# **Development Consent**

# Section 4.36 of the Environmental Planning and Assessment Act 1979

The Independent Planning Commission of NSW (the Commission), as the declared consent authority under clause 8A of the State Environmental Planning Policy (State and Regional Development) 2011 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.

[Name of Commissioner]

Member of the Commission

[Name of Commissioner]

Member of the Commission

[Name of Commissioner]

Member of the Commission

Sydney 2020

# **SCHEDULE 1**

Application Number:

.....

Consent Authority:

Applicant:

Site:

Development:

SSD 7480

Vickery Coal Pty Ltd

Independent Planning Commission of NSW

The land defined in Appendix 1

Vickery Extension 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		
Annual Review	The review required by condition E9		
Applicant	Vickery Coal Pty Ltd, or any person carrying out any development under this consent		
Approved disturbance area	The indicative surface disturbance areas identified on the Development Layout		
Approved haulage route	The route used to transport coal and reject between the development, the Tarrawonga Coal Project and the Whitehaven CHPP, which includes the use of public roads, including Blue Vale Road and the Kamilaroi Highway (refer Figure 3 in Appendix 2)		
ARI	Average Recurrence Interval		
ARTC	Australian Rail Track Corporation		
BCA	Building Code of Australia		
BC Act	Biodiversity Conservation Act 2016		
BCD	Biodiversity & Conservation Division within the Department		
ВСТ	NSW Biodiversity Conservation Trust		
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		
ccc	Community consultative committee required by condition A23		
CHPP	Coal handling and preparation plant		
Conditions of this consent	Conditions contained in Schedule 2		
Construction	All physical works required 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, but not including pre-construction activities		
Date of commencement	The date notified to the Department by the Applicant under condition A5(a)		
Day	The period from 7 am to 6 pm on Monday to Saturday, and 8 am to 6 pm on Sundays and Public Holidays		
Decommissioning	The deconstruction or demolition and removal of works and buildings 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, Industry and Environment		
Development	The development described in the document/s listed in condition A2(c), as modified by the conditions of this consent		
Development Layout	The indicative development layout depicted in Figure 2 in 0		
<b>DPI NSW Fisheries</b>	NSW Fisheries Group within the NSW Department of Primary Industries		
<b>DPIE Crown Lands</b>	Crown Lands Group within the Department		
DPIE Water	Water Group within the Department		
Ecological Rehabilitation	Rehabilitation of the approved disturbance area to satisfy biodiversity credit requirements		
EIS	The Environmental Impact Statement titled <i>Vickery Extension Project - Environmental Impact Statement</i> , prepared by Resource Strategies Pty Ltd on behalf of Vickery Coal Pty Ltd, dated September 2018, submitted with the application for consent for the development; the Applicant's report titled <i>Vickery Extension Project - Submissions Report</i> dated August 2019; the Applicant's report titled Vickery Extension Project Amendment Report dated September 2019 and the Applicant's additional information responses in support of the application dated 9 August 2019, 17 September 2019, 2 October 2019, 18 October 2019, 31 October 2019, 1 November 2019, 6		

	November 2019, 12 November 2019, 14 November 2019, 28 November 2019, 17 January 2020, 17 February 2020, 3 March 2020, 9 March 2020, 13 March 2020 and 16 March 2020
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	Environmental Planning and Assessment Act 1979
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPBC Act	Commonwealth Environment Protection and Biodiversity Conservation Act 1999
EPL	Environment Protection Licence under the POEO Act
Evening	The period from 6 pm to 10 pm
Feasible	Means what is possible and practical in the circumstances
Financial year	A period of 12 months from 1 July to 30 June
GSC	Gunnedah Shire Council
Heritage NSW	Heritage NSW in the Department of Premier and Cabinet
	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:
Heritage item	<ul> <li>the State Heritage Register under the Heritage Act 1977;</li> <li>a state agency heritage and conservation register under section 170 of the Heritage Act 1977;</li> <li>a Local Environmental Plan under the EP&amp;A Act;</li> <li>the World Heritage List;</li> </ul>
Incident	<ul> <li>the National Heritage List or Commonwealth Heritage List under the EPBC Act; or</li> <li>anything identified as a heritage item under the conditions of this consent</li> <li>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</li> </ul>
Land	Has the same meaning as the definition of the term in section 1.4 of 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
LLS	Local Land Services
Material harm	<ul> <li>Is harm to the environment that:</li> <li>involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial, or</li> <li>results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment)</li> <li>This definition excludes "harm" that is authorised under either this consent or any other statutory approval</li> </ul>
MEG	Regional NSW – Mining, Exploration and Geoscience
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 or groundwater inflow may have come into contact with carbonaceous material
Minimise	Implement all reasonable and feasible mitigation measures to reduce the impacts of the development
Mining operations	The carrying out of mining, including the extraction, processing, stockpiling and transportation of coal on the site and the associated removal, storage and/or emplacement of vegetation, topsoil, overburden and reject material
Minister	NSW Minister for Planning and Public Spaces, or delegate
Minor	Not very large, important or serious
Mitigation	Activities associated with reducing the impacts of the development

