applicant must also enter into a PA with Upper Hunter Shire Council in accordance with:
- Division 7.1 of Part 7 of the EP&A Act; and
  - the terms of the offer in Appendix 8.
- A19. If there is any dispute between the Applicant, Council and/or Upper Hunter Shire Council in regards to conditions A16, A17 and A18 then either party may refer the matter to the Planning Secretary for resolution.

## COMMUNITY CONSULTATIVE COMMITTEE

- A20. Within six months of the commencement of development under this consent, a Community Consultative Committee (CCC) must be established for the development in accordance with the Department's *Community Consultative Committee Guidelines: State Significant Projects* (2019). The CCC must continue to operate during the life of the development, or other timeframe agreed by the Planning Secretary.
- Notes:**
- The CCC is an advisory committee only.*
  - In accordance with the Guidelines, the Committee should comprise an independent chair and appropriate representation from the Applicant, Council, affected stakeholder groups and the local community.*
- A21. With the approval of the Planning Secretary, the Applicant may combine the CCC required by this consent with any similar CCC required by a consent or approval for any adjoining mine subject to common, shared or related ownership or management.

## EVIDENCE OF CONSULTATION

A22. Where conditions of this consent require consultation with an identified party, the Applicant must:

- (a) consult with the relevant party prior to submitting the subject document; and
- (b) provide details of the consultation undertaken, including:
  - (i) the outcome of that consultation, matters resolved and unresolved; and
  - (ii) details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has or proposes to address the matters not resolved.

**Note:** *The details required to be provided under A22(b) can be provided as separate correspondence and do not need to be included in the management plan document itself.*

## APPLICATION OF EXISTING STRATEGIES, PLANS OR PROGRAMS

A23. Prior to the approval of management plans under this consent, the Applicant must continue to implement any equivalent or similar management plan/s required under DA 92/97, to the satisfaction of the Planning Secretary.

## STAGING, COMBINING AND UPDATING STRATEGIES, PLANS OR PROGRAMS

A24. With the approval of the Planning Secretary, the Applicant may:

- (a) prepare and submit any strategy, plan or program required by this consent on a staged basis (if a clear description is provided as to the specific stage and scope of the development to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program);
- (b) combine any strategy, plan or program required by this consent (if a clear relationship is demonstrated between the strategies, plans or programs that are proposed to be combined); and
- (c) update any strategy, plan or program required by this consent (to ensure the strategies, plans and programs required under this consent are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the development).

A25. If the Planning Secretary agrees, a strategy, plan or program may be staged or updated without consultation being undertaken with all parties required to be consulted in the relevant condition in this consent.

A26. If the Planning Secretary agrees, a strategy, plan or program may be staged without addressing particular requirements of the relevant condition of this consent if those requirements are not applicable to the particular stage.

## PROTECTION OF PUBLIC INFRASTRUCTURE

A27. 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<sup>a</sup> that is damaged by carrying out the development; and
- (b) relocate, or pay the full costs associated with relocating, any public infrastructure<sup>a</sup> that needs to be relocated as a result of the development.

<sup>a</sup> *This condition does not apply to any damage to roads caused as a result of general road usage or otherwise addressed by contributions required by condition A16 and A17 or to damage that has been compensated under the Mining Act 1992.*

A28. The Applicant must ensure that mining activities on the site are not reasonably likely to cause damage to road reserves outside of the site.

A29. Should the increased elevation of the development's waste rock emplacement result in adverse impacts on the reception of broadcasting services from the Rossgole Tower transmission facilities, the Applicant must implement make-good provisions to the satisfaction of the Planning Secretary (such as raising the existing tower or construction of a re-transmission station) which would meet the siting and technical requirements of the Australian Communications and Media Authority.

## DEMOLITION

A30. All demolition must be carried out in accordance with *Australian Standard AS 2601-2001 The Demolition of Structures* (Standards Australia, 2001).

## STRUCTURAL ADEQUACY

A31. All new buildings and structures, and any alterations or additions to existing buildings and structures, that are part of the development, must be constructed in accordance with the relevant requirements of the BCA.

### Notes:

- *Under Part 6 of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.*
- *The Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021 sets out the requirements for the certification of the development.*

## **OPERATION OF PLANT AND EQUIPMENT**

A32. All plant and equipment used on site, or to monitor the performance of the development must be:

- (a) maintained in a proper and efficient condition; and
- (b) operated in a proper and efficient manner.

## **COMPLIANCE**

A33. The Applicant must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.

## **APPLICABILITY OF GUIDELINES**

A34. References in the conditions of this consent to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of inclusion in the condition.

A35. Notwithstanding condition A34, consistent with the conditions of this consent and without altering any limits or criteria in this consent, the Planning Secretary may, in respect of ongoing monitoring and management obligations, agree to or require compliance with an updated or revised version of such a guideline, protocol, Standard or policy, or a replacement of them.

## **CROWN LAND**

A36. The Applicant must consult with DPE – Crown Lands prior to undertaking any development on Crown Land or Crown Roads.

### **Notes:**

- *Under section 265 of the Mining Act 1992, the Applicant is required to enter into a compensation agreement with DPE – Crown Lands prior to undertaking any mining operations or related activities on Crown land or Crown roads within a mining lease.*
- *Under section 141 of the Mining Act 1992, the Applicant is required to enter into an access arrangement with DPE – Crown Lands prior to undertaking any prospecting operations on Crown land or Crown roads within an exploration licence.*

## PART B SPECIFIC ENVIRONMENTAL CONDITIONS

### NOISE

#### Noise Criteria

- B1. Except for the noise affected land in condition C1, the Applicant must ensure that the operational noise generated by the development does not exceed the criteria in Table 1.

**Table 1:** Operational noise criteria dB(A)

Noise Assessment Location <sup>a</sup>	Day	Evening	Night	Night
	L <sub>Aeq</sub> (15 min)	L <sub>Aeq</sub> (15 min)	L <sub>Aeq</sub> (15 min)	L <sub>A1</sub> (1 min)
<b>Residences on Privately-Owned Land</b>				
19, 77, 79, 84a, 140c, 169, 171, 172, 172b, 172c, 181c, 189, 190, 191, 192, 202, 203, 203b, 203c, 207, 213, 214, 215, 216, 216b, 217, 218, 219, 220, 221, 222, 223, 223b, 224, 225, 289, 526, 667a	40	37	37	45
20, 21, 35, 35b, 67, 74, 86a	40	38	38	45
43	40	39	39	45
43b	40	39	39	46
96	40	39	39	48
47	40	40	40	45
102	40	40	40	48
108	40	40	40	50
140a	40	40	40	47
82, 83, 86b, 310, 180b, 197, 202b, 212, 212b	40	36	36	45
112	40	36	36	47
194, 195, 547	42	41	36	45
193	42	41	37	45
All other residences in Noise Assessment Group (NAG) 1	40	36	36	45
All other residences in NAG 2	42	41	35	45
Other privately-owned residences	40	35	35	45

<sup>a</sup> The Noise Assessment Locations and NAGs referred to in Table 1, are shown in Appendix 3.

Noise generated by the development must be monitored and measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Noise Policy for Industry (EPA, 2017). The noise enhancing meteorological conditions determined by monitoring at the meteorological station required under condition B38 and as defined in Part D of the NSW Noise Policy for Industry (EPA, 2017) apply to the noise criteria in Table 1.

- B2. The noise criteria in Table 1 do not apply if the Applicant has an agreement with the owner/s of the relevant residence or land to exceed the noise criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

#### Temporary Construction Noise Limits

- B3. With the written agreement of the Planning Secretary, the Applicant may seek temporary construction noise limits above the operational noise criteria in Table 1, including for construction works outside of standard hours. In order to seek a temporary construction noise limit, the Applicant must develop a Construction Noise Protocol to the satisfaction of the Planning Secretary. This protocol must:

- (a) be prepared in consultation with the EPA and any residents who may be affected by the noise generated by these works;
  - (b) specify the construction works to which the temporary construction noise limits would apply and provide justification for these limits; and
  - (c) address the relevant requirements of the *Interim Construction Noise Guideline* (DECC, 2009).
- B4. The Applicant must continue to operate in accordance with the noise criteria in Table 1 until and unless a Construction Noise Protocol for the specified construction works is approved by the Planning Secretary.
- B5. The Applicant must implement any Construction Noise Protocol approved by the Planning Secretary.

#### **Noise Operating Conditions**

- B6. The Applicant must:
- (a) take all reasonable and feasible steps to minimise noise from construction and operational activities, including low frequency noise and other audible characteristics, as well as road noise associated with the development;
  - (b) implement reasonable and feasible noise attenuation measures on all plant and equipment (other than light vehicles) that will operate in noise sensitive areas;
  - (c) take all reasonable steps to minimise the noise impacts of the development in noise sensitive areas during the evening and night;
  - (d) take all reasonable steps to minimise the noise impacts of the development during noise-enhancing meteorological conditions;
  - (e) operate a comprehensive noise management system that uses a combination of predictive meteorological forecasting and real-time noise monitoring data to guide the day-to-day planning of mining operations, and the implementation of both proactive and reactive noise mitigation measures to ensure compliance with the relevant conditions of this consent;
  - (f) carry out regular attended noise monitoring (at least once a month, unless otherwise agreed by the Planning Secretary) to determine whether the development is complying with the relevant conditions of this consent; and
  - (g) regularly assess the noise monitoring data and modify or stop operations on the site to ensure compliance with the relevant conditions of this consent.
- B7. Any MOD4 Rail maintenance or rectification works outside of the Mining Lease Boundary that will be audible at the nearest private residences must be carried out during Standard Construction Hours (7 am to 6 pm, Monday to Friday; and 8 am to 1 pm on Saturdays), unless the works are:
- (a) required by:
    - (i) NSW Police; or
    - (ii) a public authority for the delivery of vehicles, plant or materials; or
  - (b) required in an emergency to avoid the loss of life, damage to property or to prevent material harm to the environment;
  - (c) approved under a Construction Noise Protocol under condition B3.

**Note:** *The Mining Lease Boundary is shown in Appendix 2.*

- B8. If the Applicant proposes to undertake MOD4 Rail construction works (outside of the Mining Lease Boundary) outside the hours specified in condition B7 above, then the Applicant must prepare an Out of Hours Work Protocol for these works, to the satisfaction of the Planning Secretary. This protocol must:
- (a) be prepared in consultation with the EPA and any residents who may be affected by the noise generated by these works;
  - (b) address the relevant requirements of the *Interim Construction Noise Guideline* (DECC, 2009); and
  - (c) be approved by the Planning Secretary before any out of hours construction works are carried out.

The Applicant must implement the Out of Hours Work Protocol as approved by the Planning Secretary.

**Note:** *For areas where construction noise is predicted to be at or below operational noise criteria at sensitive receptors, this is likely to provide sufficient justification for the need to operate outside of recommended standard hours as specified in the Interim Construction Noise Guideline (DECC, 2009).*

#### **Noise Management Plan**

- B9. The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:
- (a) be submitted for approval within six months of the commencement of development under this consent;



- (b) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
- (c) be prepared in consultation with the EPA;
- (d) describe the measures to be implemented to ensure:
  - (i) compliance with the noise criteria and operating conditions of this consent;
  - (ii) best practice management is being employed; and
  - (iii) noise impacts of the development are minimised during noise-enhancing meteorological conditions;
- (e) describe the measures to minimise development related road traffic noise generated on public roads;
- (f) describe the noise management system in detail; and
- (g) include a monitoring program that:
  - (i) uses a combination of real-time and supplementary attended monitoring to evaluate the performance of the development;
  - (ii) monitors noise at locations representative of the most affected residences;
  - (iii) includes a program to calibrate and validate the real-time noise monitoring results with the attended monitoring results over time;
  - (iv) adequately supports the noise management system;
  - (v) includes a protocol for distinguishing noise emissions of the development from any neighbouring developments; and
  - (vi) includes a protocol for identifying any noise-related exceedance, incident or non-compliance and for notifying the Department and relevant stakeholders of any such event.

B10. The Applicant must not commence construction of the Northern Link Road or extract more than 10.5 Mt of ROM coal from the site in a calendar year until the Noise Management Plan is approved by the Planning Secretary.

B11. The Applicant must implement the Noise Management Plan as approved by the Planning Secretary.

## BLASTING

### Blasting Criteria

B12. The Applicant must ensure that blasting on the site does not cause exceedances of the criteria at the locations in Table 2.

**Table 2:** *Blasting criteria*

<b>Location</b>	<b>Airblast overpressure (dB(Lin Peak))</b>	<b>Ground vibration (mm/s)</b>	<b>Allowable exceedance</b>
Residence on privately-owned land <sup>a</sup>	120	10	0%
	115	5	5% of the total number of blasts over a calendar year
Mine-owned residences	-	10	0%
Historic heritage sites <sup>b</sup>	-	10	0%
Other public infrastructure	-	50 (or a limit determined by the structural design methodology in AS 2187.2 - 2006, or its latest version)	0%

<sup>a</sup> The locations referred to in Table 2 are shown in Appendix 3.

<sup>b</sup> These limits do not apply to historic heritage sites located within the approved disturbance area

B13. The blasting criteria in Table 2 do not apply if the Applicant has an agreement with the owner/s of the relevant residence or infrastructure to exceed the blasting criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

## Blasting Hours

B14. The Applicant must only carry out blasting for the development between 9.00 am and 5.00 pm (Monday to Saturday inclusive). No blasting is allowed on Sundays, public holidays or any other time without the prior written approval of the Planning Secretary.

## Blasting Frequency

B15. The Applicant may carry out a maximum of:

- (a) 2 single blast events<sup>a</sup> a day; and
- (b) 8 single blast events<sup>a</sup> a week, averaged over a calendar year.

B16. Condition B15 does not apply to single blast events<sup>a</sup> that generate ground vibration of 0.5 mm/s or less at any residence on privately-owned land, or to blast misfires or blasts required to ensure the safety of the mine, its workers or the general public.

<sup>a</sup> Within conditions B15 and B16, 'single blast event' means a blast which involves either a single detonation or a number of individual blasts fired in quick succession in a discrete area of the development. Should an additional blast be required after a blast misfire, this additional blast and the blast misfire are counted as a single blast event.

## Property Inspections

B17. If the Applicant receives a written request from the owner of any privately-owned land within 3 kilometres of any active open cut mining pit on the site, or any other landowner where the Planning Secretary is satisfied an inspection is warranted, for a property inspection to establish the baseline condition of any buildings and structures on their land, or to have a previous property inspection updated, then within two months of receiving this request (or, in the case of a request for an inspection outside the 3 kilometres, within two months of receiving notice that the Planning Secretary is satisfied that an inspection is warranted) the Applicant must:

- (a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties to:
  - (i) establish the baseline condition of any buildings and other structures on the land, or update the previous property inspection report; and
  - (ii) identify measures that should be implemented to minimise the potential blasting impacts of the development on these buildings and structures; and
- (b) give the landowner a copy of the new or updated property inspection report.

B18. If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Applicant or the landowner disagrees with the findings of the property inspection report, either party may refer the matter to the Planning Secretary for resolution.

## Property Investigations

B19. If the owner of any privately-owned land within 3 kilometres of any active open cut mining pit on the site or any other landowner where the Planning Secretary is satisfied an investigation is warranted, claims in writing that buildings or structures on their land have been damaged as a result of blasting on the site, then within two months of receiving this written claim (or, in the case of a request for an inspection outside the 3 kilometres, within two months of receiving notice that the Planning Secretary is satisfied that an inspection is warranted) the Applicant must:

- (a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties to investigate the claim; and
- (b) give the landowner a copy of the property investigation report.

B20. If this independent property investigation confirms the landowner's claim, and both parties agree with these findings, then the Applicant must repair the damage to the satisfaction of the Planning Secretary.

B21. If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Applicant or the landowner disagrees with the findings of the independent property investigation, then either party may refer the matter to the Planning Secretary for resolution.

## Blast Operating Conditions

B22. The Applicant must:

- (a) take all reasonable steps to:
  - (i) ensure the safety of people and livestock from blasting impacts of the development;
  - (ii) protect public and private infrastructure and property in the vicinity of the site from blasting damage associated with the development; and
  - (iii) minimise blast-related dust and fume emissions;
- (b) ensure that blasting on the site does not damage heritage items (outside the approved disturbance area – see Appendix 5), and develop specific measures to protect heritage items from any blasting damage associated with the development;

- (c) minimise the frequency and duration of any public road closures for blasting, and use all reasonable efforts to avoid road closures during peak traffic periods;
- (d) operate a comprehensive blast management system that uses a combination of meteorological forecasts and predictive blast modelling to guide the planning of blasts to minimise blasting impacts;
- (e) operate a suitable system to enable interested members of the public to get up-to-date information on the proposed blasting schedule on the site and any associated road closures, including notification via SMS message of the blasting schedule and associated road closures for that day and any variations to that schedule and closures;
- (f) use all reasonable efforts to co-ordinate the timing of blasting at the site with any nearby mines to minimise cumulative blasting impacts; and
- (g) carry out regular blast monitoring to determine whether the development is complying with the relevant conditions of this consent.

B23. The Applicant must not undertake blasting on the site within 500 metres of any public road or any land outside the site not owned by the Applicant, unless the blast generates ground vibration of 0.5 mm/s or less at that location, or the Applicant has:

- (a) a written agreement with the relevant infrastructure owner or landowner to allow blasting to be carried out closer to the public road or land, and the Applicant has advised the Department in writing of the terms of this agreement; or
- (b) demonstrated, to the satisfaction of the Planning Secretary, that the blasting can be carried out closer to the public road or land without compromising the safety of people or livestock or damaging the road or other buildings and structures, and updated the Blast Management Plan to include specific mitigation measures to be implemented while blasting is being carried out within 500 metres of the road or land.

#### **Blast Management Plan**

B24. The Applicant must prepare a Blast Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:

- (a) be submitted for approval within six months of the commencement of development under this consent;
- (b) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
- (c) be prepared in consultation with the EPA;
- (d) describe the blast management system and the measures that will be implemented to ensure compliance with the blasting criteria and conditions of this consent;
- (e) include a Blast Fume Management Strategy for:
  - (i) minimising blast fume emissions;
  - (ii) rating and recording blast fume events; and
  - (iii) reporting significant blast fume events to the Department and the EPA;
- (f) include a Road Closure Management Plan for any blasting within 500 metres of a public road, that has been prepared in consultation with relevant roads authorities and includes provisions for:
  - (i) minimising the duration of closures, both on a per event basis and weekly basis;
  - (ii) avoiding closures during peak traffic periods as far as reasonable; and
  - (iii) using reasonable efforts to co-ordinate closures with nearby mines to minimise the cumulative effect of road closures;
- (g) identify any agreed alternative ground vibration limits for public or private infrastructure in the vicinity of the site (if relevant);
- (h) include a strategy to manage potential blast interactions with nearby mines;
- (i) include a strategy to monitor, mitigate and manage the effects of blasting on heritage items, including details of baseline (i.e. pre-blasting) and ongoing risk-based dilapidation surveys (subject to landowner access arrangements);
- (j) include a monitoring program for evaluating and reporting on compliance with the relevant conditions of this consent (including but not limited to condition B22(b));
- (k) include a protocol for identifying any blast-related exceedance, incident or non-compliance and for notifying the Department, the EPA and relevant stakeholders of these events;
- (l) include public notification procedures to enable members of the public, particularly surrounding residents, to get up-to-date information on the proposed blasting schedule; and
- (m) include a protocol for investigating and responding to blast-related complaints.

B25. The Applicant must not undertake any blasting north of Castlerock Road until the Blast Management Plan is approved by the Planning Secretary.

B26. The Applicant must implement the Blast Management Plan as approved by the Planning Secretary.

## AIR QUALITY AND GREENHOUSE GAS EMISSIONS

### Odour

B27. The Applicant must ensure that no offensive odours, as defined under the POEO Act, are emitted from the site.

### Air Quality Criteria

B28. Except for the air quality affected land in condition C1, the Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria listed in Table 3 at any residence on privately-owned land.

**Table 3:** Air quality criteria

Pollutant	Averaging period	Criterion
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	<sup>a, c</sup> 25 µg/m <sup>3</sup>
	24 hour	<sup>b</sup> 50 µg/m <sup>3</sup>
Particulate matter < 2.5 µm (PM <sub>2.5</sub> )	Annual	<sup>a, c</sup> 8 µg/m <sup>3</sup>
	24 hour	<sup>b</sup> 25 µg/m <sup>3</sup>
Total suspended particulate (TSP) matter	Annual	<sup>a, c</sup> 90 µg/m <sup>3</sup>

<sup>a</sup> Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources).

<sup>b</sup> Incremental impact (i.e. incremental increase in concentrations due to the development on its own).

<sup>c</sup> Excludes extraordinary events such as bushfires, prescribed burning, dust storms, fire incidents or any other activity agreed by the Planning Secretary.

B29. The air quality criteria in Table 3 do not apply if the Applicant has an agreement with the owner/s of the relevant residence or land to exceed the air quality criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

### Mine-owned Land

B30. Particulate matter emissions generated by the development must not exceed the criteria listed in Table 3 at any occupied residence on mine-owned land (including land owned by another mining company) unless:

- the tenant and landowner (if the residence is owned by another mining company) have been notified of any health risks associated with such exceedances in accordance with the notification requirements under PART C of this consent;
- the tenant of any land owned by the Applicant can terminate their tenancy agreement without penalty at any time, subject to giving 14 days' notice;
- air quality monitoring is regularly undertaken to inform the tenant and landowner (if the residence is owned by another mining company) of the likely particulate matter emissions at the residence; and
- data from this monitoring is presented to the tenant and landowner in an appropriate format for a medical practitioner to assist the tenant and landowner in making informed decisions on the health risks associated with occupying the property.

### Air Quality and Greenhouse Gas Operating Conditions

B31. The Applicant must:

- take all reasonable and feasible steps to:
  - minimise odour, fume and particulate matter (including PM<sub>10</sub> and PM<sub>2.5</sub>) emissions of the development, paying particular attention to minimising wheel-generated haul road emissions;
  - eliminate or minimise the risk of spontaneous combustion;
  - improve energy efficiency and minimise Scope 1 and Scope 2 GHGs generated by the development;
  - minimise any visible off-site air pollution generated by the development; and
  - minimise the extent of potential dust generating surfaces exposed on the site at any given point in time;

- (b) ensure that all new 'non-road' mobile diesel equipment used in undertaking the development includes reasonable and feasible diesel emissions reduction technology;
- (c) operate a comprehensive air quality management system that uses a combination of predictive meteorological forecasting and real-time air quality monitoring data to guide the day-to-day planning of mining operations and the implementation of both proactive and reactive air quality mitigation measures to ensure compliance with the relevant conditions of this consent;
- (d) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see Note c to Table 3 above);
- (e) minimise air quality impacts of the development on air quality-affected land referred to in condition C1 for as long as the land remains privately-owned (i.e. until it is acquired);
- (f) make all reasonable efforts to co-ordinate air quality management on the site with the air quality management at nearby mines to minimise cumulative air quality impacts;
- (g) carry out regular air quality monitoring to determine whether the development is complying with the relevant conditions of this consent; and
- (h) regularly assess meteorological and air quality monitoring data, and modify operations on the site to ensure compliance with the relevant conditions of this consent.

#### **Air Quality and Greenhouse Gas Management Plan**

- B32. The Applicant must prepare an Air Quality and Greenhouse Gas Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:
- (a) be submitted for approval within six months of the commencement of development under this consent;
  - (b) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
  - (c) be prepared in consultation with the CAS and EPA;
  - (d) describe the measures to be implemented to ensure:
    - (i) compliance with the air quality criteria and operating conditions of this consent;
    - (ii) best practice management is being employed to:
      - minimise the development's air quality impacts;
      - minimise the development's Scope 1 and 2 GHGEs; and
      - improve the development's energy efficiency; and
    - (iii) the air quality impacts of the development are minimised during adverse meteorological conditions and extraordinary events;
  - (e) describe the air quality management system in detail; and
  - (f) include an air quality monitoring program, undertaken in accordance with the *Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales* (DEC, 2007), that:
    - (i) includes an estimate of the emissions of PM<sub>2.5</sub> per kilometre travelled from all 'non-road' mobile diesel equipment used for the development;
    - (ii) uses monitors to evaluate the performance of the development against the air quality criteria in this consent and to guide day-to-day planning of mining operations;
    - (iii) adequately supports the air quality management system;
    - (iv) includes a protocol for distinguishing the dust emissions of the development from any neighbouring developments; and
    - (v) includes a protocol for identifying any air quality-related exceedance, incident or non-compliance and for notifying the Department and relevant stakeholders of these events.
- B33. The Applicant must not commence construction of the Northern Link Road or extract more than 10.5 Mt of ROM coal in a calendar year until the Air Quality and Greenhouse Gas Management Plan is approved by the Planning Secretary.
- B34. Within 12 months of approval of the Air Quality and Greenhouse Gas Management Plan and then every 3 years during the life of mining operations (and any period of suspension of ROM coal extraction and/or processing), the Air Quality and Greenhouse Gas Management Plan must be updated to include the following information in relation to Scope 1 and Scope 2 GHGEs:
- (a) a review of all available GHGE abatement measures relevant to the development;
  - (b) a review, to the satisfaction of the Planning Secretary, of the reasonable and feasible GHGE abatement measures, and economic considerations for the development;
  - (c) a 3-year action plan to investigate and implement all reasonable and feasible abatement measures to minimise GHGEs;

- (d) a description of measures to minimise long-term Scope 1 GHGEs. These measures are to:
- (i) have regard to the abatement measures and abatement options required by condition B34(a) and (b); and
  - (ii) be aimed at achieving, as soon as reasonably feasible but by 2034 at the latest, a 5-year rolling average by calendar year of the annual Scope 1 GHGE intensities of not more than 0.028 tonnes of CO<sub>2</sub>-e emitted from the development per tonne of ROM coal; and
- (e) a reporting of compliance with the performance measures in Table 4, and revise where reasonable and feasible to minimise GHGEs.

B35. The Applicant must implement the Air Quality and Greenhouse Gas Management Plan (and any update thereof), including any measures it describes, as approved by the Planning Secretary.

#### Minimisation of Greenhouse Gas Emissions

B36. The Applicant must comply with the performance measures in Table 4.

**Table 4:** Greenhouse gas performance measures

<b>Feature</b>	<b>Performance Measure</b>
Scope 1	<ul style="list-style-type: none"> <li>• Less than 0.87 million tonnes CO<sub>2</sub>-e emitted per calendar year, or lower emissions as determined under condition B34</li> <li>• Less than 0.80 million tonnes CO<sub>2</sub>-e emitted per calendar year (5-year rolling average), or lower emissions as determined under condition B34</li> <li>• Less than 13.9 million tonnes CO<sub>2</sub>-e emitted over the life of the development, or lower emissions as determined under condition B34</li> </ul>
Scope 2	<ul style="list-style-type: none"> <li>• Minimise CO<sub>2</sub>-e emissions by using electricity generated by renewable or carbon neutral energy sources where reasonable and feasible</li> </ul>

B37. In determining compliance with the performance measures in Table 4, the Planning Secretary will take into account any atypical or abnormal operating conditions, any exceedances already offset (or required to be offset or otherwise accounted for) under other applicable Commonwealth or State requirements (for example the NGERs scheme), changes in Global Warming Potential and/or any voluntary offsetting of CO<sub>2</sub>-e emissions by the Applicant. If, following this consideration, the Planning Secretary determines that the Applicant has exceeded any of these performance measures, including revised performance measures determined under condition B34, then the Applicant must offset the excess CO<sub>2</sub>-e emissions within six months of the Planning Secretary's determination, using a mechanism to the satisfaction of the Planning Secretary.

#### METEOROLOGICAL MONITORING

B38. Within three months of the commencement of development under this consent, the Applicant must ensure that there is a suitable meteorological station operating in the vicinity of the site that:

- (a) complies with the requirements in the Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales (DEC, 2007); and
- (b) is capable of measuring meteorological conditions in accordance with the *NSW Noise Policy for Industry* (EPA, 2017),

unless a suitable alternative is approved by the Planning Secretary following consultation with the EPA.

#### WATER

##### Water Supply

B39. The Applicant must ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of the development to match its available water supply.

B40. The Applicant must report on water extracted from the site each year (direct and indirect) in the Annual Review (referred to in condition D11), including water taken under each water licence.

**Note:** Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain all necessary water licences for the development prior to water take occurring, including during rehabilitation and post mine closure.

##### Compensatory Water Supply

B41. Prior to commencing construction of development under this consent, the Applicant must notify the owner of the bore listed in Table 5 that they may request monitoring of the listed bore to determine the level of drawdown from the development. In the event that monitoring data records drawdown of more than 2 metres as a result of the development, the Applicant must provide compensatory water in accordance with conditions B42 to B47.

**Table 5:** Private bore monitoring

Bore ID <sup>a</sup>	Receiver ID
Belgrave	143f

<sup>a</sup> The receiver ID and bore location referred to in Table 5 are shown in Appendix 4.

- B42. Within three months of the commencement of development under this consent, the Applicant must notify owners of licensed privately-owned groundwater bores that are predicted to have a drawdown of greater than 2 metres as a result of the development.
- B43. The Applicant must provide a compensatory water supply to any landowner of privately-owned land whose rightful water supply is adversely and directly impacted (other than an impact that is minor or negligible) as a result of the development, in consultation with DPE Water, and to the satisfaction of the Planning Secretary.
- B44. The compensatory water supply measures must provide an alternative long-term supply of water that is equivalent, in quality and volume, to the loss attributable to the development. Equivalent water supply should be provided (at least on an interim basis) as soon as practicable after the loss is identified, unless otherwise agreed with the landowner.
- B45. If the Applicant and the landowner cannot agree on whether the loss of water is attributed to the development or the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.
- B46. If the Applicant is unable to provide an alternative long-term supply of water, then the Applicant must provide compensation, to the satisfaction of the Planning Secretary.

**Notes:**

- The Water Management Plan (see condition B52) is required to include trigger levels for investigating potentially adverse impacts on water supplies.
- The burden of proof that any loss of surface water or groundwater access is not due to mining impacts rests with the Applicant.

- B47. In the event of any complaint relating to a privately-owned licensed groundwater bore which may, in the opinion of the Planning Secretary, have been adversely and directly impacted as a result of the development (other than an impact that is minor or negligible), the Applicant must, as soon as practicable, facilitate the provision of a temporary water supply, pending the outcome of any groundwater investigation and/or the provision of an alternative long-term supply of water as required under condition B44, to the satisfaction of the Planning Secretary.
- B48. Conditions B41 to B47 do not apply if the Applicant has a compensatory water agreement with the owner/s of the land and the Applicant has advised the Department in writing of the terms of this agreement.

**Water Discharges**

- B49. The Applicant must ensure that all surface discharges from the site comply with:
- discharge limits (both volume and quality) set for the development in any EPL; or
  - relevant provisions of the POEO Act or Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002.

**Water Management Performance Measures**

- B50. The Applicant must ensure that the development complies with the performance measures in Table 6.

**Table 6:** Water management performance measures

Feature	Performance Measure <sup>a</sup>
Water management – General	<ul style="list-style-type: none"> <li>• Maintain separation between clean and dirty (i.e. sediment-laden) and mine water management systems</li> <li>• Minimise the use of clean and potable water on the site</li> <li>• Maximise water recycling, reuse and sharing opportunities</li> <li>• Minimise the use of make-up water from external sources, including extraction from the Hunter River</li> <li>• Minimise the need for discharges to the Hunter River Salinity Trading Scheme</li> <li>• Design, install, operate and maintain water management systems in a proper and efficient manner</li> <li>• Minimise risks to the receiving environment and downstream water users</li> </ul>

<b>Feature</b>	<b>Performance Measure<sup>a</sup></b>
Alluvial aquifers	<ul style="list-style-type: none"> <li>Negligible impacts to alluvial aquifers as a result of the development, beyond those predicted in the document/s listed in condition A2(c), including: <ul style="list-style-type: none"> <li>negligible change in groundwater levels;</li> <li>negligible change in groundwater quality; and</li> <li>negligible impact to other groundwater users,</li> </ul> </li> <li>Maintain appropriate setbacks in accordance with the <i>Aquifer Interference Policy</i> (DPI, 2012)</li> <li>Protect GDEs surrounding the site by maintaining negligible impacts as a result of the development, beyond those predicted in the documents listed in condition A2(c)</li> </ul>
Erosion and sediment control works	<ul style="list-style-type: none"> <li>Design, install and maintain erosion and sediment controls in accordance with the guidance series <i>Managing Urban Stormwater: Soils and Construction</i> including <i>Volume 1: Blue Book</i> (Landcom, 2004), <i>Volume 2A: Installation of Services</i> (DECC, 2008), <i>Volume 2C: Unsealed Roads</i> (DECC, 2008), <i>Volume 2D: Main Road Construction</i> (DECC, 2008) and <i>Volume 2E: Mines and Quarries</i> (DECC, 2008)</li> <li>Design, install and maintain any creek crossings in accordance with the <i>Fisheries NSW Policy and Guidelines for Fish Habitat Conservation and Management</i> (DPI, 2013) and <i>Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings</i> (NSW Fisheries, 2003)</li> <li>Design, install and maintain any new infrastructure within 40 metres of watercourses in accordance with the guidance series for <i>Controlled Activities on Waterfront Land</i> (DPI Water, 2012)</li> </ul>
Clean water diversions and storage infrastructure	<ul style="list-style-type: none"> <li>Maximise, as far as reasonable, the diversion of clean water around disturbed areas on the site, except where clean water is captured for use on the site</li> </ul>
Sediment dams	<ul style="list-style-type: none"> <li>Design, install and maintain sediment dams in accordance with the guidance series <i>Managing Urban Stormwater: Soils and Construction – Volume 1</i> (Landcom, 2004) and <i>Volume 2E: Mines and Quarries</i> (DECC, 2008) and the requirements under the POEO Act</li> </ul>
Mine water storages	<ul style="list-style-type: none"> <li>Design, install and maintain mine water storage infrastructure to avoid unlicensed or uncontrolled discharge of mine water</li> <li>New mine water storages designed to contain the 1% AEP 24-hour-storm event and minimise permeability</li> <li>On-site storages (including mine infrastructure dams, groundwater storage and treatment dams) are suitably designed, installed and maintained (including to minimise permeability)</li> <li>Ensure adequate freeboards within all pit voids at all times to minimise the risk of discharge to surface waters</li> </ul>
Chemical and hydrocarbon storage	<ul style="list-style-type: none"> <li>Chemical and hydrocarbon products to be stored in bunded areas in accordance with the relevant Australian Standard</li> </ul>
Tailings storages	<ul style="list-style-type: none"> <li>Maximise dewatering and co-disposal of dewatered tailings from the Stage 2 CHPP within overburden emplacements</li> <li>Design and maintain tailings storage areas to prevent the movement of tailings seepage/leachate offsite</li> </ul>
Overburden emplacements	<ul style="list-style-type: none"> <li>Design, install and maintain emplacements to prevent migration of acid forming and potentially acid forming materials, and saline and sodic materials</li> <li>Design, install and maintain out-of-pit emplacements to prevent and/or manage long term saline seepage</li> </ul>
Aquatic and riparian ecosystems	<ul style="list-style-type: none"> <li>Negligible environmental consequences beyond those predicted in the document/s listed in condition A2(c)</li> <li>Maintain or improve baseline channel stability</li> <li>Develop site-specific in-stream water quality objectives in accordance with the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC &amp; ARMCANZ, 2000) and Using the ANZECC Guidelines and Water Quality Objectives in NSW (DEC, 2006) or its latest version</li> </ul>

<sup>a</sup> The performance measures in Table 6 do not apply to water management structures constructed under previous consents.

B51. The performance measures in Table 6 apply to the entire site, including all landforms constructed under previous development consents. However, these performance measures do not require any additional earthmoving works to be undertaken for landforms that have been approved and constructed under previous consents, except where those earthworks are required for the establishment of a stable and non-polluting landform.



## Water Management Plan

B52. The Applicant must prepare a Water Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:

- (a) be submitted for approval within six months of the commencement of development under this consent;
- (b) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
- (c) be prepared in consultation with DPE Water and the EPA;
- (d) describe the measures to be implemented to ensure that the Applicant complies with the water management performance measures (see Table 6);
- (e) utilise existing data from nearby mines and build on existing monitoring programs, where practicable;
- (f) include a:
  - (i) **Site Water Balance** that includes details of:
    - predicted annual inflows to and outflows from the site;
    - sources and security of water supply for the life of the development (including authorised entitlements and licences);
    - water storage capacity;
    - water use and management on the site, including any water transfers or sharing with neighbouring mines;
    - licensed discharge points and limits;
    - reporting procedures, including the annual preparation of an updated site water balance; and
    - a program to periodically validate the water balance for the development.
  - (ii) **Erosion and Sediment Control Plan** that:
    - is consistent with the requirements of *Managing Urban Stormwater: Soils and Construction - Volume 1: Blue Book* (Landcom, 2004) and *Volume 2E: Mines and Quarries* (DECC, 2008);
    - identifies activities that could cause soil erosion, generate sediment or affect flooding;
    - describes measures to minimise soil erosion and the potential for the transport of sediment to downstream waters, and manage flood risk;
    - describes the location, function, and capacity of erosion and sediment control structures and flood management structures; and
    - describes what measures would be implemented to maintain (and if necessary decommission) the structures over time;
  - (iii) **Surface Water Management and Monitoring Plan** that includes:
    - detailed baseline data on surface water flows and quality of watercourses and/or water bodies potentially impacted by the development, including:
      - stream and riparian vegetation health;
      - channel stability (geomorphology); and
      - water supply for other surface water users;
    - a detailed description of the surface water management system;
    - details of the water licensing requirements for all water storages (i.e. exempt, harvestable rights or licenced);
    - detailed plans, design objectives and performance criteria for water management infrastructure, including:
      - water run-off diversions and catch drains;
      - water storages and sediment dams including mine water management systems;
      - emplacement areas;
      - backfilled pits and final voids for the development; and
      - reinstated drainage networks on rehabilitated areas of the site;
    - surface water performance criteria, including trigger levels for identifying and investigating any potentially adverse impacts (or trends) associated with the development, for:
      - water supply for other water users;
      - downstream surface water flows and quality;
      - downstream flooding impacts;
      - stream and riparian vegetation health; and

- post-mining water pollution from rehabilitated areas of the site, including final voids;
  - a water pollution impact assessment to manage any discharges from the site;
  - a program to monitor and evaluate:
    - compliance with the relevant performance measures listed in Table 6 and the performance criteria in this plan;
    - controlled and uncontrolled discharges and seepage/leachate from the site;
    - impacts on water supply for other water users, including potential cumulative impacts;
    - surface water inflows, outflows and storage volumes, to inform the Site Water Balance; and
    - the effectiveness of the surface water management system and the measures in the Erosion and Sediment Control Plan;
  - reporting procedures for the results of the monitoring program, including notifying other water users of any elevated results; and
  - a trigger action response plan to respond to any exceedances of the relevant performance measures or performance criteria, and repair, mitigate and/or offset any adverse surface water impacts of the development, including measures to provide compensatory water supply to any affected water user under condition B41 of this Schedule.
- (iv) Groundwater Management Plan that includes:
- detailed baseline data of groundwater levels, yield and quality for groundwater resources and groundwater dependent ecosystems potentially impacted by the development, including groundwater supply for other water users;
  - a detailed description of the groundwater management system;
  - groundwater performance criteria, including trigger levels for identifying and investigating any potentially adverse groundwater impacts (or trends) associated with the development, on:
    - regional and local aquifers (alluvial and hardrock); and
    - groundwater supply for other water users such as licensed privately-owned groundwater bores;
  - a program to monitor and evaluate:
    - compliance with the relevant performance measures listed in Table 6 and the performance criteria in this plan;
    - water loss/seepage from water storages into the groundwater system, including from final voids;
    - impacts on GDEs identified outside the development footprint (including stygofauna);
    - groundwater inflows, outflows and storage volumes, to inform the Site Water Balance;
    - the hydrogeological setting of any nearby alluvial aquifers and the likelihood of any indirect impacts from the development;
    - impacts on groundwater supply for other water users, including cumulative impacts;
    - the effectiveness of the groundwater management system;
  - reporting procedures for the results of the monitoring program, including notifying other water users of any elevated results;
  - a trigger action response plan to respond to any exceedances of the relevant performance measures and groundwater performance criteria, and repair, mitigate and/or offset any adverse groundwater impacts of the development, including measures to provide compensatory water supply to any affected water user under condition B41 of this Schedule;
  - a program to periodically validate the groundwater model for the development, including a peer review of the model every 3 years, and comparison of monitoring results with modelled predictions; and
- (v) a protocol to report on the measures, monitoring results and performance criteria identified above, in the Annual Review referred to in condition D11.

