

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

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

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DEFINITIONS

Aboriginal object	Has the same meaning as the definition of the term in section 5 of the NP&W Act
Aboriginal place	Has the same meaning as the definition of the term in section 5 of the NP&W Act
Additional Disturbance Area	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
AEP	Annual Event Probability
Annual Review	The review required by condition D11
Applicant	MACH Energy Australia Pty Ltd, or any person carrying out any development under this consent
Approved disturbance area	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
BCA	Building Code of Australia
BC Act	<i>Biodiversity Conservation Act 2016</i>
BCD	Biodiversity & Conservation Division within the Department
Blast misfire	The failure of one or more holes in a blast pattern to initiate
Calendar year	A period of 12 months from 1 January to 31 December
CAS	Climate and Science Branch within the NSW Department of Planning and Environment
CCC	Community Consultative Committee required by condition A20
CHPP	Coal handling and preparation plant
CO₂-e	Carbon dioxide equivalent based on a Global Warming Potential factor of 28 for emissions of methane
Conditions of this consent	Conditions contained in Schedule 2
Construction	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
Council	Muswellbrook Shire Council
CPI	Consumer Price Index
Date of commencement	The date notified to the Department by the Applicant under condition A12
Day	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
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	NSW Department of Planning and Environment
Development	The development described in the documents listed in condition A2(c), as modified by the conditions of this consent
Development Layout	The plans in Appendix 2 of this consent
DPE-Crown Lands	Crown Lands Group within the Department
DPE Water	Water Group within the Department
EAs	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.

EEC	Endangered ecological community, as defined under the BC Act and/or EPBC Act
EIS	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
Environment	Includes all aspects of the surroundings of humans, whether affecting any human as an individual or in his or her social groupings
EPA	NSW Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2021</i>
EPBC Act	Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPL	Environment Protection Licence under the POEO Act
Evening	The period from 6.00 pm to 10.00 pm
Feasible	Means what is possible and practical in the circumstances
Fisheries NSW	Fisheries Branch of the Primary Industries Group within the Department
GDE	Groundwater Dependent Ecosystem
GHGEs	Greenhouse gas emissions
Global Warming Potential	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 ₂
Heavy vehicle	A vehicle that has a combined Gross Vehicle Mass or Aggregate Trailer Mass of more than 4.5 tonnes
Heritage NSW	Heritage NSW within the Department of Premier and Cabinet
Heritage item	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"> • the State Heritage Register under the <i>Heritage Act 1977</i>; • a state agency heritage and conservation register under section 170 of the <i>Heritage Act 1977</i>; • a Local Environmental Plan under the EP&A Act; • the World Heritage List; • the National Heritage List or Commonwealth Heritage List under the EPBC Act; or • anything identified as a heritage item under the conditions of this consent
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
Laden trains	Trains transporting mining products or materials to or from the site

Land	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		
LGA	Local Government Area		
LSC	Land and Soil Capability as defined under <i>The Land and Soil Capability Assessment Scheme – Second Approximation</i> (Office of Environment and Heritage, 2012)		
Material harm	<p>Is harm to the environment that:</p> <ul style="list-style-type: none"> involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial, or 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) <p>This definition excludes “harm” that is authorised under either this consent or any other statutory approval</p>		
MEG	Regional NSW – Mining, Exploration and Geoscience		
MIA	Mine Infrastructure Area		
Mine-Owned Land	Land owned by a mining, petroleum or extractive industry company (or its subsidiary or related party)		
Mine closure	Decommissioning and final rehabilitation of the site following the cessation of mining operations		
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 carbonaceous or saline material associated with mining operations		
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, tailings and reject material		
Minister	NSW Minister for Planning, or delegate		
Minor	Not very large, important or serious		
Mitigation	Activities associated with reducing the impacts of the development		
Negligible	Small and unimportant, such as to be not worth considering		
NGERS	National Greenhouse and Energy Reporting scheme, established under the <i>National Greenhouse and Energy Reporting Act 2007</i>		
Night	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		
Noise sensitive areas	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		
Non-compliance	An occurrence, set of circumstances or development that is a breach of this consent		
‘Non-road’ equipment	mobile	diesel	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
NP&W Act	<i>National Parks and Wildlife Act 1974</i>		
NPfl	<i>NSW Noise Policy for Industry 2017</i>		
NRAR	NSW Natural Resources Access Regulator		
Over-dimensional	Over-mass, over-size or over-length vehicles		
PA	Planning agreement within the meaning of the term in section 7.4 of the EP&A Act		
Planning Secretary	Planning Secretary under the EP&A Act, or nominee		

POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Pre-construction activities	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.
Privately-owned land	Land that is not owned by a public agency or a mining, petroleum or extractive industry company (or its subsidiary or related party)
Public infrastructure	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.
Reasonable	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
Registered Aboriginal Parties	As described in the <i>National Parks and Wildlife Regulation 2019</i>
Rehabilitation	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
Remediation	Activities associated with partially or fully repairing or rehabilitating the impacts of the development or controlling the environmental consequences of this impact
Residence	Existing or approved dwelling at the date of grant of this consent
Resources Regulator	NSW Resources Regulator
RFS	NSW Rural Fire Service
ROM	Run-of-mine
Stage 2 CHPP	Coal handling and processing plant modules constructed under this consent (i.e. excludes any coal handling and processing infrastructure constructed under previous consents)
Site	The land defined in Appendix 1
TfNSW	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^a that is damaged by carrying out the development; and
- (b) relocate, or pay the full costs associated with relocating, any public infrastructure^a that needs to be relocated as a result of the development.

^a *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 ^a	Day	Evening	Night	Night
	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{A1} (1 min)
Residences on Privately-Owned Land				
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

^a 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*

Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance
Residence on privately-owned land ^a	120	10	0%
	115	5	5% of the total number of blasts over a calendar year
Mine-owned residences	-	10	0%
Historic heritage sites ^b	-	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%

^a The locations referred to in Table 2 are shown in Appendix 3.

^b 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^a a day; and
- (b) 8 single blast events^a a week, averaged over a calendar year.

B16. Condition B15 does not apply to single blast events^a 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.

^a 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 ₁₀)	Annual	^{a, c} 25 µg/m ³
	24 hour	^b 50 µg/m ³
Particulate matter < 2.5 µm (PM _{2.5})	Annual	^{a, c} 8 µg/m ³
	24 hour	^b 25 µg/m ³
Total suspended particulate (TSP) matter	Annual	^{a, c} 90 µg/m ³

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

^b Incremental impact (i.e. incremental increase in concentrations due to the development on its own).

^c 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 PM₁₀ and PM_{2.5}) 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_{2.5} 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 CO₂-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

Feature	Performance Measure
Scope 1	<ul style="list-style-type: none"> • Less than 0.87 million tonnes CO₂-e emitted per calendar year, or lower emissions as determined under condition B34 • Less than 0.80 million tonnes CO₂-e emitted per calendar year (5-year rolling average), or lower emissions as determined under condition B34 • Less than 13.9 million tonnes CO₂-e emitted over the life of the development, or lower emissions as determined under condition B34
Scope 2	<ul style="list-style-type: none"> • Minimise CO₂-e emissions by using electricity generated by renewable or carbon neutral energy sources where reasonable and feasible

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 CO₂-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 CO₂-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^a	Receiver ID
Belgrave	143f

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

Feature	Performance Measure^a
Alluvial aquifers	<ul style="list-style-type: none"> 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"> negligible change in groundwater levels; negligible change in groundwater quality; and negligible impact to other groundwater users, Maintain appropriate setbacks in accordance with the <i>Aquifer Interference Policy</i> (DPI, 2012) 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)
Erosion and sediment control works	<ul style="list-style-type: none"> 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) 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) 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)
Clean water diversions and storage infrastructure	<ul style="list-style-type: none"> 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
Sediment dams	<ul style="list-style-type: none"> 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
Mine water storages	<ul style="list-style-type: none"> Design, install and maintain mine water storage infrastructure to avoid unlicensed or uncontrolled discharge of mine water New mine water storages designed to contain the 1% AEP 24-hour-storm event and minimise permeability On-site storages (including mine infrastructure dams, groundwater storage and treatment dams) are suitably designed, installed and maintained (including to minimise permeability) Ensure adequate freeboards within all pit voids at all times to minimise the risk of discharge to surface waters
Chemical and hydrocarbon storage	<ul style="list-style-type: none"> Chemical and hydrocarbon products to be stored in bunded areas in accordance with the relevant Australian Standard
Tailings storages	<ul style="list-style-type: none"> Maximise dewatering and co-disposal of dewatered tailings from the Stage 2 CHPP within overburden emplacements Design and maintain tailings storage areas to prevent the movement of tailings seepage/leachate offsite
Overburden emplacements	<ul style="list-style-type: none"> Design, install and maintain emplacements to prevent migration of acid forming and potentially acid forming materials, and saline and sodic materials Design, install and maintain out-of-pit emplacements to prevent and/or manage long term saline seepage
Aquatic and riparian ecosystems	<ul style="list-style-type: none"> Negligible environmental consequences beyond those predicted in the document/s listed in condition A2(c) Maintain or improve baseline channel stability Develop site-specific in-stream water quality objectives in accordance with the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC & ARMCANZ, 2000) and Using the ANZECC Guidelines and Water Quality Objectives in NSW (DEC, 2006) or its latest version

^a 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

Credit Type	Credits Required Stage 1	Credits Required Stage 2	Total
Ecosystem Credits			
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
Total	4,615	425	5,040
Species Credits			
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

Credit Type	Credits Required	
	Option 1	Option 2
Ecosystem Credits		
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*
Total	313	234
Species Credits		
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

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

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

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^a.