МОР	Mining operations plan, or similar, required by a mining lease under the Mining Act 1992
Negligible	Small and unimportant, such as to be not worth considering
Night	The period from 10 pm to 7 am on Monday to Saturday, and 10 pm to 8 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' mobile diesel equipment	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	National Parks and Wildlife Act 1974
NSC	Narrabri Shire Council
Open woodland	Medium density native woodland with a significant grassy understorey
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	Protection of the Environment Operations Act 1997
Pre-Construction works	Pre-construction works that may be required for the development, including surveys, acquisitions, fencing, investigative or geotechnical drilling or excavation, minor clearing, minor access roads, minor adjustments to services/utilities, works which allow isolation of the site so that access for construction can be provided (including service relocations)
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)
Project Rail Spur	The private rail spur associated with the development
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 National Parks and Wildlife Regulation 2019
Rehabilitation	The restoration of land disturbed by the development to a good condition, to ensure it is safe, stable and non-polluting
Residence	Existing or approved dwelling at the date of grant of this consent
Resources Regulator	NSW Resources Regulator within the Department
RFS	NSW Rural Fire Service
ROM	Run-of-mine
Site	The land defined in Appendix 1
Tarrawonga Coal Project	The Tarrawonga Coal Project approved by the Project Approval (MP 11_0047) granted under the EP&A Act by the NSW Planning Assessment Commission on 22 January 2013, as subsequently modified
TfNSW	Transport for NSW (incorporating the former NSW Roads and Maritime Services)
Vickery Coal Project	The Vickery Coal Project approved by the development consent (SSD 5000) granted under the EP&A Act by a delegate of the Minister for Planning on 19 September 2014
Whitehaven CHPP	The Whitehaven Coal Handling and Preparation Plant approved by the development consent granted under the EP&A Act by the GSC on 2 October 2002 (DA 79_2002), as subsequently modified

#### **SCHEDULE 2**

#### PART A ADMINISTRATIVE CONDITIONS

# **OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT**

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:
  - in compliance with the conditions of this consent; (a)
  - (b) in accordance with all written directions of the Planning Secretary;
  - generally in accordance with the EIS; and (c)
  - generally in accordance with the Development Layout. (d)
- Consistent with the requirements in this consent, the Planning Secretary may make written directions to the Applicant A3. in relation to:
  - the content of any strategy, study, system, plan, program, review, audit, notification, report or correspondence (a) submitted under or otherwise made in relation to this consent, including those that are required to be, and have been, approved by the Planning Secretary; and
  - the implementation of any actions or measures contained in any such document referred to in paragraph (a). (b)
- 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 the 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.

#### NOTIFICATION OF COMMENCEMENT

- The Applicant must notify the Department in writing at least two weeks prior to: A5.
  - commencing development under this consent; (a)
  - (b) commencing construction under this consent;
  - commencing mining operations under this consent; (c)
  - ceasing mining operations (i.e. leading to mine closure); and (d)
  - suspending mining operations (i.e. temporary care and maintenance). (e)
- A6. If the development is 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.

# **LIMITS OF CONSENT**

# Mining operations

Mining operations may be carried out on the site, within the approved disturbance area, for a period of 25 years from Α7 the date of this consent.

- 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
- Mining operations and rehabilitation are also regulated under the Mining Act 1992.

# Coal Extraction and Processing

- A8. A maximum of 10 million tonnes of ROM coal may be extracted from the site in any financial year.
- A maximum of 3.5 million tonnes of ROM coal extracted from other mining operations may be received at the site in A9. any financial year.
- A10. A maximum of 13 million tonnes of ROM coal may be processed on the site in any financial year.

# Coal Transport - Rail

A11. A maximum of 11.5 million tonnes of product coal may be transported from the site by rail in any financial year.