B53. The Applicant must not commence construction of the Northern Link Road or extract more than 10.5 Mt of ROM coal in a calendar year until the Water Management Plan is approved by the Planning Secretary.

B54. The Applicant must implement the Water Management Plan as approved by the Planning Secretary.

## **BIODIVERSITY**

### **Biodiversity Credits Required**

B55. The Applicant must retire the biodiversity credits specified in Table 7, unless otherwise agreed by the Planning Secretary in consultation with BCD. The retirement of credits must be carried out in consultation with BCD and in accordance with the Biodiversity Offsets Scheme of the BC Act.

**Table 7: Biodiversity credit requirements – Project excluding Northern Link Road**

<b>Credit Type</b>	<b>Credits Required Stage 1</b>	<b>Credits Required Stage 2</b>	<b>Total</b>
<b>Ecosystem Credits</b>			
483 – Grey Box x White Box Grassy Woodland	2,225	0	2,225
483 – Grey Box x White Box – Spotted Gum Grassy Woodland	328	0	328
618 – Forest Red Gum Grassy Open Forest	5	0	5
1691 – Narrow-leaved Ironbark – Grey Box Grassy Woodland	22	405	427
1602 – Spotted Gum – Narrow-leaved Ironbark Woodland	152	20	172
1605 – Narrow-leaved Ironbark Shrubby Forest	1,587	0	1,587
1605 – Plantation	289	0	289
1606 – White Box – Narrow-leaved Ironbark – Blakely's Red Gum	3	0	3
1606 – Derived Native Grassland	4	0	4
<b>Total</b>	<b>4,615</b>	<b>425</b>	<b>5,040</b>
<b>Species Credits</b>			
Cymbidium canaliculatum	0	2	2
Squirrel Glider ( <i>Petaurus norfolcensis</i> )	4,357	50	4,407

#### Staged Retirement

- B56. Prior to disturbance within the Development Footprint 1 (Stage 1) (as shown on Figure 9 in Appendix 2) the Applicant must retire the Stage 1 credits as specified in Table 7.
- B57. Prior to disturbance within the Development Footprint 1 (Stage 2) (as shown on Figure 9 in Appendix 2) the Applicant must retire the Stage 2 credits as specified in Table 7.
- B58. With the agreement of the Planning Secretary, the Applicant may adjust the staging of surface disturbance and the associated credit retirements in Table 7. Except in accordance with condition B59, the relevant credits must be retired, prior to the commencement of the associated surface disturbance.
- B59. The Applicant may carry over surplus retired credits to satisfy the credit requirements of a later stage. This may occur, for example, where approved clearing for an earlier stage was not undertaken, but the impact has already been offset.
- B60. With the agreement of the Planning Secretary in consultation with BCD, biodiversity credits associated with any undisturbed areas agreed under condition B59 as not to be subject to any surface disturbance may be removed from the total credit obligations in Table 7 (subject to recalculation and possible reduction).

#### Biodiversity Credits Required – Northern Link Road

- B61. Prior to the commencement of construction of the Northern link Road the Applicant must retire the biodiversity credits specified in Table 8, unless otherwise agreed by the Planning Secretary in consultation with BCD. The retirement of credits must be carried out in consultation with BCD and in accordance with the Biodiversity Offsets Scheme of the BC Act.

**Table 8: Biodiversity credit requirements – Northern Link Road**

<b>Credit Type</b>	<b>Credits Required</b>	
	<b>Option 1</b>	<b>Option 2</b>
<b>Ecosystem Credits</b>		
PCT 483 – Grey Box x White Box Grassy Woodland	17*	104*
PCT 483 – Grey Box x White Box – Spotted Gum Grassy Woodland	237*	72*

PCT 483 – Spotted Gum Derived Native Grassland	0	2*
PCT 618 – Forest Red Gum Grassy Open Forest	5*	5*
PCT 1605 – Plantation	6	5
PCT 1606 – White Box – Narrow-leaved Ironbark – Blakely's Red Gum	16*	16*
PCT 1606 – Derived Native Grassland	32*	30*
<b>Total</b>	<b>313</b>	<b>234</b>
<b>Species Credits</b>		
Squirrel Glider ( <i>Petaurus norfolcensis</i> )	268	194

\* Credits relevant to EPBC 2020/8735.

### Biodiversity Credits Required – *Delma vescolineata*

B62. If the Legless Lizard, *Delma vescolineata*, is listed as a threatened species under the BC Act and/or EPBC Act during the life of this consent, or otherwise agreed by the Planning Secretary, the Applicant must retire the applicable biodiversity credits (consistent with the applicable Biodiversity Risk Weighting as per the relevant row in Table 9) within 2 years of the species being listed as a threatened species under the BC Act and/or EPBC Act.

The retirement of credits must be carried out in consultation with the Planning Secretary and BCD and in accordance with the Biodiversity Offsets Scheme of the BC Act, including the application of Ancillary Rules: Biodiversity conservation actions that may be relevant to *Delma vescolineata* published under clause 6.5 of the *Biodiversity Conservation Regulation 2017*.

**Table 9:** Biodiversity credit requirements – *Delma vescolineata*

Biodiversity Risk Weighting	Credits Required Stage 1	Credits Required Stage 2	Northern Link Road Option 1	Northern Link Road Option 2
1.5	4,060	352	293	225
2	5,413	469	391	300
3	8,120	704	586	450

### Biodiversity Management Plan

B63. The Applicant must prepare a Biodiversity Management Plan to the satisfaction of the Planning Secretary. This plan must:

- (a) be submitted for approval prior to the commencement of development under this consent;
- (b) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
- (c) be prepared in consultation with BCD;
- (d) describe the vegetation clearance protocol to avoid accidental clearance in vegetation to be retained, including the relinquishment area;
- (e) describe how a mixture of pasture and woodland would be established in the final land use to minimise long-term impacts to vegetation and habitat;
- (f) describe measures to establish 66.6 ha of PCT 1605 and 7 ha of PCT 1602 as part of the rehabilitation program, consistent with the Rehabilitation Management Plan referred to in condition B92;
- (g) describe the measures to be implemented within the approved disturbance areas to:
  - (i) minimise the amount of clearing;
  - (ii) minimise impacts of ground disturbance on fauna and fauna habitat resources, including undertaking pre-clearance surveys;
  - (iii) provide for the reuse of trees containing features with the potential to provide significant habitat for nesting threatened birds, hollow-dwelling bats and/or arboreal mammals;
  - (iv) maximise the relocation of the Tiger Orchid (*Cymbidium canaliculatum*) recorded; and
  - (v) manage the provenance, collection and propagation of seed;
- (h) describe the measures to be implemented on the site to:
  - (i) control weeds, including measures to avoid and mitigate the spread of aggressive tussock grasses (e.g. Coolatai Grass, Jaragua Grass, and African Love Grass) along with priority and environmental weeds;

- (ii) control feral pests with consideration of actions identified in relevant threat abatement plans;
  - (iii) limit vehicle speed;
  - (iv) manage bushfire hazards;
  - (v) avoid impacts to the variant of PCT 483 with Spotted Gum in the canopy mapped within the relinquishment area; and
  - (vi) manage potential impacts to *Delma vescolineata*, if it is listed as a threatened species under the BC Act and/or EPBC Act in consideration of any relevant Commonwealth Conservation Advice, Recovery Plan and Threat Abatement Plans;
- (i) investigate and identify habitat that supports populations in the wild of *Delma vescolineata*, and identify, and where relevant, implement measures to remove threats to that population;
  - (j) demonstrate how development under this consent will be carried out in a manner that avoids or minimises to the greatest extent practicable any serious or irreversible damage to the survival of *Delma vescolineata*;
  - (k) describe how potential conflicts with Aboriginal heritage values will be addressed;
  - (l) include a seasonally-based program to monitor and report on:
    - (i) priority and environmental weeds, vertebrate pests and rehabilitation; and
    - (ii) the effectiveness of the above measures, progress against the detailed performance indicators and completion criteria, and identify improvements that could be implemented to improve biodiversity outcomes; and
  - (m) include details of who would be responsible for monitoring, reviewing, and implementing the plan.
- B64. The Applicant must not commence construction of the Northern Link Road or extract more than 10.5 Mt of ROM coal in a calendar year until the Biodiversity Management Plan is approved by the Planning Secretary.
- B65. The Applicant must implement the Biodiversity Management Plan as approved by the Planning Secretary.

## HERITAGE

### Protection of Aboriginal and Historic Heritage

- B66. The Applicant must ensure that the development does not cause any direct or indirect impact on any identified Aboriginal sites, conservation areas or heritage items located outside the approved disturbance area, beyond those predicted in the document/s listed in condition A2(c).

**Note:** Identified Aboriginal sites, conservation areas and heritage items are shown in the figures in Appendix 5.

- B67. If suspected human remains are discovered on the site, then all work surrounding the area must cease, and the area must be secured. The Applicant must immediately notify the Department of Climate Change, Energy, the Environment and Water, NSW National Parks and Wildlife Service, NSW Police Force and Heritage NSW, and work must not recommence in the area until authorised by NSW Police Force and Heritage NSW.
- B68. The Applicant must ensure that all known Aboriginal objects or Aboriginal places on the site, are properly recorded and those records are kept up to date, in the Aboriginal Heritage Information Management System (AHIMS) Register.

### Aboriginal Cultural Heritage Management Plan

- B69. The Applicant must prepare an Aboriginal Cultural Heritage Management Plan for the development. The plan must:
- (a) be submitted for approval within six months of the commencement of development under this consent;
  - (b) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
  - (c) be prepared in consultation with Heritage NSW and Registered Aboriginal Parties;
  - (d) describe the measures to be implemented on the site to:
    - (i) comply with the Aboriginal cultural heritage-related operating conditions of this consent;
    - (ii) ensure all workers receive suitable Aboriginal cultural heritage training/inductions prior to carrying out any activities which may cause impacts to Aboriginal objects or Aboriginal places, and that suitable records are kept of these inductions;
    - (iii) protect, monitor and manage identified Aboriginal objects and Aboriginal places (including as part of any proposed archaeological investigation of potential subsurface objects and salvage of objects within the approved disturbance area) in accordance with the commitments made in the document/s listed in condition A2(c);
    - (iv) establish alternative Aboriginal cultural heritage conservation areas (Areas B and C), or otherwise agreed alternative conservation areas, or other agreed conservation measures, within 12 months of commencement of development under this consent;
    - (v) maintain all Aboriginal cultural heritage conservation areas (Areas A, B and C), or otherwise agreed alternatives, throughout the life of the project;

- (vi) undertake further archaeological investigations, test excavations and analysis of scarred trees in accordance with the commitments made in the document/s listed in condition A2(c) (including the documents in the MACH response dated 9 September 2021);
  - (vii) protect Aboriginal objects and Aboriginal places located outside the approved disturbance area from impacts of the development;
  - (viii) manage the discovery of suspected human remains over the life of the development;
  - (ix) manage the discovery of any new Aboriginal objects or Aboriginal places, including provisions for burials, over the life of the development;
  - (x) maintain and manage reasonable access for relevant Aboriginal stakeholders to Aboriginal objects and Aboriginal places (outside of the approved disturbance area); and
  - (xi) facilitate ongoing consultation and involvement of Registered Aboriginal Parties in the conservation and management of Aboriginal cultural heritage on the site and in the area, in accordance with the commitments made in the document/s listed in condition A2(c); and
- (e) include a strategy for the care, control and storage of Aboriginal objects salvaged from the site, both during the life of the development and in the long term.

**Note:** Areas A, B and C are defined in EIS - Appendix G.

- B70. The Applicant must not commence construction of the Northern Link Road or extract more than 10.5 Mt of ROM coal in a calendar year until the Aboriginal Cultural Heritage Management Plan is approved by the Planning Secretary.
- B71. The Applicant must not undertake disturbance of Aboriginal objects not covered by a valid Aboriginal Heritage Impact Permit prior to approval of the Aboriginal Cultural Heritage Management Plan by the Planning Secretary
- B72. The Applicant must implement the Aboriginal Cultural Heritage Management Plan approved by the Planning Secretary.

#### **Historic Heritage Management Plan**

- B73. The Applicant must prepare a Historic Heritage Management Plan for the development, in respect of all non-Aboriginal cultural heritage items, to the satisfaction of the Planning Secretary. This plan must:
- (a) be submitted for approval within 6 months of the commencement of development under this consent;
  - (b) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
  - (c) be prepared in consultation with Heritage NSW, Council and relevant landowners and in accordance with the relevant Heritage NSW guidelines;
  - (d) describe how historic heritage values of the site would be recorded, preserved and archived;
  - (e) identify all heritage items in the vicinity of the site and include a statement of significance for each item;
  - (f) describe the measures to be implemented on the site to:
    - (i) ensure all workers on the site receive suitable heritage inductions prior to carrying out any activities which may cause impacts to historic heritage, and that suitable records are kept of these inductions;
    - (ii) protect heritage items located outside the approved disturbance area from impacts of the development, beyond those impacts predicted in the document/s listed in condition A2(c);
    - (iii) undertake photographic/archival recording of any items of heritage significance predicted to be impacted by the development, prior to disturbance within the Additional Disturbance Area;
    - (iv) avoid project-related use of the (timber) Kayuga Bridge;
    - (v) undertake additional archaeological investigation of sites anecdotally reported to contain human burials; and
    - (vi) identify, evaluate, record and manage any new heritage items discovered during the life of the development;
  - (g) include a program to monitor the effects of blasting on heritage items (including but not limited to Kayuga Cemetery) located outside of the approved disturbance area;
  - (h) include a strategy for the care, control and storage of heritage relics salvaged from the site; and
  - (i) include a comprehensive conservation management plan for the ongoing management of Rosebrook and Negoa Estate.
- B74. The Applicant must not commence construction of the Northern Link Road or extract more than 10.5 Mt of ROM coal in a calendar year until the Historic Heritage Management Plan is approved by the Planning Secretary.
- B75. The Applicant must implement the Historic Heritage Management Plan as approved by the Planning Secretary.

## VISUAL

### Visual Amenity and Lighting

B76. The Applicant must:

- (a) take all reasonable steps to minimise the visual and off-site lighting impacts of the development;
- (b) take all reasonable steps to shield views of mining operations and associated equipment from users of public roads and privately-owned residences;
- (c) ensure no fixed outdoor lights shine directly above the horizontal or above the building line or any illuminated structure;
- (d) ensure no in-pit mobile lighting rigs shine directly above the pit wall and other mobile lighting rigs do not shine directly above the horizontal (except where required for emergency safety purposes);
- (e) ensure that all external lighting associated with the development complies with relevant Australian Standards including the latest version of *Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting*;
- (f) ensure that the visual appearance of any new builds, structures, facilities or works (including paint colours and specifications) is aimed at blending as far as possible with the surrounding landscape.

### Visual Impact Management Plan

B77. The Applicant must prepare a Visual Impact Management Plan for the development to the satisfaction of the Planning Secretary. The plan must:

- (a) be prepared in consultation with Council;
- (b) provide for the establishment of trees and shrubs and/or the construction of mounding or bunding:
  - (i) around the water storage dams and coal preparation plant;
  - (ii) at other areas identified as necessary for the maintenance of satisfactory visual amenity;
- (c) include details of the visual appearance of all buildings, structures, facilities or works (including paint colours and specifications), aimed at blending as far as possible with the surrounding landscape;
- (d) include detailed measures to minimise the visual impacts of the out-of-pit emplacements and rail infrastructure, including:
  - (i) details of macro- and microrelief, revegetation and screen plantings for the emplacements;
  - (ii) details of proposed light screens, earth bunds and screen planting for the rail infrastructure; and
  - (iii) procedures to monitor and maintain the effectiveness of visual impact mitigation measures for the life of the development; and
- (e) include a program to implement, monitor, maintain and report on the implementation and effectiveness of the visual impact mitigation measures.

B78. The Visual Impact Management Plan must be submitted for approval within 12 months of commencement of development under this consent.

B79. The Applicant must implement the Visual Impact Management Plan as approved by the Planning Secretary.

B80. Upon receiving a written request from the owner of any residence on privately-owned land which is within 2 kms of mine landforms and has, or would have, significant direct view of the mining operations on site, the Applicant must implement visual mitigation measures (such as landscaping treatments or vegetation screens) on the land in consultation with the landowner. These measures must be reasonable and feasible, and directed toward minimising the visibility of the mining operations from the residence.

If within three months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.

**Note:** *Except in exceptional circumstances, the Planning Secretary will not require additional visual impact mitigation to be undertaken for residences that are more than 2 kilometres from the mining operations.*

## WASTE

B81. The Applicant must:

- (a) take all reasonable steps to minimise the waste (including coal rejects and tailings) generated by the development;
- (b) classify all waste in accordance with the *Waste Classification Guidelines* (EPA, 2014);
- (c) dispose of all waste at appropriately licensed waste facilities or facilities otherwise permitted to receive the waste including under an applicable resource recovery order or exemption;

- (d) manage on-site sewage treatment and disposal in accordance with the requirements of the appropriate regulatory authority; and
- (e) monitor and report on the effectiveness of the waste minimisation and management measures in the Annual Review referred to in condition D11.

B82. Except as expressly permitted in an applicable EPL, specific resource recovery order or exemption under the *Protection of the Environment Operations (Waste) Regulation 2014*, the Applicant must not receive waste at the site for storage, treatment, processing, reprocessing or disposal.

#### DANGEROUS GOODS

B83. The Applicant must ensure that the storage, handling, and transport of:

- (a) dangerous goods is carried out in accordance with the relevant Australian Standards, particularly *AS1940* and *AS1596*, and the *Dangerous Goods Code*; and
- (b) explosives are managed in accordance with the requirements of the Resources Regulator.

#### BUSHFIRE MANAGEMENT

B84. The Applicant must:

- (a) ensure that the development:
  - (i) provides for asset protection in accordance with the relevant requirements in *the Planning for Bushfire Protection* (RFS, 2019) guideline; and
  - (ii) ensure that there is suitable equipment to respond to any fires on the site; and
- (b) assist the RFS and emergency services to the extent practicable if there is a fire in the vicinity of the site.

B85. Within 12 months of the commencement of development under this consent, the Applicant must prepare a Bushfire Management Plan for the development in consultation with RFS. This plan must include a:

- (a) contact person and 24-hour contact phone number;
- (b) schedule and description of proposed bushfire mitigation works, including:
  - (i) location of managed and unmanaged vegetation within the site;
  - (ii) location of water supply; and
  - (iii) internal access roads;
- (c) plan identifying the location and storage of bulk flammable liquids and materials;
- (d) 'hot works' management plan, including:
  - (i) circumstances when 'hot works' are limited or prohibited; and
  - (ii) safety measures to be implemented when 'hot works' are being conducted; and
- (e) emergency/evacuation plan in accordance with the Guidelines for the Preparation of Emergency/Evacuation Plans (RFS) and Australian Standard AS3745 Planning for Emergencies in Facilities.

B86. The Applicant must implement the Bushfire Management Plan in consultation with RFS.

#### REHABILITATION

##### Rehabilitation Objectives

B87. The Applicant must rehabilitate the site in accordance with the provisions under the *Mining Act 1992*. This rehabilitation must be generally consistent with the proposed rehabilitation activities described in the document/s listed in condition A2(c) and shown conceptually in Appendix 6, and must comply with the objectives in Table 10.

**Table 10:** Rehabilitation objectives

<b>Feature</b>	<b>Objective</b>
All areas of the site affected by the development	<ul style="list-style-type: none"> <li>• Safe, stable and non-polluting</li> <li>• Fit for the intended post-mining land use/s</li> <li>• Establish the final landform and post-mining land use/s as soon as practicable after cessation of mining operations</li> <li>• Minimise post-mining environmental impacts</li> </ul>
Areas proposed for native ecosystem re-establishment	<ul style="list-style-type: none"> <li>• Establish/restore self-sustaining native woodland ecosystems</li> <li>• Establish local plant community types</li> <li>• Establish:               <ul style="list-style-type: none"> <li>– riparian habitat within any diverted and/or re-established creek lines and retained water features;</li> <li>– habitat, feed and foraging resources for threatened fauna species; and</li> <li>– vegetation connectivity and wildlife corridors, as far as is reasonable and feasible</li> </ul> </li> </ul>



<b>Feature</b>	<b>Objective</b>
Areas proposed for agricultural land	<ul style="list-style-type: none"> <li>Establish/restore grassland areas to support sustainable agricultural activities</li> <li>Re-establish agricultural land areas generally in accordance with the final landform plan (Appendix 6)</li> <li>Use species found in the local area that are suitable for pasture production</li> <li>Implement reasonable and feasible measures to rehabilitate agricultural land areas to LSC Class 3 to 4</li> <li>Maintain the agricultural productivity and production of non-operational project-related land</li> <li>Locate adjacent to surrounding agricultural land, where practicable</li> </ul>
Final Landform	<ul style="list-style-type: none"> <li>Stable for the intended post-mining land use/s</li> <li>Integrated with surrounding natural landforms and other mine rehabilitated landforms, to the greatest extent practicable</li> <li>Incorporate micro-relief and drainage features that mimic natural topography and mitigate erosion, to the greatest extent practicable</li> <li>Maximise surface water drainage to the natural environment i.e. free draining (excluding final void catchment)</li> <li>Minimise visual impacts, where practicable</li> </ul>
Final void	<ul style="list-style-type: none"> <li>Designed as long-term groundwater sink to prevent the release of saline water into the surrounding environment, unless further mine planning and final landform design processes identify a more suitable outcome for the final void (see condition B89)</li> <li>Minimise to the greatest extent practicable having regard to post-mining beneficial land uses for the site: <ul style="list-style-type: none"> <li>the size and depth;</li> <li>the drainage catchment;</li> <li>any high wall instability risk; and</li> <li>the risk of flood interaction</li> </ul> </li> <li>Maximise potential for beneficial reuse, where practicable</li> </ul>
Surface infrastructure of the development	<ul style="list-style-type: none"> <li>To be decommissioned and removed, unless the Resources Regulator agrees otherwise</li> </ul>
Water quality	<ul style="list-style-type: none"> <li>Water retained on the site is fit for the intended post-mining land use/s</li> <li>Water discharged from the site is suitable for receiving waters and fit for aquatic ecology and riparian vegetation</li> </ul>
Community	<ul style="list-style-type: none"> <li>Ensure public safety</li> <li>Minimise adverse socio-economic effects associated with mine closure</li> </ul>

**Note:** The rehabilitation objectives related to the establishment of native vegetation communities do not constitute an obligation for biodiversity offset purposes. Biodiversity offsets obligations in relation to development approved under this consent are regulated by conditions B55 to B61.

B88. The rehabilitation objectives in Table 10 apply to the entire site, including all landforms constructed under either this consent or previous consents. However, the Applicant is not required to undertake any additional earthmoving works on landforms that have been approved and constructed under previous consents, except where those earthworks are required for the establishment of a stable, non-polluting and free-draining landform.

### Rehabilitation Strategy

B89. The Applicant must prepare a Rehabilitation Strategy for all land disturbed by the development to the satisfaction of the Planning Secretary. This strategy must:

- be submitted for approval within 12 months of the commencement of development under this consent;
- be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
- be prepared in consultation with the BCD, Resources Regulator and Council;
- build upon the Rehabilitation Objectives in Table 10, describe the overall rehabilitation outcomes for the site, and address all aspects of rehabilitation including mine closure, final landform (including final void), post-mining land use/s and water management;
- align with strategic rehabilitation and mine closure objectives and address the principles of the *Strategic Framework for Mine Closure* (ANZMEC and MCA, 2000);
- describe how the rehabilitation measures would be integrated with the measures in the Biodiversity Management Plan referred to in condition B63 and the Visual Impact Management Plan referred to in condition B77;

- (g) describe how rehabilitation will be integrated with the mine planning process, including a plan to address premature mine closure;
- (h) include indicative mine plans and scheduling for life-of-mine rehabilitation showing each rehabilitation domain;
- (i) include details of target vegetation communities and species (including seed provenance) to be established within the proposed revegetation areas;
- (j) investigate opportunities to refine and improve the final landform and final void outcomes over time;
- (k) include a post-mining land use strategy to investigate and facilitate post-mining beneficial land uses for the site (including the final void), that:
  - (i) align with regional and local strategic land use planning objectives and outcomes;
  - (ii) support a sustainable future for the local community;
  - (iii) utilise existing mining infrastructure, where practicable; and
  - (iv) avoid disturbing self-sustaining native ecosystems, where practicable;
- (l) include a stakeholder engagement plan to guide rehabilitation and mine closure planning processes and outcomes;
- (m) investigate ways to minimise adverse socio-economic effects associated with rehabilitation and mine closure; and
- (n) include a program to periodically review and update this strategy at least every three years.

B90. The Applicant must not commence mining operations north of Castlerock Road until the Rehabilitation Strategy is approved by the Planning Secretary.

B91. The Applicant must implement the Rehabilitation Strategy approved by the Planning Secretary.

#### **Rehabilitation Management Plan**

B92. The Applicant must prepare a Rehabilitation Management Plan for the development, in accordance with the provisions under the *Mining Act 1992*.

#### **TRANSPORT**

##### **Monitoring of Coal Transport**

B93. The Applicant must:

- (a) keep accurate records of the amount of coal transported from the site (on a daily basis); and
- (b) publish these records in the Annual Review.

##### **Removal of Rail Loop and Infrastructure Corridor**

B94. By no later than 31 October 2022, unless otherwise agreed to by the Planning Secretary, the Applicant must:

- (a) remove all infrastructure associated with the development within Mining Lease No. 1645 (ML 1645) south of Wybong Road (other than infrastructure which the operator of the Bengalla mine agrees with the Applicant, in writing, can remain in situ);
- (b) do all things available to transfer or cause the grant of a mining lease over that part of ML 1645 south of Wybong Road to the operator of Bengalla mine (or its nominee);
- (c) transfer the freehold land owned by the Applicant within ML 1645 south of Wybong Road to the operator of Bengalla mine (or its nominee) at rural market value;
- (d) release any easements for pipeline and rail spur within or in the vicinity of ML 1645 south of Wybong Road which benefit land owned by the Applicant; and

B95. Following the completion of the Bengalla Link Road under SSD-5170, or as otherwise directed by the Planning Secretary, the Applicant must demolish the Bengalla Link Road bridge and, unless otherwise agreed by the Planning Secretary, reinstate the road reserve to the satisfaction of Council

##### **Road Works**

B96. The Applicant must, at its own expense:

- (a) construct the Northern Link Road realignment (Option 1 or Option 2, as described in the documents in condition A2(c)), prior to the closure of the eastern portion of Castlerock Road; and
- (b) undertake a safety audit for the full length of Castlerock Road and the intersection of Dorset Road and Kayuga Road, and implement any recommendations that may apply to the western portion of Castlerock Road within 1km of the site that would continue to serve public traffic, prior to the closure of the eastern portion of Castlerock Road,

to the satisfaction of Council<sup>a</sup>.

<sup>a</sup> If there is a dispute between the relevant parties about the implementation of this condition, then any party may refer the matter to the Planning Secretary for resolution.

### **Road Access and Signage**

- B97. The Applicant must, as far as reasonable and feasible:
- (a) implement strategies to minimise project-related use of Castlerock Road;
  - (b) require all project-related traffic to use Bengalla Link Road and Wybong Road for access; and
  - (c) ensure that workers associated with major construction activities as defined in the Traffic Management Plan are transported to the site via shuttle bus.
- B98. The Applicant must maintain signs and give at least 24 hours' notice of temporary road closures. The location and wording of the signs are to be approved by Council. A protocol is to be established, in consultation with the emergency service providers and Council, to permit the passage of emergency vehicles during road closures.

### **Traffic Management Plan**

- B99. The Applicant must prepare a Traffic Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:
- (a) be submitted for approval within six months of the commencement of development under this consent;
  - (b) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
  - (c) be prepared in consultation with TfNSW and Council;
  - (d) include details of all transport routes and traffic types to be used for development-related traffic;
  - (e) include a protocol for undertaking pre and post-dilapidation surveys and repairing any roads identified in the dilapidation surveys to have been damaged during construction and/or decommissioning works;
  - (f) include details of the measures to be implemented to minimise traffic safety issues and disruption to local road users during construction, operation and decommissioning phases of the development, including:
    - (i) temporary traffic controls, including detours and signage (where relevant);
    - (ii) notifying the local community about development-related traffic impacts;
    - (iii) define the major construction activities during which shuttle buses will be used to transport construction workers to the site;
    - (iv) minimising potential for conflict with school buses and stock movements;
    - (v) access and car parking arrangements;
    - (vi) staggering shift changes with other mining operations in the locality, where practicable, to minimise impacts during AM and PM peak traffic periods;
    - (vii) responding to any emergency repair requirements or maintenance during construction and/or decommissioning; and
    - (viii) a traffic management system for managing over-dimensional vehicles; and
  - (g) include a Drivers' Code of Conduct that includes procedures to ensure that drivers:
    - (i) adhere to posted speed limits or other required travelling speeds;
    - (ii) adhere to the designated transport routes; and
    - (iii) implement safe driving practices.
- B100. If the construction and/or decommissioning of the development is to be staged, the obligations in condition B99 apply to each stage of construction and/or decommissioning.
- B101. The Applicant must not commence construction of the Northern Link Road or extract more than 10.5 Mt of ROM coal in a calendar year until the Traffic Management Plan is approved by the Planning Secretary.
- B102. The Applicant must implement the Traffic Management Plan as approved by the Planning Secretary.

### **Road Maintenance**

- B103. During the development, the Applicant must maintain the roads and intersections between the Bengalla Mine main entrance and the Mount Pleasant Mine main entrance, including:
- (a) part of the Bengalla Link Road; and
  - (b) part of the Wybong Road.
- B104. The Applicant must develop a Maintenance Management Plan in respect of these roads, to the satisfaction of Council.

### **Thomas Mitchell Drive**

B105. The Applicant must contribute to the upgrade and maintenance of Thomas Mitchell Drive, proportionate to its impact (based on usage) on that infrastructure, in accordance with the Contributions Study prepared by GHD titled, "*Thomas Mitchell Drive Contributions Study, August 2018*" (as amended from time to time).

For Thomas Mitchell Drive, the contributions must be paid to Council in accordance with:

- (a) the payment schedule in the Contributions Study for the upgrade works; and
- (b) the maintenance schedule established in accordance with the Contributions Study during the life of the development, unless otherwise agreed with Council.

**Notes:**

- *In making a determination about the applicable contribution/s under this condition, the Planning Secretary will take into account the contributions already paid or required to be paid towards the upgrade and maintenance of the local road network in the Muswellbrook Local Government Area under this consent and any associated Planning Agreement with Council.*
- *If there is a dispute between the relevant parties about the implementation of this condition, then any party may refer the matter to the Planning Secretary for resolution.*

## PART C ADDITIONAL PROCEDURES

### ACQUISITION UPON REQUEST

- C1. Upon receiving a written request for acquisition from the owner of the privately-owned land<sup>a</sup> listed in Table 11, the Applicant must acquire the land in accordance with the procedures in conditions C12 to C19 inclusive.

**Table 11:** Land subject to acquisition upon request

<b>Acquisition Basis</b>	<b>Receiver ID</b>
Air Quality and Noise	118, 120, 120c, 121, 143b, 143e, 147, 153a, 154, 154b, 156a, 157a, 159
Air Quality	112
Noise	136, 143a

<sup>a</sup> The location of the land referred to in Table 11 is shown in Appendix 3.

### ADDITIONAL MITIGATION UPON REQUEST

- C2. Upon receiving a written request for mitigation from the owner of any residence on the privately-owned land<sup>a</sup> listed in Table 11 or Table 12, the Applicant must implement additional mitigation measures at or in the vicinity of the residence in consultation with the landowner. These measures must be consistent with the measures outlined in the *Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Development* (NSW Government, 2018). They must also be reasonable and feasible, proportionate to the level of predicted impact and directed towards reducing the noise and/or air quality impacts of the development. The Applicant must also be responsible for the reasonable costs of ongoing maintenance of these additional mitigation measures until the cessation of mining operations.

**Table 12:** Land subject to additional mitigation upon request

<b>Mitigation Basis</b>	<b>Receiver ID</b>
Noise	20, 21, 35, 35b, 43, 43b, 47, 67, 74, 86a, 96, 102, 108, 140a

<sup>a</sup> The locations of the land referred to in Table 12 are shown in Appendix 3.

- C3. If within three months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, the Applicant must arrange an independent review of the measures to be implemented and either party may then refer the matter to the Planning Secretary for resolution.
- C4. For the life of the development, the Applicant must continue to contribute to reasonable maintenance and recurrent operating costs associated with the noise mitigation measures installed at privately-owned residences under the development and as described in the documents listed in condition A2(c). The contribution to ongoing maintenance and recurrent operating costs must be consistent with any existing agreement between the Applicant and the relevant landowner.

### NOTIFICATION OF LANDOWNERS/TENANTS

- C5. Within one month of the commencement of development under this consent, the Applicant must:
- (a) notify in writing the owner of:
    - (i) the land listed in Table 11 that they have the right to require the Applicant to acquire their land at any stage during the development;
    - (ii) the residences on the land listed in Table 11 that they are entitled to ask the Applicant to install additional mitigation measures at the residence; and
    - (iii) any privately-owned land within 3 kilometres of the approved open cut mining pit/s that they are entitled to ask the Applicant for an inspection to establish the baseline condition of any buildings or structures on their land, or to have a previous property inspection report updated;
  - (b) notify the tenants of any mine-owned land of their rights under this consent; and
  - (c) send a copy of the fact sheet entitled *"Mine Dust and You"* (NSW Health, 2017) to the owners and/or existing tenants of any land (including mine-owned land) where the predictions in the document/s listed in condition A2(c) identify that dust emissions generated by the development are likely to be greater than the relevant air quality criteria identified in condition B28 at any time during the life of the development.

- C6. Prior to entering into any tenancy agreement for any land owned by the Applicant that is predicted to experience exceedances of the recommended air quality criteria in Table 3 and/or noise criteria in Table 1, the Applicant must:
- (a) advise the prospective tenants of the potential health and amenity impacts associated with living on the land, and give them a copy of the fact sheet entitled "*Mine Dust and You*" (NSW Health, 2017); and
  - (b) advise the prospective tenants of the rights they would have under this consent,
- to the satisfaction of the Planning Secretary.

#### **NOTIFICATION OF EXCEEDANCES**

- C7. As soon as practicable and no longer than 7 days after obtaining monitoring results showing an exceedance of any noise, blasting or air quality criterion in PART B of this consent, the Applicant must provide the details of the exceedance to any affected landowners, tenants and the CCC.
- C8. For any exceedance of any air quality criterion in PART B of this consent, the Applicant must also provide to any affected landowners and/or tenants a copy of the fact sheet entitled "*Mine Dust and You*" (NSW Health, 2017).

#### **INDEPENDENT REVIEW**

- C9. If a landowner considers the development to be exceeding any relevant noise, blasting or air quality criterion in PART B of this consent, they may ask the Planning Secretary in writing for an independent review of the impacts of the development on their residence or land.
- C10. If the Planning Secretary is not satisfied that an independent review is warranted, the Planning Secretary will notify the landowner in writing of that decision, and the reasons for that decision, within 21 days of the request for a review.
- C11. If the Planning Secretary is satisfied that an independent review is warranted, within three months of the Planning Secretary's decision, the Applicant must:
- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Planning Secretary, to:
    - (i) consult with the landowner to determine their concerns;
    - (ii) conduct monitoring to determine whether the development is complying with the relevant criterion in PART B of this consent; and
    - (iii) if the development is not complying with the relevant criterion, identify measures that could be implemented to ensure compliance with the relevant criterion;
  - (b) give the Planning Secretary and landowner a copy of the independent review; and
  - (c) comply with any written requests made by the Planning Secretary to implement any findings of the review.

#### **LAND ACQUISITION**

- C12. Within three months of receiving a written request for acquisition from a landowner with acquisition rights, the Applicant must make a binding written offer to the landowner based on:
- (a) the current market value of the landowner's interest in the land at the date of this written request, as if the land was unaffected by the development, having regard to the:
    - (i) existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and
    - (ii) presence of improvements on the land and/or any approved building or structure which has been physically commenced at the date of the landowner's written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of the additional noise and/or air quality mitigation measures in condition C2;
  - (b) the reasonable costs associated with:
    - (i) relocating within the Muswellbrook Local Government Area, or to any other local government area determined by the Planning Secretary; and
    - (ii) obtaining independent legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and
  - (c) reasonable compensation for any disturbance caused by the land acquisition process.
- C13. If, within two months of the binding written offer being made under condition C12, the Applicant and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Planning Secretary for resolution.
- C14. Upon receiving a request, under condition C13, the Planning Secretary will request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer to:
- (a) consider submissions from both parties;
  - (b) determine a fair and reasonable acquisition price for the land and/or the terms upon which the land is to be acquired, having regard to the matters referred to in condition C12;

- (c) prepare a detailed report setting out the reasons for any determination; and
  - (d) provide a copy of the report to both parties.
- C15. Within 14 days of receiving the independent valuer's report, the Applicant must make a binding written offer to the landowner to purchase the land at a price not less than the independent valuer's determination.
- C16. However, if either party disputes the independent valuer's determination, then within 14 days of receiving the independent valuer's report, either party may refer the matter to the Planning Secretary for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following consultation with the independent valuer and both parties, the Planning Secretary will determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in condition C12, the independent valuer's report, the detailed report of the party that disputes the independent valuer's determination and any other relevant submissions.
- C17. Within 14 days of this determination, the Applicant must make a binding written offer to the landowner to purchase the land at a price not less than the Planning Secretary's determination.
- C18. If the landowner refuses to accept the Applicant's binding written offer under this condition within six months of the offer being made, then the Applicant's obligations to acquire the land shall cease, unless the Planning Secretary determines otherwise.
- C19. The Applicant must pay all reasonable costs associated with the land acquisition process described in conditions C12 to C18 inclusive, including the costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of this plan at the Office of the Registrar-General.

## PART D ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

### ENVIRONMENTAL MANAGEMENT

#### Environmental Management Strategy

- D1. The Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary. This strategy must:
- (a) be submitted for approval within six months of the commencement of development under this consent;
  - (b) provide the strategic framework for environmental management of the development;
  - (c) identify the statutory approvals that apply to the development;
  - (d) set out the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
  - (e) set out the procedures to be implemented to:
    - (i) keep the local community and relevant agencies informed about the operation and environmental performance of the development;
    - (ii) receive record, handle and respond to complaints;
    - (iii) resolve any disputes that may arise during the course of the development;
    - (iv) respond to any non-compliance and any incident;
    - (v) respond to emergencies; and
  - (f) include:
    - (i) references to any strategies, plans and programs approved under the conditions of this consent; and
    - (ii) a clear plan depicting all the monitoring to be carried out under the conditions of this consent.
- D2. The Applicant must not commence construction of the Northern Link Road or extract more than 10.5 Mt of ROM coal in a calendar year until the Environmental Management Strategy is approved by the Planning Secretary.
- D3. The Applicant must implement the Environmental Management Strategy as approved by the Planning Secretary.

#### Adaptive Management

- D4. The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and performance measures in this consent. Any exceedance of these criteria or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.

Where any exceedance of these criteria or performance measures has occurred, the Applicant must, at the earliest opportunity:

- (a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;
- (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
- (c) implement reasonable remediation measures as directed by the Planning Secretary.