^a 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^a 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

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

^a 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^a 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

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

^a 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_{2-e} 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_{2-e} 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
Freehold	14		DP255048
Freehold	14		DP112792
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
Freehold	23		DP1041946
Freehold	24		DP742543
Freehold	25		DP1053537
Freehold	26		DP750926
Freehold	27		DP745897

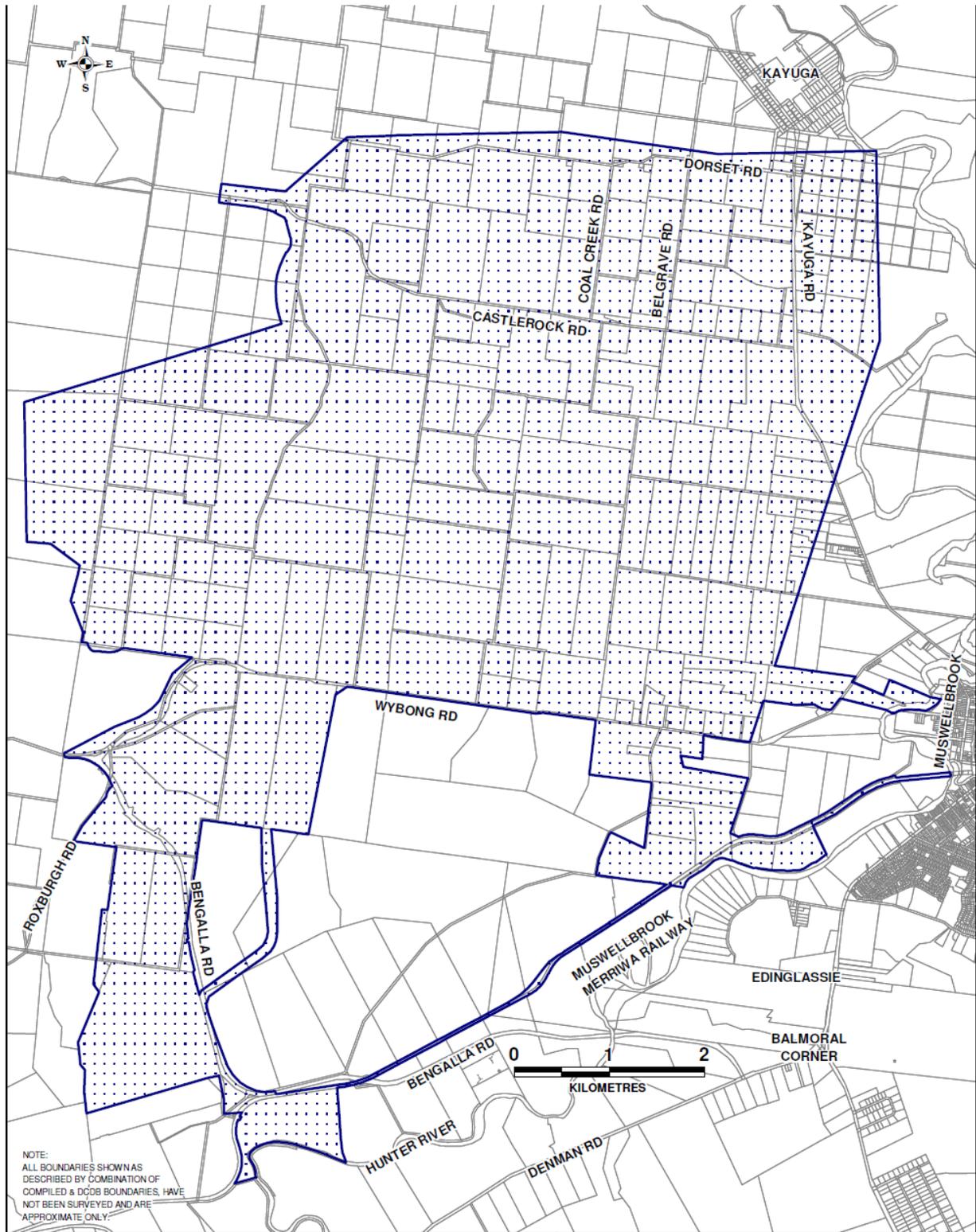
Tenure Type	Lot	Section	Deposited Plan Number
Freehold	28		DP750926
Freehold	29		DP731706
Freehold	30		DP137297
Freehold	35		DP1076510
Freehold	36		DP1108421
Freehold	38		DP750926
Freehold	39		DP750926
Freehold	41		DP750926
Freehold	42		DP750926
Freehold	43		DP750926
Freehold	44		DP750926
Freehold	45		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
Freehold	177		DP750926
Freehold	181		DP750926
Freehold	184		DP750926
Freehold	188		DP750926
Freehold	189		DP750926
Freehold	190		DP750926
Freehold	193		DP750926
Freehold	195		DP750926
Freehold	196		DP750926
Freehold	199		DP750926
Freehold	200		DP750926
Freehold	211		DP750926
Freehold	212		DP750926
Freehold	213		DP750926
Freehold	214		DP750926
Freehold	215		DP750926
Freehold	216		DP750926
Freehold	217		DP750926
Freehold	218		DP750926
Freehold	219		DP750926
Freehold	220		DP750926
Freehold	221		DP750926
Freehold	224		DP750926
Freehold	236		DP750926
Freehold	237		DP750926
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



MACH Energy

MACH Energy Australia
Mt Pleasant Project

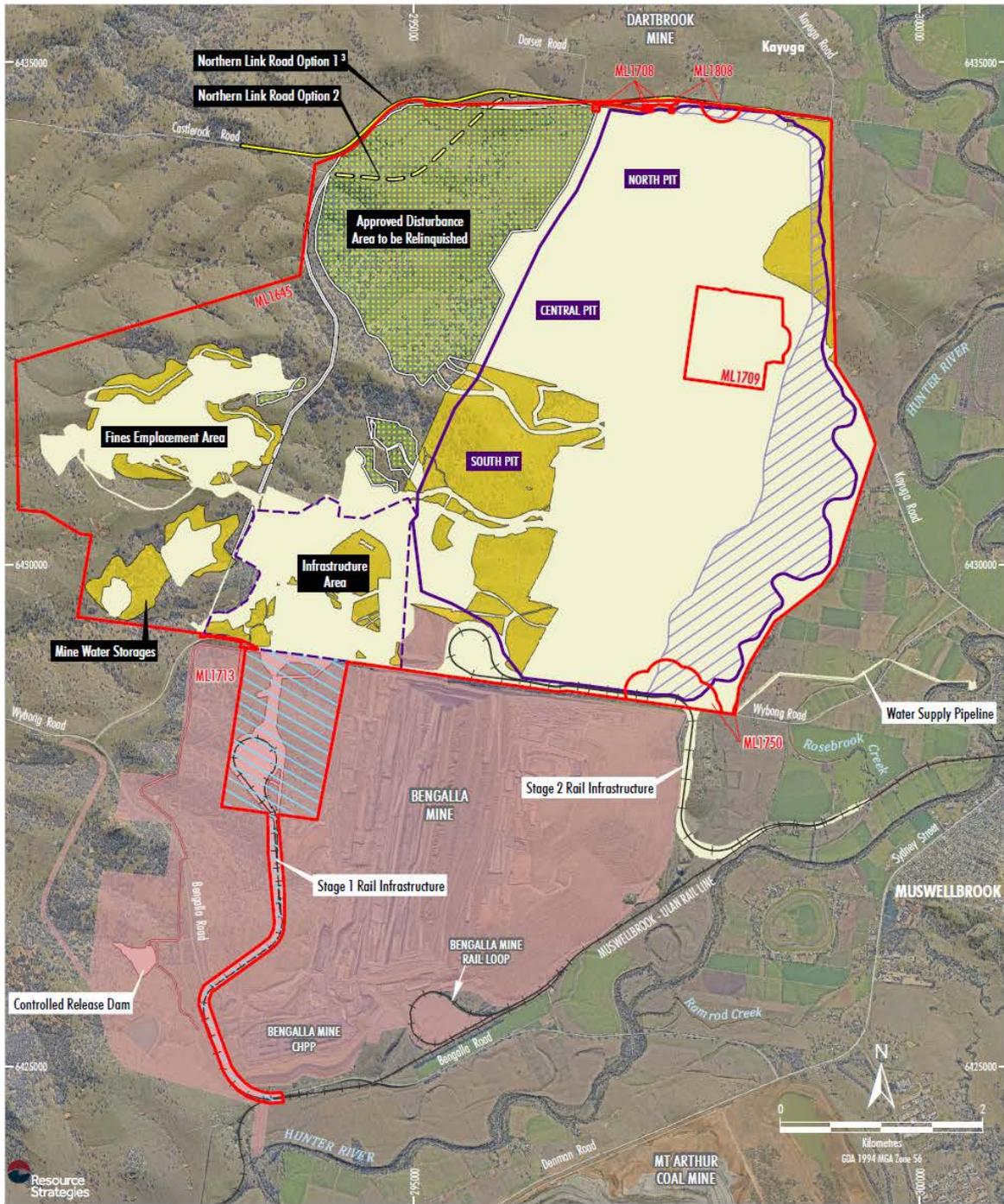
Drawn By: SC
Date: 17/02/22
Layout: A4
Projection: MGA 56
Location: Muswellbrook
Contour: N/A
Version: 04

**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) ¹
 - 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) ¹
- Additional/Revised Project Elements**
- Approved Disturbance Area to be Relinquished ²
 - Approximate Additional Disturbance of Project Extensions ¹
 - Northern Link Road Option 1 Centreline ³
 - 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