# Coal Transport - Road

- A12. For the period up until the commissioning of the Kamilaroi Highway overpass, the Applicant:
  - may not transport more than 3.5 million tonnes of ROM coal from the site by road in any financial year; (a)

- (b) may transport up to 150,000 tonnes of this ROM coal from the site in any financial year for direct distribution to domestic markets via the approved haulage route to the Kamilaroi Highway;
- (c) shall transport all other coal from the site to the Whitehaven CHPP via the approved haulage route; and
- (d) shall, together with the proponent of the Tarrawonga Coal Project, ensure that the cumulative haulage of coal along the approved haulage route does not exceed 3.5 million tonnes in any financial year.
- A13. For the period following the commissioning of the Kamilaroi Highway overpass and until the commissioning of the Project Rail Spur, the Applicant:
  - (a) may not transport more than 4.5 million tonnes of ROM coal from the site by road in any financial year;
  - (b) may transport up to 150,000 tonnes of this ROM coal from the site in any financial year for direct distribution to domestic markets via the approved haulage route to the Kamilaroi Highway;
  - (c) shall transport all other coal from the site to the Whitehaven CHPP via Blue Vale Road and the Kamilaroi Highway overpass; and
  - (d) shall, together with the proponent of the Tarrawonga Coal Project, ensure that the cumulative haulage of coal along the approved haulage route does not exceed 4.5 million tonnes in any financial year.
- A14. Following the commissioning of the CHPP, rail load-out facility and Project Rail Spur, the Applicant must only transport coal from the site by rail except for up to 150,000 tonnes of ROM coal which may be transported from the site by road in any financial year for direct distribution to domestic markets via the approved haulage route to the Kamilaroi Highway.
- A15. The Applicant shall only transport coal from the site by road, receive coal from other mining operations or receive coal reject from the Whitehaven CHPP by road between the hours of:
  - (a) 6 am to 9.15 pm Monday to Friday;
  - (b) 7 am to 5.15 pm Saturday; and
  - (c) at no time on Sundays or Public Holidays.

# **Hours of Operation**

- A16. The Applicant may undertake the development 24 hours a day, 7 days a week, except for;
  - (a) transport operations as described in condition A15;
  - (b) blasting operations as described in condition B19; and
  - (c) construction hours as described in condition C1.

#### **Identification of Approved Disturbance Area**

A17. Within three months of the date of commencement of development under this consent, or other timeframe agreed by the Planning Secretary, the Applicant must provide to the Department a survey plan of the boundaries of the approved disturbance areas.

#### SURRENDER OF EXISTING CONSENT

- A18. Within 12 months of the date of commencement of development under this consent, or other timeframe agreed by the Planning Secretary, the following development consents are to be surrendered in accordance with the EP&A Regulation:
  - (a) the development consent for the Vickery Coal Project (SSD 5000); and
  - (b) the development consent for the Canyon Coal Mine (DA 8-1-2005).
  - 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.
- A19. Upon the date of commencement of development under this consent, and before the surrender of the existing development consents required under condition A18, the conditions of this consent prevail to the extent of any inconsistency.

# **PLANNING AGREEMENT**

- A20. Within 6 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 GSC and NSC in accordance with:
  - (a) Division 7.1 of Part 7 of the EP&A Act; and
  - (b) the terms of the Applicant's offer to GSC and NSC in Appendix 7.
- A21. If the Applicant and NSC do not enter into a PA within the timeframe under condition A20, then within a further 3 months, the Applicant must make a Section 7.12 of the EP&A Act contribution to NSC of \$3.2 Million. The amount to be paid is to be adjusted at the time of the actual payment, in accordance with the provisions of the *Narrabri Shire Section 7.12 Fixed Development Consent Levies Contributions Plan 2011*.

A22. If there is any dispute between the Applicant and the relevant Council in regards to conditions A20 and A21 then either party may refer the matter to the Planning Secretary for resolution.

#### **COMMUNITY CONSULTATIVE COMMITTEE**

A23. The Applicant must continue operation of the Vickery Coal Project Community Consultative Committee (CCC) established under SSD 5000 for the development. The CCC must be operated in accordance with the Department's Community Consultative Committee Guidelines: State Significant Projects (2019) 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, GSC, NSC and the local community.

#### **EVIDENCE OF CONSULTATION**

- A24. 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 for approval; and
  - (b) provide details of the consultation undertaken to the Planning Secretary, including:
    - (i) the outcome of that consultation, matters resolved and unresolved; and
    - (ii) details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.

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

- A25. 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);
  - (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); and
  - (d) combine any strategy, plan or program required by this consent with any similar strategy, plan or program required by a consent or approval for any adjoining mine subject to common, shared or related ownership or management.
- 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.
- A27. 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.