#### Management Plan Requirements

- D5. Management plans required under this consent must be prepared in accordance with relevant guidelines, and include:
- (a) summary of relevant background or baseline data;
  - (b) details of:
    - (i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);
    - (ii) any relevant limits or performance measures and criteria; and
    - (iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;
  - (c) any relevant commitments or recommendations identified in the document/s listed in condition A2(c);
  - (d) a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;
  - (e) a program to monitor and report on the:
    - (i) impacts and environmental performance of the development; and
    - (ii) effectiveness of the management measures set out pursuant to condition D4(c);
  - (f) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;



- (g) a program to investigate and implement ways to improve the environmental performance of the development over time;
- (h) a protocol for managing and reporting any:
  - (i) incident, non-compliance or exceedance of any impact assessment criterion or performance criterion;
  - (ii) complaint; or
  - (iii) failure to comply with other statutory requirements;
- (i) public sources of information and data to assist stakeholders in understanding environmental impacts of the development; and
- (j) a protocol for periodic review of the plan.

**Note:** *The Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.*

- D6. The Applicant must ensure that management plans prepared for the development are consistent with the conditions of this consent and any EPL issued for the site.

#### **REVISION OF STRATEGIES, PLANS AND PROGRAMS**

- D7. Within three months of:
- (a) the submission of an incident report under condition D9 or D10;
  - (b) the submission of an Annual Review under condition D11;
  - (c) the submission of an Independent Environmental Audit under condition D13;
  - (d) the approval of any modification of the conditions of this consent (unless the conditions require otherwise); or
  - (e) notification of a change in development phase under condition A12;

the suitability of existing strategies, plans and programs required under this consent must be reviewed by the Applicant.

- D8. If necessary, to either improve the environmental performance of the development, cater for a modification or comply with a direction, the strategies, plans and programs required under this consent must be revised, to the satisfaction of the Planning Secretary. Where revisions are required, the revised document must be submitted to the Planning Secretary for approval within six weeks of the review.

**Note:** *This is to ensure strategies, plans and programs are updated on a regular basis and to incorporate any recommended measures to improve the environmental performance of the development.*

#### **REPORTING AND AUDITING**

##### **Incident Notification**

- D9. The Applicant must immediately notify the Department and any other relevant agencies immediately after it becomes aware of an incident. The notification must be in writing via the Department's Major Projects Website and identify the development (including the development application number and name) and set out the location and nature of the incident.

##### **Non-Compliance Notification**

- D10. Within seven days of becoming aware of a non-compliance, the Applicant must notify the Department of the non-compliance. The notification must be in writing via the Department's Major Projects Website and identify the development (including the development application number and name), set out the condition of this consent that the development is non-compliant with, why it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

**Note:** *A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.*

##### **Annual Review**

- D11. By the end of March each year after the commencement of development under this consent a report must be submitted to the Department reviewing the environmental performance of the development, to the satisfaction of the Planning Secretary. This review must:
- (a) describe the development (including any rehabilitation) that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year;
  - (b) include a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, including a comparison of these results against the:
    - (i) relevant statutory requirements, limits or performance measures/criteria;
    - (ii) requirements of any plan or program required under this consent;
    - (iii) monitoring results of previous years; and
    - (iv) relevant predictions in the document/s listed in condition A2(c);

- (c) identify any non-compliance or incident which occurred in the previous calendar year, and describe what actions were (or are being) taken to rectify the non-compliance and avoid reoccurrence;
- (d) evaluate and report on:
  - (i) the effectiveness of the noise and air quality management systems, including a review of the reactive management measures implemented at the site during the previous year of operations;
  - (ii) quantification of the number of hours that reactive management measures were implemented, specifying the trigger for the implementation of these measures; and
  - (iii) compliance with the performance measures, criteria and operating conditions of this consent;
- (e) include an addendum report on Scope 1 and Scope 2 GHGEs, which reports:
  - (i) annual methane and annual total CO<sub>2-e</sub> emissions (both categorised by source);
  - (ii) overall emissions benchmarked against representative industry sectors and the predictions in the EIS, and performance measures set in condition B36 and/or under condition B34; and
  - (iii) measures undertaken to minimise Scope 1 and Scope 2 GHGEs, including actions taken under condition B34 and estimated reductions in CO<sub>2-e</sub> as a result of measures implemented;
- (f) identify any trends in the monitoring data over the life of the development;
- (g) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
- (h) describe what measures will be implemented over the next calendar year to improve the environmental performance of the development.

D12. Copies of the Annual Review must be submitted to Council and made available to the CCC and any interested person upon request.

#### **Independent Environmental Audit**

D13. Within one year of commencement of development under this consent, and every three years after, unless the Planning Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. The audit must:

- (a) be led by a suitably qualified, experienced and independent auditor whose appointment has been endorsed by the Planning Secretary;
- (b) be conducted by a suitably qualified, experienced and independent team of experts (including any expert in field/s specified by the Planning Secretary) whose appointment has been endorsed by the Planning Secretary;
- (c) be carried out in consultation with the relevant agencies and the CCC;
- (d) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent, water licences and mining leases for the development (including any assessment, strategy, plan or program required under these approvals);
- (e) review the adequacy of any approved strategy, plan or program required under the abovementioned approvals and this consent;
- (f) recommend appropriate measures or actions to improve the environmental performance of the development and any assessment, strategy, plan or program required under the abovementioned approvals and this consent; and
- (g) be conducted and reported to the satisfaction of the Planning Secretary.

D14. Within three months of commencing an Independent Environmental Audit, the Applicant must submit a copy of the audit report to the Planning Secretary, and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. The recommendations must be implemented.

#### **Monitoring and Environmental Audits**

D15. Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, compliance report and independent audit.

D16. For the purposes of this condition, as set out in the EP&A Act, "monitoring" is monitoring of the development to provide data on compliance with the consent or on the environmental impact of the development, and an "environmental audit" is a periodic or particular documented evaluation of the development to provide information on compliance with the consent or the environmental management or impact of the development. Noise, blast and/or air quality monitoring under this consent may be undertaken at suitable representative monitoring locations instead of at privately-owned residences or other locations listed in Part B, providing that these representative monitoring locations are set out in the respective management plan/s.

## ACCESS TO INFORMATION

- D17. Within one month of the commencement of development under this consent until the completion of all rehabilitation required under this consent, the Applicant must:
- (a) make the following information and documents (as they are obtained, approved or as otherwise stipulated within the conditions of this consent) publicly available on its website:
    - (i) the documents listed in condition A2(c) of this consent;
    - (ii) all current statutory approvals for the development;
    - (iii) all approved strategies, plans and programs required under the conditions of this consent;
    - (iv) the proposed staging plans for the development if the construction, operation or decommissioning of the development is to be staged;
    - (v) minutes of CCC meetings;
    - (vi) regular reporting on the environmental performance of the development in accordance with the reporting requirements in any plans or programs approved under the conditions of this consent;
    - (vii) a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;
    - (viii) a summary of the current phase and progress of the development;
    - (ix) contact details to enquire about the development or to make a complaint;
    - (x) a complaints register, updated monthly;
    - (xi) the Annual Reviews of the development;
    - (xii) audit reports prepared as part of any Independent Environmental Audit of the development and the Applicant's response to the recommendations in any audit report;
    - (xiii) any other matter required by the Planning Secretary; and
  - (b) keep such information up to date, to the satisfaction of the Planning Secretary.

**APPENDIX 1 SCHEDULE OF LAND**

Tenure Type	Lot	Section	Deposited Plan Number
Freehold	1	1	DP2770
Freehold	1	1	DP192121
Freehold	1	2	DP2770
Freehold	1	2	DP192121
Freehold	1	3	DP2770
Freehold	1	4	DP2770
Freehold	1	5	DP2770
Freehold	1	6	DP2770
Freehold	1	8	DP2770
Freehold	1		DP104563
Freehold	1		DP112742
Freehold	1		DP114090
Freehold	1		DP194043
Freehold	1		DP213293
Freehold	1		DP254339
Freehold	1		DP312392
Freehold	1		DP318999
Freehold	1		DP401237
Freehold	1		DP544039
Freehold	1		DP629491
Freehold	1		DP634490
Freehold	1		DP655691
Freehold	1		DP706645
Freehold	1		DP742324
Freehold	1		DP744333
Freehold	1		DP745369
Freehold	1		DP780673
Freehold	1		DP791576
Crown	1		DP904885
Freehold	1		DP905281
Freehold	1		DP906668
Freehold	1		DP911212
Freehold	1		DP915913
Freehold	1		DP944232
Freehold	1		DP998239
Freehold	1		DP1072667
Freehold	1		DP1080962
Freehold	1		DP1081385
Freehold	1		DP1100374
Freehold	1		DP1137590
Freehold	1		DP1199733
Freehold	1		DP718834
Freehold	2	1	DP2770
Freehold	2	2	DP192121

Tenure Type	Lot	Section	Deposited Plan Number
Freehold	2	3	DP2770
Freehold	2	4	DP2770
Freehold	2	5	DP2770
Freehold	2	6	DP2770
Freehold	2	8	DP2770
Freehold	2		DP104563
Freehold	2		DP112742
Freehold	2		DP114090
Freehold	2		DP194043
Freehold	2		DP629491
Freehold	2		DP634490
Freehold	2		DP706645
Freehold	2		DP780673
Freehold	2		DP791576
Freehold	2		DP801249
Freehold	2		DP915913
Freehold	2		DP997931
Freehold	2		DP998239
Freehold	2		DP1081385
Freehold	2		DP1234475
Freehold	2		DP561117
Freehold	3	1	DP2770
Freehold	3	2	DP192121
Freehold	3	3	DP2770
Freehold	3	5	DP2770
Freehold	3	8	DP2770
Freehold	3	28	DP758554
Freehold	3	29	DP758554
Freehold	3		DP112742
Freehold	3		DP194043
Freehold	3		DP629491
Freehold	3		DP791576
Freehold	3		DP998239
Freehold	3		DP998477
Freehold	3		DP1183514
Freehold	3		DP1199733
Freehold	3		DP1234475
Freehold	4	1	DP2770
Freehold	4	2	DP2770
Freehold	4	2	DP192121
Freehold	4	3	DP2770
Freehold	4	4	DP2770
Freehold	4	5	DP2770
Freehold	4	6	DP2770

Tenure Type	Lot	Section	Deposited Plan Number
Freehold	4	8	DP2770
Freehold	4	28	DP758554
Freehold	4	29	DP758554
Freehold	4		DP801249
Freehold	4		DP1199733
Freehold	4		DP1234475
Freehold	5	1	DP2770
Freehold	5	2	DP192121
Freehold	5	3	DP2770
Freehold	5	4	DP2770
Freehold	5	6	DP2770
Freehold	5	8	DP2770
Freehold	5	28	DP758554
Freehold	5		DP112742
Freehold	5		DP801249
Freehold	5		DP1199733
Freehold	5		DP1234475
Freehold	6	1	DP2770
Freehold	6	2	DP192121
Freehold	6	3	DP2770
Freehold	6	8	DP2770
Freehold	6	28	DP758554
Freehold	6		DP749716
Freehold	6		DP750926
Freehold	6		DP821183
Freehold	6		DP1199733
Freehold	6		DP1234475
Freehold	7	2	DP192121
Freehold	7		DP112742
Freehold	7		DP236668
Freehold	7		DP749716
Freehold	7		DP784436
Freehold	7		DP821183
Freehold	7		DP1170997
Freehold	7		DP1199733
Freehold	7		DP1234475
Freehold	8		DP255048
Freehold	8		DP770911
Freehold	8		DP1170997
Freehold	8		DP1199733
Freehold	9		DP255048
Freehold	9		DP750926
Freehold	9		DP1199733
Freehold	10		DP255048
Freehold	10		DP750926

Tenure Type	Lot	Section	Deposited Plan Number
Freehold	10		DP1184928
Freehold	10		DP1199733
Freehold	10		DP326668
Freehold	11		DP112742
Freehold	11		DP255048
Freehold	11		DP1051153
Freehold	11		DP1184928
Freehold	12		DP112742
Freehold	12		DP255048
Freehold	12		DP659924
Freehold	12		DP112792
Freehold	13		DP112742
Freehold	13		DP255048
Freehold	13		DP750926
Freehold	13		DP112792
Freehold	14	8	DP2770
Freehold	14		DP112742
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Freehold	15		DP112742
Freehold	15		DP255048
Freehold	15		DP750926
Freehold	15		DP112792
Freehold	16		DP112742
Freehold	16		DP255048
Freehold	16		DP750926
Freehold	16		DP112792
Freehold	17		DP2770
Freehold	17		DP112742
Freehold	18		DP112742
Freehold	19		DP112742
Freehold	19		DP750926
Freehold	20		DP112742
Freehold	20		DP747226
Freehold	20		DP1072668
Freehold	21		DP554140
Freehold	21		DP750926
Freehold	22		DP554140
Freehold	22		DP870608
Freehold	22		DP1041946
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Freehold	24		DP742543
Freehold	25		DP1053537
Freehold	26		DP750926
Freehold	27		DP745897

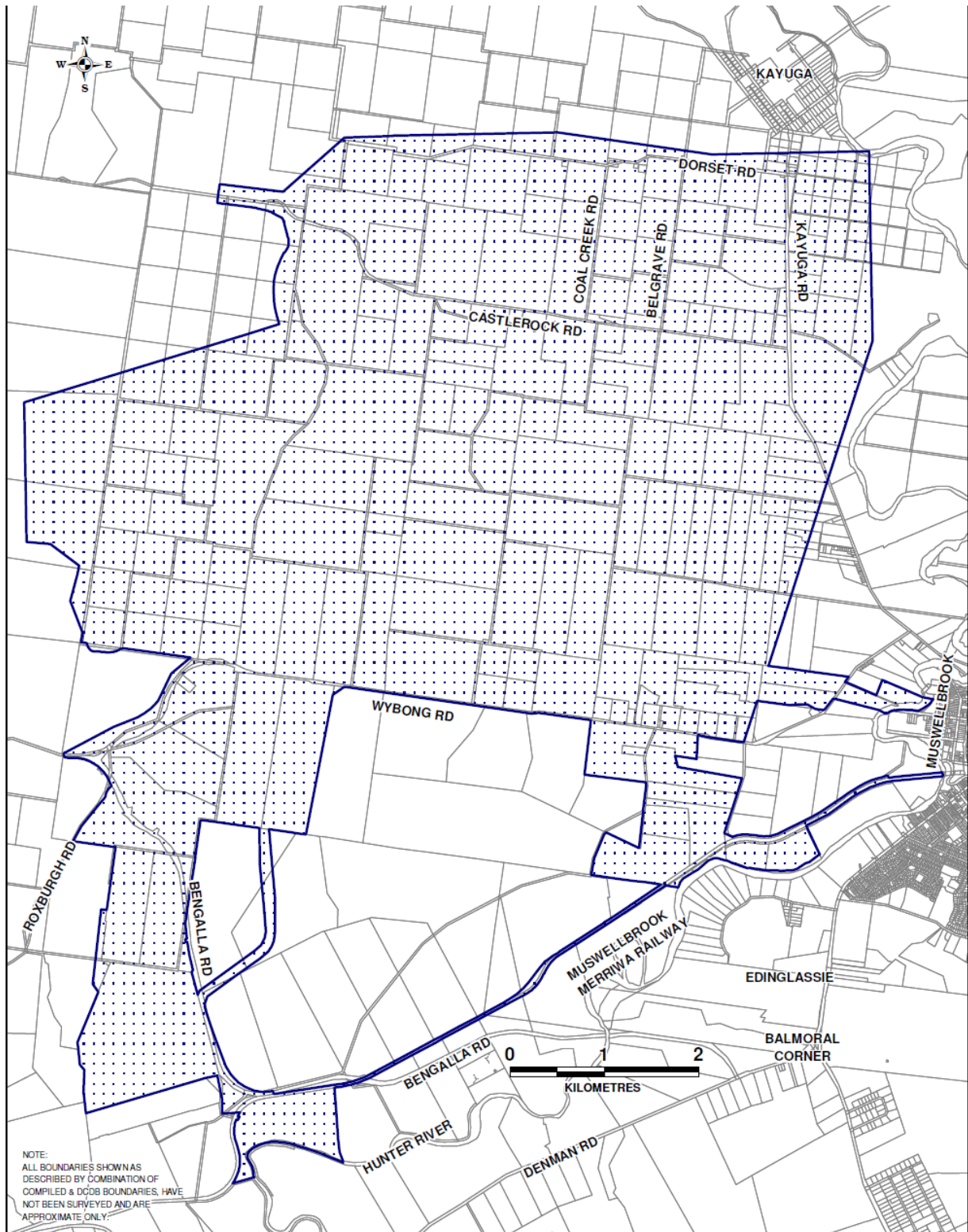
Tenure Type	Lot	Section	Deposited Plan Number
Freehold	28		DP750926
Freehold	29		DP731706
Freehold	30		DP137297
Freehold	35		DP1076510
Freehold	36		DP1108421
Freehold	38		DP750926
Freehold	39		DP750926
Freehold	41		DP750926
Freehold	42		DP750926
Freehold	43		DP750926
Freehold	44		DP750926
Freehold	45		DP750926
Freehold	50		DP809718
Freehold	51		DP809718
Freehold	71		DP626353
Freehold	71		DP750926
Freehold	72		DP626353
Freehold	72		DP750926
Freehold	73		DP750926
Freehold	74		DP750926
Freehold	86		DP750926
Freehold	90		DP750926
Crown	90		DP1215947
Freehold	91		DP620639
Freehold	91		DP750926
Freehold	92		DP750926
Freehold	93		DP750926
Freehold	94		DP665393
Freehold	100		DP1177385
Freehold	101		DP1148907
Freehold	102		DP1148907
Freehold	103		DP1148907
Freehold	104		DP1148907
Freehold	105		DP1148907
Freehold	106		DP1148907
Freehold	122		DP750926
Freehold	123		DP700578
Freehold	123		DP750926
Freehold	124		DP700578
Freehold	124		DP750926
Freehold	126		DP750926
Freehold	127		DP750926
Freehold	129		DP750926
Freehold	130		DP750926
Freehold	131		DP750926

Tenure Type	Lot	Section	Deposited Plan Number
Freehold	132		DP558246
Freehold	132		DP750926
Freehold	133		DP750926
Freehold	135		DP750926
Freehold	143		DP750926
Freehold	144		DP1120266
Freehold	145		DP1120266
Freehold	146		DP750926
Freehold	147		DP1083411
Freehold	149		DP750926
Freehold	150		DP750926
Freehold	151		DP750926
Freehold	152		DP750926
Freehold	153		DP750926
Freehold	154		DP750926
Freehold	164		DP635272
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Freehold	181		DP750926
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Freehold	238		DP750926
Freehold	239		DP750926
Freehold	240		DP750926
Freehold	241		DP750926

Tenure Type	Lot	Section	Deposited Plan Number
Freehold	242		DP750926
Freehold	251		DP750926
Freehold	253		DP750926
Freehold	254		DP750926
Freehold	256		DP750926
Freehold	258		DP750926
Freehold	259		DP750926
Freehold	260		DP750926
Freehold	261		DP561919
Freehold	261		DP750926
Freehold	262		DP750926
Freehold	263		DP750926
Freehold	264		DP750926
Freehold	265		DP750926
Freehold	268		DP567444
Freehold	268		DP750926
Freehold	269		DP567444
Freehold	269		DP750926
Freehold	270		DP750926
Freehold	271		DP750926
Freehold	272		DP750926

Tenure Type	Lot	Section	Deposited Plan Number
Freehold	273		DP750926
Freehold	274		DP750926
Freehold	275		DP750926
Freehold	276		DP750926
Freehold	278		DP750926
Freehold	279		DP750926
Freehold	280		DP750926
Freehold	282		DP750926
Freehold	505		DP711996
Freehold	641		DP554159
Freehold	1006		DP1235827
Freehold	1007		DP1235827
Freehold	1008		DP1235827
Freehold	1009		DP1235827
Freehold	1453		DP628493
Crown	7001		DP93329
Crown	7304		DP1146786
Freehold	A		DP174071
Freehold	A		DP432713
Freehold	B		DP174071
Freehold	B		DP432713

Other	
Crown Water Course	Hunter River
State Rail Authority (Crown)	Railway lands located between or adjacent to the above Parcels of Land
Muswellbrook Shire Council or Department of Lands (Crown)	Various Council and Crown Public and Unformed Roads located within, between or adjacent to the above Parcels of Land, including Bengalla Road, Castlerock Road, Dorset Road, Kayuga Road and Wybong Road
Crown	Creeks or streams located within, between or adjacent to the above Parcels of Land. Any Unidentified Crown Land or Crown Land Historical Title Residues located within, between or adjacent to the above Parcels of Land
Freehold	Any Unidentified Historical Title Residues located within, between or adjacent to the above Parcels of Land



NOTE:  
 ALL BOUNDARIES SHOWN AS  
 DESCRIBED BY COMBINATION OF  
 COMPILED & DGD BOUNDARIES, HAVE  
 NOT BEEN SURVEYED AND ARE  
 APPROXIMATE ONLY.

**MACH Energy**  
 MACH Energy Australia  
 Mt Pleasant Project

Drawn By: SC  
 Date: 17/02/22  
 Layout: A4  
 Projection: MGA 56  
 Location: Muswellbrook  
 Contour: N/A  
 Version: 04

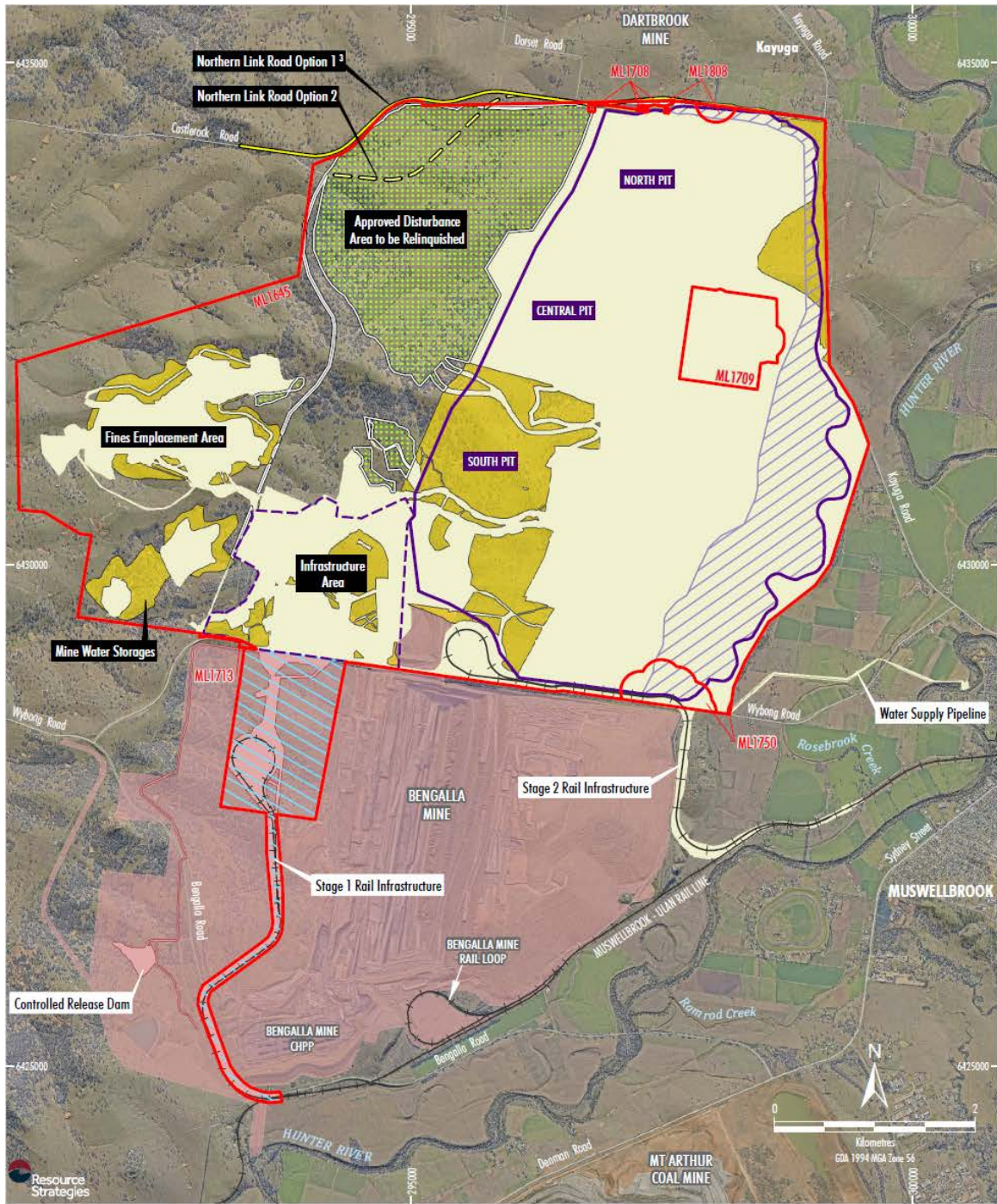
**Mount Pleasant Optimisation Project  
 Provisional Development Application Area**

THE SITE INCLUDES ALL LAND AND/OR LOTS LISTED IN THE SCHEDULE OF  
 LANDS TABLE TO THE EXTENT THAT SUCH LAND AND/OR LOTS FALL WITHIN  
 AND/OR ARE INTERSECTED BY THE DEVELOPMENT CONSENT BOUNDARY

Workspace Ref: MACH MPO Optimisation Project Consent Boundary 220217.wor  
 PDF Ref: MACH MPO Optimisation Project Consent Boundary 220217.PDF



APPENDIX 2 DEVELOPMENT LAYOUT PLANS



- LEGEND**
- Existing Mine Elements**
- Mining Lease Boundary (Mount Pleasant Operation)
  - Project Continuation of Existing/Approved Surface Development (DA92/97) <sup>1</sup>
  - Infrastructure to be removed under the Terms of Condition 37, Schedule 3 (DA92/97)
  - Bengalla Mine Approved Disturbance Boundary (SSD-5170)
  - Existing/Approved Mount Pleasant Operation Infrastructure within Bengalla Mine Approved Disturbance Boundary (SSD-5170) <sup>1</sup>
- Additional/Revised Project Elements**
- Approved Disturbance Area to be Relinquished <sup>2</sup>
  - Approximate Additional Disturbance of Project Extensions <sup>1</sup>
  - Northern Link Road Option 1 Centreline <sup>3</sup>
  - Northern Link Road Option 2 Centreline
  - Approximate Extent of Project Open Cut and Waste Rock Placement Landforms
  - Approximate Extent of Project Out-of-Pit Waste Employment
  - Revised Infrastructure Area Envelope

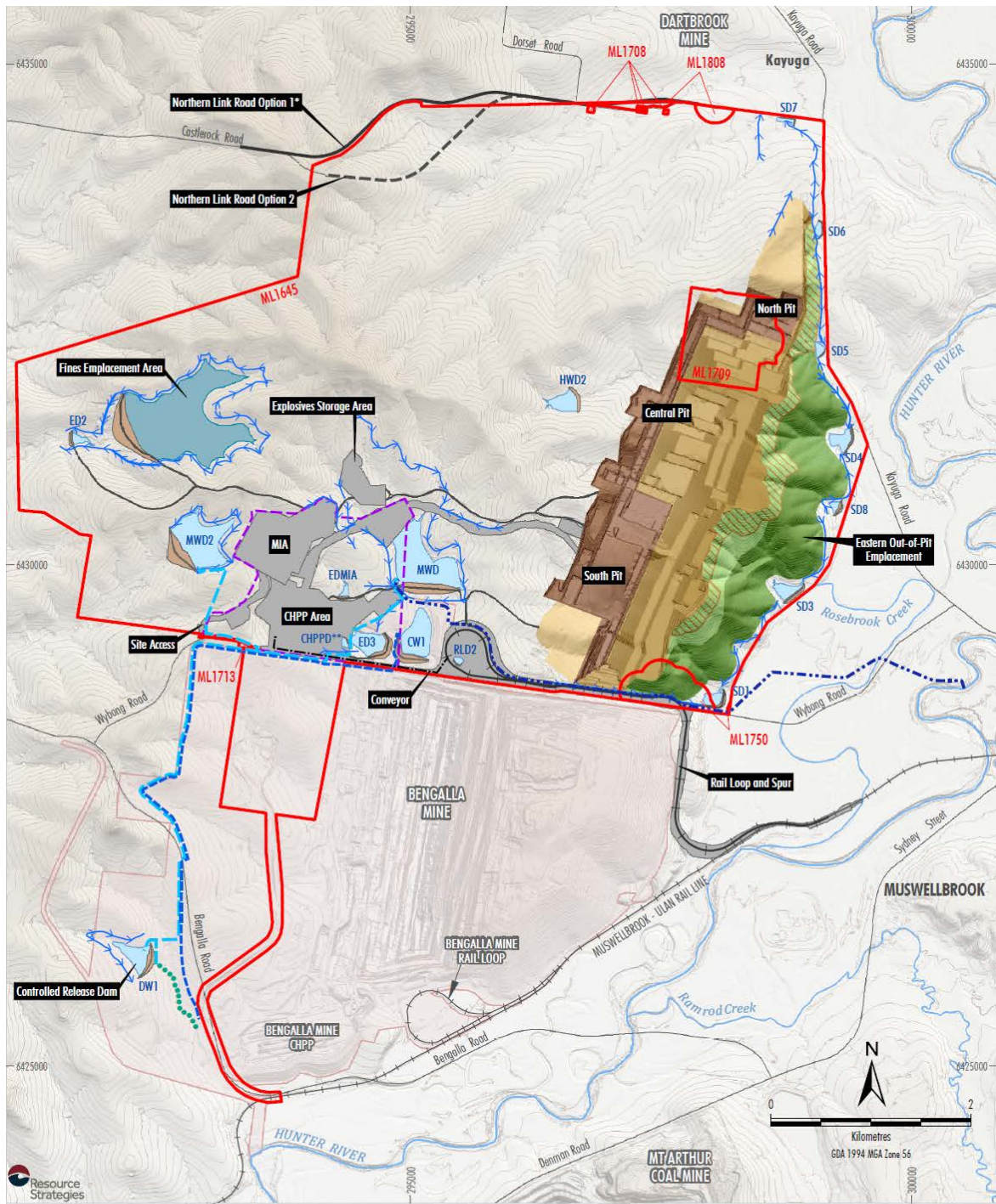
- NOTES**
1. Excludes some incidental Project components such as water management infrastructure, access tracks, topsoil stockpiles, power supply, temporary offices, other ancillary works and construction disturbance.
  2. Subject to detailed design of Northern Link Road alignment.
  3. Preferred alignment subject to landholder access.

Source: MACH (2020); NSW Spatial Services (2020); Department of Planning and Environment (2016) Orthophoto: MACH (2020)

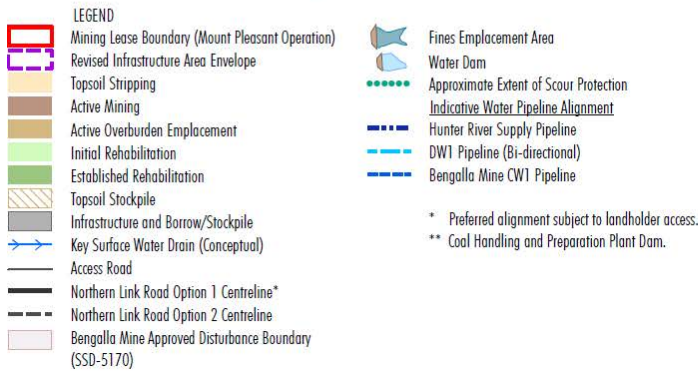
**MACHEnergy**  
 MOUNT PLEASANT OPTIMISATION PROJECT  
 General Arrangement of the Project

Figure 3-1

Figure 1: General Project Arrangement



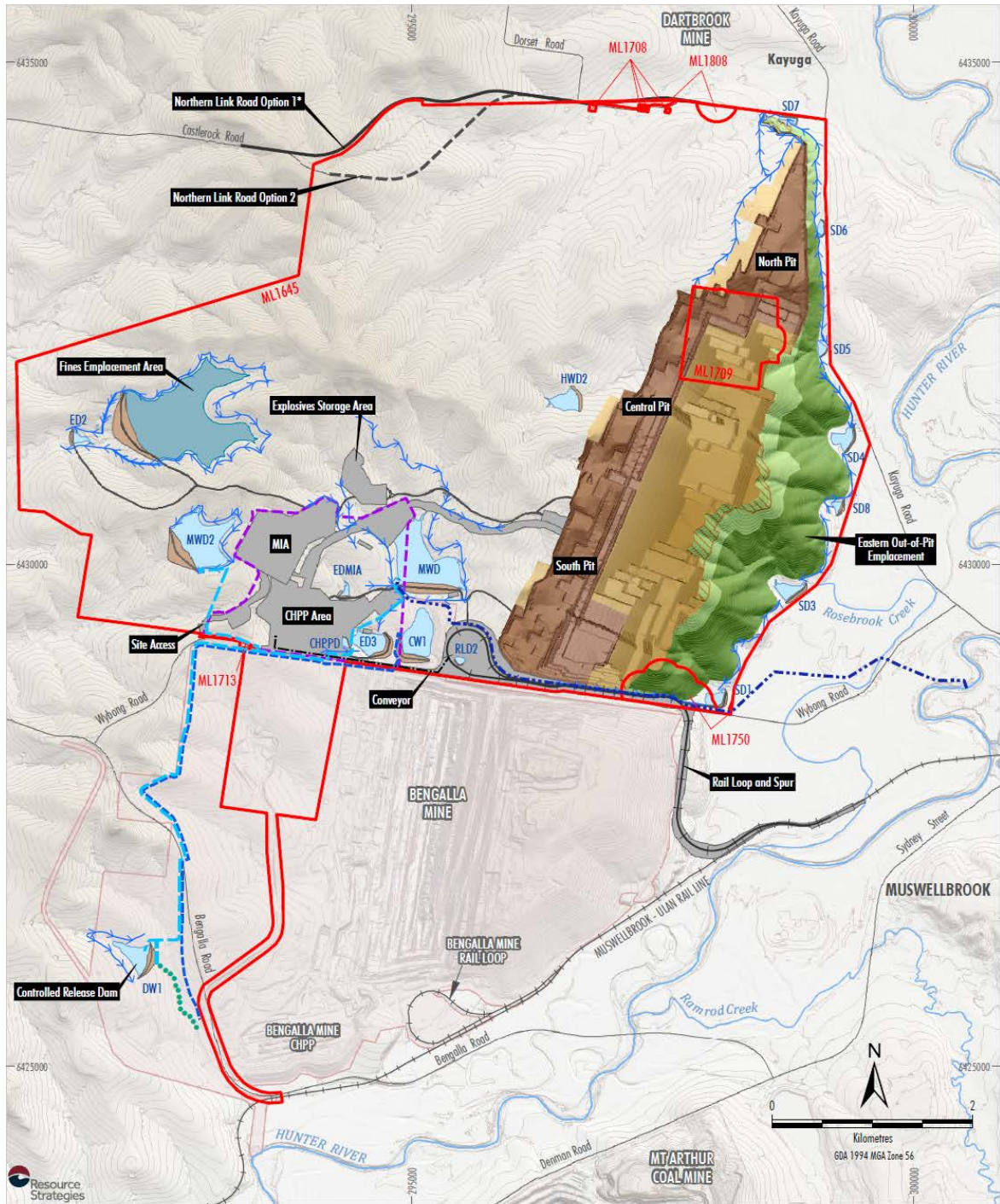
Source: MACH (2020); NSW Spatial Services (2020)



**MACHEnergy**  
 MOUNT PLEASANT OPTIMISATION PROJECT  
 Provisional General Arrangement  
 2026

Figure 3-4

Figure 2: General Project Arrangement – 2026



- LEGEND**
- Mining Lease Boundary (Mount Pleasant Operation)
  - Revised Infrastructure Area Envelope
  - Topsoil Stripping
  - Active Mining
  - Active Overburden Emplacement
  - Initial Rehabilitation
  - Established Rehabilitation
  - Topsoil Stockpile
  - Infrastructure and Borrow/Stockpile
  - Key Surface Water Drain (Conceptual)
  - Access Road
  - Northern Link Road Option 1 Centreline\*
  - Northern Link Road Option 2 Centreline
  - Bengalla Mine Approved Disturbance Boundary (SSD-5170)
  - Fines Emplacement Area
  - Water Dam
  - Approximate Extent of Scour Protection
  - Indicative Water Pipeline Alignment
  - Hunter River Supply Pipeline
  - DW1 Pipeline (Bi-directional)
  - Bengalla Mine CW1 Pipeline

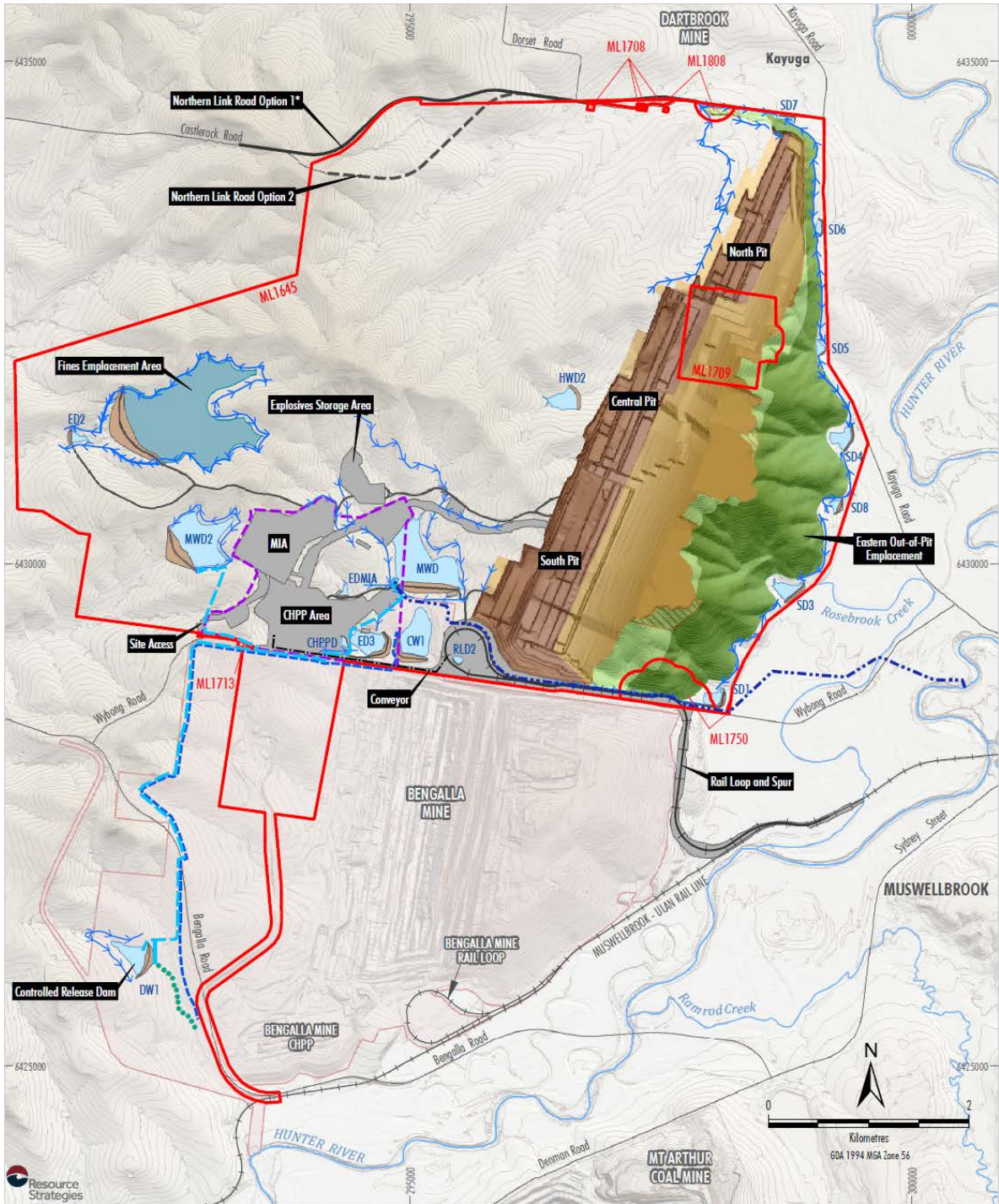
\* Preferred alignment subject to landholder access.