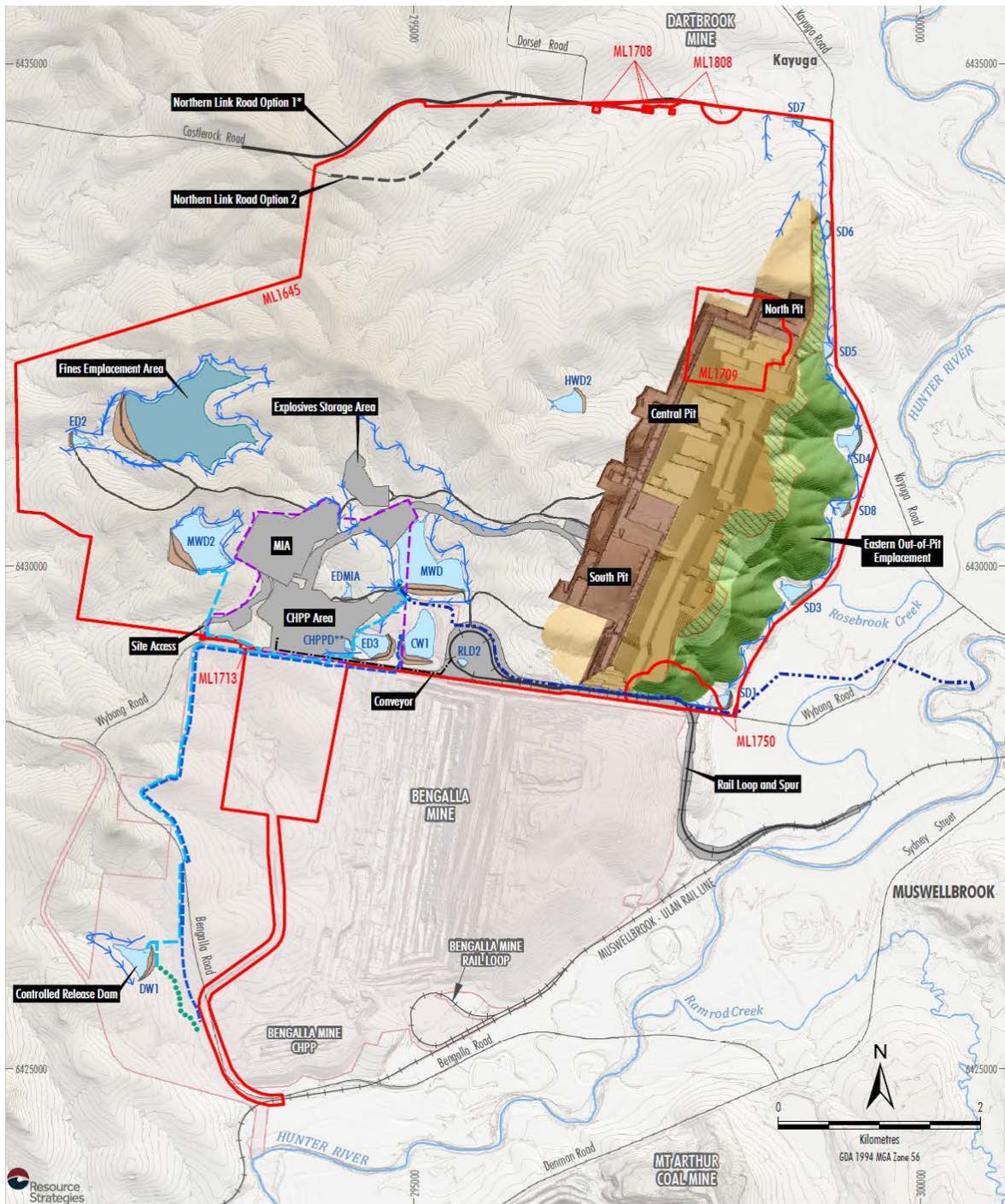
- NOTES**
1. Excludes some incidental Project components such as water management infrastructure, access tracks, topsoil stockpiles, power supply, temporary offices, other ancillary works and construction disturbance.
 2. Subject to detailed design of Northern Link Road alignment.
 3. Preferred alignment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



- LEGEND**
- Mining Lease Boundary (Mount Pleasant Operation)
 - Revised Infrastructure Area Envelope
 - Topsoil Stripping
 - Active Mining
 - Active Overburden Employment
 - 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 Employment Area
- Water Dam
- Approximate Extent of Scour Protection
- Indicative Water Pipeline Alignment
- Hunter River Supply Pipeline
- DW1 Pipeline (Bi-directional)
- Bengalla Mine CW1 Pipeline

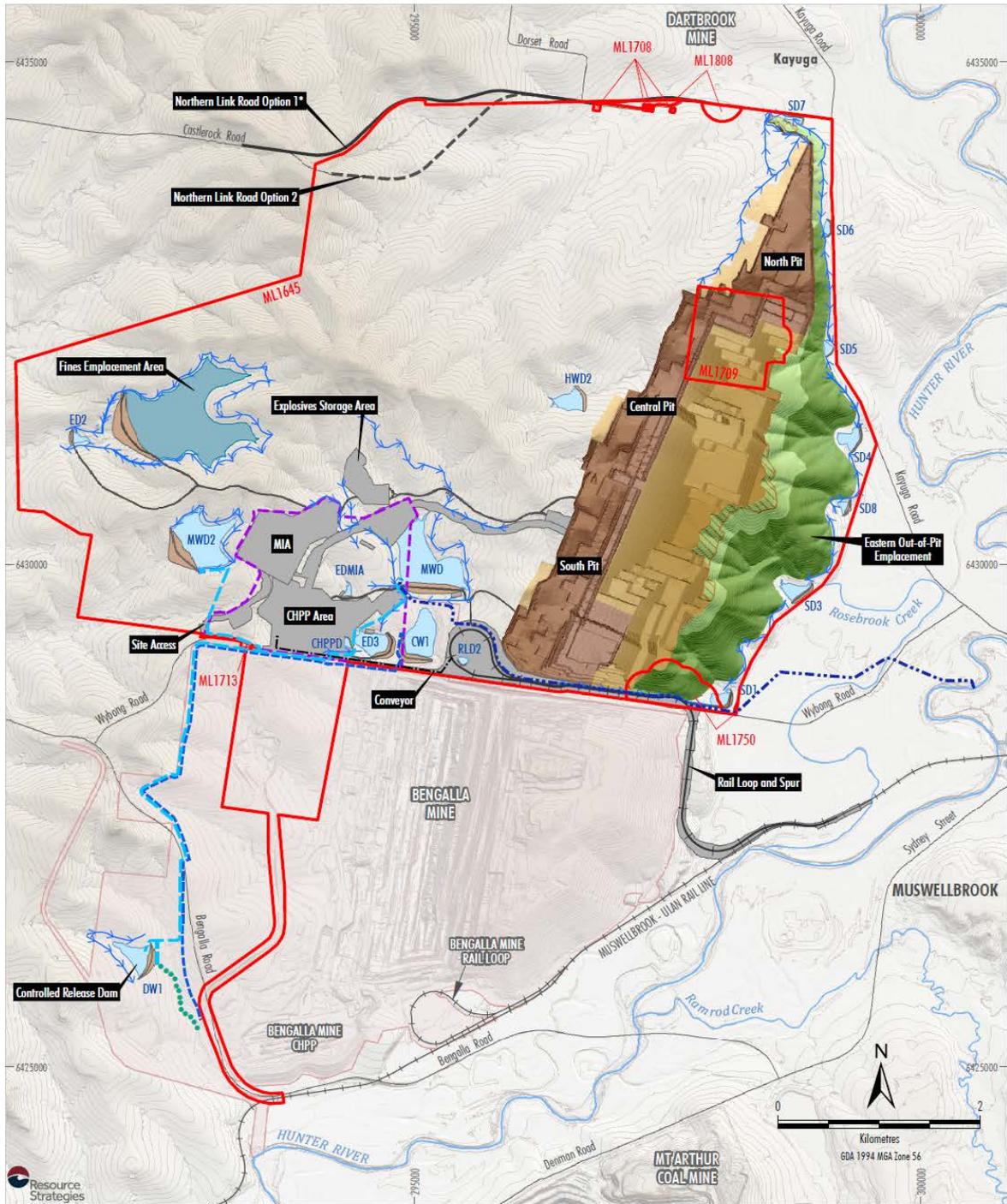
* Preferred alignment subject to landholder access.
 ** Coal Handling and Preparation Plant Dam.