# APPLICATION OF EXISTING STRATEGIES, PLANS OR PROGRAMS

A28. The Applicant must continue to apply existing management strategies, plans or monitoring programs approved under SSD 5000 for the Vickery Coal Project and DA 8-1-2005 for the Canyon Coal Mine, until the approval of a similar plan, strategy or program under this consent.

#### **PUBLIC INFRASTRUCTURE**

# **Protection of Public Infrastructure**

- A29. Unless the Applicant and the applicable authority agree otherwise, the Applicant must:
  - repair, or pay the full costs associated with repairing, any public infrastructure<sup>a</sup> that is damaged by carrying out the development; and
  - (b) relocate, or pay the full costs associated with relocating, any public infrastructure<sup>a</sup> that needs to be relocated as a result of the development.

Note: 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 A20 or to damage subject to compensation under the Mining Act 1992.

# **DEMOLITION**

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

#### 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.
- Part 8 of the EP&A Regulation 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 (or later update) of the condition.
- A35. However, 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 DPIE – Crown Lands prior to undertaking 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 DPIE – 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 DPIE

   Crown Lands prior to undertaking any prospecting operations on Crown land or Crown roads within an exploration licence.

NSW Government Department of Planning, Industry and Environment

#### PART B SPECIFIC ENVIRONMENTAL CONDITIONS

#### **NOISE**

#### **Operational Noise Criteria**

B1. The Applicant must ensure that the noise generated by the development does not exceed the criteria in Table 1 at any residence<sup>a</sup> on privately-owned land, excluding the noise-affected land referred to in Table 13.

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

Danislaman	Day	Evening	Ni	ght
Residence <sup>a</sup>	LAeq (15 min)	LAeq (15 min)	LAeq (15 min)	L <sub>AF max</sub>
131a	40	37	37	52
131b, 132	40	36	36	52
All other privately-owned residences	40	35	35	52

<sup>&</sup>lt;sup>a</sup> The locations referred to in Table 1 are shown in Appendix 1.

B2. The Applicant must ensure that noise generated by transporting coal on the Kamilaroi Highway overpass does not exceed the criteria in Table 2 at any residence on privately-owned land.

**Table 2:** Kamilaroi Highway overpass noise criteria dB(A)

Land	Day L <sub>Aeq(15 min)</sub>	Evening & Night  L <sub>Aeq(15 min)</sub>	Night  L <sub>A1 (1 min)</sub>
223	44	44	65
224	46	46	64
284	40	36	55
292	40	36	57
Any other residence within 2.5 km of the centreline of the private haul road or Kamilaroi Highway overpass	40	35	55
All other privately-owned residences	40	35	45

<sup>&</sup>lt;sup>a</sup> The locations referred to in Table 2 are shown in Appendix 1

- B3. Noise generated by the development must be measured in accordance with the relevant requirements and exemptions (including certain meteorological conditions) of the *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 *Noise Policy for Industry* (EPA, 2017) apply to the noise criteria in Table 1 and Table 2.
- B4. The noise criteria in Table 1 and Table 2 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.

# **Construction Noise Criteria**

- B5. Between the hours of:
  - (a) 7 am to 6 pm Monday to Friday;
  - (b) 8 am to 1 pm Saturday; and
  - (c) At no time on Sundays or Public Holidays,

the Applicant must ensure that the noise from activities associated with the construction of the Project Rail Spur, Kamilaroi Highway Overpass and road realignments does not exceed the criteria in Table 3 at any residence on privately-owned land, unless otherwise agreed by the Planning Secretary.

**Table 3:** Project construction noise criteria dB(A)

Landa	Construction Noise Criteria	
	L <sub>Aeq(15min)</sub>	
223	49	

224	56
All privately-owned residences	45

<sup>&</sup>lt;sup>a</sup> The locations referred to in Table 3 are shown in Appendix 1

B6. If the Applicant proposes to undertake any construction works outside the hours specified in conditions C1 and C2, then the Applicant must prepare and implement an Out of Hours Work Protocol for these works to the satisfaction of the Planning Secretary. This protocol must be prepared in consultation with the EPA and the residents who would be affected by the noise generated by these works, and be consistent with the requirements of the *Interim Construction Noise Guideline* (Department of Environment and Climate Change, 2009). The Applicant shall not carry out any out of hours construction works before this protocol has been approved by the Planning Secretary.