Source: MACH (2020); NSW Spatial Services (2020)

**MACHEnergy**  
 MOUNT PLEASANT OPTIMISATION PROJECT  
 Provisional General Arrangement  
 2028

Figure 3-5

Figure 3: General Project Arrangement – 2028



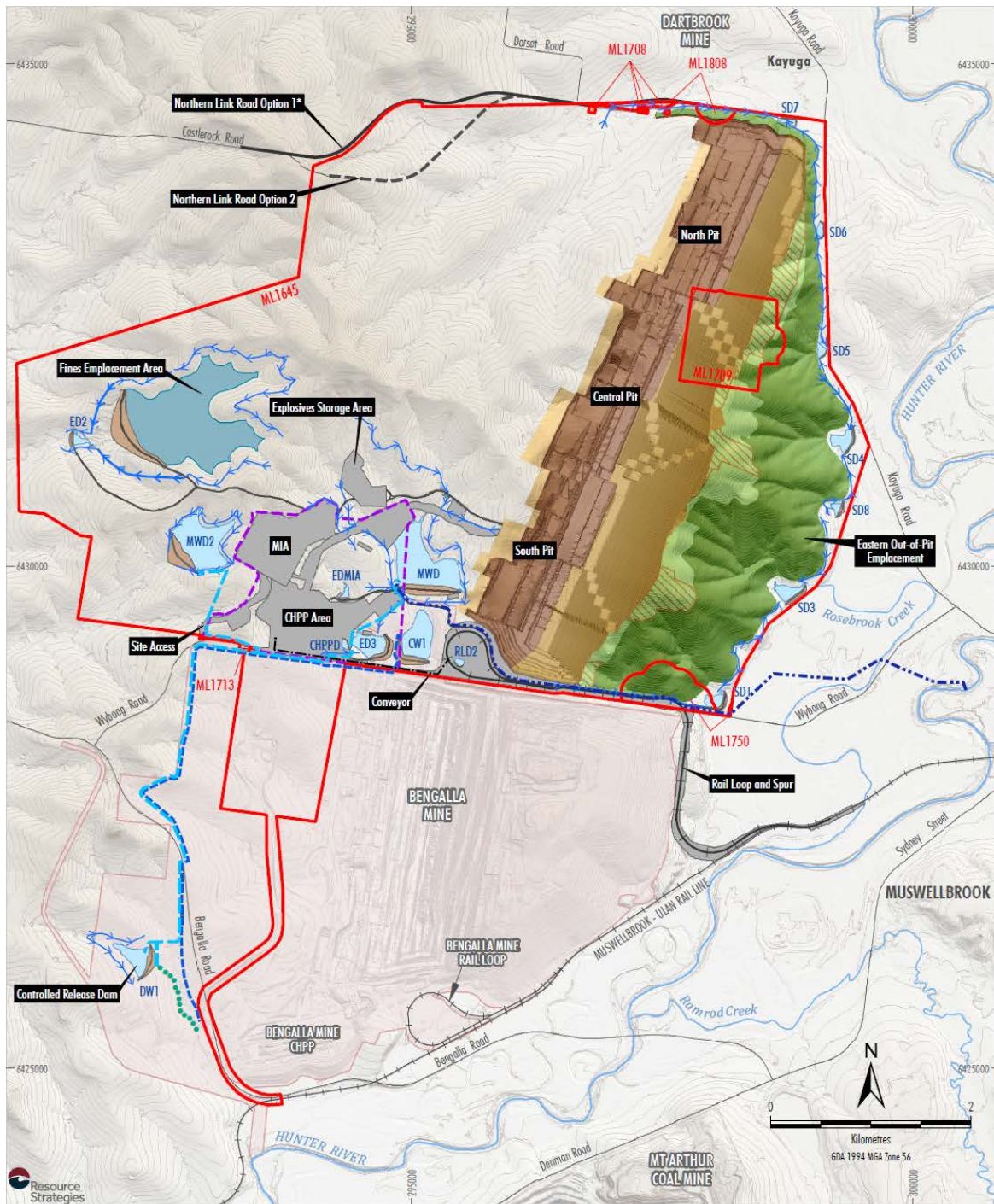
- LEGEND**
- Mining Lease Boundary (Mount Pleasant Operation)
  - Revised Infrastructure Area Envelope
  - Topsoil Stripping
  - Active Mining
  - Active Overburden Emplacement
  - Initial Rehabilitation
  - Established Rehabilitation
  - Topsoil Stockpile
  - Infrastructure and Borrow/Stockpile
  - Key Surface Water Drain (Conceptual)
  - Access Road
  - Northern Link Road Option 1 Centreline\*
  - Northern Link Road Option 2 Centreline
  - Bengalla Mine Approved Disturbance Boundary (SSD-5170)
  - Fines Emplacement Area
  - Water Dam
  - Approximate Extent of Scour Protection
  - Indicative Water Pipeline Alignment
  - Hunter River Supply Pipeline
  - DW1 Pipeline (Bi-directional)
  - Bengalla Mine CW1 Pipeline
- \* Preferred alignment subject to landholder access.

Source: MACH (2020); NSW Spatial Services (2020)

**MACHEnergy**  
 MOUNT PLEASANT OPTIMISATION PROJECT  
 Provisional General Arrangement  
 2031

**Figure 3-6**

**Figure 4: General Project Arrangement - 2031**



- LEGEND**
- Mining Lease Boundary (Mount Pleasant Operation)
  - Revised Infrastructure Area Envelope
  - Topsoil Stripping
  - Active Mining
  - Active Overburden Emplacement
  - Initial Rehabilitation
  - Established Rehabilitation
  - Topsoil Stockpile
  - Infrastructure and Borrow/Stockpile
  - Key Surface Water Drain (Conceptual)
  - Access Road
  - Northern Link Road Option 1 Centreline\*
  - Northern Link Road Option 2 Centreline
  - Bengalla Mine Approved Disturbance Boundary (SSD-5170)
  - Fines Emplacement Area
  - Water Dam
  - Approximate Extent of Scour Protection
  - — — — Indicative Water Pipeline Alignment
  - — — — Hunter River Supply Pipeline
  - — — — DW1 Pipeline (Bi-directional)
  - — — — Bengalla Mine CW1 Pipeline

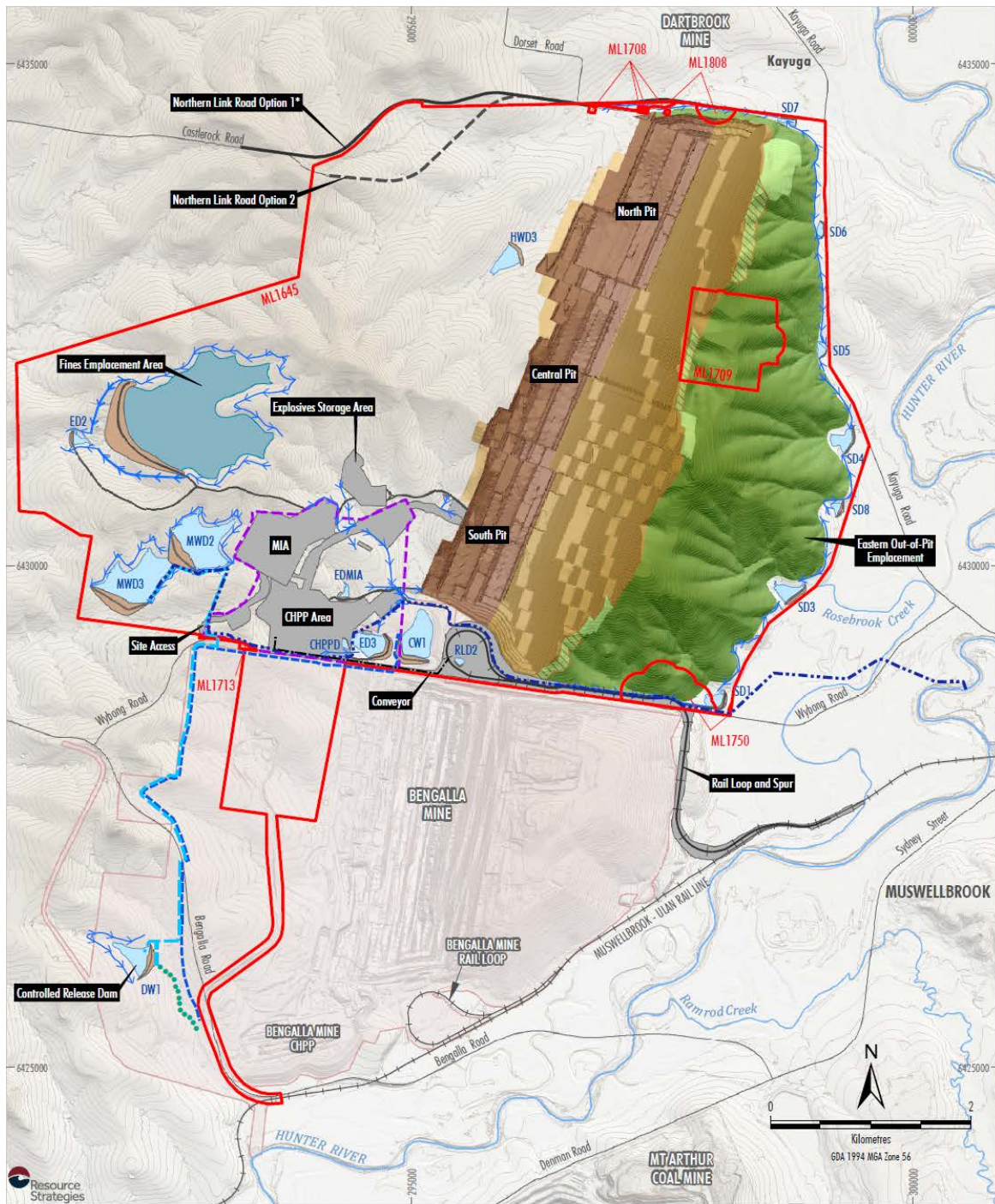
\* Preferred alignment subject to landholder access.

Source: MACH (2020); NSW Spatial Services (2020)

**MACHenergy**  
 MOUNT PLEASANT OPTIMISATION PROJECT  
 Provisional General Arrangement  
 2034

**Figure 3-7**

**Figure 5: General Project Arrangement - 2034**



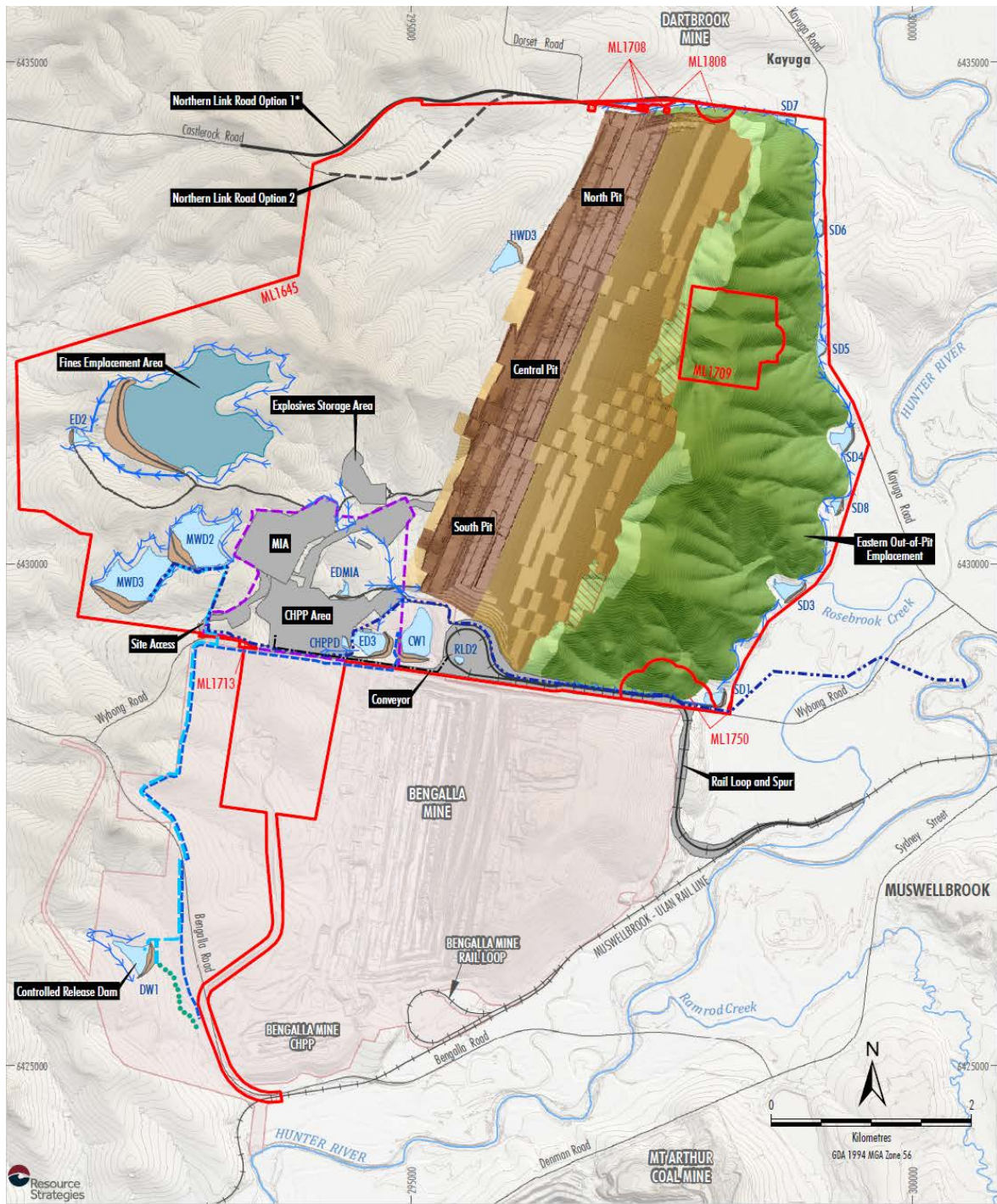
- LEGEND**
- Mining Lease Boundary (Mount Pleasant Operation)
  - Revised Infrastructure Area Envelope
  - Topsoil Stripping
  - Active Mining
  - Active Overburden Emplacement
  - Initial Rehabilitation
  - Established Rehabilitation
  - Topsoil Stockpile
  - Infrastructure and Borrow/Stockpile
  - Key Surface Water Drain (Conceptual)
  - Access Road
  - Northern Link Road Option 1 Centreline\*
  - Northern Link Road Option 2 Centreline
  - Bengalla Mine Approved Disturbance Boundary (SSD-5170)
  - Fines Emplacement Area
  - Water Dam
  - Approximate Extent of Scour Protection
  - Indicative Water Pipeline Alignment
  - Hunter River Supply Pipeline
  - DW1 Pipeline (Bi-directional)
  - Bengalla Mine CW1 Pipeline
- \* Preferred alignment subject to landholder access.

Source: MACH (2020); NSW Spatial Services (2020)

**MACHEnergy**  
 MOUNT PLEASANT OPTIMISATION PROJECT  
 Provisional General Arrangement  
 2041

Figure 3-8

Figure 6: General Project Arrangement - 2041



Source: MACH (2020); NSW Spatial Services (2020)

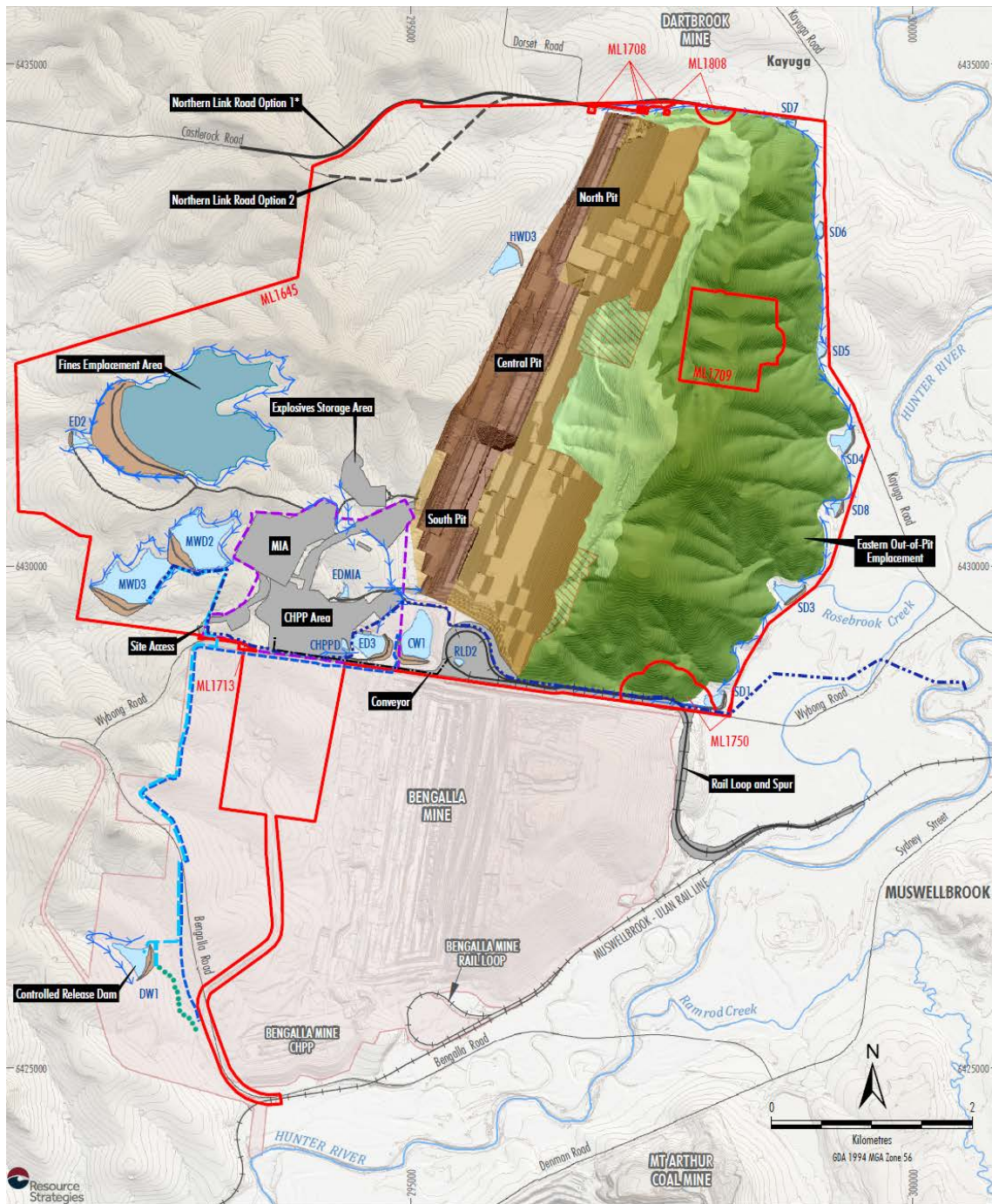
- LEGEND**
- Mining Lease Boundary (Mount Pleasant Operation)
  - Revised Infrastructure Area Envelope
  - Topsoil Stripping
  - Active Mining
  - Active Overburden Emplacement
  - Initial Rehabilitation
  - Established Rehabilitation
  - Topsoil Stockpile
  - Infrastructure and Borrow/Stockpile
  - Key Surface Water Drain (Conceptual)
  - Access Road
  - Northern Link Road Option 1 Centreline\*
  - Northern Link Road Option 2 Centreline
  - Bengalla Mine Approved Disturbance Boundary (SSD-5170)
  - Fines Emplacement Area
  - Water Dam
  - Approximate Extent of Scour Protection
  - Indicative Water Pipeline Alignment
  - Hunter River Supply Pipeline
  - DW1 Pipeline (Bi-directional)
  - Bengalla Mine CW1 Pipeline

\* Preferred alignment subject to landholder access.

**MACHEnergy**  
 MOUNT PLEASANT OPTIMISATION PROJECT  
 Provisional General Arrangement  
 2044

Figure 3-9

Figure 7: General Project Arrangement - 2044



Source: MACH (2020); NSW Spatial Services (2020)



**MACHEnergy**  
 MOUNT PLEASANT OPTIMISATION PROJECT  
 Provisional General Arrangement  
 2047

Figure 3-10

Figure 8: General Project Arrangement – 2047



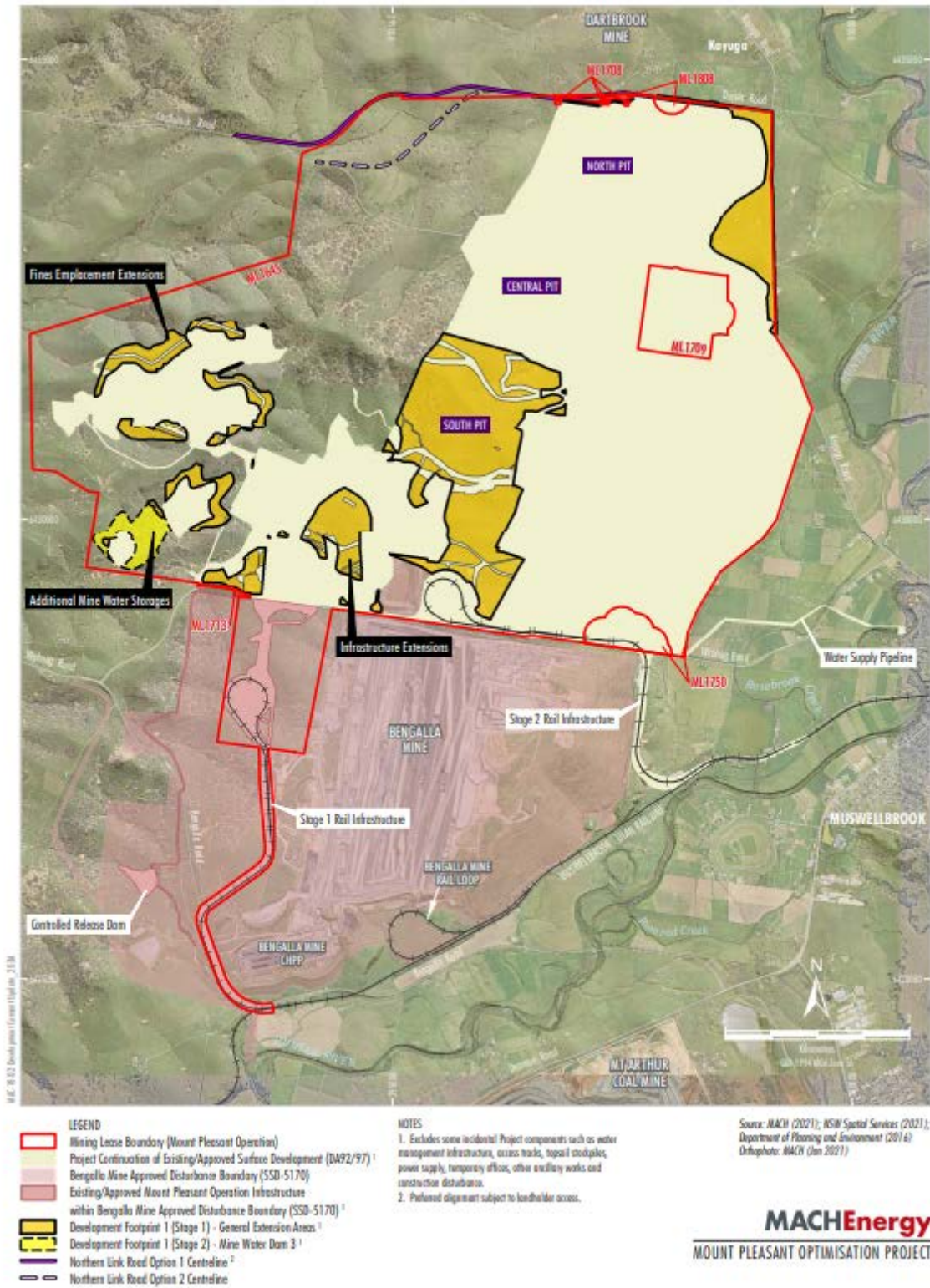
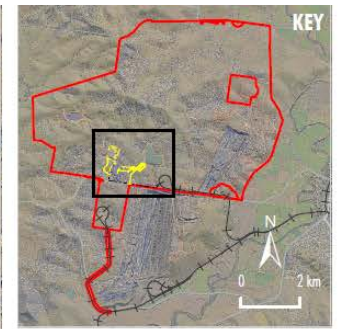
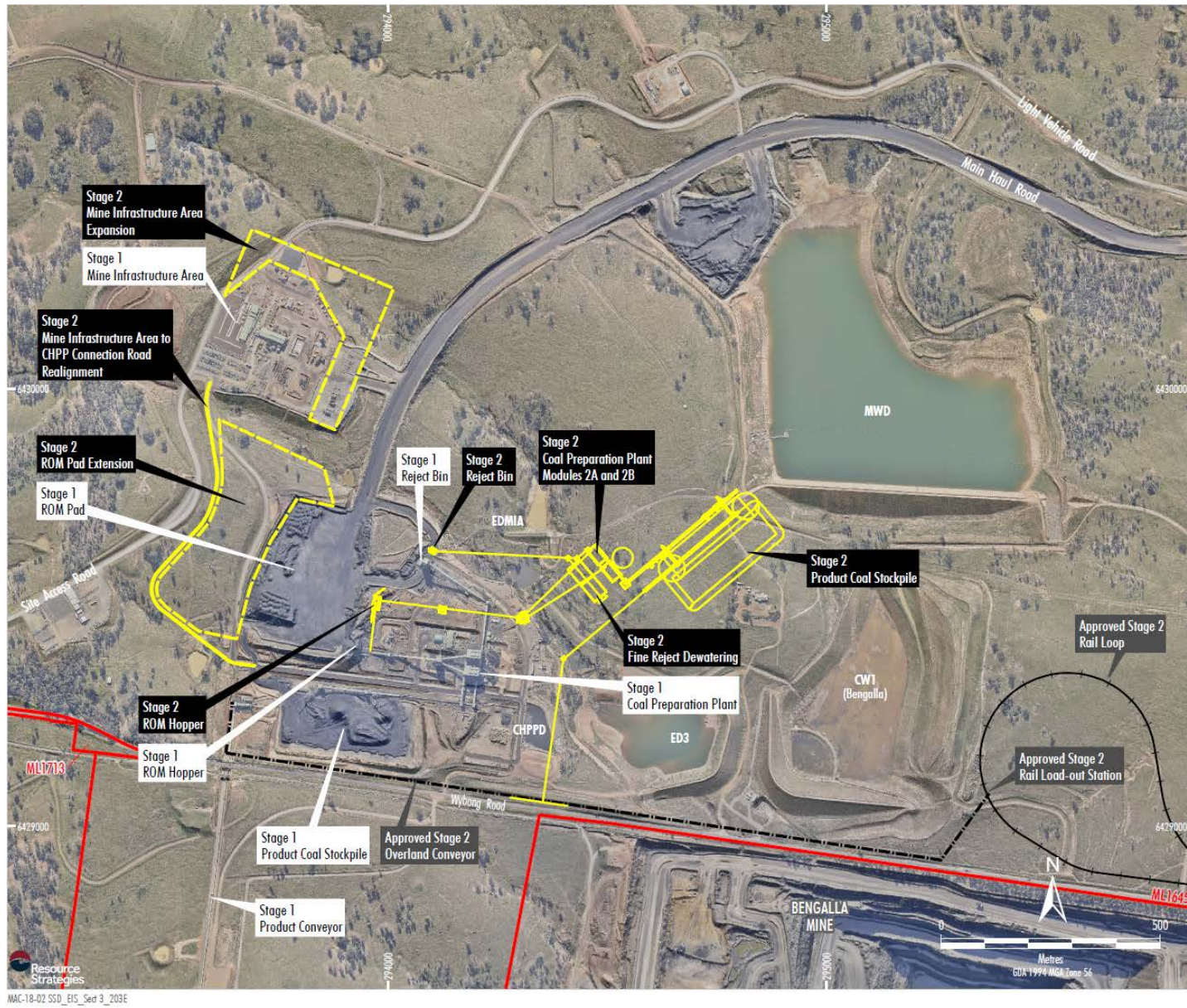


Figure 9: Staging of Project Disturbance Areas



**LEGEND**  
 Mining Lease Boundary  
 (Mount Pleasant Operation)

Source: MACH (2020); NSW Spatial Services (2020)  
 Orthophoto: MACH (July 2020)

**MACH Energy**  
 MOUNT PLEASANT OPTIMISATION PROJECT  
 Indicative Materials Handling and  
 Mine Infrastructure Area Layout

**Figure 3-12**

Figure 10: Indicative Mine Infrastructure Area Layout

### APPENDIX 3 RECEIVER ZONES AND LOCATIONS

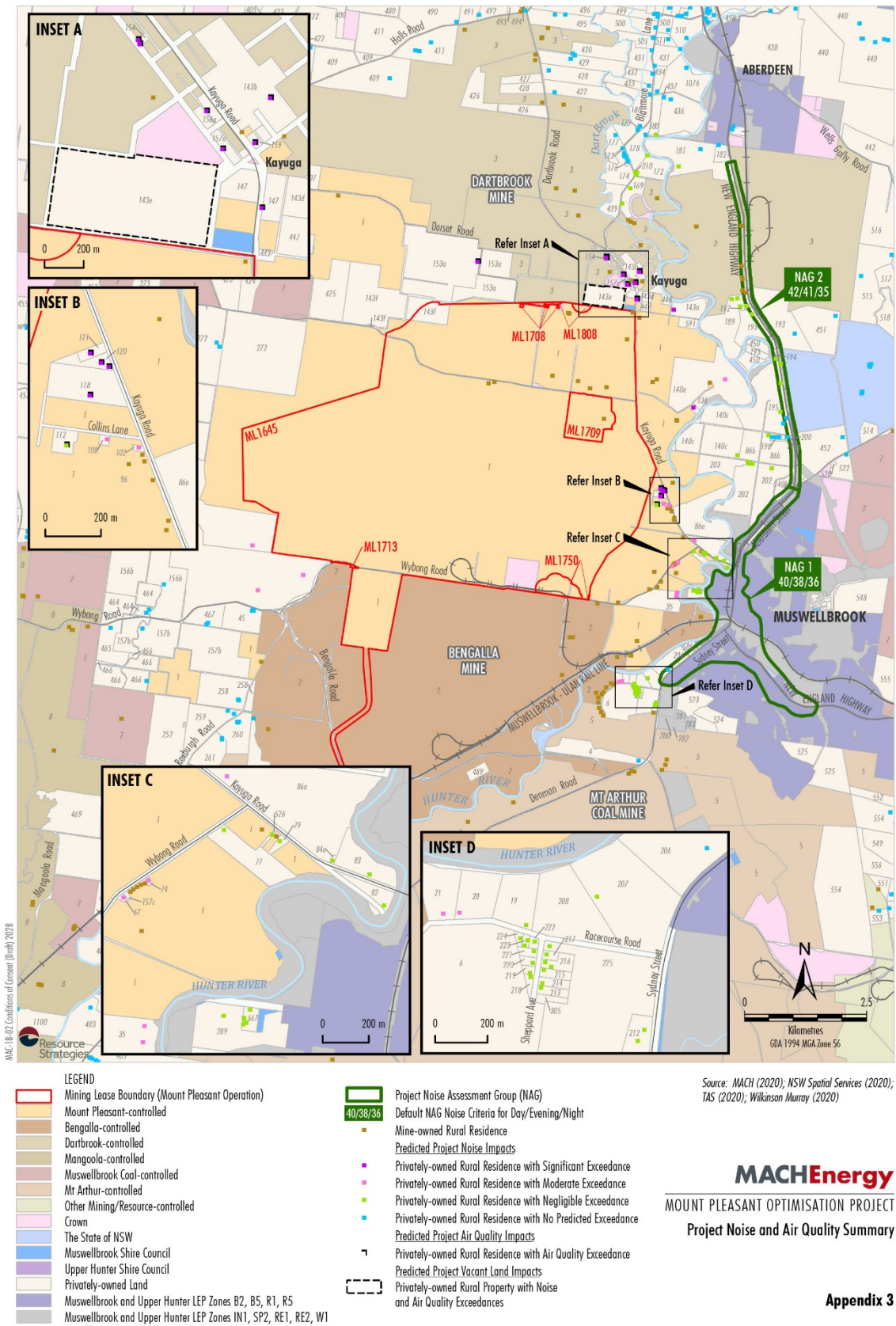
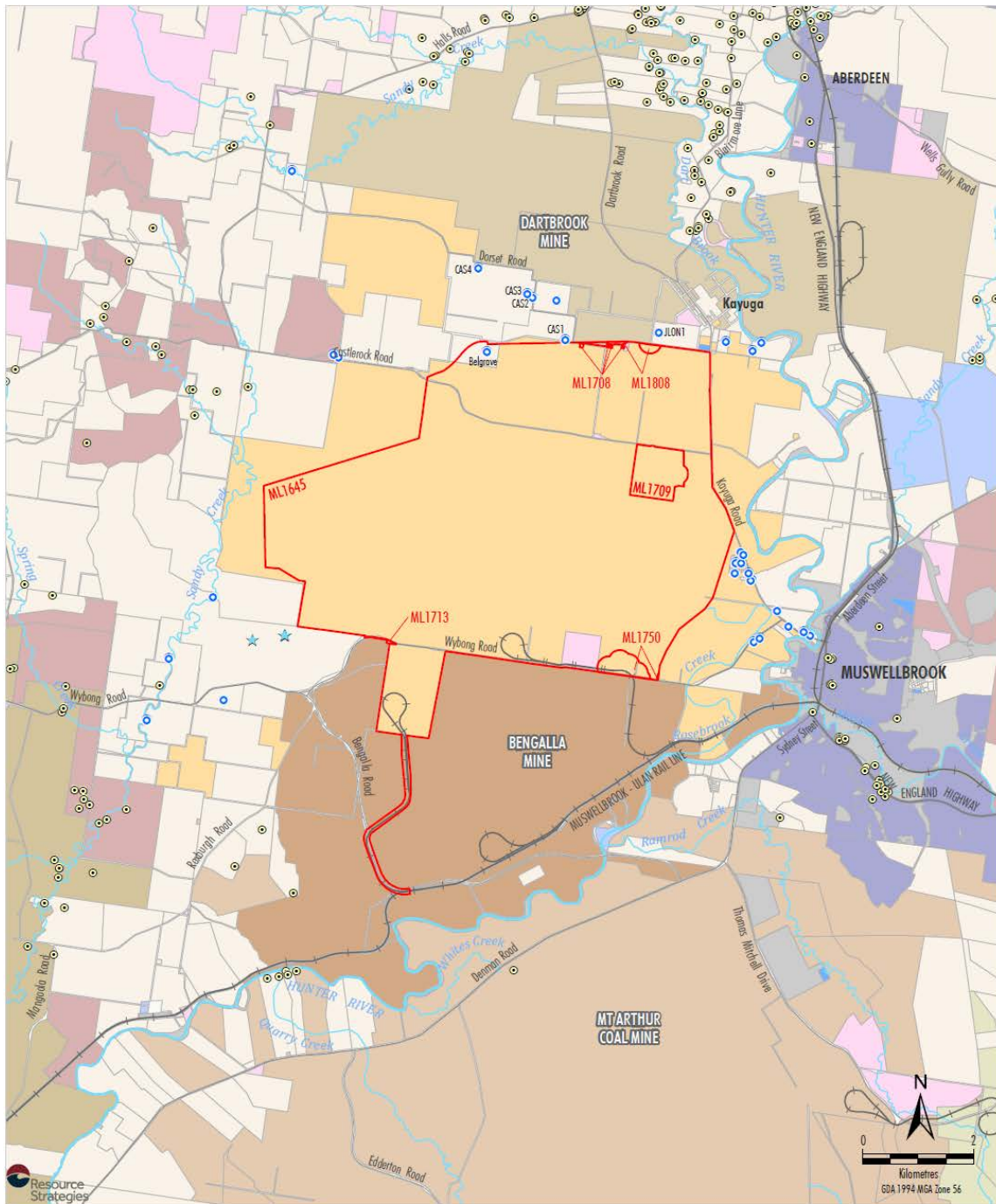


Figure 11: Receiver Locations

## APPENDIX 4 GROUNDWATER BORE LOCATIONS



- LEGEND**
- Mining Lease Boundary (Mount Pleasant Operation)
  - Mount Pleasant-controlled
  - Bengalla-controlled
  - Dartbrook-controlled
  - Mangoola-controlled
  - Muswellbrook Coal-controlled
  - Mt Arthur-controlled
  - Other Mining/Resource-controlled
  - Crown
  - The State of NSW
  - Muswellbrook Shire Council
  - Upper Hunter Shire Council
  - Privately-owned Land
  - Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
  - Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

- Bore/Well on Privately-Owned Land (Bore Census)
- ★ Spring on Privately-owned Land (Bore Census)
- Water NSW Record

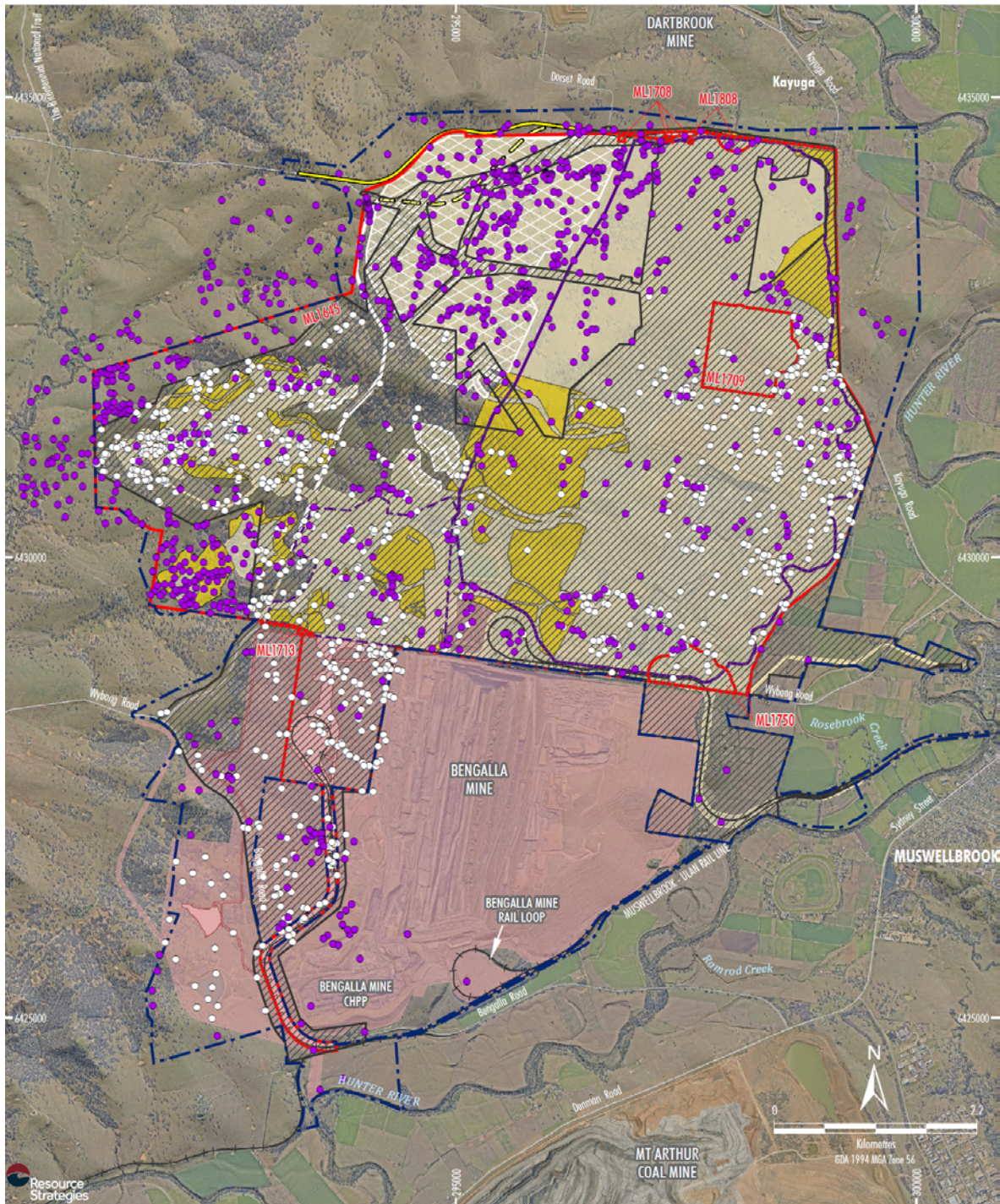
Source: MACH (2020); Water NSW (2020); NSW Spatial Services (2020)