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



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

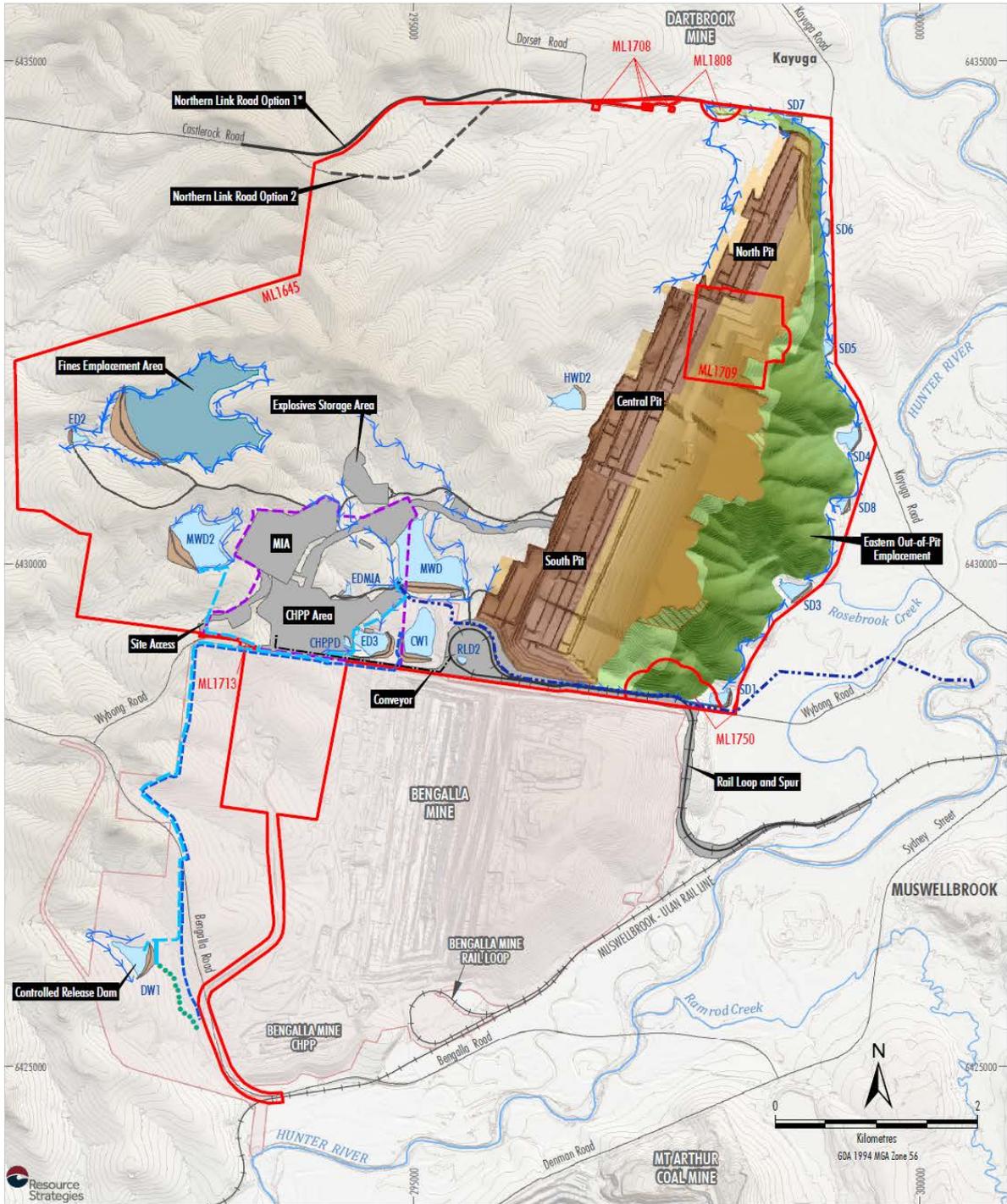
- LEGEND**
- Mining Lease Boundary (Mount Pleasant Operation)
 - Revised Infrastructure Area Envelope
 - Topsoil Stripping
 - Active Mining
 - Active Overburden Emplacement
 - Initial Rehabilitation
 - Established Rehabilitation
 - Topsoil Stockpile
 - Infrastructure and Borrow/Stockpile
 - Key Surface 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
 2028

Figure 3-5

Figure 3: General Project Arrangement – 2028



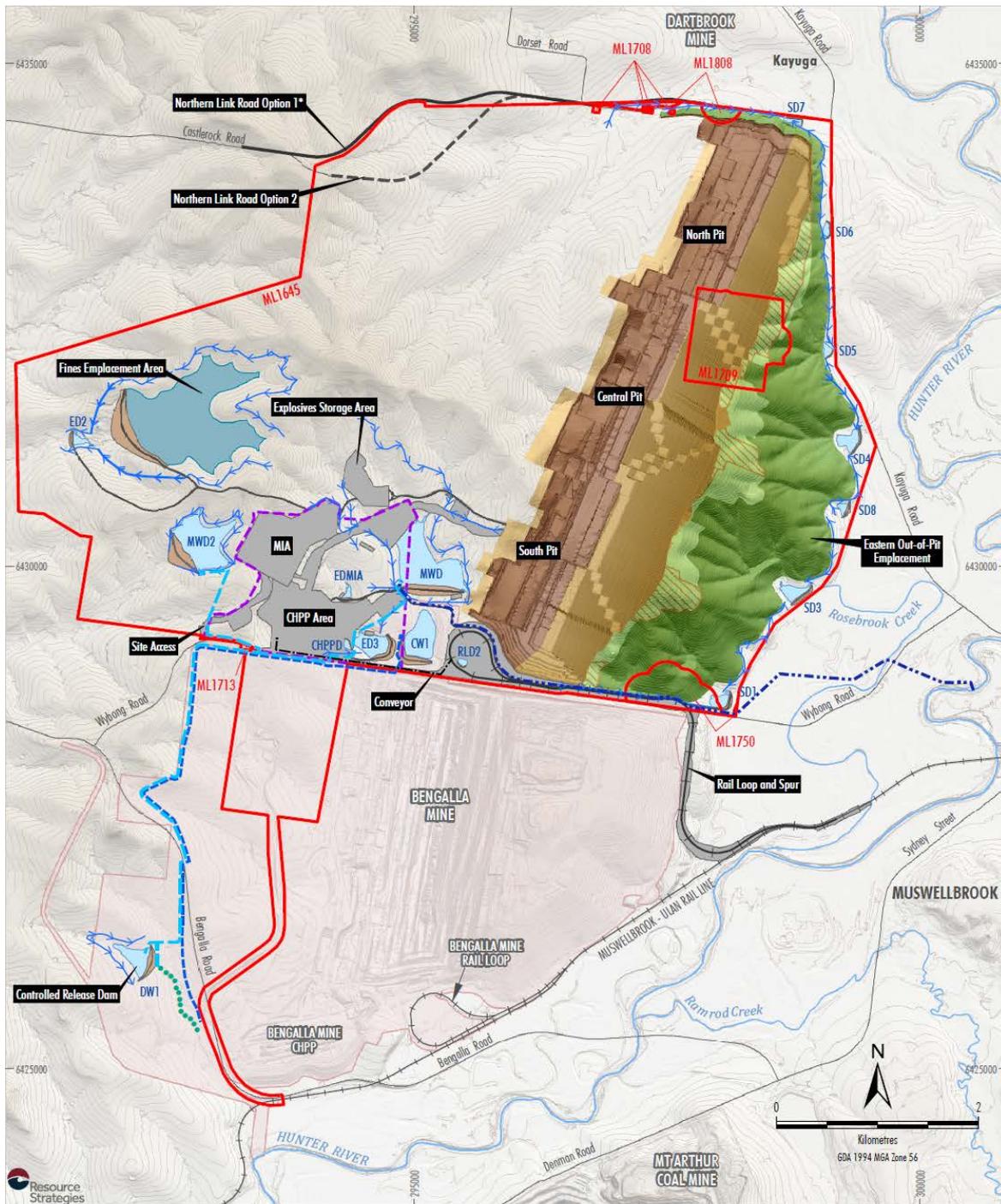
- LEGEND**
- Mining Lease Boundary (Mount Pleasant Operation)
 - Revised Infrastructure Area Envelope
 - Topsoil Stripping
 - Active Mining
 - Active Overburden Emplacement
 - Initial Rehabilitation
 - Established Rehabilitation
 - Topsoil Stockpile
 - Infrastructure and Borrow/Stockpile
 - Key Surface 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

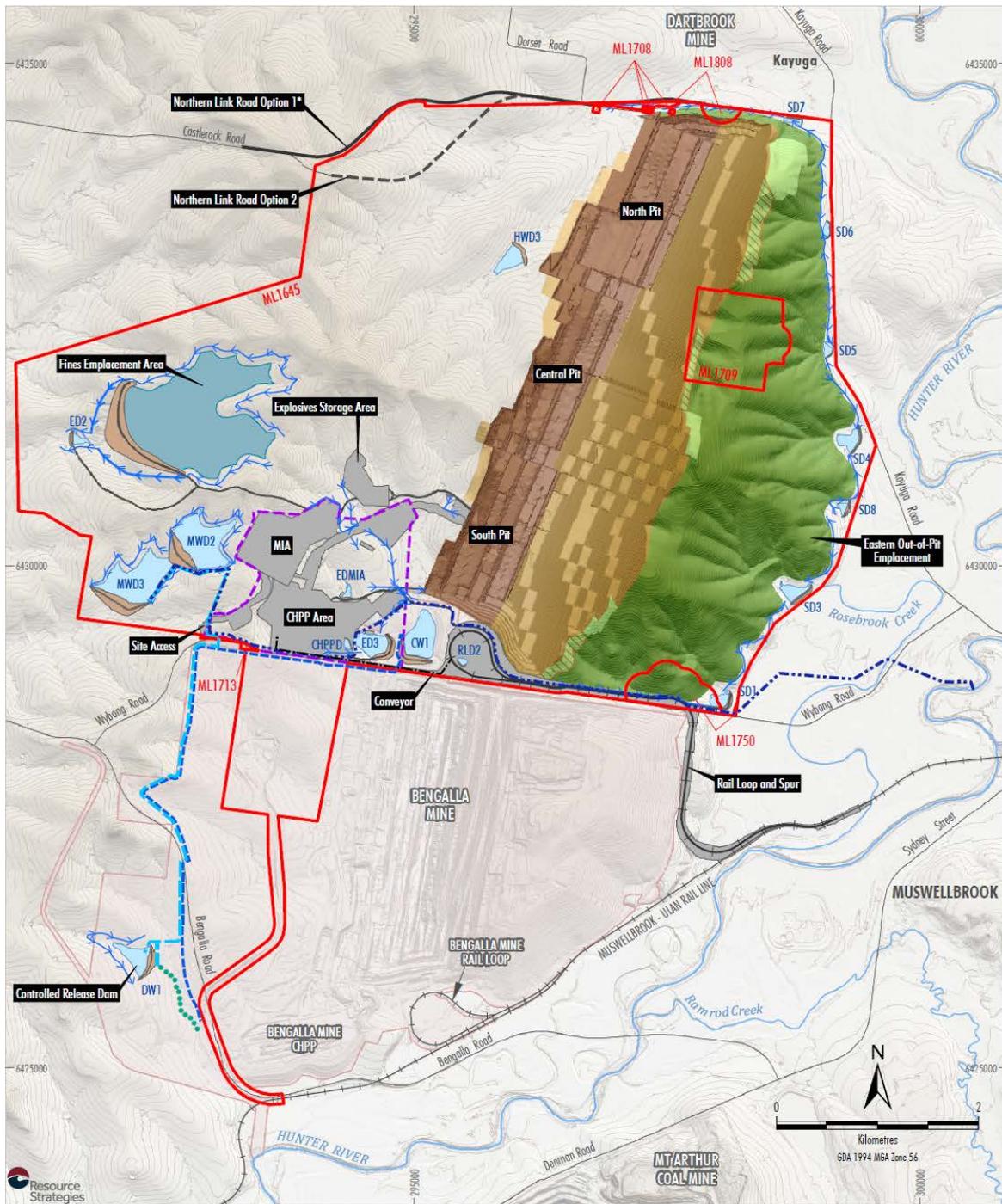
* Preferred alignment subject to landholder access.