**Note**: For areas where construction noise from the Project Rail Spur is predicted to be at or below 40 dB(A) and/ or below the operational noise criteria in Table 1 at sensitive receptors, this is likely to provide sufficient justification to operate outside of recommended standard hours as specified in the ICNG.

# **Project Rail Spur Operational Noise Criteria**

B7. The Applicant must ensure that noise generated by transporting coal on the Project Rail Spur does not exceed the criteria in Table 4 at any residence on privately-owned land.

Table 4: Project Rail Spur noise criteria dB(A)

Land <sup>a</sup>	Day	Evening	Night
Land	L <sub>Aeq</sub> (11 hr)	L <sub>Aeq</sub> (4 hr)	LAeq (9 hr)
144 <sup>b</sup>	50	45	42
All privately-owned residences	50	45	40

<sup>&</sup>lt;sup>a</sup> The locations referred to in Table 4 are shown in Appendix 1

B8. The noise criteria in Table 4 do not apply if the Applicant has an agreement with the owner/s of the relevant residence or land to generate higher noise levels, and the Applicant has advised the Department in writing of the terms of this agreement.

# **Public Road Traffic Noise Criteria**

B9. The Applicant, together with the owners of the Tarrawonga coal mine, must ensure that the noise generated on public roads by the development and the other mine does not exceed the criteria in Table 5 at any existing residence on privately-owned land.

Table 5: Road traffic noise criteria dB(A)

Land	Day and Evening L <sub>Aeq (15 hour)</sub>	Night LAeq (9 hour)
All privately-owned residences	60	55

**Note**: Traffic noise generated by the development is to be measured in accordance with the relevant procedures in the NSW Road Noise Policy (Department of Environment and Climate Change, 2011).

B10. The noise criteria in Table 5 do not apply if the Applicant has a written agreement with the relevant landowner to exceed the criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

# **Project Rail Spur Noise impacts**

- B11. The Applicant must:
  - (a) prior to commencing the construction of the Project Rail Spur:
    - commission suitably qualified and experienced person/s to review the design of the Project Rail Spur, and determine whether it incorporates all reasonable and feasible noise mitigation measures, including suitable measures to minimise low frequency noise; and
    - (ii) provide the Planning Secretary with a report summarising the recommended noise mitigation measures and the proposed measures to be incorporated in the design of the Project Rail Spur;
  - (b) implement the recommendations of this acoustic review in condition (a);
  - (c) undertake commissioning trials of the Project Rail Spur to determine the optimal train speed to minimise noise impacts; and
  - (d) following commissioning of the spur line, undertake targeted noise monitoring to determine the accuracy of predicted acoustic impacts and effectiveness of any noise reduction measures, including monitoring during adverse inversion conditions, to be described in the Noise Management Plan required by condition B15,

<sup>&</sup>lt;sup>b</sup> Applicable only to the DA approved dwelling on this property once it has been constructed

to the satisfaction the Planning Secretary.

#### Attenuation of Plant

#### B12. The Applicant must:

- (a) ensure that:
  - (i) when ROM coal extraction exceeds 3.5 Mt in a financial year, all mining trucks and water carts used on the site are commissioned as noise suppressed (or attenuated) units;
  - (ii) where reasonable and feasible, improvements are made to existing noise suppression equipment as better technologies become available; and
- (b) monitor and report on the implementation of these requirements annually on its website.

#### B13. The Applicant must:

- (a) conduct a testing program of the attenuated plant on site, with each item of plant tested at no greater than 3 yearly intervals, to ensure that the attenuation remains effective and maintained within in-service tolerances;
- (b) restore the effectiveness of any attenuation if it is found to be defective; and
- (c) report on the results of any testing and/or attenuation work annually on its website, including a summary of any implications for meeting compliance objectives.

# **Noise Operating Conditions**

# B14. The Applicant must:

- take all reasonable steps to minimise all noise from construction, operational and transport activities, including low frequency noise and other audible characteristics, as well as road and rail noise associated with the development, particularly during noise-enhancing meteorological conditions;
- (b) implement reasonable and feasible noise attenuation measures on all plant and equipment that will operate in noise sensitive areas:
- (c) monitor and record all major equipment use and make this data readily available at the request of the Department or the EPA;
- (d) operate a comprehensive noise management system that uses a combination of meteorological forecasts, predictive noise modelling and real-time monitoring to guide the day to day planning of mining operations and the implementation of adaptive management both proactive and reactive noise mitigation measures to ensure compliance with the relevant conditions of this consent;
- (e) record the daily adaptive management measures implemented on the site, including how operations were modified or stopped to comply with the noise criteria in Table 1, and make these records readily available at the request of the Department or the EPA;
- (f) ensure that the Project Rail Spur is only accessed by locomotives that are approved to operate on the NSW rail network in accordance with the noise limits in ARTC's EPL (No. 3142);
- (g) use its best endeavours to ensure that the rolling stock supplied by service providers on the Project Rail Spur line is designed, constructed and maintained to minimise noise;
- (h) ensure any new rail rolling stock manufactured specifically for the development is designed, constructed and maintained to minimise noise; and
- (i) 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.