**MACHEnergy**  
 MOUNT PLEASANT OPTIMISATION PROJECT  
 Groundwater Bores, Wells and Springs  
 Identified during the Bore Census

**Figure 7-18**

*Figure 12: Groundwater Bore Locations*

APPENDIX 5 HERITAGE SITES



- LEGEND**
- Existing Mine Elements**
- Mining Lease Boundary (Mount Pleasant Operation)
  - Approximate Extent of Existing/Approved Surface Development (DA92/97) <sup>1</sup>
  - Bengalla Mine Approved Disturbance Boundary (SSD-5170)
  - Existing/Approved Mount Pleasant Operation Infrastructure within Bengalla Mine Approved Disturbance Boundary (SSD-5170) <sup>1</sup>
- Additional/Revised Project Elements**
- Approved Disturbance Area to be Relinquished <sup>2</sup>
  - Approximate Additional Disturbance of Project Extensions <sup>1</sup>
  - Northern Link Road Option 1 Centreline <sup>3</sup>
  - Northern Link Road Option 2 Centreline
  - Approximate Extent of Project Open Cut and Waste Rock Emplacement Landforms
  - Revised Infrastructure Area Envelope

- Development Application Area
- Existing AHIP Areas (AHIPs #C0002053, #C0002092, #C0004783)
- Known Salvaged Site <sup>4</sup>
- Other Recorded Aboriginal Heritage Site <sup>4</sup>

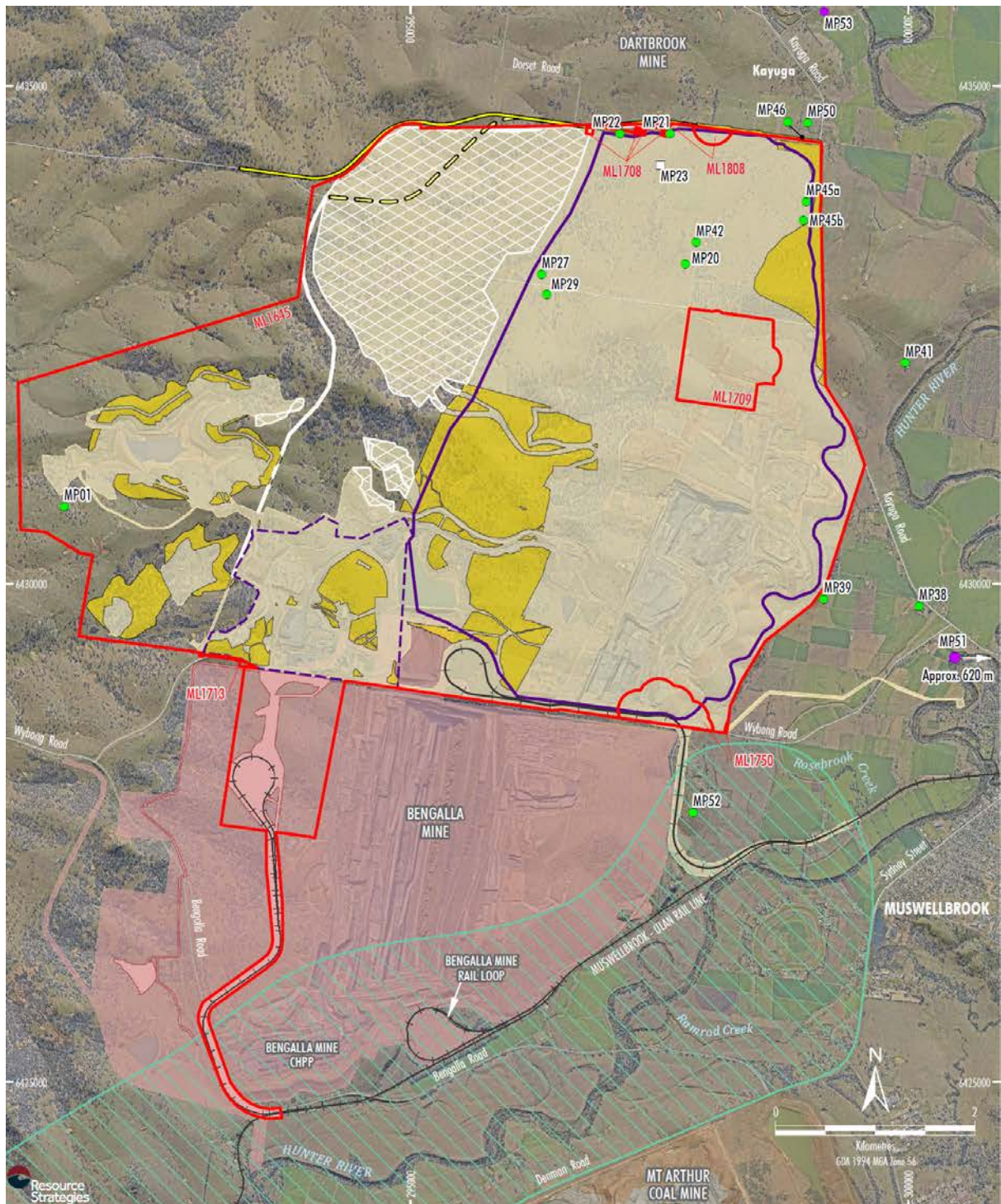
- NOTES**
1. Excludes some incidental Project components such as water management infrastructure, access tracks, topsoil stockpiles, power supply, temporary offices, other ancillary works and construction disturbance.
  2. Subject to detailed design of Northern Link Road alignment.
  3. Preferred alignment subject to landholder access.
  4. Includes 41 sites subsequently reassessed not to be Aboriginal Sites.

Source: MACH (2020); NSW Spatial Services (2020); National Trust of Australia (1985); Department of Planning and Environment (2016)  
 Orthophoto: MACH (2020)

**MACH Energy**  
 MOUNT PLEASANT OPTIMISATION PROJECT  
 Location of Known Aboriginal Heritage Sites and Existing AHIP Areas

Figure 7-28

Figure 13: Aboriginal Cultural Heritage Sites



- LEGEND**
- Existing Mine Elements**
- Mining Lease Boundary (Mount Pleasant Operation)
  - Approximate Extent of Existing/Approved Surface Development (DA92/97) <sup>1</sup>
  - Bengalla Mine Approved Disturbance Boundary (SSD-5170)
  - Existing/Approved Mount Pleasant Operation Infrastructure within Bengalla Mine Approved Disturbance Boundary (SSD-5170) <sup>1</sup>
- Additional/Revised Project Elements**
- Approved Disturbance Area to be Relinquished <sup>2</sup>
  - Approximate Additional Disturbance of Project Extensions <sup>1</sup>
  - Northern Link Road Option 1 Centreline <sup>3</sup>
  - Northern Link Road Option 2 Centreline
  - Approximate Extent of Project Open Cut and Waste Rock Emplacement Landforms
  - Revised Infrastructure Area Envelope

- Muswellbrook-Jerrys Plains Landscape Conservation Area
- Site of Interest
- Historic Heritage Sites
- Local Significance
- State Significance

**NOTES**

1. Excludes some incidental Project components such as water management infrastructure, access tracks, topsoil stockpiles, power supply, temporary offices, other ancillary works and construction disturbance.

2. Subject to detailed design of Northern Link Road alignment.

3. Preferred alignment subject to landholder access.

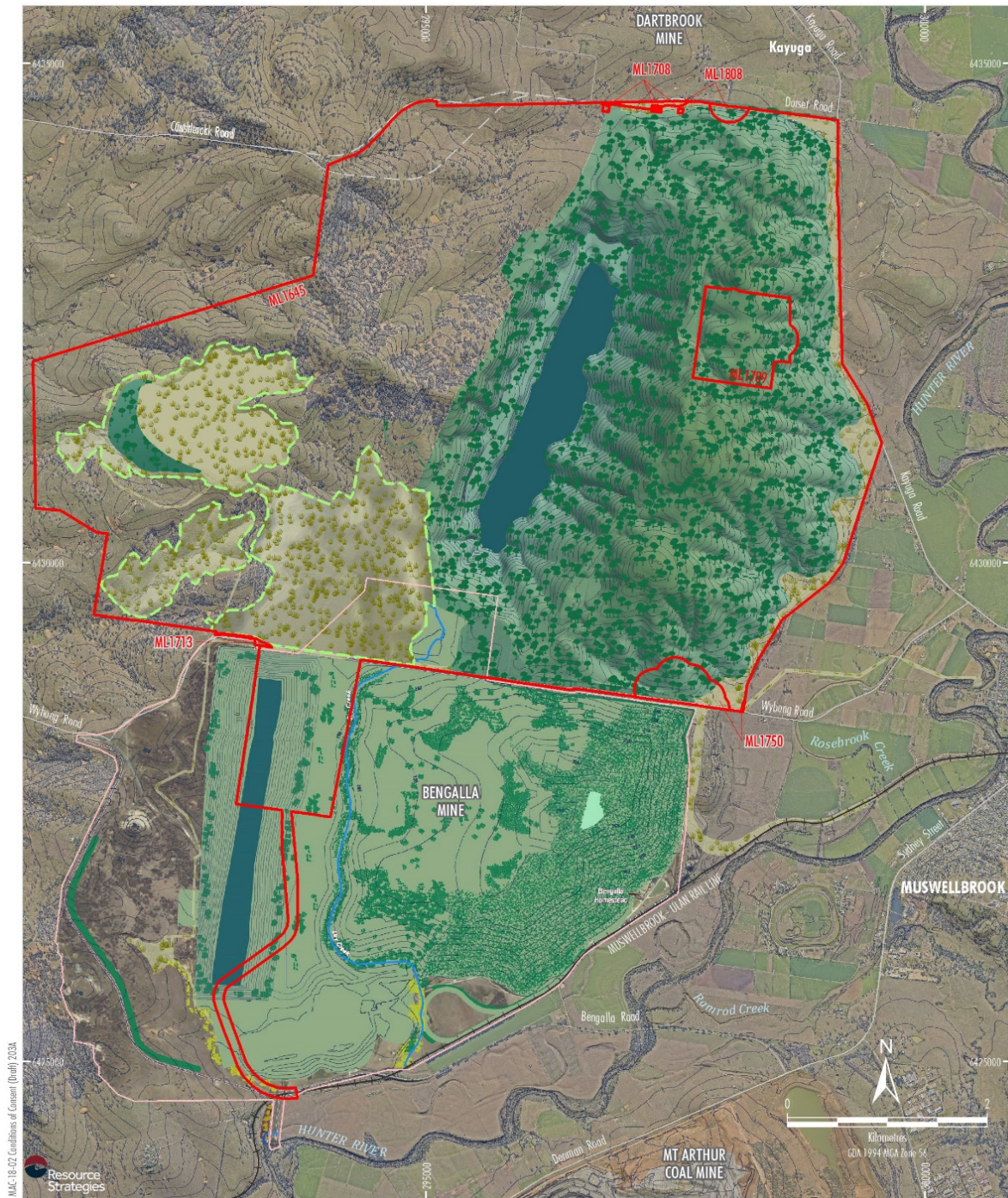
Source: MACH (2020); NSW Spatial Services (2020); National Trust of Australia (1985); Department of Planning and Environment (2016); Orthophoto: MACH (2020)

**MACHEnergy**  
 MOUNT PLEASANT OPTIMISATION PROJECT  
 Relevant Historic Heritage Sites

Figure 7-29

Figure 14: Historic Heritage Sites

## APPENDIX 6 REHABILITATION PLAN



MAC-18-02 Conditions of Consent (Draft) 2024

- LEGEND**
- Mining Lease Boundary (Mount Pleasant Operation)
  - Final Landform Contour (10 m Interval)
  - Secondary/Post-mining Land Use Domains**
  - Domain A - Final Void
  - Domain C - Agricultural Land
  - Domain D - Native Woodland/Grassland
  - Potential High Intensity Agriculture Area

Note: Light vehicle access roads and upslope diversions associated with minimising the catchment of the final void and fines emplacement area are not shown.

- Bengalla Mine Conceptual Final Landform\*
- Project Boundary (Appendix 2 of Development Consent SSD-5170) (Dated 23 December 2016)

\* Digitised from Appendix 9 of Development Consent (SSD-5170) and amended in the Mount Pleasant Operation CHPP area.

Source: MACH (2022); Bengalla Mine (2016); NSW Spatial Services (2020); Department of Planning and Environment (2016) Orthophoto: MACH (2020)

**MACHEnergy**  
MOUNT PLEASANT OPTIMISATION PROJECT  
Conceptual Final Landform  
and Final Land Use Areas

### Appendix 6

Figure 15: Conceptual Final Landform

**APPENDIX 7 GENERAL TERMS OF APPLICANT'S VPA OFFER WITH COUNCIL**

<i>Item</i>	<i>Development Contributions</i>
Mount Pleasant Community Contribution	\$604,079 per annum (indexed annually according to CPI). A community representative committee will be established, including Applicant representatives, to make recommendations to Council regarding these community contributions.
Council Road Maintenance Costs	Costs associated with the maintenance of roads, as reasonably apportioned to the use of the road by Mount Pleasant, up to a maximum annual payment of \$277,863 per annum (indexed according to CPI). This contribution will be made for the recurrent road maintenance to be used at Councils discretion for that purpose.
Environmental Officer	The Applicant to make contributions to an Environmental Officer, up to a maximum of \$24,169 per annum (indexed annually according to CPI).
Apprenticeships	The Applicant to use its best endeavours to engage 4 apprentices per year for the life of the mine sourced from residents within the Muswellbrook Shire and Aberdeen.

**Notes:**

- *Payments are subject to CPI adjustments.*
- *The Applicant must make all reasonable and feasible endeavours to engage apprentices who are permanent residents of the Muswellbrook Shire Local Government Area.*



**APPENDIX 8 GENERAL TERMS OF APPLICANT'S VPA OFFER WITH UPPER HUNTER SHIRE COUNCIL**

<i>Intended Use</i>	<i>Development Contributions</i>
Community Enhancement Fund contribution to benefit the community of Aberdeen	\$250,000 per annum (indexed to CPI)
Employment of a part time Aboriginal Community Liaison Officer by Upper Hunter Shire Council	\$25,000 per annum (indexed to CPI)

**Notes:**

- *Payments are subject to CPI adjustments.*

**APPENDIX E**  
**DEVELOPMENT CONSENT DA 92/97**

**ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979 (UNAMENDED)**

**DETERMINATION OF DEVELOPMENT APPLICATION  
PURSUANT TO SECTION 91**

I, the Minister for Urban Affairs and Planning, pursuant to Section 101 of the unamended Environmental Planning and Assessment Act, 1979 (“the Act”), determine the development application (“the application”) referred to in Schedule 1 by granting consent to the application subject to the conditions set out in Schedule 2.

The reasons for the imposition of the conditions are to:

- (i) minimise the adverse impact the development may cause through water and air pollution, noise and visual disturbance;
- (ii) provide for environmental monitoring and reporting; and
- (iii) set requirements for infrastructure provision.

Signed

Andrew Refshauge  
**Minister for Urban Affairs and Planning**

Sydney,

22 December

1999

File No. N95/00147

Red text represents MOD 1 dated 19 September 2011  
Blue text represents MOD 2 dated 29 March 2017  
Green text represents MOD 3 dated 24 August 2018  
Purple text represents MOD 4 dated 16 November 2018  
Orange text represents MOD 5 dated 29 June 2022

**SCHEDULE 1**

**Development Application:**

DA 92/97

**Applicant:**

MACH Energy Australia Pty Ltd

**Consent Authority:**

Minister for Urban Affairs and Planning

**Land:**

See Appendix 1

**Development:**

Construction and operation of the Mt Pleasant open cut coal mine and associated infrastructure

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## DEFINITIONS

Annual review	The review required by condition 3 of Schedule 5
Applicant	MACH Energy Australia Pty Ltd, or any person/s who rely on this consent to carry out development that is subject to this consent
ARTC	Australian Rail Track Corporation
BCA	Building Code of Australia
BCD	Biodiversity & Conservation Division within the Department
Blast misfire	The failure of one or more holes in a blast pattern to initiate
CCC	Community Consultative Committee
CHPP	Coal Handling and Preparation Plant
Conditions of this consent	Conditions contained in Schedules 2 to 5 inclusive
Council	Muswellbrook Shire Council
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Decommissioning	The deconstruction or demolition and removal of works installed as part of the development
Demolition	The deconstruction and removal of buildings, sheds and other structures on the site
Department	Department of Planning and Environment
Development	The development described in the documents listed in condition 2 of Schedule 2, as modified by the conditions of this consent
DPE Water	Water Group within the Department
EA (MOD 1)	The Environmental Assessment for the Mt Pleasant Project Modification prepared by EMGA Mitchell McLennan, dated October 2010; the associated response to submissions, dated December 2010; and the addendum to the environmental assessment, dated 31 August 2011
EA (MOD 2)	The Environmental Assessment titled <i>Mount Pleasant Operation (DA 92/97) – South Pit Haul Road Modification</i> prepared by MACH Energy Australia Pty Ltd dated 30 January 2017
EA (MOD 3)	The Environmental Assessment titled <i>Mount Pleasant Operation Mine Optimisation Modification</i> prepared by MACH Energy Australia Pty Ltd, dated 31 May 2017, including the <i>Response to Submissions</i> and covering letter, dated 23 November 2017, and <i>response to additional information</i> , dated 15 February 2018, provided by the Applicant in support of the application
EA (MOD 4)	The Environmental Assessment titled <i>Mount Pleasant Operation Rail Modification</i> prepared by MACH Energy Australia Pty Ltd, dated 18 December 2017, including the <i>Response to Submissions</i> , dated 25 June 2018 and additional information, dated 14 August 2018, 7 September 2018, and 24 September 2018, provided by the Applicant in support of the application
EIS	The Environmental Impact Statement for the Mt Pleasant Mine, prepared by ERM Mitchell McCotter and dated September 1997, as modified by the Applicant's submissions to the Commission of Inquiry into the establishment and operation of the Mt Pleasant Mine
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPL	Environment Protection Licence issued under the POEO Act
Evening	The period from 6pm to 10pm
Environment	Includes all aspects of the surroundings of humans, whether affecting any human as an individual or in his or her social groupings
Feasible	Means what is possible and practical in the circumstances
Heritage NSW	Heritage NSW within the Department
Incident	An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance
Land	In general, the definition of land is consistent with the definition in the EP&A Act. However, in relation to the noise and air quality conditions in Schedules 2-5 it means the whole of a lot, or contiguous lots owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this modification
m	Metres
Material harm	Is harm that: <ul style="list-style-type: none"> <li>• involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial, or</li> <li>• results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000, (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment)</li> </ul> <p>This definition excludes “harm” that is authorised under either this consent or any other statutory approval</p>
Mine water	Water that accumulates within, or drains from, active mining and infrastructure areas and any other areas where runoff may have come into contact with coal or

	carbonaceous material
Minimise	Implement all reasonable and feasible mitigation measures to reduce the impacts of the development
Mining operations	The carrying out of mining, including the extraction, processing, stockpiling and transportation of coal on the site and the associated removal, storage and/or emplacement of vegetation, topsoil, overburden and reject material
Minister	Minister for Planning, or delegate
Minor	Small in quantity, size and degree
Mitigation	Activities associated with reducing the impacts of the development
Modification 4	The modification to the development as described in EA (MOD 4)
NAG	Noise assessment group
MOD 4 rail infrastructure	The rail infrastructure as described in EA (MOD 4) and shown in Figure 2 of Appendix 2
MOD 4 water infrastructure	The water supply pipeline, pump station and ancillary infrastructure described in EA (MOD 4) and identified as "MPO Hunter River Supply Pipeline" in Figure 2 of Appendix 2
MOD 4 construction works	All physical works associated with the establishment of the rail and water infrastructure as described in EA (MOD 4)
Negligible	Small and unimportant, such as to be not worth considering
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and public holidays
Non-compliance	An occurrence, set of circumstances or development that is a breach of this consent
Operational noise	Means noise, including construction and rail noise, generated by the development within the Mining Lease Boundary as shown in Figure 2 of Appendix 2
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Privately-owned land	Land that is not owned by a public agency, or a mining company (or its subsidiary)
Public infrastructure	Linear and related infrastructure that provides services to the general public, such as roads, railways, water supply, gas supply, drainage, sewerage, telephony, telecommunications etc
Rail loop and infrastructure corridor	The area shaded blue in Figure 3 of Appendix 2
Registered Aboriginal Parties	As described in the <i>National Parks and Wildlife Regulation 2009</i>
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Rehabilitation	The treatment or management of land disturbed by the development for the purpose of establishing a safe, stable and non-polluting environment, and includes remediation
Relinquishment area	The area delineated as "Area Relinquished for Overburden Emplacement and Major Infrastructure" in Figure 3 of Appendix 2
Remediation	Activities associated with partially or fully repairing the impacts and/or environmental consequences of the development
Resources Regulator	NSW Resources Regulator
ROM	Run-of-mine
SANSW	Subsidence Advisory NSW
Secretary	Planning Secretary under the EP&A Act, or nominee
Site	The land listed in Appendix 1
Southern catchment	The catchment located in the south west corner of the site and identified in Figure 12 of the EIS as the active fines emplacement
Statement of commitments	The Applicant's commitments in Appendix 3
TfNSW	Transport for NSW

## SCHEDULE 2 ADMINISTRATIVE CONDITIONS

### OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

1. In addition to meeting the specific performance measures and criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction and operation of the development, and any rehabilitation required under this consent.

### TERMS OF CONSENT

2. The Applicant must carry out the development:
  - (a) generally in accordance with the EIS, EA (MOD 1), EA (MOD 2), EA (MOD 3), EA (MOD 4) and project layout plans; and
  - (b) in accordance with the Statement of Commitments and conditions of this consent.

*Notes:*

- The project layout plans are shown in Appendix 2.
- The Statement of Commitments is reproduced in Appendix 3.

3. Consistent with the requirements in this consent, the Secretary may make written directions to the Applicant in relation to:
  - (a) the content of any strategy, study, system, plan, program, review, audit, notification, report or correspondence submitted under or otherwise made in relation to this consent, including those that are required to be, and have been, approved by the Secretary; and
  - (b) the implementation of any actions or measures contained in any such document referred to in condition 3(a).
4. The conditions of this consent and directions of the Secretary prevail to the extent of any inconsistency, ambiguity or conflict between them and a document/s listed in condition 2(a) above. In the event of an inconsistency, ambiguity or conflict between any of the document/s listed in condition 2(a) the most recent document prevails to the extent of the inconsistency, ambiguity or conflict.

### LIMITS ON CONSENT

#### Mining Operations

5. The Applicant may carry out mining operations on the site until 22 December 2026.

*Note: Under this consent, the Applicant is required to rehabilitate the site and carry out additional undertakings to the satisfaction of both the Secretary and the Resources Regulator. Consequently this consent will continue to apply in all other respects - other than the right to conduct mining operations - until the rehabilitation of the site and these additional undertakings have been carried out satisfactorily.*

#### Coal Extraction

6. The Applicant must not extract more than 10.5 million tonnes of ROM coal from the site in a calendar year.

#### Coal Transport

7. Product coal may only be transported from the site by rail.
8. The Applicant must ensure that train movements at the site (ie arrival or dispatch) do not exceed:
  - (a) a maximum of 18 per day; or
  - (b) 6 per day, averaged over each calendar year.

*Note: In this condition, "day" means any 24-hour period.*

### STRUCTURAL ADEQUACY

9. All new buildings and structures, and any alterations or additions to existing buildings and structures, that are part of the development, must be constructed in accordance with:
  - (a) the relevant requirements of the BCA; and
  - (b) any additional requirements of SA NSW where the building or structure is located on land within a declared Mine Subsidence District.

*Notes:*

- Under Part 6 of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the development.

- *The development is located in the Muswellbrook Mine Subsidence District. Under section 21 of the Coal Mine Subsidence Compensation Act 2017, the Applicant is required to obtain the Chief Executive of SA NSW's approval before carrying out certain development in a Mine Subsidence District.*

## DEMOLITION

10. The Applicant **must** ensure that all demolition work on site is carried out in accordance with AS 2601-2001: *The Demolition of Structures*, or its latest version.

## PROTECTION OF PUBLIC INFRASTRUCTURE

11. 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,

*Note: This condition does not include matters that are expressly provided for in the conditions of this consent, such as the maintenance of public roads.*

## OPERATION OF PLANT AND EQUIPMENT

12. The Applicant **must** ensure that all plant and equipment used on site, or to transport coal from the site, is:
  - (a) maintained in a proper and efficient condition; and
  - (b) operated in a proper and efficient manner.

## APPLICATION OF EXISTING STRATEGIES, PLANS OR PROGRAMS

13. The Applicant **must** continue to apply existing management strategies, plans or monitoring programs approved prior to the approval of Modification 4, until the approval of a similar plan, strategy or program following the approval of Modification 4.

13. Deleted

## PLANNING AGREEMENT

14. By the end of March 2012, unless otherwise agreed by the **Secretary**, the Applicant **must** enter into a planning agreement with Council in accordance with:
  - (a) Division 6 of Part 4 of the EP&A Act; and
  - (b) the terms of the Applicant's offer dated 14 February 2011, which is summarised in Appendix 4.

This agreement **must** provide for annual payments to be made to Council with the first period for payment commencing upon the commencement of development on the site.

## EVIDENCE OF CONSULTATION

15. Where conditions of this consent require consultation with an identified party, the Applicant **must**:
  - (a) consult with the relevant party prior to submitting the subject document to the Secretary for approval; and
  - (b) provide details of the consultation undertaken including:
    - (i) the outcome of that consultation, matters resolved and unresolved; and
    - (ii) details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.

## COMPLIANCE

16. The Applicant **must** ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.

## APPLICABILITY OF GUIDELINES

17. References in the conditions of this consent to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of this consent.

However, consistent with the conditions of this consent and without altering any limits or criteria in this consent, the Secretary may, when issuing directions under this consent in respect of ongoing monitoring and management obligations, require compliance with an updated or revised version of such a guideline, protocol, Standard or policy, or a replacement of them.



## SCHEDULE 3 ENVIRONMENTAL PERFORMANCE CONDITIONS

### ACQUISITION UPON REQUEST

- If the Applicant receives a written request for acquisition from the owner of any land listed in Table 1, then the Applicant must acquire the land in accordance with the procedures in conditions 6-7 of Schedule 4.

*Table 1: Land subject to acquisition upon request*

<b>Basis</b>	<b>Receiver</b>
Noise	23, 45, 47, 67, 96, 102, 108, 112, 118, 120, 120c, 121, 136, 143a, 143b, 143c, 143d, 143e, 147, 153a, 153b, 156a, 157a, 158, 159, 447, 448, 449
Noise & Air	43, 43b
Air	20 <sup>2</sup> , 21 <sup>2</sup>

Notes:

- To identify the locations referred to in Table 1, see the figures in Appendix 5.
- The Applicant is only required to acquire and/or install mitigation measures at this property if acquisition and/or mitigation is not reasonably achievable under a separate approval for the Bengalla mine.

### ADDITIONAL MITIGATION UPON REQUEST

- Upon receiving a written request from the owner of any residence on any land listed in Table 1 (unless the owner of that land has requested acquisition) or Table 2, the Applicant must implement additional:
  - noise mitigation measures (such as double-glazing, insulation and/or air conditioning); and/or
  - air quality mitigation measures (such as air filters, a first flush roof water drainage system and/or air conditioning),
 as relevant, at the residence(s) in consultation with the owner.

These measures must be reasonable and feasible, and directed towards reducing the noise and/or air quality impacts of the development on the residence(s). The Applicant must also be responsible for the reasonable costs of ongoing maintenance of these additional mitigation measures until the cessation of mining operations.

If within 3 months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.

*Table 2: Land where additional mitigation measures are available on request*

<b>Basis</b>	<b>Receiver</b>
Noise	19, 20, 21, 68, 74, 77, 79, 80a, 84a, 86a, 139, 140a, 140c, 154, 203, 207, 257, 258, 259, 526

Note:

- To identify the locations referred to in Table 2, see the figures in Appendix 5.

## NOISE

### Noise Criteria

- Except for the noise-affected land referred to in Table 1, the Applicant must ensure that the operational noise generated by the development does not exceed the criteria in Table 3 at any residence on privately-owned land.

*Table 3: Noise criteria dB(A)*

<b>Receiver or other location</b>	<b>Day</b>	<b>Evening</b>	<b>Night</b>	
	<b>L<sub>Aeq</sub>(15min)</b>	<b>L<sub>Aeq</sub>(15min)</b>	<b>L<sub>Aeq</sub>(15min)</b>	<b>L<sub>A1</sub>(1min)</b>
68, 74	43	42	42	45
86a	42	42	42	45
35, 35b, 77	42	41	41	45
79, 80a, 140c, 526	41	41	41	45
289	41	40	40	45
84a, 139, 154, 203, 257, 258a	40	40	40	45
83	40	39	39	45
86b, 140a, 202, 259	39	39	39	45

198, 202b	38	38	38	45
260, 261	37	37	37	45
169, 272	36	36	36	45
NAG 5 - All privately-owned land	41	40	39	45
NAG 6 - All privately-owned land	37	37	37	45
NAG 7 - All privately-owned land	40	37	37	45
NAG 8 - All privately-owned land	41	39	39	45
NAG 9 - All privately-owned land	39	38	37	45
NAG 11 - All privately-owned land	37	36	35	45
All other privately-owned land	35	35	35	45

**Notes:**

- To identify the locations referred to in Table 3, see the figures in Appendix 5.
- Noise generated by the development is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy, with the exception of the application of modifying factors under Fact Sheet C of the Noise Policy for Industry.

However, these criteria do not apply if the Applicant has a written agreement with the relevant landowner to exceed the criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

4. Deleted

**Cumulative Noise Criteria**

5. Except for the noise-affected land referred to in Table 1, the Applicant **must** implement all reasonable and feasible measures to ensure that the **operational** noise generated by the development combined with the noise generated by other mines in the area does not exceed the criteria in Table 5 at any residence on privately-owned land.

*Table 5: Cumulative noise criteria dB(A)  $L_{Aeq}$  (period)*

<b>Location</b>	<b>Day</b>	<b>Evening</b>	<b>Night</b>
NAG 8, 9	55	45	40
All other privately-owned land	50	45	40

**Notes:**

- To identify the locations referred to in Table 5, see the figures in Appendix 5; and
- Cumulative noise is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.

6. Deleted

**Rail Noise**

7. The Applicant **must only use** locomotives and rolling stock that are approved to operate on the NSW rail network in accordance with the noise limits in Sydney Trains' EPL (No. 12208) and ARTC's EPL (No. 3142).

**Noise Operating Conditions**

8. The Applicant **must:**
- implement best practice noise management, including all reasonable and feasible noise mitigation measures to minimise the **construction**, operational, low frequency, and rail noise generated by the development;
  - minimise the noise impacts of the development during temperature inversions;
  - regularly assess the real-time noise monitoring and meteorological forecasting data and relocate, modify, and/or stop operations on site to ensure compliance with the relevant conditions of this consent; and
  - co-ordinate the noise management on site with the noise management at nearby mines (including the Bengalla mine) to minimise the cumulative noise impacts of the mines, to the satisfaction of the **Secretary**.

*Note: Monitoring under this consent is not required at all residences and the use of representative monitoring locations can be used to demonstrate compliance with criteria, if agreed to by the Secretary.*

## Noise Management Plan

9. The Applicant **must** prepare a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must:
- be submitted to the Secretary for approval by 30 June 2019, unless otherwise agreed by the Secretary;
  - describe the measures (including both proactive and reactive mitigation measures) to be implemented to:
    - ensure compliance with the noise criteria and operating conditions in this consent;
    - minimise rail noise (including wheel and brake squeal) to the greatest extent practicable; and
    - minimise the noise impacts of the development during noise-enhancing meteorological conditions when the operational noise criteria in this consent do not apply (see Notes to condition 3 of Schedule 3);
  - include a noise monitoring program that:
    - uses a combination of real-time and supplementary attended monitoring to evaluate the performance of the development;
    - accounts for the occurrence of any noise enhancement between the site, and any sensitive receivers located beyond the site boundary; and
    - includes a protocol for determining exceedances of the relevant conditions of this consent.
  - include a protocol that has been prepared in consultation with the owners of the nearby mines (including the Bengalla mine) to minimise the cumulative noise impacts of the mines.

The Applicant must implement the management plan as approved by the Secretary.

## BLASTING

### Blasting Criteria

10. The Applicant **must** ensure that the blasting on the site does not cause exceedances of the criteria in Table 7.

Table 7: Blasting criteria

Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance
Residence on privately owned land	120	10	0%
	115	5	5% of the total number of blasts over a period of 12 months
Historic heritage sites	-	10	0%
All public infrastructure	-	50	0%

However, these criteria do not apply if the Applicant has a written agreement with the relevant owner or infrastructure provider/owner, and the Applicant has advised the Department in writing of the terms of this agreement.

### Blasting Hours

11. The Applicant **must** only carry out blasting on site between 9am and 5pm Monday to Saturday inclusive. No blasting is allowed on Sundays, public holidays, or at any other time without the written approval of the Secretary.

### Blasting Frequency

12. Unless otherwise agreed by the Secretary, the Applicant may carry out a maximum of:
- 1 blast a day; and
  - 5 blasts a week, averaged over any calendar year;
- for the development.

This condition does not apply to blasts that generate ground vibration of 0.5 mm/s or less at any residence on privately-owned land, or to blasts required to ensure the safety of the mine or its workers.

*Note: For the purposes of this condition, a blast refers to a single blast event, which may involve a number of individual blasts fired in quick succession in a discrete area of the mine.*

## Property Inspections

13. If the Applicant receives a written request from the owner of any privately-owned land within 2 kilometres of the approved open cut mining pit/s on site, for a property inspection to establish the baseline condition of any buildings and/or structures on his/her land, or to have a previous property inspection report updated, then within 2 months of receiving this request the Applicant **must**:
- (c) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties, to:
    - establish the baseline condition of the buildings and/or structures on the land, or update the previous property inspection report;
    - identify any measures that should be implemented to minimise the potential blasting impacts of the development on these buildings and/or structures; and
  - (d) give the landowner a copy of the new or updated property inspection report.

If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Applicant or the landowner disagrees with the findings of the property inspection report, either party may refer the matter to the Secretary for resolution.

## Property Investigations

14. If the owner of any privately-owned land claims that the buildings and/or structures on his/her land have been damaged as a result of blasting on site, then within 2 months of receiving this claim the Applicant **must**:
- (a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties, to investigate the claim; and
  - (b) give the landowner a copy of the property investigation report.

If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Applicant or the landowner disagrees with the findings of the property investigation report, either party may refer the matter to the Secretary for resolution.

If this independent property investigation confirms the landowner's claim, and both parties agree with these findings, then the Applicant **must** repair the damages to the satisfaction of the Secretary.

If the Applicant or landowner disagrees with the findings of the independent property investigation, then either party may refer the matter to the Secretary for resolution.

## Blast Operating Conditions

15. The Applicant **must**:
- (a) implement best blasting management practice on site to:
    - protect the safety of people and livestock in the surrounding area;
    - protect public or private infrastructure/property in the surrounding area;
    - minimise the dust and fume emissions of the blasting on site; and
    - minimise blasting impacts on heritage items in the vicinity of the site;
  - (b) co-ordinate the blasting on site with the blasting at nearby mines (including the Bengalla mine) to minimise the cumulative blasting impacts of the mines; and
  - (c) operate a suitable system to enable the public to get up-to-date information on the proposed blasting schedule on site, to the satisfaction of the Secretary.
16. The Applicant **must** not undertake blasting within 500 metres of:
- (a) a public road without the approval of Council; and
  - (b) any land outside the site not owned by the Applicant, unless:
    - the Applicant has a written agreement with the relevant landowner to allow blasting to be carried out closer to the land, and the Applicant has advised the Department in writing of the terms of this agreement, or
    - the Applicant has:
      - demonstrated to the satisfaction of the Secretary that the blasting can be carried out closer to the land without compromising the safety of the people or livestock on the land, or damaging the buildings and/or structures on the land; and
      - updated the Blast Management Plan to include the specific measures that would be implemented while blasting is being carried out within 500 metres of the land.

## Blast Management Plan

17. The Applicant **must** prepare a Blast Management Plan for the development to the satisfaction of the Secretary. This plan must:
- (a) be submitted to the Secretary for approval prior to carrying out any blasting on site;

- (b) describe the measures that would be implemented to ensure compliance with the relevant conditions of this consent;
- (c) include a road closure management plan, prepared in consultation with Council;
- (d) include a blast monitoring program for evaluating compliance with the relevant conditions of approval; and
- (e) include a protocol that has been prepared in consultation with the owners of nearby mines (including the Bengalla mine) for minimising and managing cumulative blasting impacts of the mines.

The Applicant must implement the management plan as approved by the Secretary.

## AIR QUALITY & GREENHOUSE GAS

### Odour

18. The Applicant must ensure that no offensive odours are emitted from the site, as defined under the POEO Act, unless otherwise authorised by an EPL.

### Greenhouse Gas Emissions

19. The Applicant must implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site.

### Air Quality Criteria

20. Except for the air quality-affected land referred to in Table 1, the Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not exceed the criteria listed in Tables 8, 9 or 10 at any residence on privately-owned land.

Table 8: Long term criteria for particulate matter

Pollutant	Averaging Period	<sup>d</sup> Criterion
Total suspended particulate (TSP) matter	Annual	<sup>a</sup> 90 µg/m <sup>3</sup>
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	<sup>a</sup> 25 µg/m <sup>3</sup>
Particulate matter < 2.5 µm (PM <sub>2.5</sub> )	Annual	<sup>a</sup> 8 µg/m <sup>3</sup>

Table 9: Short term criteria for particulate matter

Pollutant	Averaging Period	<sup>d</sup> Criterion
Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	<sup>b</sup> 50 µg/m <sup>3</sup>
Particulate matter < 2.5 µm (PM <sub>2.5</sub> )	24 hour	<sup>b</sup> 25 µg/m <sup>3</sup>

Table 10: Long term criteria for deposited dust

Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level
<sup>c</sup> Deposited dust	Annual	<sup>b</sup> 2 g/m <sup>2</sup> /month	<sup>a</sup> 4 g/m <sup>2</sup> /month

Notes to Tables 8-10:

<sup>a</sup> Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources);

<sup>b</sup> Incremental impact (i.e. incremental increase in concentrations due to the development on its own);

<sup>c</sup> Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method; and

<sup>d</sup> Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by the Secretary.

21. Deleted

### Air Quality Operating Conditions

22. The Applicant must:
- (a) implement best practice air quality management, including all reasonable and feasible measures to minimise the odour, fume and dust emissions of the development;
  - (b) minimise visible air pollution generated by the development;
  - (c) minimise, where reasonable and feasible, the extent of potential dust generating surfaces exposed on the site at any given point in time;

- (d) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see Note d above under Tables 8-10);
- (e) regularly assess the real-time air quality monitoring and meteorological forecasting data and relocate, modify and/or stop operations on site to ensure compliance with the relevant conditions of this consent; and
- (f) co-ordinate the air quality management on site with the air quality management at nearby mines (including the Bengalla mine) to minimise cumulative air quality impacts from the mines, to the satisfaction of the Secretary.