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



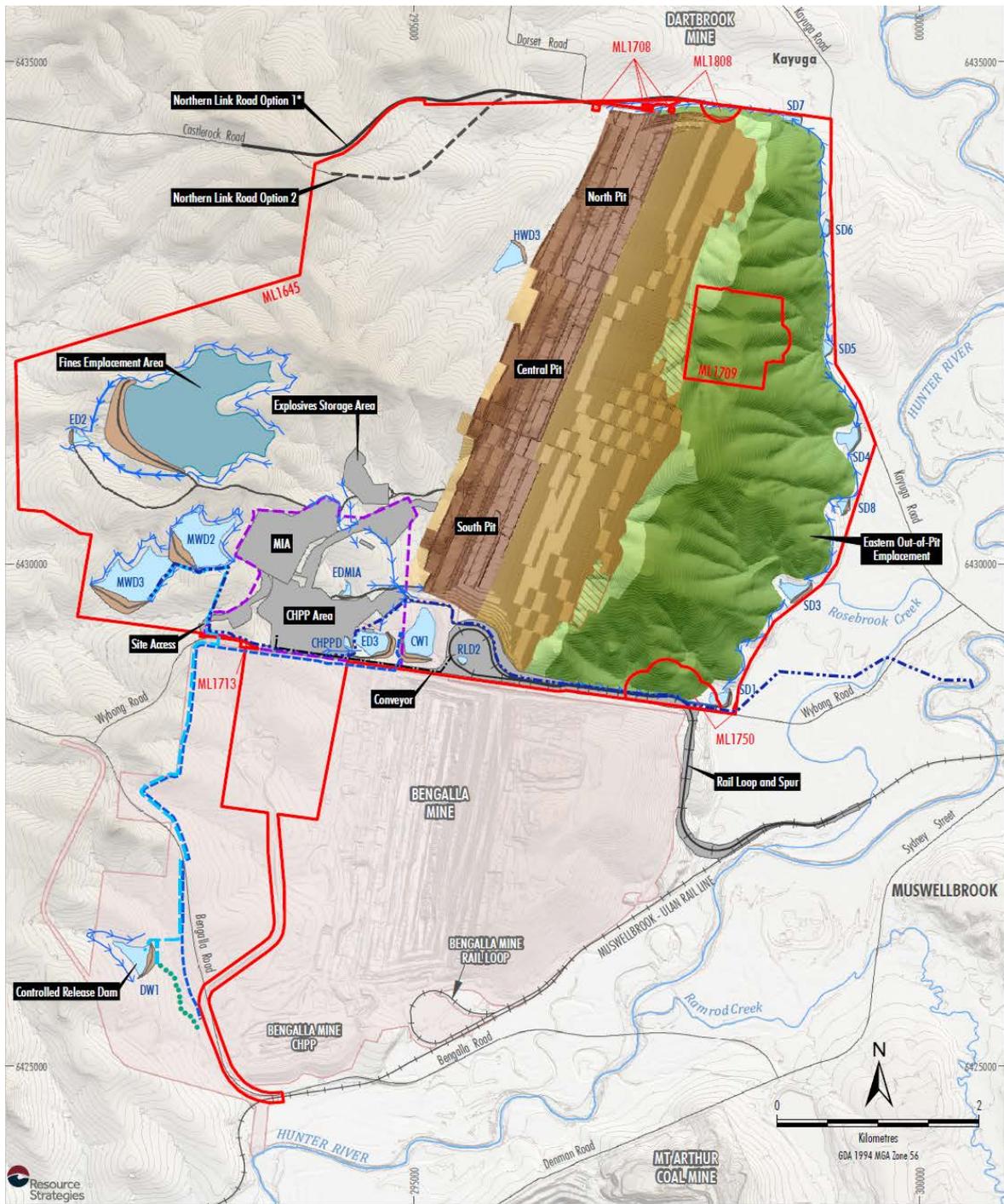
- LEGEND**
- Mining Lease Boundary (Mount Pleasant Operation)
 - Revised Infrastructure Area Envelope
 - Topsoil Stripping
 - Active Mining
 - Active Overburden Emplacement
 - Initial Rehabilitation
 - Established Rehabilitation
 - Topsoil Stockpile
 - Infrastructure and Borrow/Stockpile
 - Key Surface 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)

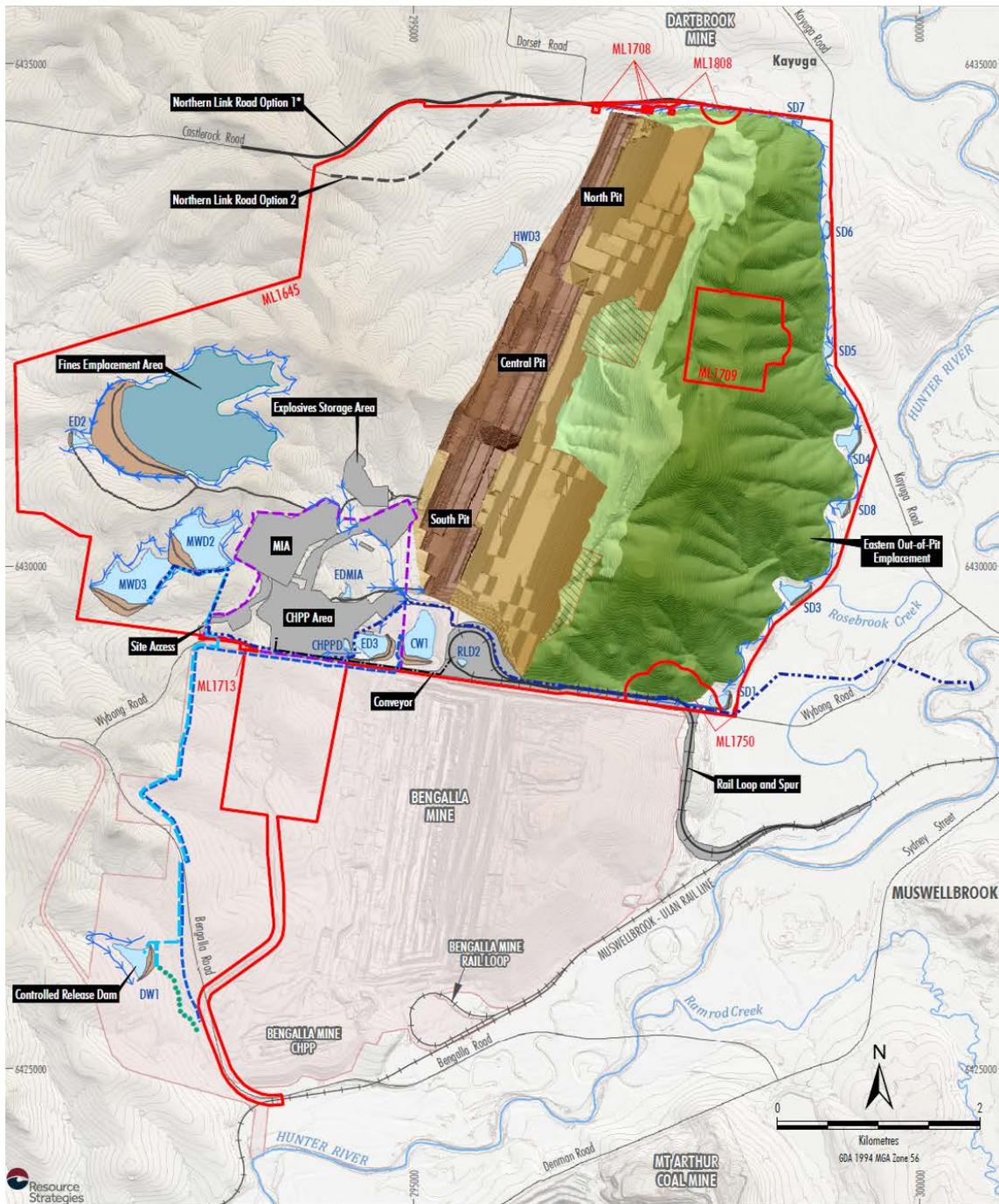
- LEGEND**
- Mining Lease Boundary (Mount Pleasant Operation)
 - Revised Infrastructure Area Envelope
 - Topsoil Stripping
 - Active Mining
 - Active Overburden Emplacement
 - Initial Rehabilitation
 - Established Rehabilitation
 - Topsoil Stockpile
 - Infrastructure and Borrow/Stockpile
 - Key Surface 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