# Noise Management Plan

- B15. The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:
  - (a) be prepared by a suitably qualified and experienced person/s;
  - (b) be prepared in consultation with the EPA;
  - (c) be submitted to the Planning Secretary for approval prior to carrying out construction under this consent;
  - (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 that would be implemented to ensure the noise impacts from the construction and operation of the Kamilaroi Highway overpass and Project Rail Spur are minimised as far as practicable;
  - (f) describe the measures to minimise road traffic noise generated by employee commuter vehicles on public roads:
  - (g) describe the noise management system in detail;

- (h) describe the fleet attenuation and testing program; and
- (i) include a monitoring program that:
  - uses a combination of real-time and supplementary attended monitoring to evaluate the performance of the development;
  - (ii) includes a program to calibrate and validate the real-time noise monitoring results with the attended monitoring results over time;
  - (iii) adequately supports the noise management system;
  - (iv) includes a procedure for undertaking attended noise compliance monitoring; and
  - (v) 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.
- B16. The Applicant must implement the Noise Management Plan as approved by the Planning Secretary.

#### **BLASTING**

# **Blasting Criteria**

B17. The Applicant must ensure that blasting on the site does not cause exceedances of the criteria at the locations <sup>a</sup> in Table 6.

Table 6: Blasting criteria

Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance
Residence on privately-owned	120	10	0%
land	115	5	5% of the total number of blasts over a calendar year
Kurrumbede <sup>b</sup>	133	10	0%
All other public infrastructure		50 (or a limit determined by the structural design methodology in AS 2187.2 - 2006, or other alternative limit for public infrastructure, to the satisfaction of the Planning Secretary)	0%

# Notes:

- <sup>a</sup> The locations referred to in Table 6 are shown in Appendix 1 and Appendix 5.
- <sup>b</sup> Unless a more appropriate criterion is established by the structural engineer's findings in condition B72 and agreed to by the Planning Secretary.
- B18. The blasting criteria in Table 6 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**

B19. The Applicant must only carry out blasting on the site between 9 am and 5 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**

- B20. The Applicant may carry out a maximum of:
  - (a) 1 single blast event<sup>a</sup> a day; and
  - (b) 5 single blast events<sup>a</sup> a week, averaged over a calendar year.
- B21. Condition B20 does not apply to blasts that generate ground vibration of 0.5 mm/s or less at any residence on privately-owned land, or to blast misfires or blasts required to ensure the safety of the mine, its workers or the general public.

**Note:**<sup>a</sup> Within conditions B20 and B21, a '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**

- B22. If the Applicant receives a written request from the owner of any privately-owned land within 2 kilometres of any approved open cut mining pit on the site 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 the Applicant must:
  - (a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties to:
    - 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.
- B23. 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**

- B24. If the owner of any privately-owned land within 2 kilometres of any approved 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 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.
- B25. 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.
- B26. 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**

- B27. 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 the dust and fume emissions of any blasting;
  - (b) ensure that blasting on the site does not damage heritage items<sup>a</sup>, including Aboriginal grinding groove site 20-04-0009 and the Kurrumbede Homestead, except in accordance with the predictions in the document/s listed in condition A2(c), and develop specific measures to protect heritage items outside the approved disturbance areas from any blasting damage associated with the development;
  - (c) 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;
  - (d) 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;
  - (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 public 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 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.

Note: a The locations of the heritage items referred to in paragraph (b) are shown in Appendix 5.

B28. 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, 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**

- B29. The Applicant must prepare a Blast Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:
  - (a) be prepared by a suitably qualified and experienced person/s;
  - (b) be prepared in consultation with the EPA;
  - be submitted to the Planning Secretary for approval prior to carrying out any blasting operations on site under this consent;
  - (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 in accordance with *Visual NOx Fume Rating Scale* (AEISG, 2011), or equivalent monitoring technique; 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 GSC and NSC and includes provisions for:
    - (i) minimising the duration of closures, both on a per event basis and weekly basis;
    - (ii) avoiding peak traffic periods as far as reasonable; and
    - (iii) co-ordinating 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); and
  - (h) include a monitoring program for evaluating and reporting on compliance with the relevant conditions of this
    consent.
- B30. The Applicant must implement the Blast Management Plan as approved by the Planning Secretary.