### **Air Quality and Greenhouse Gas Management Plan**

23. The Applicant **must** prepare an Air Quality and Greenhouse Gas Management Plan for the development to the satisfaction of the Secretary. This plan must:
- (a) be submitted to the Secretary for approval prior to carrying out any development on site;
  - (b) describe the measures that would be implemented to ensure compliance with the relevant conditions of this consent, including a real-time air quality management system that employs reactive and proactive mitigation measures;
  - (c) include an air quality monitoring program that:
    - uses a combination of real-time monitors and supplementary monitors to evaluate the performance of the development;
    - includes PM<sub>2.5</sub> monitoring (although this obligation could be satisfied by the regional air quality monitoring network if sufficient justification is provided);
    - includes a protocol for determining exceedances of the relevant conditions of this consent; and
  - (d) include a protocol that has been prepared in consultation with the owners of nearby mines to minimise the cumulative air quality impacts of the mines.

The Applicant **must** implement the management plan as approved by the Secretary.

### **METEOROLOGICAL MONITORING**

24. For the life of the development, the Applicant **must** ensure that there is a meteorological station operating in the vicinity of the site that:
- (a) complies with the requirements in the *Approved Methods for Sampling of Air Pollutants in NSW* guideline; and
  - (b) is capable of continuous real-time measurement of temperature lapse rate in accordance with the *NSW Industrial Noise Policy*, or as otherwise approved by the Secretary.

### **SOIL & WATER**

*Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain water licences for the development.*

#### **Water Supply**

25. The Applicant **must** ensure that it has sufficient water for all stages of development, and if necessary, adjust the scale of mining operations on site, to match its available water supply to the satisfaction of the Secretary.

#### **Water Discharges**

26. The Applicant **must** ensure that any surface water discharges from the site comply with the:
- (a) discharge limits (both volume and quality) set for the development in any EPL; or
  - (b) relevant provisions of the POEO Act or *Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002*.

#### **Compensatory Water Supply**

27. The Applicant **must** provide compensatory water supply to any landowner of privately-owned land whose water entitlements are adversely and directly impacted (other than an impact that is negligible) as a result of the development, in consultation with DPE Water, and to the satisfaction of the Secretary.

The compensatory water supply measures must provide an alternative long-term supply of water that is equivalent, **in quality and volume**, to the loss attributed to the development. Equivalent water supply should be provided (at least on an interim basis) **as soon as practicable after the loss is identified, unless otherwise agreed with the landowner**.

If the Applicant and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.

If the Applicant is unable to provide an alternative long-term supply of water, then the Applicant **must** provide alternative compensation to the satisfaction of the **Secretary**.

### Water Management Plan

28. The Applicant **must** prepare a Water Management Plan for the development to the satisfaction of the **Secretary**. This plan must be prepared in consultation with **DPE Water** and **EPA**, and be submitted to the **Secretary** for approval by 30 June 2019, unless otherwise agreed by the **Secretary**. The plan must include:
- (a) a Site Water Balance, which must:
    - include details of:
      - sources and security of water supply;
      - water use on site;
      - water management on site;
      - any off-site water transfers; and
    - investigate and implement all reasonable and feasible measures to minimise water use by the development;
  - (b) an Erosion and Sediment Control Plan, which must:
    - identify activities that could cause soil erosion, generate sediment or affect flooding;
    - describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters, and manage any flood risk;
    - describe the location, function, and capacity of erosion and sediment control structures;
    - describe what measures would be implemented to maintain the structures over time;
  - (c) a Surface Water Management Plan, which must include:
    - detailed baseline data on surface water flows and quality in creeks and other waterbodies that could potentially be affected by the development;
    - surface water and stream health impact assessment criteria including trigger levels for investigating any potentially adverse surface water impacts;
    - a program to monitor and maintain the bridge openings and culverts associated with the MOD 4 rail infrastructure and ensure that they remain clear of blockages;
    - a program to monitor surface water flows and quality in the watercourses that could be affected by the project; and
    - reporting procedures for the results of the monitoring program;
  - (d) a Groundwater Management Plan, which must include:
    - detailed plans, including design objectives and performance criteria, for the design and management of the proposed final voids;
    - detailed baseline data of groundwater levels, yield and quality in the region, and privately-owned groundwater bores, that could be affected by the development;
    - groundwater impact assessment criteria including trigger levels for investigating any potentially adverse groundwater impacts;
    - a program to monitor and assess:
      - groundwater inflows to the mining operations;
      - impacts on regional and local (including alluvial) aquifers;
      - impacts on the groundwater supply of potentially affected landowners;
      - impacts on groundwater dependent ecosystems and riparian vegetation;
  - (e) a Surface and Ground Water Response Plan, which must include:
    - a response protocol for any exceedances of the surface water and groundwater assessment criteria;
    - measures to offset the loss of any baseflow to watercourses caused by the development;
    - measures to prevent, minimise or offset groundwater leakage from alluvial aquifers caused by the development;
    - measures to compensate landowners of privately-owned land whose water supply is adversely affected by the development; and
    - measures to mitigate and/or offset any adverse impacts on groundwater dependent ecosystems or riparian vegetation.

The Applicant **must** implement the management plan as approved by the **Secretary**.

- 28A. The Applicant **must** decommission the existing water supply infrastructure within the rail loop and infrastructure corridor, including the associated pump station, within 6 months of the commissioning of the MOD 4 water infrastructure.

*Notes:*

- *The existing rail loop and infrastructure corridor is shown in Figure 3 of Appendix 2.*
- *The decommissioning of infrastructure within the rail loop and infrastructure corridor is also controlled under condition 37 of Schedule 3.*

- 28B. The Applicant **must** notify **DPE Water**, in writing, within 14 days of completing the following:

- (a) the commissioning of the MOD 4 water infrastructure; and
- (b) the decommissioning of existing water supply infrastructure within the rail loop and infrastructure corridor.

## BIODIVERSITY

- 29. Deleted
- 30. Deleted
- 31. Deleted

### Biodiversity Management Plan

32. The Applicant **must** prepare a Biodiversity Management Plan for the development to the satisfaction of the **Secretary**. This plan must:
- (a) be prepared in consultation with **BCD** and Council, and be submitted to the **Secretary** for approval by 30 June 2019, unless otherwise agreed by the **Secretary**;
  - (b) include:
    - a description of the short, medium, and long term measures that would be implemented to:
      - manage the remnant vegetation and habitat on the site; and
      - **avoid and manage remnant vegetation and habitat within the relinquishment area**;
    - a detailed description of the measures that would be implemented over the next 3 years, including the procedures to be implemented for:
      - implementing revegetation and regeneration within the disturbance areas, including establishment of canopy, sub-canopy (if relevant), understorey and ground strata;
      - maximising salvage and beneficial use of resources in areas that are to be impacted, including vegetative, soil and cultural heritage resources;
      - protecting vegetation and soil outside the disturbance areas;
      - rehabilitating creeks and drainage lines on the site, to minimise net loss of stream length and aquatic habitat;
      - managing salinity;
      - conserving and reusing topsoil;
      - undertaking pre-clearance surveys;
      - managing impacts on fauna;
      - landscaping the site and along public roads to minimise visual and lighting impacts;
      - collecting and propagating seed;
      - salvaging and reusing material from the site for habitat enhancement;
      - salvaging, transplanting and/or propagating threatened flora and native grassland;
      - controlling weeds and feral pests;
      - managing grazing and agriculture on site;
      - controlling access; and
      - bushfire management;
    - a program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria;
    - a description of the potential risks to successful revegetation, and a description of the contingency measures that would be implemented to mitigate these risks; and
    - details of who would be responsible for monitoring, reviewing, and implementing the plan.

The Applicant **must** implement the management plan as approved by the **Secretary**.

## HERITAGE

*Note: Under the National Parks and Wildlife Act 1974 or the Heritage Act 1977, the Applicant is required to obtain approvals for any impacts to Aboriginal objects and/or significant relics.*

### Aboriginal Heritage Conservation Strategy

33. The Applicant **must** prepare an Aboriginal Heritage Conservation Strategy for the development to the satisfaction of the **Secretary**. This strategy must:
- (a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the **Secretary**;
  - (b) be prepared in consultation with **Heritage NSW** and the **Registered Aboriginal Parties**;
  - (c) be submitted to the **Secretary** for approval prior to carrying out any development on site;
  - (d) provide for the establishment and conservation of an off-site Aboriginal cultural heritage conservation area/s that has comparable Aboriginal cultural heritage values (both cultural and archaeological) to the areas that would be developed on site;
  - (e) describe the measures that would be implemented to provide appropriate long term security for the proposed Aboriginal cultural heritage conservation areas; and
  - (f) include an action plan for the implementation of the strategy.



The detailed measures for the implementation of the strategy are to be outlined in the Heritage Management Plan (see condition 36).

The Applicant must implement the approved strategy as approved from time to time by the Secretary.

*Note: The Aboriginal cultural heritage conservation area/s may be combined with any similar offset/conservation area required for the development under Commonwealth legislation, subject to suitably offsetting the cultural heritage impacts of the development.*

34. Within 2 years of the approval of the Aboriginal Heritage Conservation Strategy, the Applicant must demonstrate to the satisfaction of the Secretary, that it has made suitable arrangements to provide appropriate long term security for the Aboriginal cultural heritage conservation area/s in the Aboriginal Heritage Conservation Strategy.

#### Oral History

35. By the end of December 2013, the Applicant must prepare a detailed history of the Mount Pleasant locality to the satisfaction of the Secretary. This history must:
- be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;
  - be prepared in consultation with the Heritage NSW, the local history society, local community (including former residents as far as is practicable), and Registered Aboriginal Parties;
  - be prepared in accordance with the relevant Heritage Council of NSW guidelines; and
  - include detailed historical research as well as an oral history.

#### Aboriginal Heritage Management Plan

36. The Applicant must prepare a Aboriginal Heritage Management Plan for the development to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with Heritage NSW and the Registered Aboriginal Parties by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;
  - be submitted to the Secretary for approval by 30 June 2019, unless otherwise agreed by the Secretary;
  - include:
    - a detailed plan for the implementation of the approved Aboriginal Heritage Conservation Strategy (required under condition 34);
    - a description of the measures that would be implemented to:
      - comply with the requirements of any Aboriginal Heritage Impact Permit issued for the development, including any approved archaeological testing and salvage program;
      - store the Aboriginal objects salvaged, both during construction and in the long term;
      - protect, monitor and/or manage all Aboriginal objects on site until the impacts of the development on these objects is unavoidable;
      - minimise the blasting impacts of the development on Aboriginal objects in the vicinity of the site;
      - manage the discovery of any human remains or previously unidentified Aboriginal objects on site;
      - enable Registered Aboriginal Parties to get reasonable access to the site during the development;
      - ensure Registered Aboriginal Parties are consulted about the conservation and management of Aboriginal cultural heritage on site; and
      - ensure construction personnel receive suitable heritage inductions prior to carrying out any development on site, and that suitable records are kept of these inductions.

The Applicant must implement the management plan as approved by the Secretary.

#### Notes:

- The Aboriginal Heritage Management Plan must be consistent with the requirements of any Aboriginal Heritage Impact Permit(s) issued by Heritage NSW relevant to the development.
- The Applicant must ensure that Aboriginal site recording forms for newly recorded sites and Aboriginal site impact recording forms for salvaged sites are submitted to Heritage NSW for inclusion on the Aboriginal Heritage Information Management System database.

## TRANSPORT

### Removal of Rail Loop and Infrastructure Corridor

37. The Applicant must, by no later than 31 October 2022:

- (a) remove all infrastructure associated with the development within Mining Lease No. 1645 (ML 1645) south of Wybong Road (other than infrastructure which the operator of the Bengalla mine agrees with the Applicant, in writing, can remain in situ);
- (b) do all things available to transfer or cause the grant of a mining lease over that part of ML 1645 south of Wybong Road to the operator of Bengalla mine or its nominee;
- (c) transfer the freehold land owned by the Applicant within ML 1645 south of Wybong Road to the operator of Bengalla mine (or its nominee) at rural market value;
- (d) release any easements for pipeline and rail spur within or in the vicinity of ML 1645 south of Wybong Road which benefit land owned by the Applicant; and
- (e) demolish the Bengalla Link Road bridge required under condition 38 (a) below and, unless otherwise agreed by the Secretary, reinstate the road reserve to the satisfaction of Council.

*Note:* The rail loop and infrastructure corridor is shown in Figure 3 of Appendix 2.

## Road Works

*Note:* Under the Roads Act 1993, the Applicant is required to obtain the consent of the appropriate roads authority prior to carrying out work on or over a public road.

38. The Applicant **must**, at its own expense:
- (a) construct a bridge to carry the Bengalla Link Road over the proposed Mount Pleasant rail loop, in consultation with the operators of the Bengalla Mine;
  - (b) construct the Mount Pleasant Northern Link Road to Dorset Road, prior to the closure of Castlerock Road;
  - (c) construct the Mount Pleasant Western Link Road (generally in accordance with Council's Western Roads Strategy) from the intersection of the Bengalla Link Road to the intersection of the Mount Pleasant Northern Link Road, prior to the closure of Wybong Road;
  - (d) construct the Mount Pleasant Mine Access Road;
  - (e) upgrade the Wybong Road from the Bengalla Link Road to the Mount Pleasant Mine Access Road; and
  - (f) construct an overpass or underpass across Wybong Road, or other means of crossing Wybong Road, should a construction road be proposed, to the satisfaction of Council.
39. Should the following intersections be required, the Applicant **must** undertake construction works at:
- (a) the intersection of the Western Link Road and access to the mine site;
  - (b) the intersection of the Bengalla Link Road and the Western Link Road;
  - (c) the intersection of the Castlerock/Mount Pleasant Northern Link Road and the Western Link Road; and
  - (d) the intersection of the Mount Pleasant Northern Link Road and Kayuga Road, to the satisfaction of Council and/or TfNSW.

If there is any dispute between the Applicant and Council or TfNSW in relation to the funding or upgrade works, then any of the parties may refer the matter to the **Secretary** for resolution.

- 39A. The Applicant **must**, by no later than 31 October 2022:
- (a) construct a rail overpass to carry the MOD 4 rail infrastructure over Wybong Road;
  - (b) construct a road bridge to carry Overton Road over the MOD 4 rail infrastructure; and
  - (c) partially realign Overton Road, as shown conceptually in Figure 5 of EA (MOD 4), in accordance with the relevant requirements of *Austrroads Guide to Road Design* and to the satisfaction of Council.

The Secretary may waive or alter the above requirements if they are no longer required following the completion of the final design of the MOD 4 rail infrastructure.

40. The Applicant **must**:
- (a) prepare a detailed schedule outlining the timing of the road works required by conditions 38, 39 and 39A by the end of June 2018; and
  - (b) update this schedule annually, to the satisfaction of Council.

## Road Maintenance

41. During the development, the Applicant **must** maintain the roads and intersections between the Bengalla Mine main entrance and the Mt Pleasant Mine main entrance, including:
- (a) part of the Bengalla Link Road;
  - (b) part of the Wybong Road; and
  - (c) part of the Mount Pleasant Western Link Road.

The Applicant **must** develop a Maintenance Management Plan in respect of these roads, to the satisfaction of Council.

## Thomas Mitchell Drive

- 41A. The Applicant must contribute to the upgrade and maintenance of Thomas Mitchell Drive, proportionate to its impact (based on usage) on that infrastructure, in accordance with the Contributions Study prepared by GHD titled, "Thomas Mitchell Drive Contributions Study, May 2015" as amended by the supplementary report dated, August 2018 (as amended from time to time), unless otherwise agreed with the Secretary.

For Thomas Mitchell Drive, the contributions must be paid to Council in accordance with:

- (a) the payment schedule in the Contributions Study for the upgrade works; and
- (b) the maintenance schedule established in accordance with the Contributions Study during the life of the development,

unless otherwise agreed with Council.

Notes:

- In making a determination about the applicable contribution/s under this condition, the Secretary will take into account the contributions already paid or required to be paid towards the upgrade and maintenance of the local road network in the Muswellbrook Local Government Area under this consent and any associated Planning Agreement with Council.
- If there is a dispute between the relevant parties about the implementation of this condition, then any party may refer the matter to the Secretary for resolution.

## Road Access and Signage

42. The Applicant **must** ensure that as far as possible the preferred mine access road route, as described in the EIS, is the only route used by employees and contractors travelling to the mine site from Muswellbrook.
43. The Applicant **must** maintain signs and give at least 24 hours notice of temporary road closures. The location and wording of the signs are to be approved by Council. A protocol is to be established, in consultation with the emergency service providers and Council, to permit the passage of emergency vehicles during road closures.

## Monitoring of Coal Transport

44. The Applicant **must**:
- (a) keep records of the:
    - amount of coal transported from the site (on a monthly basis); and
    - date and time of each train movement generated by the development; and
  - (b) make these records available on its website at the end of each calendar year.

## CONSTRUCTION OF RAIL AND WATER SUPPLY INFRASTRUCTURE

- 44A. The Applicant must carry out a detailed geotechnical investigation of former underground mine workings in the vicinity of the MOD 4 rail infrastructure. This investigation must:
- (a) be undertaken by suitably qualified and experienced persons;
  - (b) be undertaken in consultation with SA NSW;
  - (c) determine the extent of underground mine workings;
  - (d) provide recommendations to ensure the geotechnical stability of MOD 4 rail infrastructure; and
  - (e) be conducted and reported to the satisfaction of the Secretary.

A final report detailing the outcomes of the geotechnical investigation must be submitted to the Secretary. The Applicant must not commence MOD 4 construction works in the vicinity of the former underground mine until the Geotechnical Investigation Report is approved by the Secretary.

- 44B. The Applicant must implement the recommendations of the Geotechnical Investigation Report to the satisfaction of the Secretary.
- 44C. The Applicant must design and construct the MOD 4 rail infrastructure to meet the following performance criteria during a 1% Annual Exceedance Probability flood event:
- (a) no more than 0.1 m increase in flood levels on any privately-owned land;
  - (b) no more than 0.01 m increase in flood levels at any privately-owned residence or commercial spaces;
  - (c) no more than 0.01 m increase in flood levels at any public roads servicing privately-owned properties; and
  - (d) no more than 0.1 m per second increase in flood velocities at privately-owned residences or commercial spaces.
- 44D. The Applicant must commission an independent review of the final design of the MOD 4 rail infrastructure, including any associated hydraulic structures. This review must:
- (a) be undertaken by suitably qualified and experienced persons;
  - (b) be undertaken in consultation with BCD;

- (c) demonstrate that the final design meets the performance criteria in condition 44C above;
- (d) be conducted and reported to the satisfaction of the Secretary.

A final report detailing the outcomes of the independent review must be submitted to the Secretary. The Applicant must not commence MOD 4 construction works until the final report is approved by the Secretary.

- 44E. The Applicant must ensure that any asbestos encountered during MOD 4 construction works is monitored, handled, transported and disposed of by appropriately qualified and licensed contractors in accordance with the requirements of SafeWork NSW and relevant guidelines, including:
- (a) *Work Health and Safety Regulation 2017*;
  - (b) SafeWork NSW Code of Practice – How to Manage and Control Asbestos in the Workplace September 2016;
  - (c) SafeWork NSW Code of Practice – How to Safely Remove Asbestos September 2016;
  - (d) *Protection of the Environment Operations (Waste) Regulation 2014*; and
  - (e) the EPA’s *Waste Classification Guidelines*.
- 44F. All MOD 4 construction works outside of the Mining Lease Boundary must be carried out during Standard Construction Hours (7 am to 6 pm, Monday to Friday; and 8 am to 1 pm on Saturdays), unless the works are:
- (a) required by:
    - NSW Police; or
    - a public authority for the delivery of vehicles, plant or materials; or
  - (b) required in an emergency to avoid the loss of life, damage to property or to prevent material harm to the environment; or
  - (c) approved under an Out of Hours Work Protocol.

*Note: The Mining Lease Boundary is shown in Figure 2 of Appendix 2.*

- 44G. If the Applicant proposes to undertake MOD 4 construction works (outside of the Mining Lease Boundary) outside the hours specified in condition 44F above, then the Applicant must prepare an Out of Hours Work Protocol for these works, to the satisfaction of the Secretary. This protocol must:
- (a) be prepared in consultation with the EPA and any residents who may be affected by the noise generated by these works;
  - (b) address the relevant requirements of the *Interim Construction Noise Guideline* (DECC, 2009); and
  - (c) be approved by the Secretary before any out of hours construction works are carried out.

The Applicant must implement the Out of Hours Work Protocol as approved by the Secretary.

*Note: For areas where construction noise is predicted to be at or below operational noise criteria at sensitive receptors, this is likely to provide sufficient justification for the need to operate outside of recommended standard hours as specified in the Interim Construction Noise Guideline (DECC, 2009).*

- 44H. The Applicant must ensure that the combined operational noise of the development and noise generated by the MOD 4 construction works outside of the Mining Lease Boundary does not exceed the criteria in Table 10A at any residence on privately-owned land.

**Table 10A: Construction noise criteria**

<b>Receiver or other location</b>	<b>Standard Construction Hours dB(A) <math>L_{Aeq(15min)}</math></b>
67, 215, 216, 218, 219	47
206, 217, 220, 221, 225, 532, 533	48
222, 223, 531	49
224, 530	50
19, 20, 21, 207, 289	51
527, 528	56
529	54
68	57
23	69
All other privately-owned land	5 dB(A) above the daytime operational $L_{Aeq(15min)}$ noise criteria in Table 3

**Notes:**

- To identify the locations referred to in Table 10A, see the figures in Appendix 5.
- The Mining Lease Boundary is shown in Figure 2 of Appendix 2.
- Noise generated by the development is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy, with the exception of the application of modifying factors under Fact Sheet C of the Noise Policy for Industry.

However, these criteria do not apply if the Applicant has a written agreement with the relevant landowner to exceed the criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

44. The Applicant must prepare a Construction Environmental Management Plan for MOD 4 construction works, to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with the EPA, Council and any relevant road or utilities authorities;
  - describe measures to be implemented to minimise construction-related noise, vibration, dust, biodiversity and visual impacts, including specific measures to minimise:
    - surface disturbance; and
    - the cumulative impacts of construction and operational noise;
  - describe detailed procedures to be implemented to:
    - notify affected landowners of upcoming construction activities;
    - receive, record, handle and respond to construction-related complaints; and
    - resolve any disputes that may arise during MOD 4 construction works;
  - include a Construction Traffic Management Plan which:
    - describes the measures to be implemented to minimise traffic safety issues and disruption to local road users, including managing light, heavy and over-dimensional vehicles during construction works; and
    - includes procedures for notifying other road users (including local bus operators) of any construction works that may disrupt their usual use of the road; and
  - include a Historic Heritage Management Plan which describes measures to implement the relevant historic heritage management commitments outlined in Appendix 3; and
  - include an Unexpected Contamination Protocol which describes the procedures to be implemented in the event that potentially contaminated material is identified during construction, including:
    - procedures for testing, removal and disposal of potentially contaminated material; and
    - measures to ensure compliance with the requirements of SafeWork NSW and relevant guidelines.

The Applicant must not commence MOD 4 construction works until the Construction Environmental Management Plan is approved by the Secretary. The Applicant must implement the Construction Environmental Management Plan as approved by the Secretary.

## VISUAL

### Visual Amenity and Lighting

45. The Applicant must:
- implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development;
  - ensure no outdoor lights shine above the horizontal; and
  - ensure that all external lighting associated with the development complies with *Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting* or its latest version,
- to the satisfaction of the Secretary.

### Additional Visual Mitigation Measures

46. Upon receiving a written request from the owner of any residence on privately-owned land which has, or would have, significant direct view of the mining operations on site, the Applicant must implement visual mitigation measures (such as landscaping treatments or vegetation screens) on the land in consultation with the landowner. These measures must be reasonable and feasible, and directed toward minimising the visibility of the mining operations from the residence.

If within 3 months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.

*Note: Except in exceptional circumstances, the Secretary will not require additional visual impact mitigation to be undertaken for residences that are more than 3 kilometres from the mining operations.*

### Visual Impact Management Plan

47. The Applicant must prepare a Visual Impact Management Plan to mitigate the visual impacts of the development to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with Council, and submitted to the Secretary for approval by 30 June 2019, unless otherwise agreed by the Secretary;
  - provide for the establishment of trees and shrubs and/or the construction of mounding or bunding:
    - along the access road to the mine site;

- around the water storage dams and coal preparation plant;
  - at other areas identified as necessary for the maintenance of satisfactory visual amenity;
- (c) include details of the visual appearance of all buildings, structures, facilities or works (including paint colours and specifications), aimed at blending as far as possible with the surrounding landscape; and
- (d) include detailed measures to minimise the visual impacts of the MOD 4 rail infrastructure, including:
- details regarding any proposed light screens, earth bunds and screen planting; and
  - procedures to monitor and maintain the effectiveness of visual impact mitigation measures for the life of the development.

The Applicant must implement the management plan as approved by the Secretary.

## BUSHFIRE MANAGEMENT

48. The Applicant must:
- (a) ensure that the development is suitably equipped to respond to any fires on site; and
  - (b) assist the Rural Fire Service and emergency services as much as possible if there is a fire in the vicinity of the site.

## WASTE

### Waste Minimisation & Disposal

49. The Applicant must:
- (a) minimise the waste (including coal reject) generated by the development;
  - (b) ensure that the waste generated by the development is appropriately stored, handled and disposed of in a lawful manner.

### On-site Sewage

50. The Applicant must ensure that all sewage generated on site is treated and disposed of to the satisfaction of Council.

### Disposal of Fine Rejects

51. The Applicant must not emplace fine rejects in the southern catchment without the written approval of the Secretary

### Waste Management Plan

52. The Applicant must prepare a Waste Management Plan for the development to the satisfaction of the Secretary. This plan must:
- (a) be prepared in consultation with DPE Water and the Resources Regulator, and submitted to the Secretary for approval prior to carrying any development on site;
  - (b) describe the measures that would be implemented to avoid, minimise, reuse and recycle all waste streams generated by the development;
  - (c) include a fines emplacement plan; and
  - (d) a program to evaluate the fines emplacement plan and methods, with a view to emplacing fines within active mining areas.

The Applicant must implement the management plan as approved by the Secretary.

## REHABILITATION

### Rehabilitation Objectives

53. The Applicant must rehabilitate the site in accordance with the provisions under the *Mining Act 1992*. This rehabilitation must be generally consistent with the conceptual final landform depicted in Figure 4 in Appendix 2, and comply with the objectives in Table 11.

Table 11: Rehabilitation Objectives

Feature	Objective
All areas of the site affected by the development	<ul style="list-style-type: none"> <li>• Safe, stable &amp; non-polluting</li> <li>• Fit for the intended post-mining land use/s</li> </ul>
Areas proposed for native ecosystem re-establishment	<ul style="list-style-type: none"> <li>• Restore self-sustaining native woodland ecosystems characteristic of vegetation communities found in the local area, as shown conceptually in Figure 4 in Appendix 2.</li> <li>• Establish areas of self-sustaining:</li> </ul>

Feature	Objective
	<ul style="list-style-type: none"> <li>– riparian habitat, within any diverted and/or re-established creek lines and retained water features;</li> <li>– potential habitat for threatened flora and fauna species; and</li> <li>– wildlife corridors, as far as is reasonable and feasible, and as shown conceptually in Figure 4 in Appendix 2.</li> </ul>
Areas proposed for agricultural land	<ul style="list-style-type: none"> <li>• Establish/restore grassland areas to support sustainable agricultural activities</li> <li>• Achieve the nominated land capability classification</li> </ul>
Other land affected by the development	<ul style="list-style-type: none"> <li>• Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprised of local native plant species (unless the Resources Regulator agrees otherwise)</li> </ul>
Final Landform	<ul style="list-style-type: none"> <li>• Stable and sustainable for the intended post-mining land use/s</li> <li>• Integrated with surrounding natural landforms</li> <li>• Incorporate micro-relief and drainage lines that are consistent with surrounding topography, to the greatest extent practicable</li> <li>• Maximise surface water drainage to the natural environment (excluding final void catchment)</li> </ul>
Final voids	<ul style="list-style-type: none"> <li>• Designed as long term groundwater sinks to maximise ground water flows across back filled pits to the final void</li> <li>• Minimise to the greatest extent practicable: <ul style="list-style-type: none"> <li>– the size and depth of final voids;</li> <li>– the drainage catchment of final voids;</li> <li>– any high wall instability risk; and</li> <li>– the risk of flood interaction</li> </ul> </li> </ul>
Surface infrastructure of the development	<ul style="list-style-type: none"> <li>• To be decommissioned and removed, unless the Resources Regulator agrees otherwise</li> </ul>
Rehabilitation materials	<ul style="list-style-type: none"> <li>• Materials from areas disturbed under this consent (including topsoils, substrates and seeds) are to be recovered, managed and used as rehabilitation resources, to the greatest extent practicable</li> </ul>
Water quality	<ul style="list-style-type: none"> <li>• Water retained on the site is fit for the intended post-mining land use/s</li> <li>• Water discharged from the site is suitable for receiving waters and fit for aquatic ecology and riparian vegetation</li> </ul>
Community	<ul style="list-style-type: none"> <li>• Ensure public safety</li> <li>• Minimise adverse socio-economic effects associated with mine closure</li> </ul>

54. By the end of January 2019, unless otherwise agreed by the Secretary, the Applicant must prepare a Rehabilitation Strategy for the development to the satisfaction of the Secretary. This strategy must:
- (a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary;
  - (b) be prepared in consultation with the Resources Regulator and Council;
  - (c) build upon the Rehabilitation Objectives in Table 11 and the conceptual final landform depicted in Figure 4 in Appendix 2, including identification of opportunities for increasing the areas of woodland and habitat connectivity within the rehabilitated landscape;
  - (d) include details of the canopy, sub-canopy, understory and ground strata species to be established in the rehabilitation areas, with a particular focus on ensuring the achievement of an appropriate level of diversity and mix of functional groups within each target community;
  - (e) include an indicative schedule for the staged rehabilitation of the development;
  - (f) include a protocol for periodic trials to demonstrate that the proposed agricultural land capability of grassland areas in the final landform is being achieved; and
  - (g) include a protocol for periodic trials to demonstrate that the target vegetation communities proposed in rehabilitated woodland areas and fauna habitat is being achieved.

The Applicant must implement the approved strategy as approved from time to time by the Secretary.

### Progressive Rehabilitation

55. The Applicant must rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable steps must be taken to minimise the total area exposed at any time. Interim stabilisation and temporary vegetation strategies must be employed when areas prone to dust generation, soil erosion and weed incursion cannot be permanently rehabilitated.

*Note: It is accepted that some parts of the site that are progressively rehabilitated may be subject to further disturbance at some later stage of the development.*

- 55A. The Applicant must implement all reasonable and feasible measures to provide for the interim stabilisation and temporary vegetation of the existing rail loop and infrastructure corridor, as soon as reasonably practicable following the removal of infrastructure as required under condition 37.

*Note: The Applicant's obligations under this condition will cease following the transfer or grant of a mining lease over that part of ML 1645 south of Wybong Road to the operator of Bengalla mine (or its nominee).*

### Rehabilitation Management Plan

56. By the end of April 2019, unless otherwise agreed by the Secretary, the Applicant must prepare a Rehabilitation Management Plan for the development in accordance with the provisions under the *Mining Act 1992*.
-



## SCHEDULE 4 ADDITIONAL PROCEDURES

### NOTIFICATION OF LANDOWNERS

1. By the end of December 2011, the Applicant must:
  - (a) notify in writing the owners of:
    - the land listed in Table 1 of Schedule 3 that they have the right to require the Applicant to acquire their land at any stage of the development;
    - any residence on the noise-affected land in Table 1 or Table 2 of Schedule 3 that they are entitled to ask for additional noise mitigation measures to be installed at their residence at any stage of the development;
    - any residences on the air quality-affected land listed in Table 1 that they are entitled to ask for additional air quality mitigation measures to be installed at their residence at any stage of the development;
    - any privately-owned land within 2 kilometres of the approved open cut mining pit on the site that they are entitled to ask for an inspection to establish the baseline condition of any buildings and/or structures on their land, or to have a previous property inspection updated; and
  - (b) send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the owners and/or existing tenants of any land (including mine-owned land) where the predictions in the documents listed in condition 2(a) of Schedule 2 identify that dust emissions generated by the development are likely to be greater than the relevant air quality criteria in Schedule 3 at any time during the life of the development.

Within one month of any modification that leads to new land being added to Tables 1 or 2 of Schedule 3, the Applicant must notify affected land owners in accordance with the requirements of paragraph (a).

- 1A. Prior to entering into any tenancy agreement for any land owned by the Applicant that is predicted to experience exceedances of the recommended dust and/or noise criteria, the Applicant must:
  - (a) advise the prospective tenants of the potential health and amenity impacts associated with living on the land, and give them a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time); and
  - (b) advise the prospective tenants of the rights they would have under this consent, to the satisfaction of the Secretary.
2. As soon as practicable after obtaining monitoring results showing:
  - (a) exceedance of the relevant criteria in Schedule 3, the Applicant must notify the affected landowner and tenants in writing of the exceedance, and provide regular monitoring results to each of these parties until the development is complying with the relevant criteria again; and/or
  - (b) an exceedance of the relevant criteria of Schedule 3, the Applicant must send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the affected landowners and/or existing tenants of the land (including the tenants of any mine-owned land).

### INDEPENDENT REVIEW

3. If an owner of privately-owned land considers the development to be exceeding the criteria in Schedule 3, then he/she may ask the Secretary in writing for an independent review of the impacts of the development on his/her land.

If the Secretary is not satisfied that an independent review is warranted, the Secretary will notify the landowner in writing of that decision, and the reasons for that decision, within 21 days of the request for a review.

If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision, the Applicant must:

- (a) commission a suitably qualified, experienced and independent expert, whose appointment has been approved by the Secretary, to:
  - consult with the landowner to determine his/her concerns;
  - conduct monitoring to determine whether the development is complying with the relevant criteria; and
  - if the development is not complying with these criteria then:
    - determine if more than one mine is responsible for the exceedance, and if so the relative share of each mine towards the impact on the land;
    - identify the measures that could be implemented to ensure compliance with the relevant criteria; and
- (b) give the Secretary and landowner a copy of the independent review.

4. Deleted

5. Deleted

## LAND ACQUISITION

6. Within 3 months of receiving a written request from a landowner with acquisition rights, the Applicant **must** make a binding written offer to the landowner based on:
- (a) the current market value of the landowner's interest in the land at the date of this written request, as if the land was unaffected by the development, having regard to the:
    - existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and
    - presence of improvements on the land and/or any approved building or structure which has been physically commenced at the date of the landowner's written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of the additional mitigation measures required under condition 2 of [Schedule 3](#);
  - (b) the reasonable costs associated with:
    - relocating within the Muswellbrook, Singleton or Scone local government area, or to any other local government area determined by the [Secretary](#); and
    - obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and
  - (c) reasonable compensation for any disturbance caused by the land acquisition process.

However, if at the end of this period, the Applicant and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer the matter to the [Secretary](#) for resolution.

Upon receiving such a request, the [Secretary](#) shall request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer to:

- consider submissions from both parties;
- determine a fair and reasonable acquisition price for the land and/or the terms upon which the land is to be acquired, having regard to the matters referred to in paragraphs (a)-(c) above;
- prepare a detailed report setting out the reasons for any determination; and
- provide a copy of the report to both parties.

Within 14 days of receiving the independent valuer's report, the Applicant **must** make a binding written offer to the landowner to purchase the land at a price not less than the independent valuer's determination.

However, if either party disputes the independent valuer's determination, then within 14 days of receiving the independent valuer's report, they may refer the matter to the [Secretary](#) for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following consultation with the independent valuer and both parties, the [Secretary](#) will determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in paragraphs (a)-(c) above, the independent valuer's report, the detailed report of the party that disputes the independent valuer's determination and any other relevant submissions.

Within 14 days of this determination, the Applicant **must** make a binding written offer to the landowner to purchase the land at a price not less than the [Secretary's](#) determination.

If the landowner refuses to accept the Applicant's binding written offer under this condition within 6 months of the offer being made, then the Applicant's obligations to acquire the land shall cease, unless the [Secretary](#) determines otherwise.

7. The Applicant **must** pay all reasonable costs associated with the land acquisition process described in condition 6 above, including the costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of this plan at the Office of the Registrar-General.
-

## SCHEDULE 5 ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

### ENVIRONMENTAL MANAGEMENT

#### Environmental Management Strategy

1. If the Secretary requires, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:
  - (a) be submitted to the Secretary for approval prior to carrying out any development on site;
  - (b) provide the strategic framework for environmental management of the development;
  - (c) identify the statutory approvals that apply to the development;
  - (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
  - (e) describe the procedures that would be implemented to:
    - keep the local community and relevant agencies informed about the operation and environmental performance of the development;
    - receive, handle, respond to, and record complaints;
    - resolve any disputes that may arise during the course of the development;
    - respond to any non-compliance;
    - respond to emergencies; and
  - (f) include:
    - copies of any strategies, plans and programs approved under the conditions of this consent; and
    - a clear plan depicting all the monitoring to be carried out in relation to the development.

The Applicant must implement the approved strategy as approved from time to time by the Secretary.

#### Adaptive Management

- 1A. The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedule 3. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.

Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity:

- (a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;
- (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
- (c) implement remediation measures as directed by the Secretary, to the satisfaction of the Secretary.

#### Management Plan Requirements

2. The Applicant must ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:
  - (a) detailed baseline data;
  - (b) a description of:
    - the relevant statutory requirements (including any relevant consent, licence or lease conditions);
    - any relevant limits or performance measures/criteria;
    - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;
  - (c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
  - (d) a program to monitor and report on the:
    - impacts and environmental performance of the development;
    - effectiveness of any management measures (see c above);
  - (e) a contingency plan to manage any unpredicted impacts and their consequences;
  - (f) a program to investigate and implement ways to improve the environmental performance of the development over time;
  - (g) a protocol for managing and reporting any:
    - incidents;
    - complaints;
    - non-compliances with statutory requirements; and
    - exceedances of the impact assessment criteria and/or performance criteria; and

- (h) a protocol for periodic review of the plan.

*Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.*

### Annual Review

3. By the end of March each year (or other such timing as agreed by the Secretary), the Applicant must submit a report to the Department reviewing the environmental performance of the development to the satisfaction of the Secretary. This review must:
- describe the development (including any rehabilitation) that was carried out in the past calendar year, and the development that is proposed to be carried out over the next calendar year;
  - include a comprehensive review of the monitoring results and complaints records of the development over the past calendar year, which includes a comparison of these results against the:
    - relevant statutory requirements, limits or performance measures/criteria;
    - monitoring results of previous years; and
    - relevant predictions in the documents listed in condition 2(a) of Schedule 2;
  - identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
  - identify any trends in the monitoring data over the life of the development;
  - identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
  - describe what measures will be implemented over the next year to improve the environmental performance of the development.

### Revision of Strategies, Plans and Programs

4. Within 3 months of:
- the submission of an annual review under condition 3 above;
  - the submission of an incident report under condition 7 below;
  - the submission of an audit under condition 9 below; and
  - any modification to the conditions of this consent,
- the Applicant must review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Secretary.

Within 4 weeks of conducting any such review, the Applicant must advise the Secretary of the outcomes of the review, and submit any revised documents for the approval of the Secretary.

#### Notes:

- The purpose of this condition is to ensure that strategies, plans and programs are regularly updated to incorporate any measures recommended to improve environmental performance of the project.
- In the event of an inconsistency between condition 4(d) above and any condition in Schedule 3 of this consent, the latter prevails.

### Updating & Staging Strategies, Plans or Programs

- 4A. The Applicant may at any time submit revised strategies, plans or programs for the approval of the Secretary. With the agreement of the Secretary, the Applicant may also submit any strategy, plan or program required by this consent on a staged basis.