- 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
 2047

Figure 3-10

Figure 8: General Project Arrangement – 2047

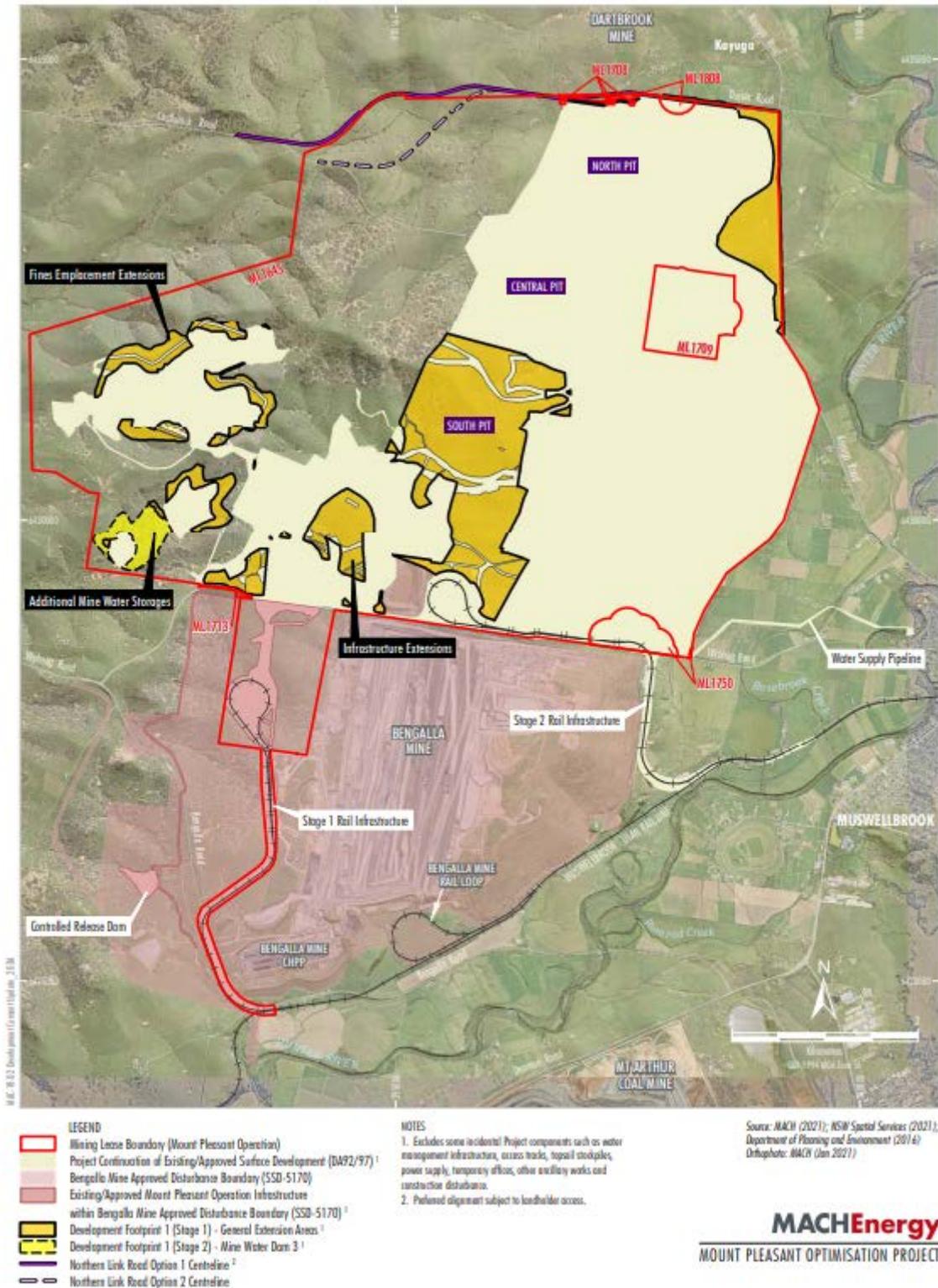
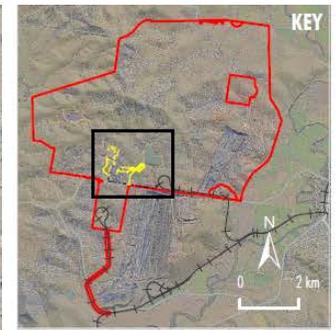
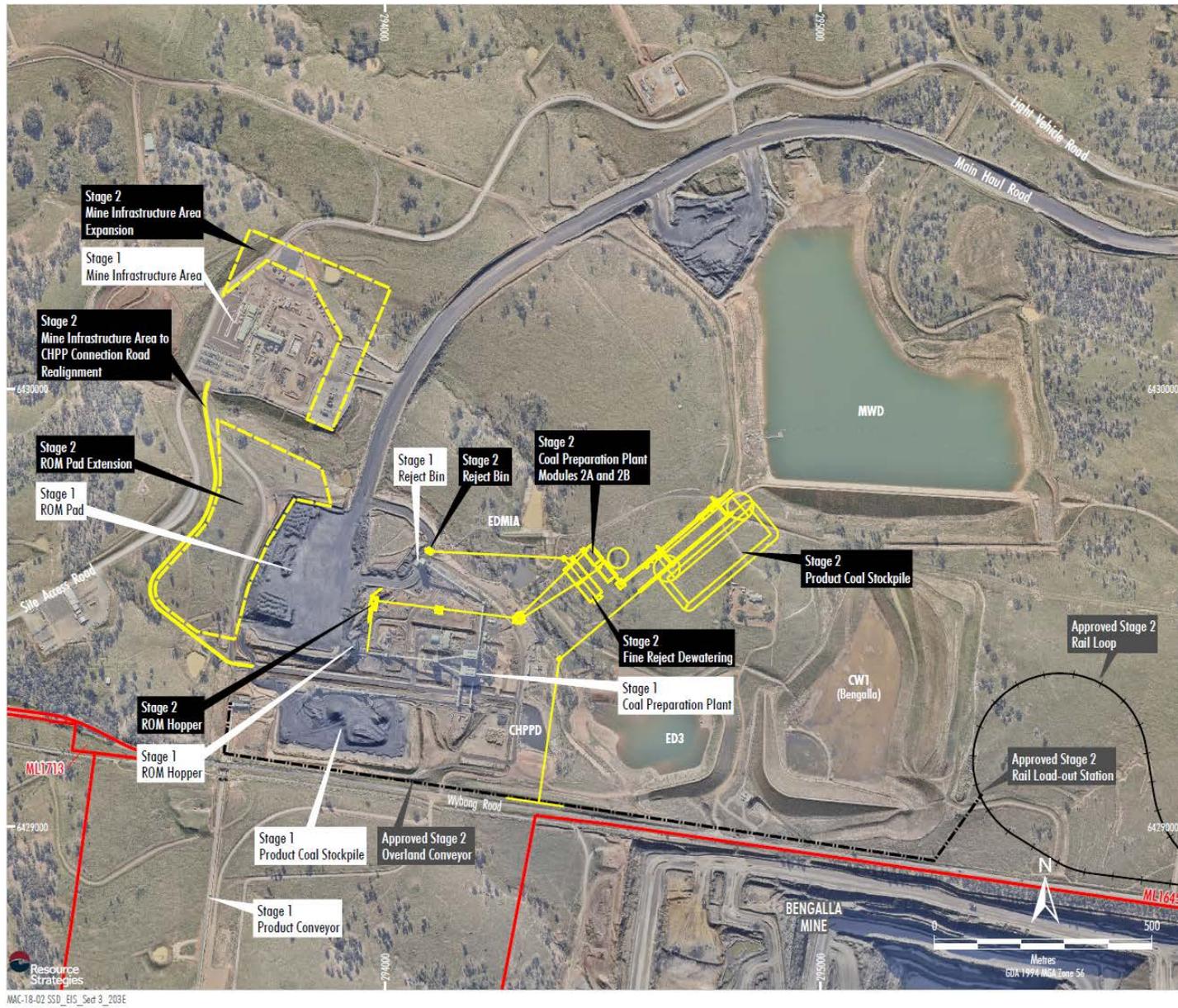