#### AIR QUALITY AND GREENHOUSE GAS

#### Odour

B31. Unless otherwise authorised by an EPL, the Applicant must ensure that no offensive odours, as defined under the POEO Act, are emitted from the site.

# Air Quality Criteria

B32. 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 7 at any residence on privately-owned land.

Table 7: Air quality criteria

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

#### Notes:

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

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

- <sup>c</sup> Excludes extraordinary events such as bushfires, prescribed burning, dust storms, fire incidents or any other activity agreed by the Planning Secretary.
- B33. The air quality criteria in Table 7 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

- Particulate matter emissions generated by the development must not exceed the criteria listed in Table 7 at any B34 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 D of this consent:
  - (b) 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 (c) another mining company) of the likely particulate matter emissions at the residence; and
  - (d) 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 Operating Conditions**

#### B35. The Applicant must:

- take all reasonable steps to:
  - minimise odour, fume and particulate matter (including PM<sub>10</sub> and PM<sub>2.5</sub>) emissions of the development, paying particular attention to minimising wheel-generated haul road emissions;
  - improve energy efficiency and reduce Scope 1 and Scope 2 greenhouse gas emissions of the (ii) development:
  - (iii) 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 (iv) time:
- ensure that all 'non-road' mobile diesel equipment used in undertaking the development includes reasonable (b) and feasible diesel emissions reduction technology;
- operate a comprehensive air quality management system that uses a combination of meteorological forecasts, (c) predictive air quality modelling and real-time monitoring 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:
- minimise air quality impacts of the development during adverse meteorological conditions and extraordinary (d) events (see Note c to Table 7 above):
- (e) carry out regular air quality monitoring to determine whether the development is complying with the relevant conditions of this consent; and
- (f) 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

- B36. 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:
  - be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the (a) Planning Secretary;
  - (b) be prepared in consultation with the EPA;
  - be submitted to the Planning Secretary for approval prior to carrying out construction under this consent; (c)
  - describe the measures to be implemented to ensure: (d)
    - compliance with the air quality criteria and operating conditions of this consent;
    - best practice management is being employed (including in respect of minimisation of greenhouse gas (ii) emissions from the site and energy efficiency) to:
      - minimise the development's air quality impacts;
      - minimise the development's Scope 1 and 2 greenhouse gas emissions; and

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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) 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;
  - (ii) adequately supports the air quality management system; and
  - (iii) 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.
- B37. The Applicant must implement the Air Quality and Greenhouse Gas Management Plan as approved by the Planning Secretary.

#### **METEOROLOGICAL MONITORING**

- B38. Prior to commencing mining operations under this consent and for the remaining life of the development, 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);
  - (b) is capable of continuous real-time measurement of wind speed, wind direction sigma theta and temperature;
  - (c) is capable of measuring meteorological conditions in accordance with the 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, 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, including during rehabilitation and post mine closure.

# **Compensatory Water Supply**

- B41. 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 mining operations, in consultation with DPIE Water, and to the satisfaction of the Planning Secretary.
- B42. 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.
- B43. 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.
- B44. 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.
- B45. However, conditions B41 to B44 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.

#### Notes

- The Water Management Plan (see condition 28) is required to include trigger levels for investigating potentially adverse impacts on water supplies.
- The burden of proof that any loss of water supply is not due to mining impacts rests with the Applicant.

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# **Water Discharges**

- B46. The Applicant must ensure that all surface discharges from the site comply with:
  - (a) discharge limits (both volume and quality) set for the development in any EPL; or
  - (b) relevant provisions of the POEO Act.

# **Mine Water Storages**

B47. The Applicant shall implement all reasonable and feasible measures to prevent migration of saline water from the mine water storages or provide suitable measures to offset the salinity impacts on the Namoi River, to the satisfaction of the EPA and the Planning Secretary.

# **Flooding**

- B48. The Applicant shall ensure that the design and construction of the project, including the Project Rail Spur and Kamilaroi Highway overpass, is consistent with the objectives of the *Floodplain Management Plan for the Upper Namoi Valley Floodplain 2019*, to the satisfaction of the Planning Secretary.
- B49. The Project Rail Spur, Project Rail Spur bridges and any upgrade to the haul road must be designed and constructed to minimise flooding and scouring impacts, in consultation with BCD and consistent with the recommendations of the Department's flood peer review. Prior to construction of the Project Rail Spur or any upgrades to the haul road, the Proponent shall undertake a flood assessment of the detailed design to confirm there would be minimal impacts as predicted in the documents listed in condition A2(c).