With the agreement of the Secretary, the Applicant may prepare a revision or stage of any strategy, plan or program required under this consent without undertaking consultation with all parties nominated under the applicable condition in this consent.

#### Notes:

- While any strategy, plan or program may be submitted on a staged basis, the Applicant must ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times.
- If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.

### Management of Cumulative Impacts

5. In conjunction with the owners of the nearby mines (including the Bengalla mine), the Applicant must use its best endeavours to minimise the cumulative impacts of the development on the surrounding area to the satisfaction of the Secretary.

*Note: Nothing in this consent is to be construed as requiring the Applicant to act in a manner which is contrary to the Trade Practices Act 1974.*

## Community Consultative Committee

6. The Applicant **must** operate a Community Consultative Committee (CCC) for the development to the satisfaction of the **Secretary**. This CCC must be operated in general accordance with the **Department's Community Consultative Committee Guidelines State Significant Projects November 2016**, or its latest version.

*Note: The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.*

## Incident Notification

7. The Applicant **must** immediately notify the Department and any other relevant agencies after it becomes aware of an incident. The notification must be in writing via the Department's Major Projects Website and identify the development (including the development application number and name) and set out the location and nature of the incident.

## Non-Compliance Notification

- 7A. Within seven days of becoming aware of a non-compliance, the Applicant **must** notify the Department of the non-compliance. The notification must be in writing via the Department's Major Projects Website and identify the development (including the development application number and name), set out the condition of this consent that the development is non-compliant with, why it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

*Note: A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.*

## Monitoring and Environmental Audits

- 7B. Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, compliance report and independent audit.

*Note: For the purposes of this condition, as set out in the EP&A Act, "monitoring" is monitoring of the development to provide data on compliance with the consent or on the environmental impact of the development, and an "environmental audit" is a periodic or particular documented evaluation of the development to provide information on compliance with the consent or the environmental management or impact of the development.*

## Regular Reporting

8. The Applicant **must** provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent, and to the satisfaction of the **Secretary**.

## INDEPENDENT ENVIRONMENTAL AUDIT

9. By the end of March 2014, and every 3 years thereafter, unless the **Secretary** directs otherwise, the Applicant **must** commission, commence and pay the full cost of an Independent Environmental Audit of the development. This audit must:
  - (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the **Secretary**;
  - (b) include consultation with the relevant agencies and the CCC;
  - (c) assess the environmental performance of the development and whether it is complying with the requirements in this consent and any relevant EPL or Mining Lease or necessary water licences (including any assessment, plan or program required under these approvals);
  - (d) review the adequacy of strategies, plans or programs required under the abovementioned approvals (including whether the development has met or is trended towards the progressive performance and completion criteria detailed in these strategies, plans or programs);
  - (e) if necessary, recommend appropriate measures or actions to improve the environmental performance of the development, and/or any strategy, plan or program required under the abovementioned approvals; and
  - (f) be conducted and reported to the satisfaction of the **Secretary**.

*Notes:*

- *This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.*

10. Within 12 weeks of commencing any audit, or as otherwise agreed by the **Secretary**, the Applicant **must** submit a copy of the audit report to the **Secretary** and any other NSW Government agency that

requests it, together with its response to any recommendations contained in the audit report and a timetable for the implementation of these recommendations, as required. The Applicant must implement the audit report recommendations, to the satisfaction of the Secretary.

#### ACCESS TO INFORMATION

11. The Applicant must:

- (a) make the following information publicly available on its website:
- the documents listed in condition 2(a) of Schedule 2;
  - all current statutory approvals for the development;
  - approved strategies, plans and programs required under the conditions of this consent;
  - a comprehensive summary of the monitoring results of the development, which have been reported in accordance with the various plans and programs approved under the conditions of this consent;
  - a complaints register, which is to be updated on a monthly basis;
  - minutes of CCC meetings;
  - the annual reviews (over the last 5 years);
  - any independent environmental audit, and the Applicant's response to the recommendations in any audit;
  - any other matter required by the Secretary; and
- (b) keep this information up to date, to the satisfaction of the Secretary.
-

**APPENDIX 1  
SCHEDULE OF LAND**

Tenure Type	Lot	Section	Deposited Plan Number
Freehold	1	8	2770
Freehold	1	5	2770
Freehold	1	6	2770
Freehold	1	3	2770
Freehold	1	4	2770
Freehold	1	1	2770
Freehold	1	2	2770
Freehold	1		104563
Freehold	1		112742
Freehold	1		114090
State Rail Authority (Crown)	1		189134
Freehold	1	2	192121
Freehold	1	1	192121
Freehold	1		194043
Freehold	1		213293
Freehold	1		254339
Freehold	1		312392
Freehold	1		318999
Freehold	1		401237
Freehold	1		544039
Freehold	1		629491
Freehold	1		634490
Freehold	1		655691
Freehold	1		706645
Freehold	1		742324
Freehold	1		744333
Freehold	1		745369
Freehold	1		780673
Freehold	1		791576
Crown	1		904885
Freehold	1		905281
Freehold	1		906668
Freehold	1		911212
Freehold	1		915913
Freehold	1		944232
Freehold	1		998239
Freehold	1		1072667
Freehold	1		1080962
Freehold	1		1081385
Freehold	1		1100374

Tenure Type	Lot	Section	Deposited Plan Number
Freehold	1		1137590
State Rail Authority (Crown)	1		1129338
Freehold	1		1199733
Freehold	1		718834
Freehold	2	8	2770
Freehold	2	5	2770
Freehold	2	6	2770
Freehold	2	3	2770
Freehold	2	1	2770
Freehold	2	4	2770
Freehold	2		104563
Freehold	2		112742
Freehold	2		114090
Freehold	2	2	192121
Freehold	2		194043
Freehold	2		629491
Freehold	2		634490
Freehold	2		706645
Freehold	2		780673
Freehold	2		791576
Freehold	2		801249
Freehold	2		915913
Freehold	2		997931
Freehold	2		998239
Freehold	2		1081385
Freehold	2		1234475
Freehold	2		561117
Freehold	3	8	2770
Freehold	3	5	2770
Freehold	3	3	2770
Freehold	3	1	2770
Freehold	3		112742
Freehold	3	2	192121
Freehold	3		194043
Freehold	3		236668
Freehold	3		629491
Freehold	3	28	758554
Freehold	3	29	758554
Freehold	3		791576
Freehold	3		998239

Tenure Type	Lot	Section	Deposited Plan Number
Freehold	3		998477
Freehold	3		1183514
State Rail Authority (Crown)	3		1170997
Freehold	3		1199733
Freehold	3		1234475
Freehold	4	8	2770
Freehold	4	5	2770
Freehold	4	6	2770
Freehold	4	4	2770
Freehold	4	3	2770
Freehold	4	1	2770
Freehold	4	2	2770
Freehold	4	2	192121
Freehold	4	28	758554
Freehold	4	29	758554
Freehold	4		801249
State Rail Authority (Crown)	4		1170997
Freehold	4		1199733
Freehold	4		1234475
Freehold	5	8	2770
Freehold	5	6	2770
Freehold	5	4	2770
Freehold	5	3	2770
Freehold	5	1	2770
Freehold	5		112742
Freehold	5	2	192121
Freehold	5	28	758554
Freehold	5		801249
State Rail Authority (Crown)	5		1170997
Freehold	5		1199733
Freehold	5		1234475
Freehold	6	8	2770
Freehold	6	3	2770
Freehold	6	1	2770
Freehold	6	2	192121
Freehold	6		749716
Freehold	6		750926
Freehold	6	28	758554
Freehold	6		821183
Freehold	6		1199733
Freehold	6		1234475

Tenure Type	Lot	Section	Deposited Plan Number
Freehold	7		112742
Freehold	7	2	192121
Freehold	7		236668
Freehold	7		749716
Freehold	7		784436
Freehold	7		821183
Freehold	7		1170997
Freehold	7		1199733
Freehold	7		1234475
Freehold	8		255048
Freehold	8		770911
Road	8		1072668
Freehold	8		1170997
Freehold	8		1199733
Freehold	9		255048
Freehold	9		750926
Road	9		1072668
Freehold	9		1199733
Freehold	10		255048
Freehold	10		750926
Road	10		1072668
Freehold	10		1184928
Freehold	10		1199733
Freehold	10		236668
Freehold	11		112742
Freehold	11		255048
Freehold	11		1051153
Road	11		1072668
Freehold	11		1184928
Freehold	12		112742
Freehold	12		255048
Freehold	12		659924
Road	12		1072668
Freehold	12		1112792
Freehold	13		112742
Freehold	13		255048
Freehold	13		750926
Freehold	13		1112792
Freehold	14	8	2770
Freehold	14		112742
Freehold	14		255048
Freehold	14		1112792
Freehold	15		112742



Tenure Type	Lot	Section	Deposited Plan Number
Freehold	15		255048
Freehold	15		750926
Freehold	15		1112792
Freehold	16		112742
Freehold	16		255048
Freehold	16		750926
Freehold	16		1072668
Freehold	16		1112792
Freehold	17		2770
Freehold	17		112742
Road	17		1072668
Freehold	18		112742
Freehold	18		1072668
Freehold	19		112742
Freehold	19		750926
Road	19		1072668
Freehold	20		112742
Freehold	20		747226
Freehold	20		1072668
Freehold	21		554140
Freehold	21		750926
Freehold	22		554140
Freehold	22		776758
Freehold	22		870608
Freehold	22		1041946
Freehold	22		1072668
Freehold	23		1041946
Freehold	24		742543
Freehold	24		1072668
Freehold	25		1053537
Freehold	25		1072668
Freehold	26		750926
Freehold	26		1072668
Freehold	27		745897
Freehold	27		1072668
Freehold	28		750926
Freehold	29		731706
Freehold	30		137297
Freehold	35		1076510
Freehold	36		1108421
Freehold	38		750926
Freehold	39		750926

Tenure Type	Lot	Section	Deposited Plan Number
Freehold	41		750926
Freehold	42		750926
Freehold	43		750926
Freehold	44		750926
Freehold	45		750926
Freehold	50		809718
Freehold	51		809718
Freehold	71		626353
Freehold	71		750926
Freehold	72		626353
Freehold	72		750926
Freehold	73		750926
Freehold	74		750926
Freehold	86		750926
Freehold	90		750926
Crown	90		1215947
Freehold	91		750926
Freehold	91		620639
Freehold	92		750926
Freehold	93		750926
Freehold	94		665393
Road	100		1148907
Freehold	100		1177385
Freehold	101		1148907
Freehold	102		1148907
Freehold	103		1148907
Freehold	104		1148907
Freehold	105		1148907
Freehold	106		1148907
Freehold	122		750926
Freehold	123		700578
Freehold	123		750926
Freehold	124		700578
Freehold	124		750926
Freehold	126		750926
Freehold	127		750926
Freehold	130		750926
Freehold	131		750926
Freehold	132		558246
Freehold	132		750926
Freehold	133		750926
Freehold	135		750926

Tenure Type	Lot	Section	Deposited Plan Number
Freehold	143		750926
Freehold	144		1120266
Freehold	145		1120266
Freehold	146		750926
Freehold	147		1083411
Freehold	149		750926
Freehold	150		750926
Freehold	151		750926
Freehold	152		750926
Freehold	153		750926
Freehold	154		750926
Freehold	164		635272
Freehold	177		750926
Freehold	181		750926
Freehold	184		750926
Freehold	188		750926
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Freehold	193		750926
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Freehold	239		750926
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Freehold	241		750926
Freehold	242		750926
Freehold	251		750926
Freehold	253		750926

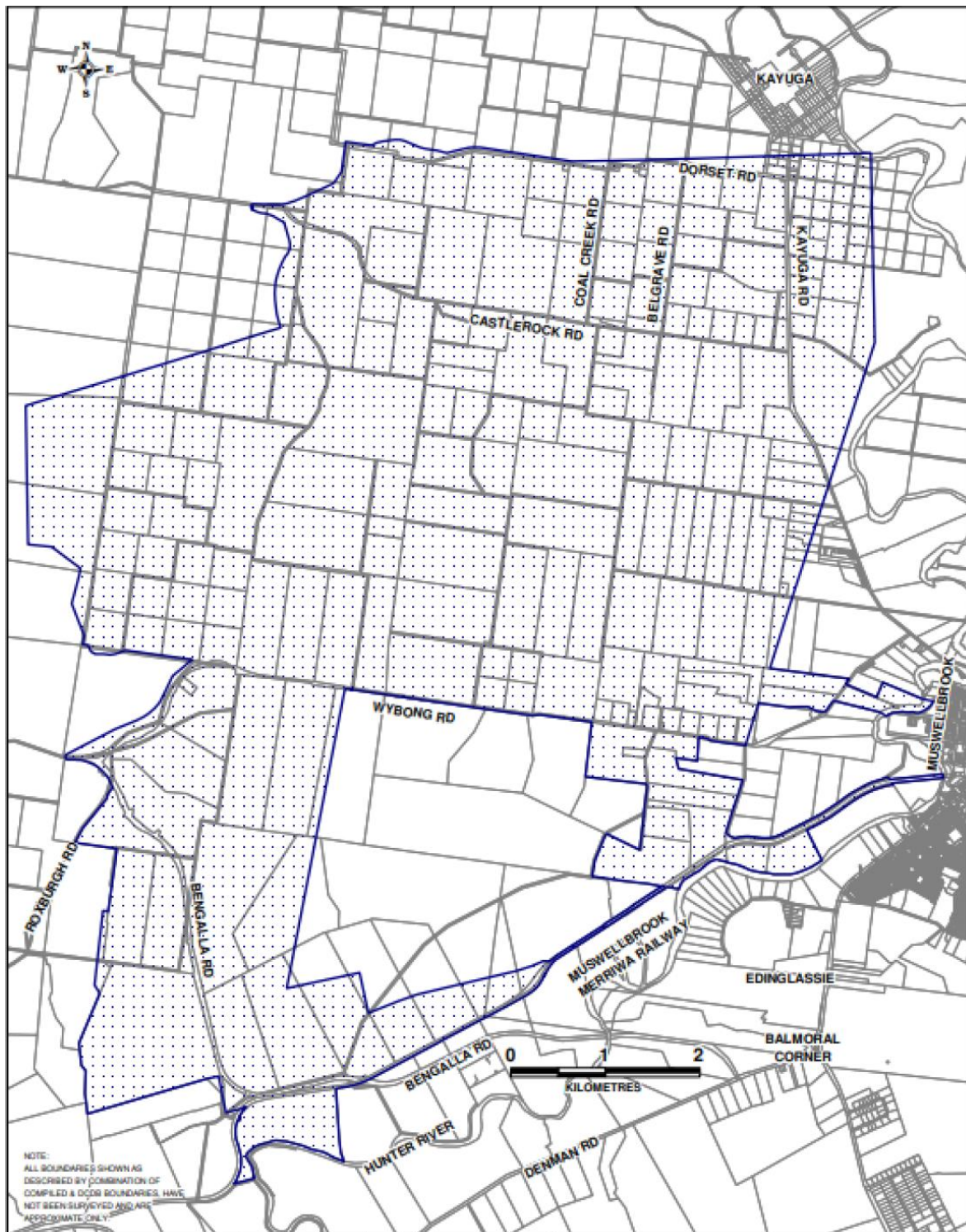
Tenure Type	Lot	Section	Deposited Plan Number
Freehold	254		750926
Freehold	256		750926
Freehold	258		750926
Freehold	259		750926
Freehold	260		750926
Freehold	261		561919
Freehold	261		750926
Freehold	262		750926
Freehold	263		750926
Freehold	264		750926
Freehold	265		750926
Freehold	268		567444
Freehold	268		750926
Freehold	269		567444
Freehold	269		750926
Freehold	270		750926
Freehold	271		750926
Freehold	272		750926
Freehold	273		750926
Freehold	274		750926
Freehold	275		750926
Freehold	276		750926
Freehold	278		750926
Freehold	279		750926
Freehold	280		750926
Freehold	282		750926
Freehold	505		711996
Freehold	641		554159
Freehold	1006		1235827
Freehold	1007		1235827
Freehold	1008		1235827
Freehold	1009		1235827
State Rail Authority (Crown)	1031		1164040
Freehold	1453		628493
Crown	7001		93329
Crown	7304		1146786
Freehold	A		174071
Freehold	A		432713
Freehold	B		174071
Freehold	B		432713
Crown Watercourse		Hunter River	
State Rail Authority (Crown)		Muswellbrook Merriwa Railway	

Tenure Type	Lot	Section	Deposited Plan Number
State Rail Authority (Crown)			Railway lands located within, between or adjacent to the above parcels of land
Muswellbrook Council or Department of Lands (Crown)			Various council and Crown public and unformed roads located within, between or adjacent to the above parcels of land
Freehold			Any identified or unidentified historical title residues located within, between or adjacent to the above parcels of land

Tenure Type	Lot	Section	Deposited Plan Number
Crown			Creeks or streams located within, between or adjacent to the above parcels of land
Crown			Any unidentified Crown land or Crown land historical title residues located within, between or adjacent to the above parcels of land

Note: The Development Consent Boundary is shown conceptually on the figure below.

FOR INFORMATION



NOTE:  
 ALL BOUNDARIES SHOWN AS  
 DESCRIBED BY COMBINATION OF  
 COMPILED & DCDB BOUNDARIES, HAVE  
 NOT BEEN SURVEYED AND ARE  
 APPROXIMATE ONLY.

**MACHenergy**  
 MACH Energy Australia  
 Mt Pleasant Project

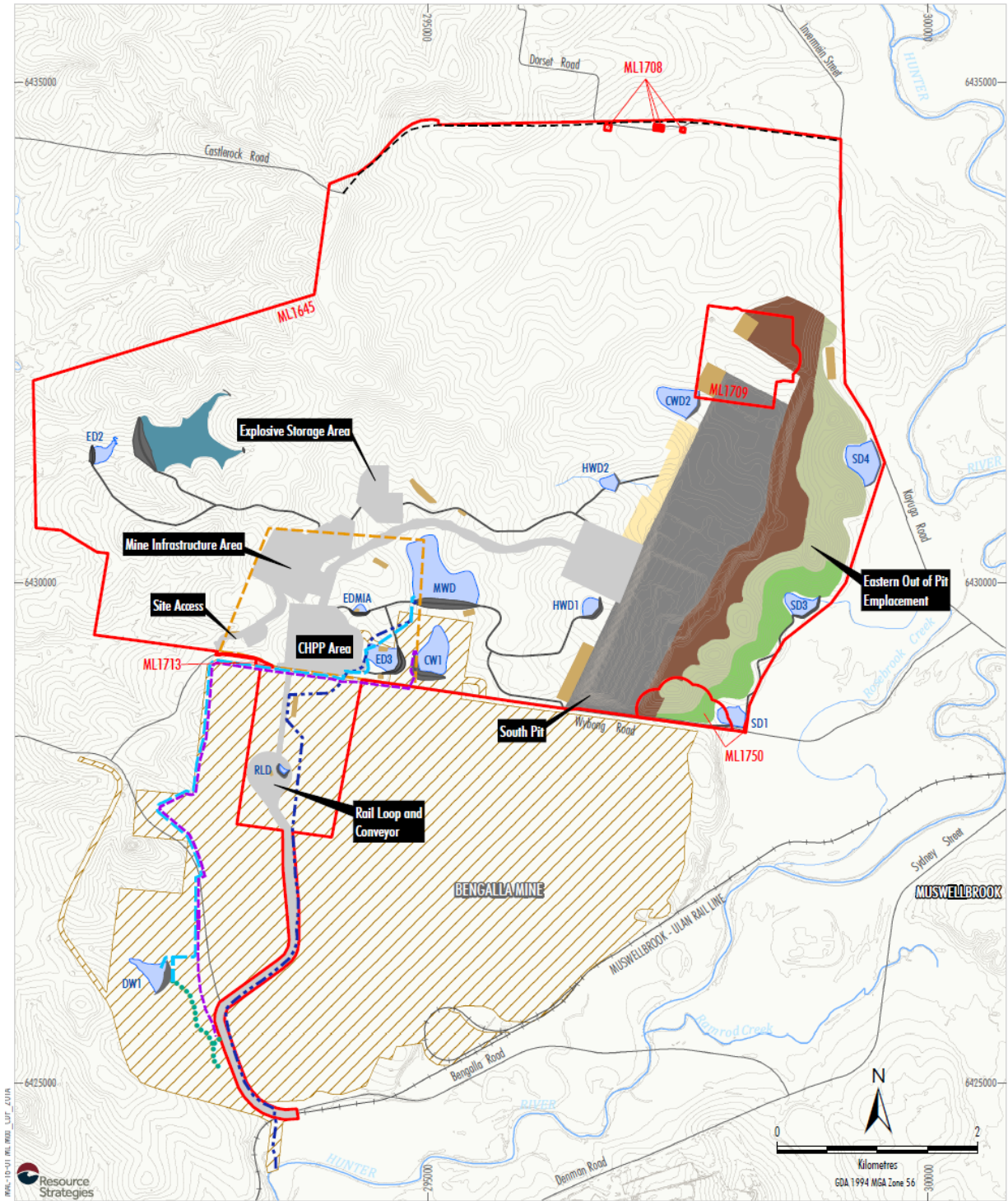
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 Projection: MGA 2020 56  
 Location: Muswellbrook  
 Contour: N/A  
 Version: 06

**Development Consent Boundary**

THE SITE INCLUDES ALL LAND AND/OR LOTS LISTED IN THE SCHEDULE OF LANDS TABLE TO THE EXTENT THAT SUCH LAND AND/OR LOTS FALL WITHIN AND/OR ARE INTERSECTED BY THE DEVELOPMENT CONSENT BOUNDARY

Workspace Ref: MACH MPD Mod 5 Consent 220427.vor  
 PDF Ref: MACH MPD Mod 5 Consent 220427.PDF

**APPENDIX 2**  
**FIGURE 1 - CONCEPTUAL PROJECT LAYOUT PLAN AT 2021**



- |  |  |
|--|--|
| Mining Lease Boundary                                  | Indicative Water Pipeline Alignment    |
| Bengalla Mine Approved Disturbance Boundary (SSD-5170) | MPO Hunter River Supply Pipeline       |
| Infrastructure Area Envelope                           | MPO DW1 Pipeline (Bi-directional)      |
| Active Stripping Area                                  | Bengalla Mine CW1 Pipeline             |
| Active Mining Area                                     | Approximate Extent of Scour Protection |
| Active Overburden Emplacement Area                     | Water Dam                              |
| Topsoil Stockpile                                      | Fines Emplacement Area                 |
| Initial Rehabilitation                                 |  |
| Established Rehabilitation                             |  |
| Infrastructure and Borrow/Stockpile Area               |  |
| Access Road  |  |
| Northern Link Road                                     |  |

Source: NSW Land & Property Information (2017); NSW Division of Resources & Energy (2017); MACH Energy (2017)

**MACHEnergy**  
MOUNT PLEASANT OPERATION

**FIGURE 2 - CONCEPTUAL PROJECT LAYOUT PLAN AT 2025**

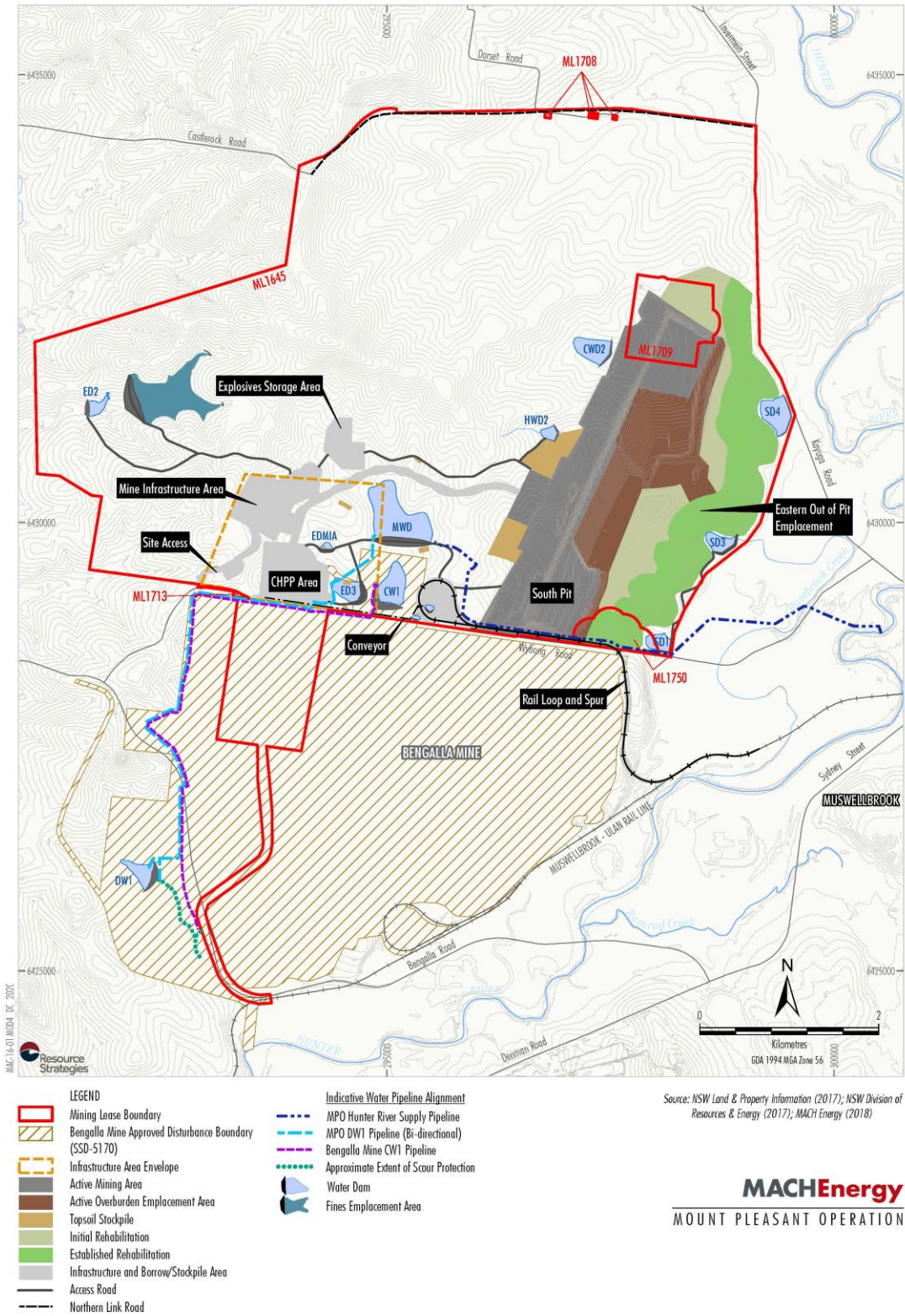
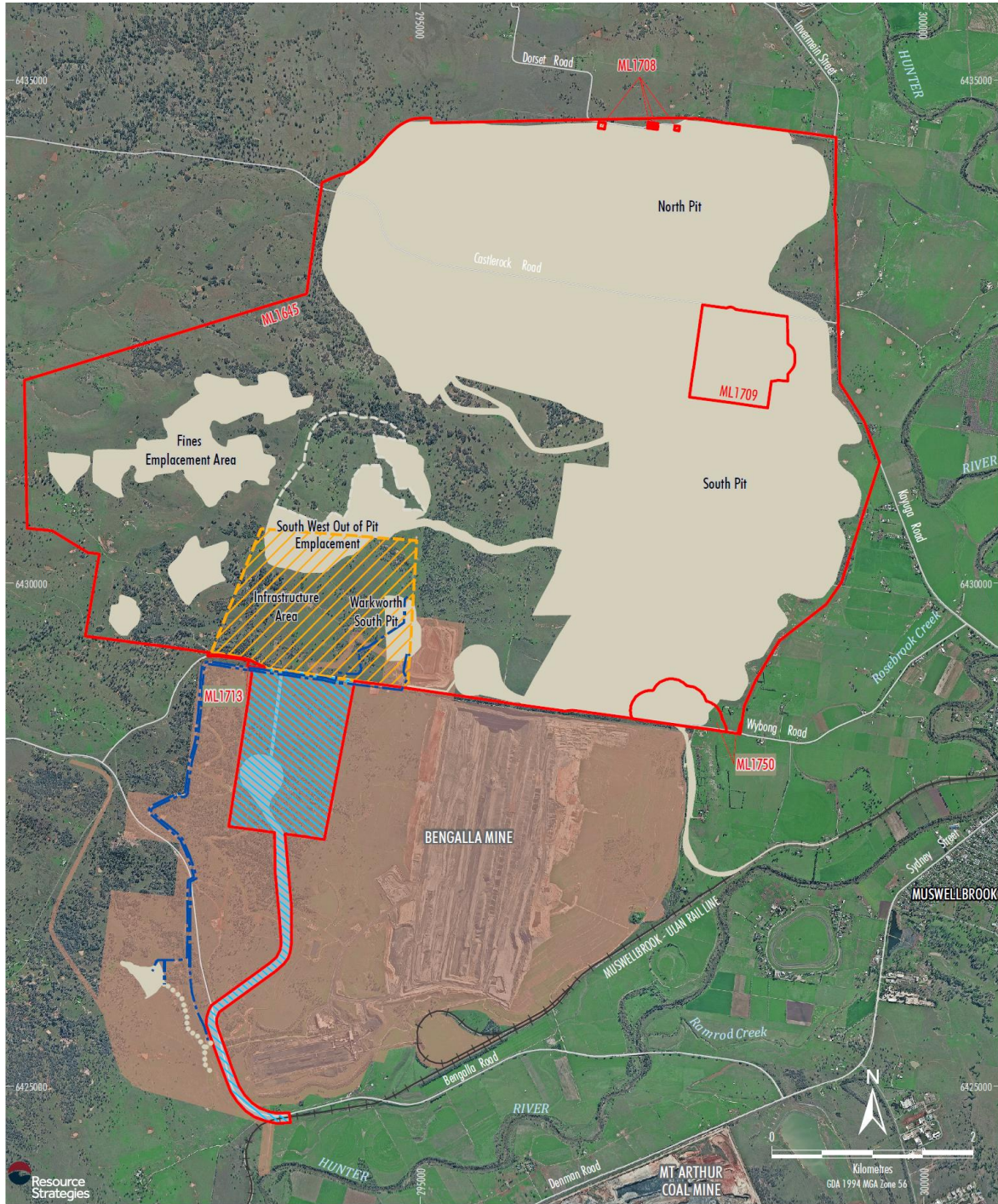


FIGURE 3 - APPROVED SURFACE DISTURBANCE PLAN



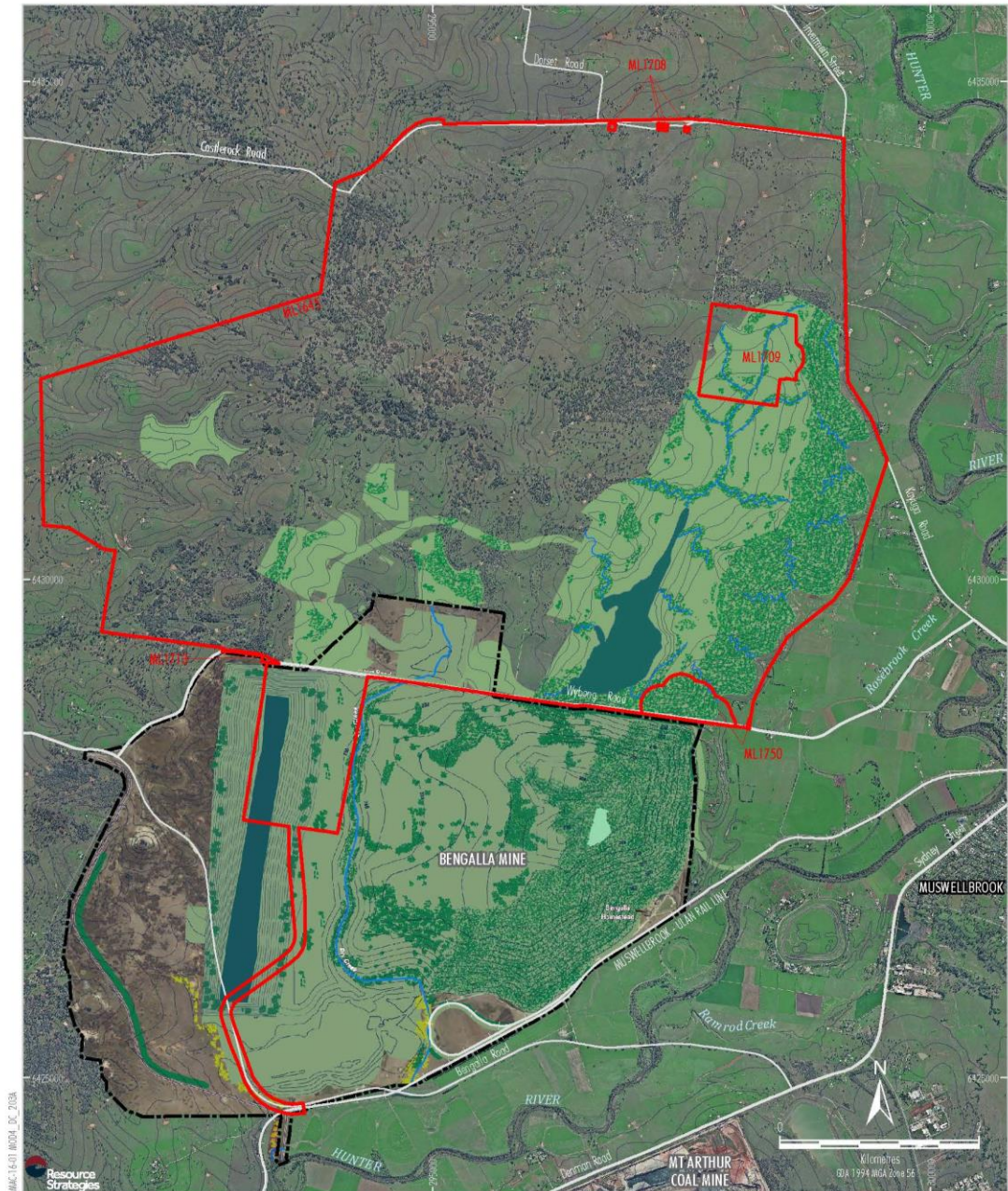
- LEGEND**
- Mining Lease Boundary
  - Approximate Extent of Approved Surface Development <sup>1</sup>
  - Indicative Water Pipeline Alignment
  - Area Relinquished for Overburden Emplacement and Major Infrastructure
  - Infrastructure Area Envelope
  - Infrastructure to be removed under the Terms of Condition 37, Schedule 3
  - Indicative Existing Coal Transport Infrastructure
  - Bengalla Mine Approved Disturbance Boundary (SSD-5170)

**NOTE**  
 1. Excludes some project components such as water management infrastructure, infrastructure within the Infrastructure Area Envelope, offsite coal transport infrastructure, road diversions, access tracks, topsoil stockpiles, power supply, temporary offices, signalling, other ancillary works and construction disturbance.

Source: NSW Land & Property Information (2017); NSW Division of Resources & Energy (2018); Department of Planning and Environment (2016); MACH Energy (2017)  
 Orthophoto: MACH Energy (Aug 2016)

**MACHEnergy**  
 MOUNT PLEASANT OPERATION  
 Revised Approved Surface Disturbance Plan

**FIGURE 4 - CONCEPTUAL FINAL LANDFORM**



- LEGEND**
- Mt Pleasant Mining Lease Boundary
  - Final Void
  - Final Rehabilitation
  - Bengalla Mine Conceptual Final Landform \*
  - Project Boundary (Appendix 2 of Development Consent SSD-5170) (Dated 23 December 2016)
  - Dry Creek
  - Final Void Lake
  - Rehabilitation
  - Rehabilitation Class III
  - Indicative Tree Screens (or equivalent)
  - Treed Rehabilitation
  - Indicative Restorative Area
- \* Digitised from Appendix 9 of Development Consent (SSD-5170) and amended in the Mount Pleasant Operation CHPP area.