Figure 9: Staging of Project Disturbance Areas



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

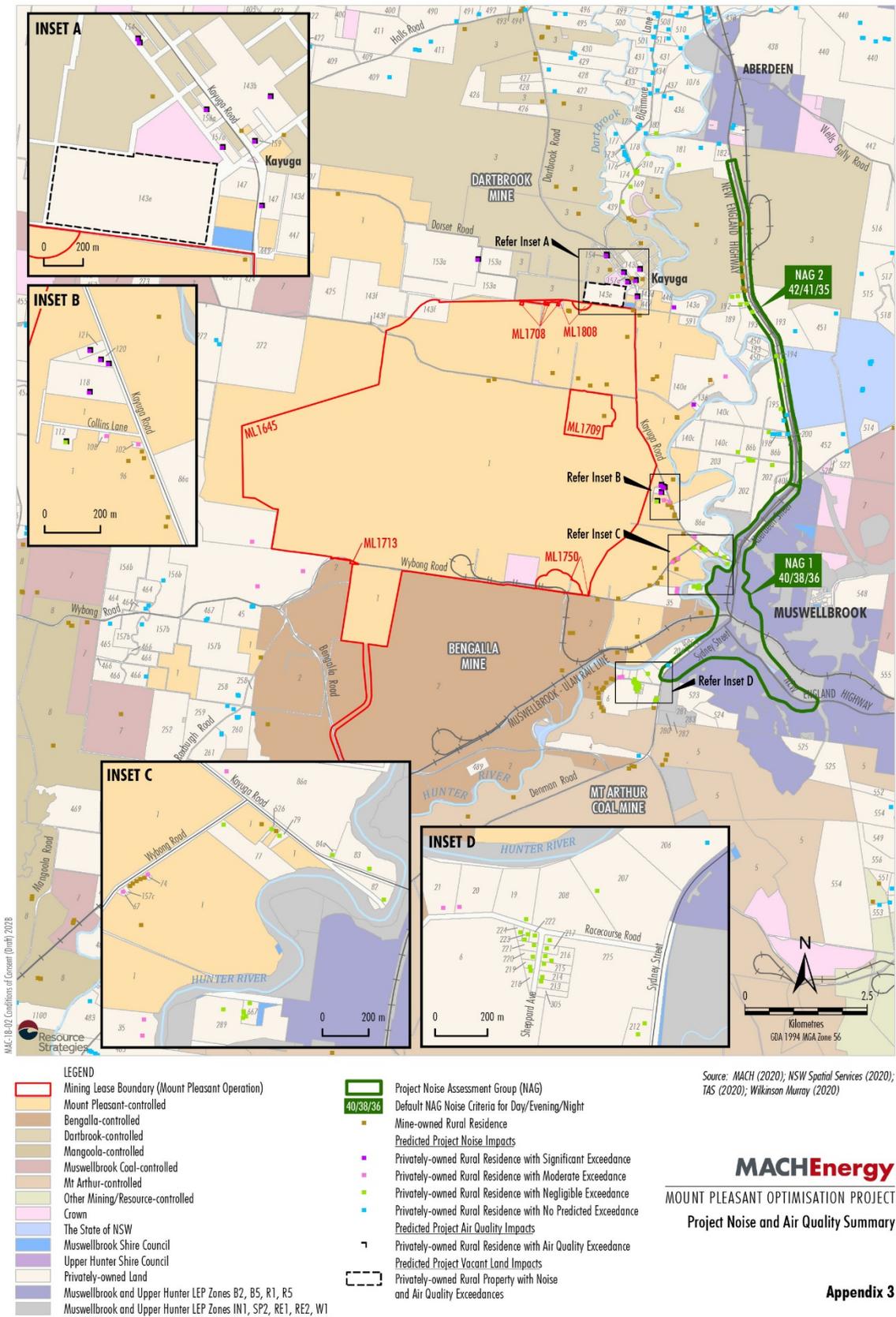
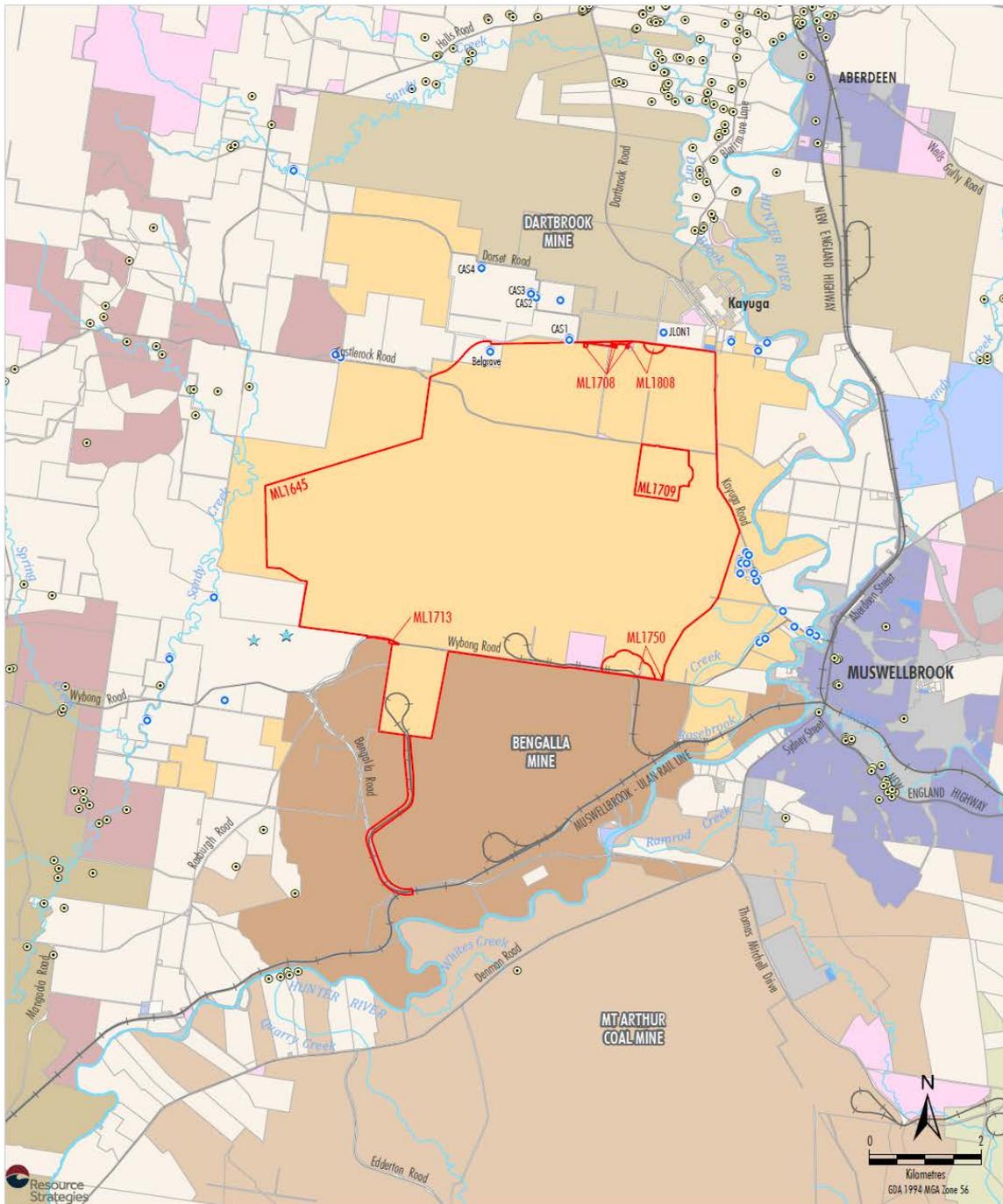


Figure 11: Receiver Locations

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

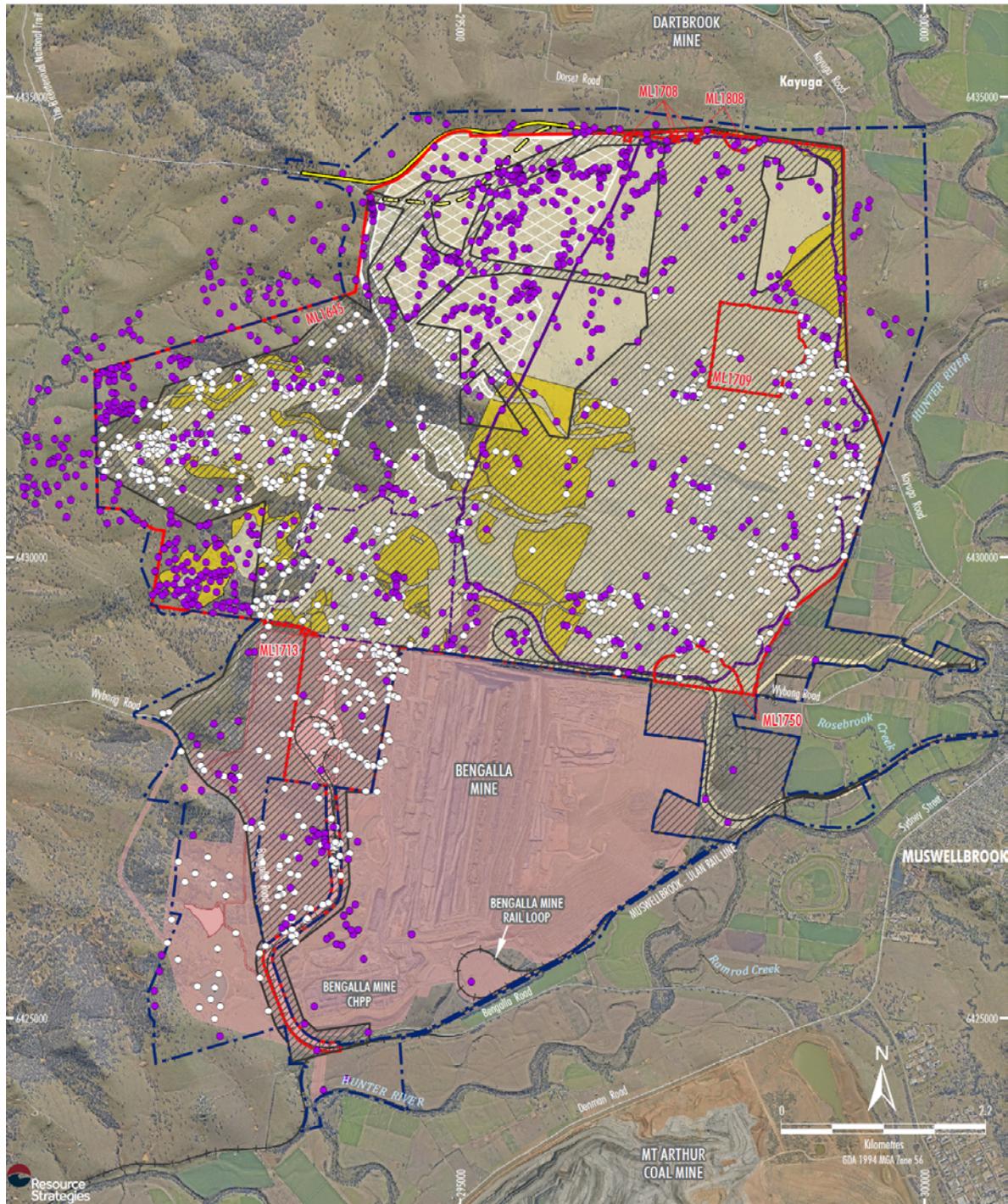
Source: MACH (2020); Water NSW (2020); NSW Spatial Services (2020)