Source: NSW Land & Property Information (2017); NSW Division of Resources & Energy (2017); Department of Planning and Environment (2016); MACH Energy (2017)  
 Orthophoto: MACH Energy (Aug 2016)

**MACHEnergy**  
 MOUNT PLEASANT OPERATION  
 Conceptual Final Landform  
 (2026)



## APPENDIX 3 STATEMENT OF COMMITMENTS

Environmental aspect	Commitment
Noise and vibration	<ul style="list-style-type: none"> <li>• A NMP will be prepared in accordance with the development consent.</li> <li>• The NMP will be extended to include management of potential noise emissions associated with the <a href="#">MOD 4 rail infrastructure</a>. The plan will also consider proactive and predictive modelling and management, and protocols for managing noise during adverse meteorological conditions.</li> <li>• Noise monitoring will continue to be undertaken in accordance with the development consent.</li> <li>• Implementation of the following feasible and reasonable mitigation measures: <ul style="list-style-type: none"> <li>– Deleted;</li> <li>– plant will operate in less exposed areas during the more sensitive night period;</li> <li>– procurement of new and best available technology plant;</li> <li>– provision of noise suppression on all mobile plant. It anticipated that the noise suppression technology will require an outlay of capital expenditure of between \$15M and \$20M; and</li> <li>– updating the comprehensive operational noise management plan to include real-time back to base noise monitoring using the best available technology.</li> </ul> </li> <li>• <a href="#">The Applicant</a> is committed to working with its communities and extend the opportunity for upfront acquisition upon request to the <a href="#">privately-owned properties</a> listed in Table 1 of Schedule 3.</li> </ul>
Ecology	<ul style="list-style-type: none"> <li>• Deleted</li> <li>• Details of the rehabilitation of the infrastructure area upon decommissioning will be provided in the REMP.</li> <li>• Ecological management for the Mount Pleasant Project will be undertaken in accordance with the existing development consent.</li> </ul>
Air quality	<ul style="list-style-type: none"> <li>• Air quality management for the Mount Pleasant Project will be undertaken in accordance with the Air Quality Management Plan which is a requirement under the existing development consent.</li> </ul>
Aboriginal cultural heritage	<ul style="list-style-type: none"> <li>• Aboriginal cultural heritage management will continue to be undertaken in accordance with relevant <a href="#">Applicant</a> procedures.</li> <li>• Deleted</li> <li>• Where site avoidance is impossible, cultural heritage management approaches that are set out in the CHMP for the Mount Pleasant Project area will be applied. This will include lodging an application for the relevant AHIPs under section 90 of the NPW Act.</li> <li>• Deleted</li> <li>• Aboriginal cultural heritage sites that cannot be avoided will be mitigated by standard salvage collection measures in accordance with the <a href="#">Aboriginal Heritage Management Plan</a>, following the issue of an AHIP (section 90, NPW Act).</li> <li>• The <a href="#">Aboriginal Heritage Management Plan</a> will be revised to include the proposed modifications and any requirements specified by the regulator.</li> <li>• Any mitigation salvage will be staged over time based upon mine operation plan requirements and the zoning regime of the CHMP.</li> <li>• All cultural materials collected will be stored in a storage facility to be established at the Mount Pleasant Project or VCA under an approved Care and Control Permit.</li> <li>• All cultural heritage sites not affected by the proposed development will be managed in situ in accordance with the <a href="#">Aboriginal Heritage Management Plan</a></li> </ul>

**Environmental aspect    Commitment**

	<p>procedures for long-term protective management and to minimise future development disturbance.</p> <ul style="list-style-type: none"><li>• Sites that are assessed as vulnerable to damage due to the proximity to roads and tracks or other operational infrastructure will be appropriately buffered and barricaded in accordance with existing site protection protocols including monitoring protocols.</li></ul>
Visual amenity	<ul style="list-style-type: none"><li>• Visual amenity management will be undertaken in accordance with the development consent, which requires the preparation of a Visual Impact Management Plan.</li><li>• Lighting management will be undertaken in accordance with the development consent, including preparation of an engineering report regarding light emissions.</li></ul>
Deleted	<ul style="list-style-type: none"><li>• Deleted</li></ul>
Deleted	<ul style="list-style-type: none"><li>• Deleted.</li><li>• Deleted</li></ul>
Deleted	<ul style="list-style-type: none"><li>• Deleted</li></ul>
Removal of Mount Pleasant Infrastructure South of Wybong Road	<ul style="list-style-type: none"><li>• MACH Energy Australia Pty Ltd (MACH Energy) or any person/s who rely on any development consent to carry out the Mount Pleasant development (as modified or replaced by a new development consent from time to time) will, by no later than 31 October 2022:<ol style="list-style-type: none"><li>a) remove all infrastructure associated with the Development within Mining Lease No. 1645 (ML 1645) south of Wybong Road (other than infrastructure which the operator of the Bengalla Mine agrees with MACH Energy in writing can remain in situ);</li><li>b) do all things available to transfer or cause the grant of a mining lease over that part of ML 1645 south of Wybong Road to the operator of Bengalla Mine or its nominee;</li><li>c) transfer the freehold land owned by MACH Energy within ML 1645 south of Wybong Road to the operator of Bengalla Mine (or its nominee) at rural market value; and</li><li>d) release the easements for pipeline and rail spur within or in the vicinity of ML 1645 south of Wybong Road which benefit land owned by MACH Energy.</li></ol><p><i>Note: The obligations under this commitment are not subject to the grant of development consent or any other approvals or access arrangements for alternative coal transport infrastructure for the Development and must be satisfied irrespective of the existence of any such approvals or infrastructure.</i></p></li></ul>
Flooding	<ul style="list-style-type: none"><li>• MACH Energy will design the MOD 4 rail infrastructure (including associated hydraulic structures) to meet the following criteria for potential flooding impacts for a 1% Annual Exceedance Probability flood event:<ul style="list-style-type: none"><li>○ no more than 0.1 m increase in flood levels on any privately-owned land;</li><li>○ no more than 0.01 m increase in flood levels at any privately-owned dwellings or commercial spaces;</li><li>○ no more than 0.01 m increase in flood levels at any public roads servicing privately-owned properties; and</li><li>○ no more than 0.1 metres per second (m/s) increase in flood velocities at privately-owned dwellings or commercial spaces.</li></ul></li></ul>
Rail Noise	<ul style="list-style-type: none"><li>• MACH Energy will document in the Mount Pleasant Operation Noise Management Plan reasonable and feasible measures that can be undertaken to minimise rail brake squeal associated with the MOD 4 rail infrastructure.</li><li>• The MOD 4 rail infrastructure will be subject to best practice detailed design, including consideration of brake squeal and bunching potential.</li><li>• MACH Energy will work with rail freight providers and a noise specialist during the final commissioning of the MOD 4 rail infrastructure to undertake trials and implement operational noise controls. This may include, for example, optimising train speed to reduce observed excessive noise.</li></ul>

**Environmental aspect**   **Commitment**

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	<ul style="list-style-type: none"><li>• In the event of recurring rail noise complaints, MACH Energy will consult with rail freight providers to investigate the cause of the noise and investigate reasonable and feasible mitigation options to address the issue. This may include, for example, further varying rail speeds, driver behaviour or stock maintenance. MACH Energy will consider the outcomes of any such investigation in the renewal or extension of Mount Pleasant Operation rail freight contracts.</li></ul>
Redundant Infrastructure Removal in Bengalla Mine Footprint	<ul style="list-style-type: none"><li>• MACH Energy will stabilise redundant rail infrastructure areas within the footprint of the Bengalla Mine such that they do not pose an ongoing material source of dust emissions (i.e. seeding to establish a cover crop and/or application of a dust suppressant) prior to management of these areas being transferred to Bengalla Mine.</li><li>• Existing Mount Pleasant Operation rail spur erosion and sediment control water management structures (e.g. sediment fences) within the footprint of Bengalla Mine will also be left in place, subject to agreement of Bengalla Mine.</li></ul>
Visual Vegetation Screens	<ul style="list-style-type: none"><li>• MACH Energy will inspect the condition of the vegetation visual screens described in the Visual Impact Management Plan on a quarterly basis, and maintain these vegetation visual screens to the satisfaction of the Secretary.</li></ul>
Construction Traffic	<ul style="list-style-type: none"><li>• MACH Energy will develop a Construction Traffic Management Plan for the MOD 4 construction works in consultation with Council and to the satisfaction of the Secretary.</li></ul>
Management of Historic Heritage Items	<ul style="list-style-type: none"><li>• MACH Energy will implement historic heritage management associated with MOD 4 in consultation with Council and a copy of any resulting reports/documentation will be provided to Council for its records.</li><li>• MACH Energy will consult with Council on the content of the photographic record of Overton Orchard and Race Track.</li><li>• MACH Energy will limit movement of vehicles/machinery in the area of the Overton Orchard and Race Track to avoid potential damage outside of the MOD 4 disturbance footprint, in consultation with Council. This includes avoiding disturbance of the areas shown in blue on Figure 6 of the Statement of Heritage Impact (Extent, 2007) included as Appendix F of EA (MOD 4).</li><li>• MACH Energy will consult with Council on potential points of access and routes for heavy vehicles and machinery at the Blunt's Butter Factory. Points of access and routes will be demarcated and MACH Energy will ensure heavy vehicles remain within the demarcated areas.</li><li>• MACH Energy will consult with Council regarding appropriate demarcation to restrict movement of heavy vehicles near the two cuttings located east of Overton Orchard. If artefacts are exposed at the base of the well at MP13, works will cease until an archaeologist advises whether or not they constitute 'relics' under the NSW Heritage Act 1977 and whether works should proceed pursuant to an application for an 'exception', or an excavation permit.</li></ul>

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*(Note: References to abbreviations, tables, sections, figures and appendices are references to the EA MOD 1, unless otherwise stated)*

**APPENDIX 4**  
**GENERAL TERMS FOR THE PLANNING AGREEMENT**

The Applicant undertakes to make the following Development Contributions:

Note: where indicated in the following table CPI will be applied to the payment on each anniversary of the payment with the payment being increased in line with the CPI for the previous 12 month period.

Column 1	Column 2
Item	Development Contribution
Proposed Mt Pleasant Community Contribution	\$500,000 per annum (indexed annually according to CPI). A community representative committee will be established, including Applicant representatives, to make recommendations to Council regarding these community contributions.
Council Road Maintenance Costs	Costs associated with the maintenance of roads, as reasonably apportioned to the use of the road by Mount Pleasant, up to a maximum annual payment of \$220,000 per annum (indexed according to CPI). This contribution will be made for the recurrent road maintenance to be used at Councils discretion for that purpose.
Environmental Officer	The Applicant to make contributions to an Environmental Officer, up to a maximum of \$20,000 per annum (indexed annually according to CPI).
Apprenticeships	The Applicant to use its best endeavours to engage 4 apprentices per year for the life of the mine sourced from residents within the Muswellbrook Shire and Aberdeen.

## APPENDIX 5 LAND OWNERSHIP, RECEIVER LOCATIONS AND NOISE ASSESSMENT GROUPS

Ref No	Landholder	Ref No	Landholder	Ref No	Landholder
1	MACH ENERGY AUSTRALIA PTY LTD	182	JG & AJ SADLER	302	MJ & MJ DUNCAN
2	BENGALLA MINING COMPANY PTY LTD	189	OB O'BRIEN	305	RH ENGLEBRECHT
3	ANGLO COAL (DARTBROOK MANAGEMENT) PTY LTD	191	JA & JE FIBBINS	400	ROSSGOLE PASTORAL COMPANY PTY LTD
4	JR SCRIVEN	192	IG & CW INGLE	401	JL & DG DAY
5	COAL OPERATIONS AUSTRALIA LTD	193	GM & KL SMITH	402	PC BRITTAN
6	MUSWELLBROOK RACE CLUB LTD	194	TC & JBA HARRIS	403	WILCROW PTY LTD
7	MUSWELLBROOK COAL COMPANY LTD	195	T & RK YOUNG	404	JL & DG & RW DAY
8	MANGOOKA COAL OPERATIONS PTY LTD	198	TJ & NP GOLDRICK	405	GL & JL DANIELS
19	DP ENGLEBRECHT	199	NA BURLING	406	LE & SR HOLDSWORTH
20	KB & JA BARNETT	200	R EASTON	407	AD LONERGAN
21	MJ MCGOLDRICK	201	PA & MP O'BRIEN	408	SN BATEMAN
23	JABETIN PTY LTD	202	DN RAPHAEL	409	AP CORLISS
35	C HORNE	203	RF & MA MILLARD	410	V BATEMAN
43	JB MOORE	206	WJ HARDES	411	DL CADDEY
45	BA & TE STRACHAN	207	SW & KL BARKLEY	412	JA BAILEY
47	BL & ML BATES	208	FK & WDG ALMOND & PW HUME	413	MUH LUMBY
67	JM SIMPSON	212	DR & CJ TUBB	414	PG LUCK
68	RK & NV GOOGE	213	ENGLEBRECHT RACING STABLES PTY LTD	415	SJ FRANKLAND
74	N & M SORMAZ	214	AL THOMSON-WEIR & RC WEIR	416	RV MITCHELL
77	DM PURSER	215	WJ & CB MCINTOSH	417	M & JA CASTELLANA
79	DW ADNUM	216	NU KEEVERS	418	PB WATTS
80	WJ ADNUM	217	RRA FARNSWORTH	419	KM BATES & TG WOODS
82	CK BIRCH	218	SY JOHNSON	420	D COLLINS
83	LG & CM KELMAN	219	GL & KL ANDREWS	421	GW RICHARDS
84	GE PITMAN	220	RA BYRNES & MA MOLLER	422	ME DANIELS
86	COWTIME INVESTMENTS PTY LTD	221	TD BARRON	423	DB WRIGHT
96	RP GRAY	222	ML & EA SWEENEY	424	TJ & AD & J LONERGAN & DM MCGUIGAN
102	AJPS MATHER	223	MC & LJ DOBIE	425	JE LONERGAN
108	JS GIBSON	224	DL ROBINSON	426	J BIRCH
112	BD BARRY	225	MR CRANFIELD & JR GLEESON	427	IJ BYFIELD
118	JM & CA HAYES	249	TW ROOTS	428	JM GOWING
120	DL & PA MOORE	252	RM & KF MERRICK	429	KP & MD & JJ COLLINS & ML WILLIAMSON
121	C & JM MOORE	257	PG & CM LANE	430	DJ HULBERT
136	DG YORE	258	NU & RY ELLIS	431	GJ DAY
139	RW & LP UPTON	259	MR PEEL	432	REN & TR ADAM & KL CONE
140	DAPKOS PTY LTD	260	PSJ MURRAY	433	CJ ASHFORD & JP BRENNAN
143	JS & NM LONERGAN	261	PR ELLIS	434	GJ & RL JONES
147	MJ & RG ADNUM	271	DE KILGANNON & DS MACDOUGALL	435	MN FRASER
153	GM CASEY	272	GC SPARRE	436	MEDEGATE PTY LTD
154	PD & F STANDING	273	IJ & CM RICHARDS	437	BG & S CANVIN
156	JE & JL LONERGAN	280	MONADELPHOUS PROPERTIES PTY LTD	438	WALFERTAN PROCESSORS PTY LTD
157	RB PARKINSON	281	JR & JA BUCKLEY	439	PITNACREE (BLAIRMORE) PTY LTD
158	JM HOATH	282	JE ANDERSON & KL & J CAMPBELL & MV & DJ & SE & TP HALLETT	440	DARLEY AUSTRALIA PTY LTD
159	JE & MS DUCEY			441	MACQUEEN PROJECTS PTY LTD
169	L GREENSILL & J WATTUS	283	SRP & RF RAY	442	WJ BOURKE
172	RL & CE THOMPSON	285	THE NEW SOUTH WALES GREYHOUND BREEDERS OWNERS & TRAINERS ASSOCIATION LTD	443	RG & K BRADLEY
173	TL KING & JA WARD			444	JW & VL BRACE
174	TJ & ML POWER	286	MUSWELLBROOK SHIRE COUNCIL	445	AUSGRID
176	JAF & LA ALLAN	287	TELSTRA CORPORATION LTD	446	W CLARKE & G HURST & W KELYMACK & G LANE & G WOOLNOUGH
177	FW & HM & SA WHEATLEY	288	LA & JM WEBSTER	447	NM & JS LONERGAN
178	PA NEELY	289	RA & EA LAWMAN	448	JS LONERGAN
179	FW WHEATLEY	292	GR & MK WALSH	449	KM LEE
180	FA WHEATLEY & SON PTY LTD	293	MG & LJ LATHAM	450	KL & GM SMITH
181	KL & HR DAY PTY LTD	296	JM WILD		

Source: NSW Land & Property Information (2018)

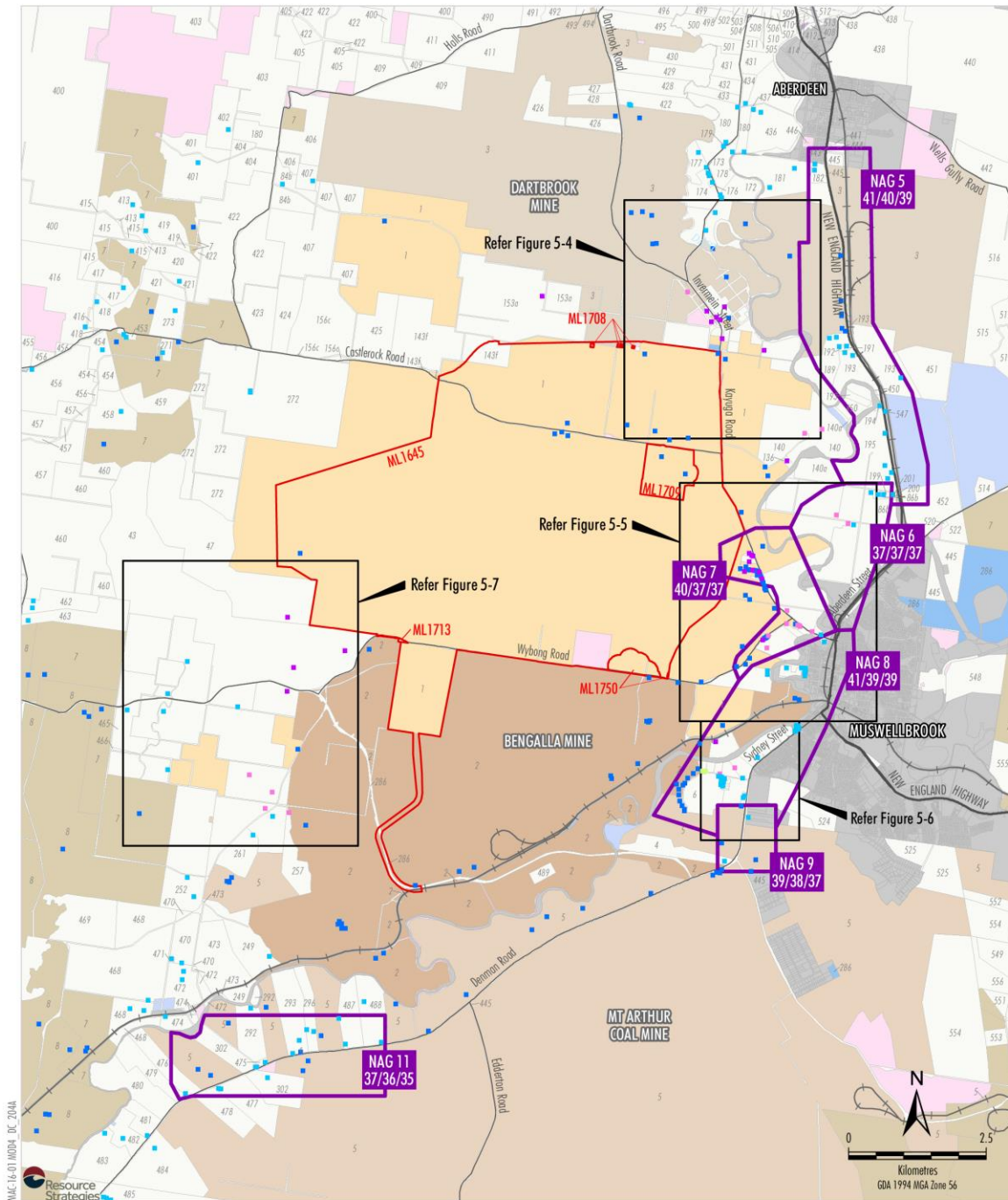
**MACHEnergy**  
MOUNT PLEASANT OPERATION  
Landholder List

Figure 5-1

Ref No	Landholder	Ref No	Landholder
451	GK & HM SANSON	506	SA & RP WITHERS
452	AJR MADDEN	507	NE GOLLAN
453	SC & ME DEVER	508	VG FOSTER
454	AP & PE MCMANUS	509	GJ DAY & J WATTUS
455	RP KEAST	510	YR & SG WILKS
456	GT KEAST	511	MJ & KM FARRELL
457	AM PRATT	512	GR & EA MEDHURST
458	HJ WRIGHT	513	DC & GJ WILTON
459	AJ & LL MARTIN	514	BROADCAST AUSTRALIA PTY LTD
460	RG GOWING	515	SB & JA REICHEL
462	SH JENNA	516	MP CLIFFORD
463	IV & CA INGOLD	517	FL COLEMAN & JC THOMAS
464	KL BALMER & JL SMITH	518	VM FRENCH
465	FN & WL GOOGE	520	JEHOVAH'S WITNESSES CONGREGATIONS
466	GT MCNEILL	522	BJ & VR PASSLOW
467	MWJ & LC WALTON	523	HG & MG COPE & PM & FP FARRELL
468	S.R. & J.W. LAWSON (LUNDISFARNE) PTY LTD	524	G GILLFEATHER
469	FN GOOGE	525	IR & F WEBBER
470	JJ & PJ BROWN	526	DL WICKS
471	PJ BROWN	527	DJ & GH CORK
472	JDM MARKHAM	528	AS CHICK
473	MR & M PEEL	529	TH HAMILTON & AM SMITH
474	AA & BT MEYER	530	SC & NU BULLARD & JM HARRISON
475	EJ & CA DENTON	531	GJ & EA MUNZENBERGER
476	LA & CA MACPHERSON	532	VL ROSE
477	MW TURNER	533	MJ BROWN
478	RL ANGUS	534	EE MARKS
479	HM WENG & FYP ZHU	535	GL & DN HORTON
480	HR & BC GRUGEON	536	LJ CUMMINS
481	RL WILKS	537	TJ D'HERVILLE
482	DJ PHILLIPS	538	KD POWER & T VERO
483	RW JONES	539	PH CURTAIN & CA SINGLETON
484	TR & KM PAULSEN	540	GRENTLE PTY LTD
485	PR & M BURGEMANN	541	JG HINDER & VG MATHEWS
486	GW & HM BLAKE	542	PE & GJ CHAPMAN
487	E RANKIN	543	KD CLOSE
488	E & WJ RANKIN	544	DS & RM NEWTON
489	ALIFORM PTY LTD	545	JA GREEN
490	RL GORDON	546	SJ SCOTT
491	PW GILLIGAN	547	LA & FK & G BRYANT
492	HM & CR GOODSSELL	548	WANARUAH LOCAL ABORIGINAL LAND COUNCIL
493	AW & JC YOUNG	549	TTW KEAST & RA SUMNER
494	BJ & K FLAHERTY	550	SR PAGE
495	DAVHAM NOMINEES PTY LTD	551	PA & SL RYAN
496	RW DAVIS	552	MT PERRAM
498	SCONE POLO CLUB INCORPORATED	553	MF & AV DOHERTY
499	RD & TL JONES	554	K CASBEN
500	GWRD HOLDINGS PTY LTD	555	GLENDOWER PASTORAL CO PTY LTD & GYARRAN PTY LTD
501	JW TAYLOR		
502	LC SCOWEN	556	CS JACOBSEN
503	JR GORDON	557	CJ & LE DUCK
504	MT O'CONNELL		
505	GC O'HARA		

Source: NSW Land & Property Information (2018)

Figure 5-2



IMC 16-01 MOD4 DC 2044  
Resource Strategies

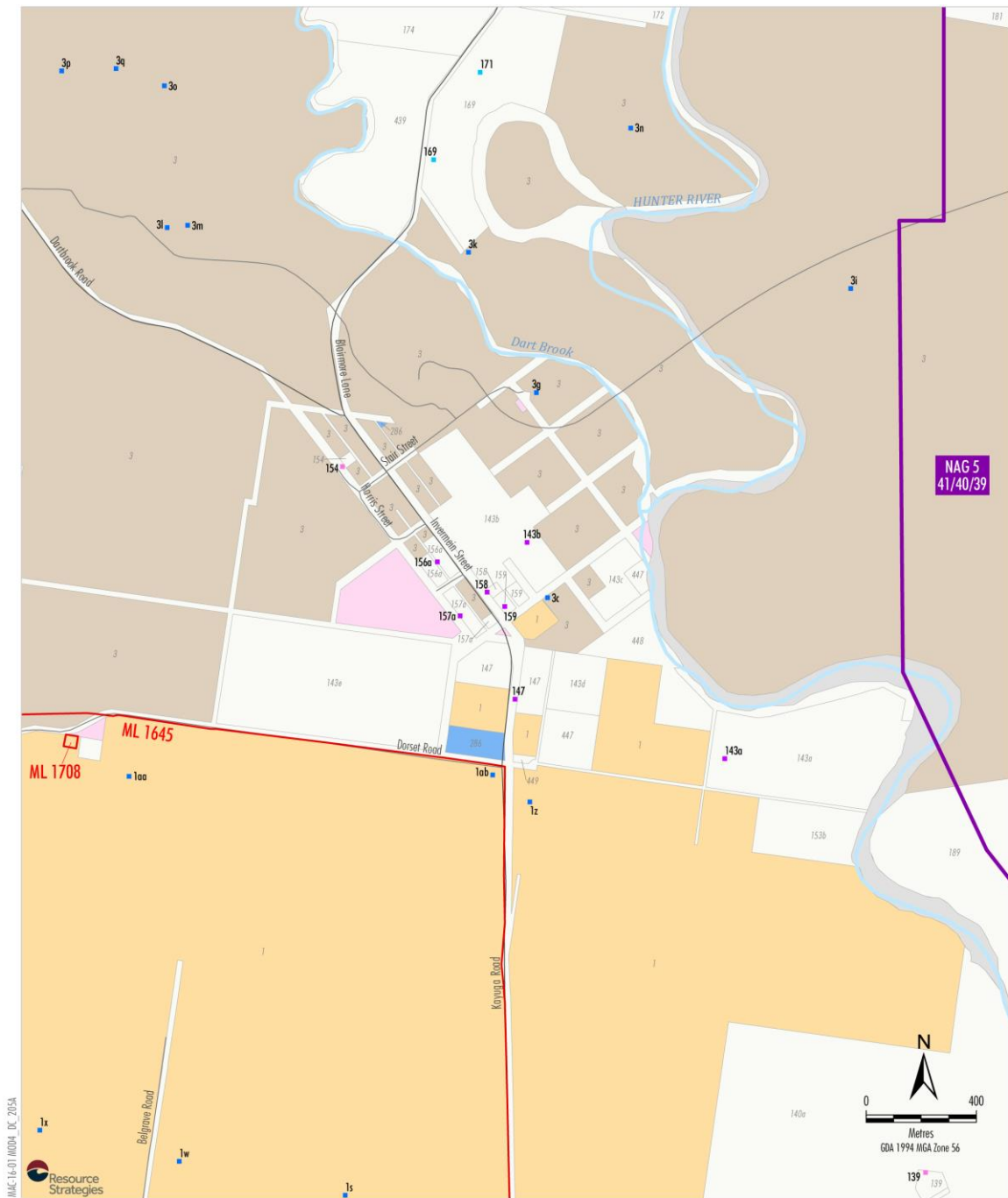
- LEGEND**
- Mining Lease Boundary
  - Muswellbrook and Upper Hunter LEPS Zones B2, B5, IN1, SP2, R2, R5, RE1, RE2 and W1
  - Crown
  - Crown/State of NSW
  - The State of NSW
  - Muswellbrook Shire Council
  - Upper Hunter Shire Council
  - Mount Pleasant Controlled
  - Bengalla Controlled
  - Dartbrook Controlled
  - Mt Arthur Controlled
  - Other Mining/Resource Company Controlled
  - Privately Owned Land
  - Mine-owned Dwelling
  - Privately-owned Residence - MPO Acquisition on Request
  - Privately-owned Residence - MPO Mitigation/Acquisition on Request \*
  - Privately-owned Residence - MPO Mitigation on Request
  - Other Privately-owned Residence
  - Noise Assessment Group (NAG)
  - Default NAG Noise Criteria for Day/Evening/Night

Source: NSW Land & Property Information (2017); NSW Division of Resources & Energy (2017)

**MACHEnergy**  
MOUNT PLEASANT OPERATION  
Land Ownership

\* MPO Mitigation on Request - rail noise. MPO is only required to acquire and/or install air quality mitigation measures at this property if acquisition and/or mitigation is not reasonably achievable under a separate approval for the Bengalla Mine.

**Figure 5-3**



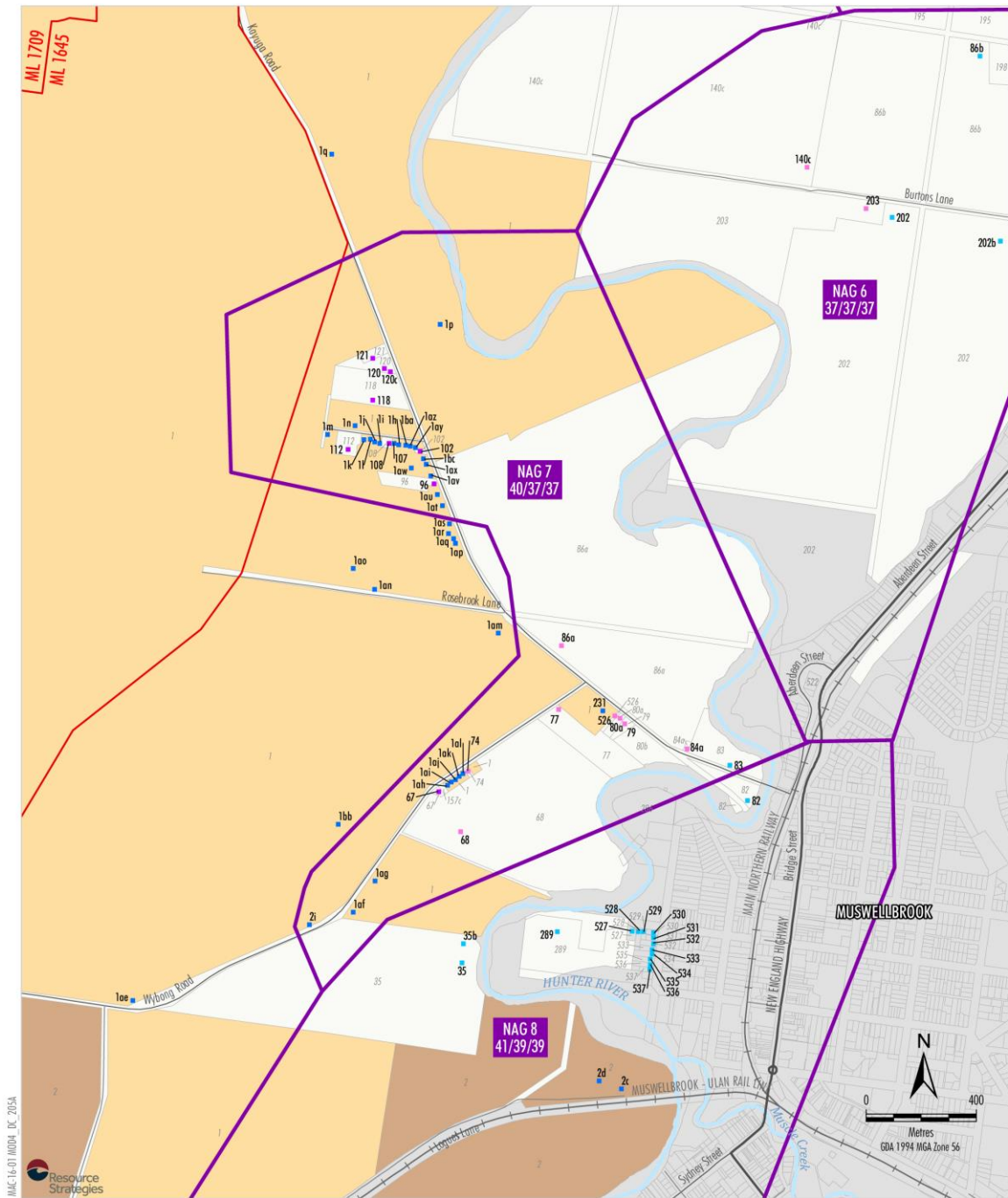
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Resource Strategies
- LEGEND**
- Mining Lease Boundary
  - Muswellbrook and Upper Hunter LEPs Zones B2, B5, IN1, SP2, R2, R5, RE1, RE2 and W1
  - Crown
  - Muswellbrook Shire Council
  - Mount Pleasant Controlled
  - Dartbrook Controlled
  - Privately Owned Land
  - Noise Assessment Group (NAG)
  - Default NAG Noise Criteria for Day/Evening/Night
- Mine-owned Dwelling
  - Privately-owned Residence - MPO Acquisition on Request
  - Privately-owned Residence - MPO Mitigation on Request
  - Other Privately-owned Residence

Source: NSW Land & Property Information (2016); NSW Division of Resources & Energy (2016); MACH Energy (2016)

**MACHEnergy**  
MOUNT PLEASANT OPERATION  
Land Ownership  
Dartbrook Inset

Figure 5-4





MACH 16-01 MDD04\_DC\_2015A



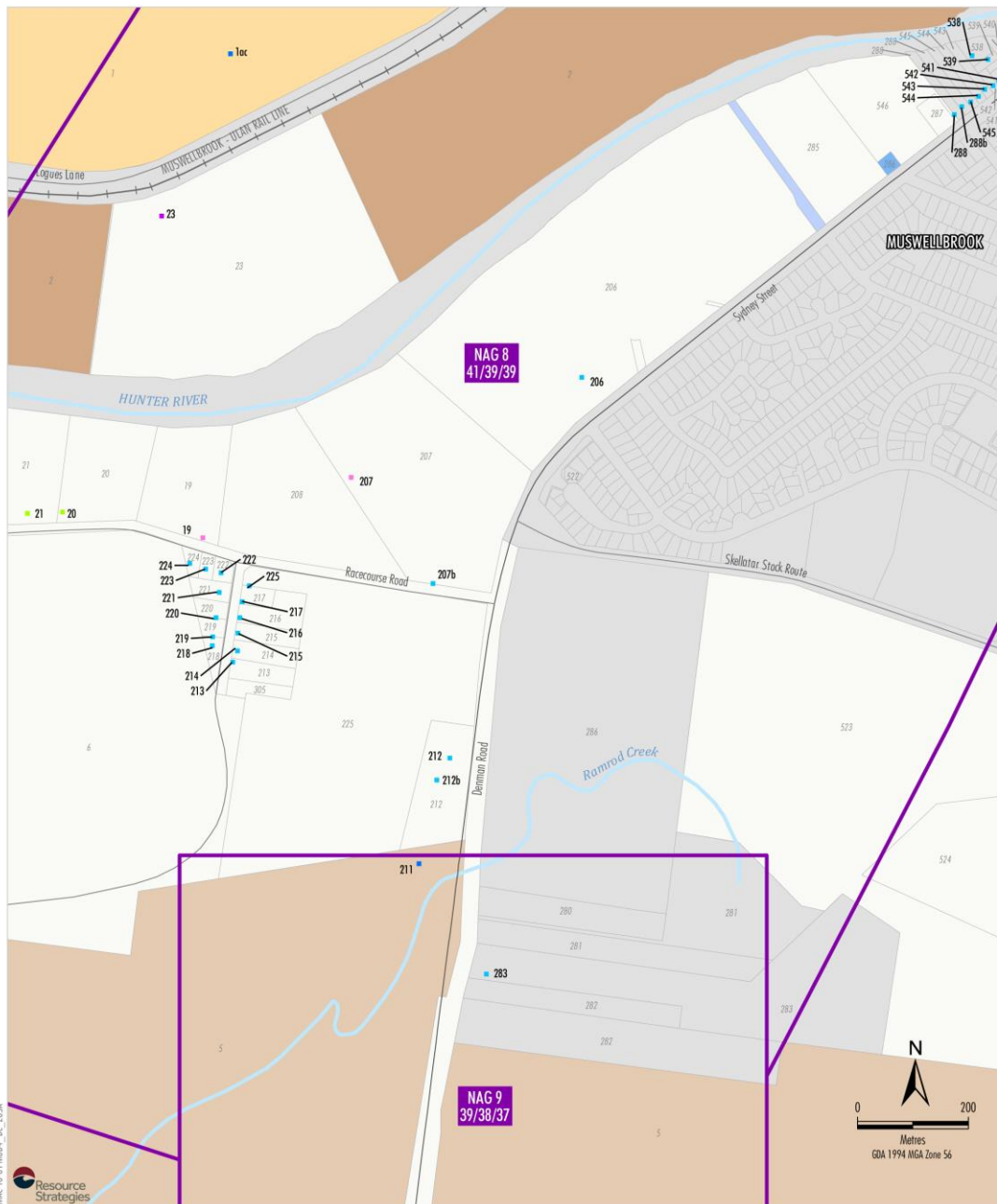
- LEGEND**
- Mining Lease Boundary
  - Muswellbrook and Upper Hunter LEPs Zones B2, B5, IN1, SP2, RZ, R5, RE1, RE2 and W1
  - Muswellbrook Shire Council
  - Mount Pleasant Controlled
  - Bengalla Controlled
  - Privately Owned Land
  - Noise Assessment Group (NAG)
  - Default NAG Noise Criteria for Day/Evening/Night

- Mine-owned Dwelling
- Privately-owned Residence - MPO Acquisition on Request
- Privately-owned Residence - MPO Mitigation on Request
- Other Privately-owned Residence

Source: NSW Land & Property Information (2016); NSW Division of Resources & Energy (2016); MACH Energy (2016)

**MACHEnergy**  
 MOUNT PLEASANT OPERATION  
 Land Ownership  
 Kayuga Road Inset

Figure 5-5



AMC 16-01 MOD4 DC 2015A  
Resource Strategies

- LEGEND**
- Muswellbrook and Upper Hunter LEPS Zones B2, B5, INT, SP2, R2, R5, RE1, RE2 and W1
  - The State of NSW
  - Muswellbrook Shire Council
  - Mount Pleasant Controlled
  - Bengalla Controlled
  - Mt Arthur Controlled
  - Privately Owned Land
  - Noise Assessment Group (NAG)
  - 37/36/35 Default NAG Noise Criteria for Day/Evening/Night

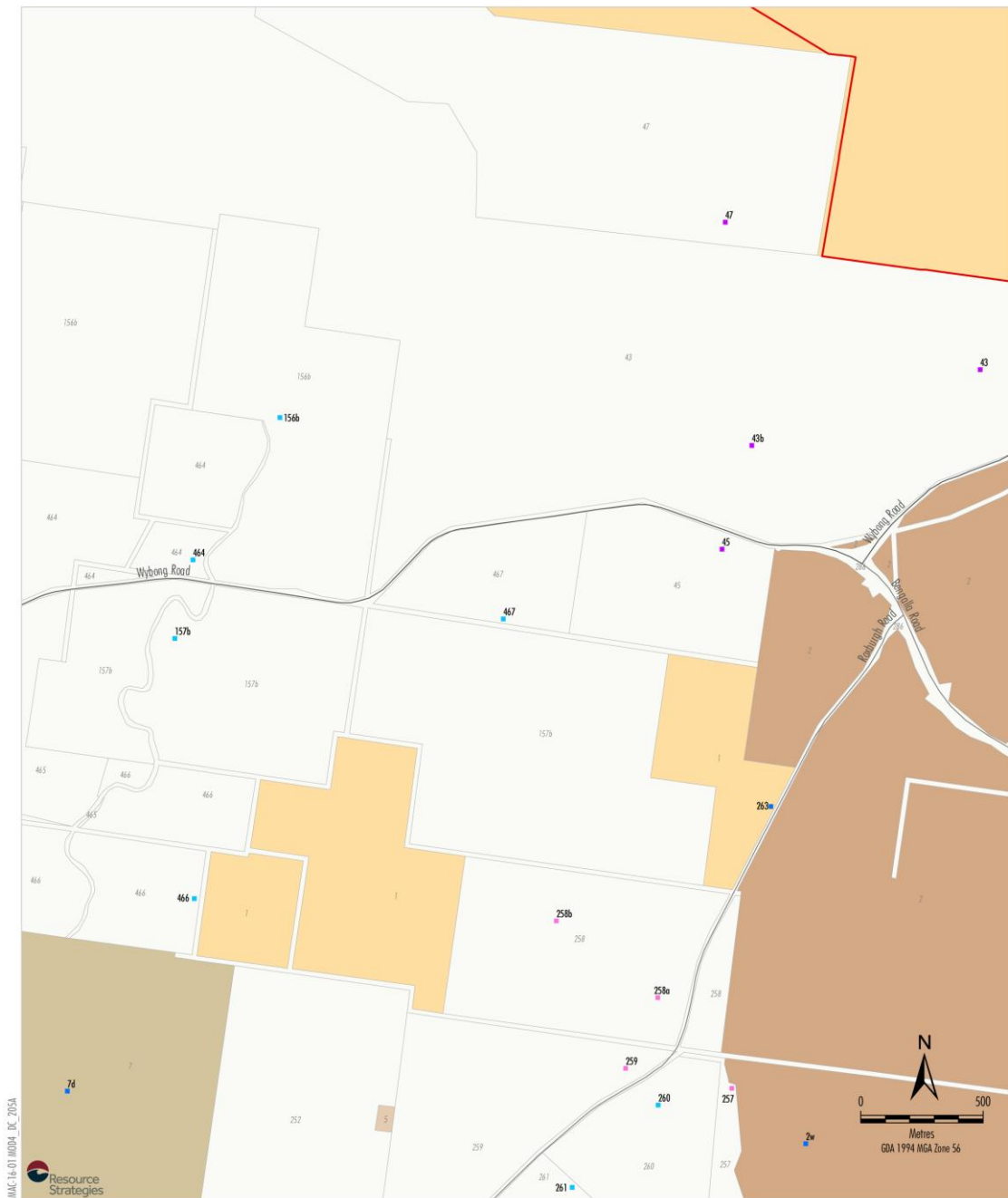
- Mine-owned Dwelling
- Privately-owned Residence - MPO Acquisition on Request
- Privately-owned Residence - MPO Mitigation/Acquisition on Request \*
- Privately-owned Residence - MPO Mitigation on Request
- Other Privately-owned Residence

\* MPO Mitigation on Request - rail noise. MPO is only required to acquire and/or install air quality mitigation measures at this property if acquisition and/or mitigation is not reasonably achievable under a separate approval for the Bengalla Mine.

Source: NSW Land & Property Information (2016); NSW Division of Resources & Energy (2016); MACH Energy (2016)

**MACH Energy**  
MOUNT PLEASANT OPERATION  
Land Ownership  
Denman Road Inset

Figure 5-6



- MAC 14-01 MPOA\_DC\_2016A
- LEGEND**
- Mining Lease Boundary
  - Mount Pleasant Controlled
  - Bengalla Controlled
  - Mt Arthur Controlled
  - Other Mining/Resource Company Controlled
  - Privately Owned Land
- 
- Mine-owned Dwelling
  - Privately-owned Residence - MPO Acquisition on Request
  - Privately-owned Residence - MPO Mitigation on Request
  - Other Privately-owned Residence
- 
- 37/36/35 Noise Assessment Group (NAG)
  - Default NAG Noise Criteria for Day/Evening/Night

Source: NSW Land & Property Information (2016); NSW Division of Resources & Energy (2016); MACH Energy (2016)

**MACH Energy**  
 MOUNT PLEASANT OPERATION  
 Land Ownership  
 Wybong Road Inset

**Figure 5-7**