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) ¹
 - Bengalla Mine Approved Disturbance Boundary (SSD-5170)
 - Existing/Approved Mount Pleasant Operation Infrastructure within Bengalla Mine Approved Disturbance Boundary (SSD-5170) ¹
- Additional/Revised Project Elements**
- Approved Disturbance Area to be Relinquished ²
 - Approximate Additional Disturbance of Project Extensions ¹
 - Northern Link Road Option 1 Centreline ³
 - 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 ⁴
- Other Recorded Aboriginal Heritage Site ⁴

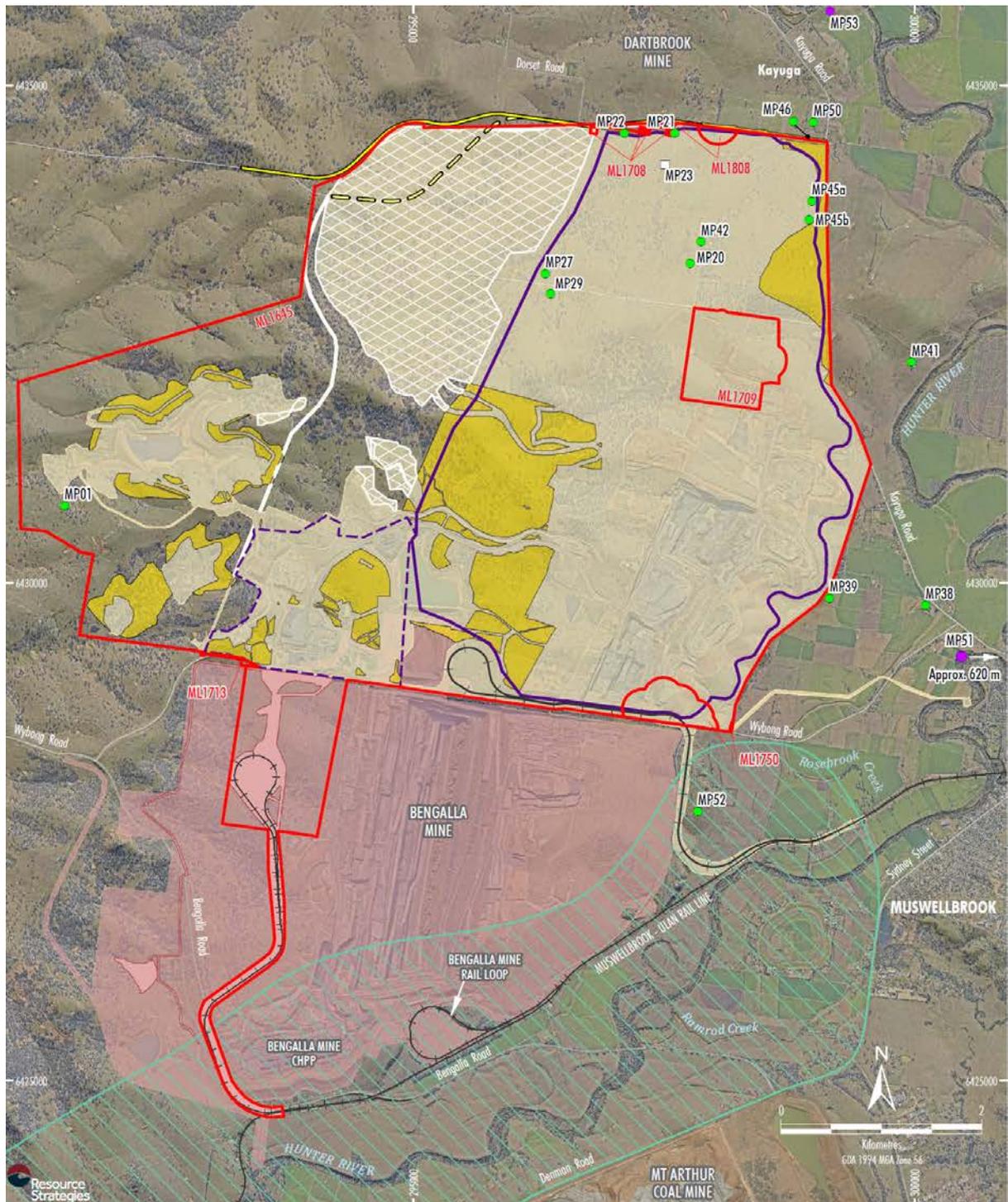
- NOTES**
1. Excludes some incidental Project components such as water management infrastructure, access tracks, topsoil stockpiles, power supply, temporary offices, other ancillary works and construction disturbance.
 2. Subject to detailed design of Northern Link Road alignment.
 3. Preferred alignment 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) ¹
 - Bengalla Mine Approved Disturbance Boundary (SSD-5170)
 - Existing/Approved Mount Pleasant Operation Infrastructure within Bengalla Mine Approved Disturbance Boundary (SSD-5170) ¹
- Additional/Revised Project Elements**
- Approved Disturbance Area to be Relinquished ²
 - Approximate Additional Disturbance of Project Extensions ¹
 - Northern Link Road Option 1 Centreline ³
 - 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.

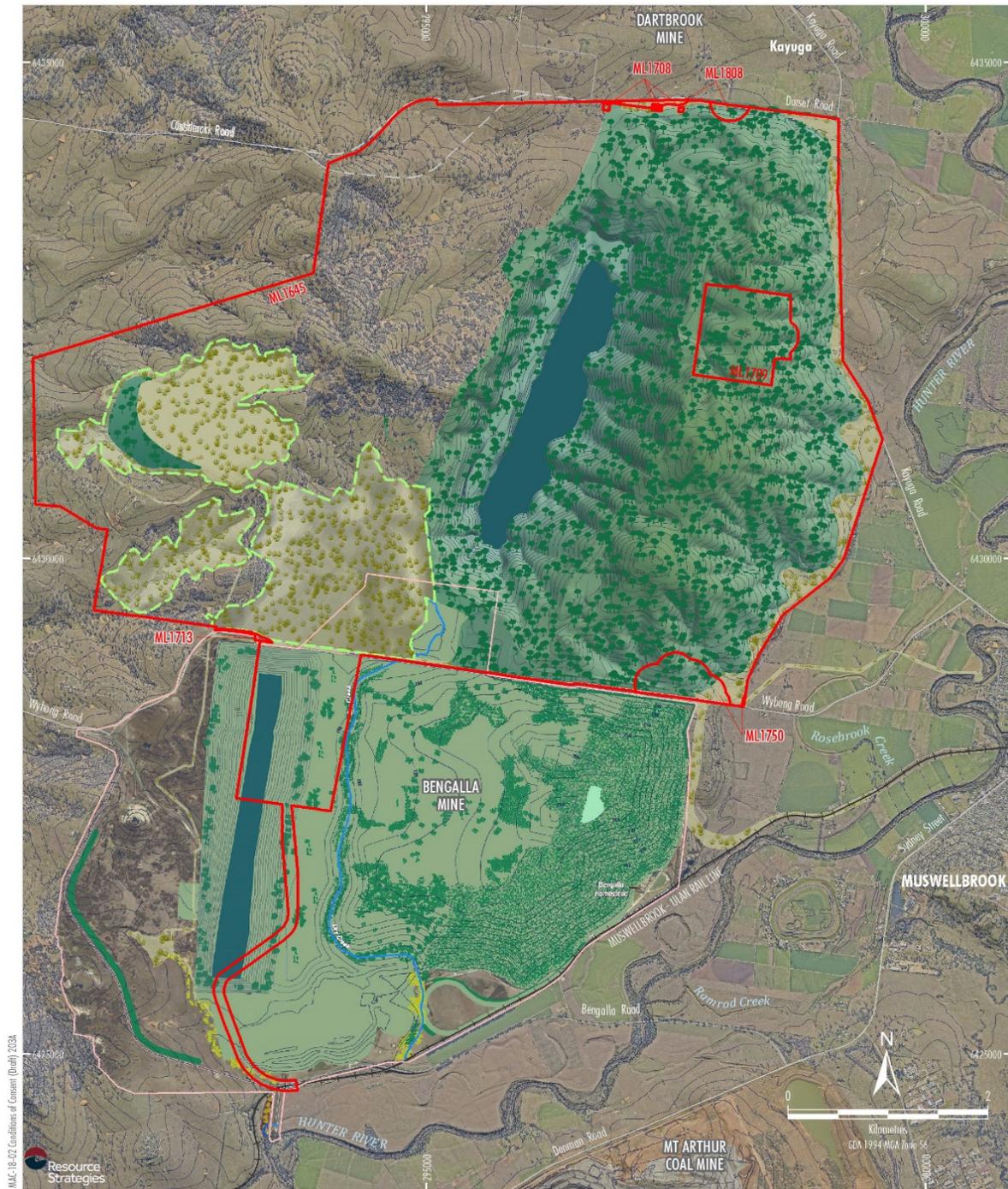
Source: MACH (2020); NSW Spatial Services (2020); National Trust of Australia (1985); Department of Planning and Environment (2016); Orthophoto: MACH (2020)

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

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)

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

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.*