# Namoi River Pipeline

- B50. Prior to the construction of the Namoi River pipeline and pump station, the Applicant shall:
  - (a) consult with DPI NSW Fisheries regarding the general operation and design of the pump station and screens to avoid and mitigate impacts on native fish;
  - (b) consult with GSC regarding the design and construction of the pipeline in the Braymont Road Reserve; and
  - (c) implement all reasonable and feasible recommendations from DPI NSW Fisheries and GSC in regard to the design and construction of the pipeline and pump station,

to the satisfaction of the Planning Secretary.

# **Water Management Performance Measures**

B51. The Applicant must ensure that the development complies with the performance measures in Table 8.

Table 8: Water management performance measures

Feature	Performance Measure
Water management – General	<ul> <li>Maintain the clean water management system separate from the dirty (i.e. sediment laden) and mine water management systems</li> <li>Minimise the use of clean and potable water</li> <li>Maximise water recycling, reuse and sharing opportunities</li> <li>Maximise the capture and reuse of mine water and dirty water to meet operational demands for water, including dust suppression activities</li> <li>Minimise the use of make-up water from licensed external sources</li> <li>Design, install, operate and maintain water management infrastructure in a proper and efficient manner</li> <li>Minimise risks to the receiving environment and downstream water users</li> </ul>
Alluvial aquifers	<ul> <li>Negligible impacts to alluvial aquifers caused by the development beyond those predicted in the document/s listed in condition A2(c), including:         <ul> <li>negligible impacts to water quality;</li> <li>negligible change in groundwater levels; and</li> <li>negligible impact to other groundwater users;</li> </ul> </li> <li>Comply with the Minimal Impact Consideration for Aquifer Interference Activities for Alluvial Water Source (highly productive groundwater sources) under the NSW Aquifer Interference Policy (DPI, 2012)</li> </ul>
Erosion and sediment control works	<ul> <li>Design, install and maintain erosion and sediment controls in accordance with the best management practice guidance series Managing Urban Stormwater: Soils and Construction – Volume 1 (Landcom, 2004) and 2E Mines and Quarries (DECC, 2008)</li> <li>Design, install and maintain any new infrastructure within 40 metres of watercourses in accordance with the guidance series for Controlled Activities on Waterfront Land (DPI Water, 2012) or latest versions</li> <li>Design, install and maintain any creek crossings in accordance with the Fisheries NSW Policy and Guidelines for Fish Habitat Conservation and Management (DPI, 2013) and Why Do Fish Need To Cross The Road? Fish Passage Requirements for Waterway Crossings (NSW Fisheries, 2003), or their latest versions</li> </ul>
Flood protection works	Design, install and maintain flood levees to protect mining areas from a probable maximum flood event and to ensure no increased flooding impacts on roads or privately-owned land

Feature	Performance Measure
Construction and operation of linear infrastructure	Design and construct the Project Rail Spur and Kamilaroi Highway overpass such that this infrastructure will not cause significant increased flooding, in particular increased affluxes and velocities at key locations, redistribution in and around the overpass, and flood levels at residences
Clean water diversions and storage infrastructure	<ul> <li>Design, install and maintain the clean water system to capture and convey the 100 year ARI flood event</li> <li>Maximise, as far as reasonable, the diversion of clean water around disturbed areas on the site, except where clean water is captured for use on the site</li> </ul>
Sediment dams	<ul> <li>Design, install and maintain sediment dams in accordance with the guidance series Managing Urban Stormwater: Soils and Construction – Volume 1 (Landcom, 2004) and 2E Mines and Quarries (DECC, 2008) and the requirements under the POEO Act</li> </ul>
	<ul> <li>Design, install and maintain sediment dams to include contingency measures to prevent the potential mobilisation of pollutants and ensure compliance with the requirements of the Water Management Act 2000 and the EPL discharge criteria</li> </ul>
Mine water storages	<ul> <li>Design, install and maintain mine water storage infrastructure to ensure no discharge of mine water to the off-site environment</li> <li>New storages designed to contain the 100 year ARI storm event and minimise permeability</li> <li>Ensure adequate freeboard within all pit voids at all times to minimise the risk of discharge to surface waters and groundwater</li> </ul>
In-pit emplacement of acid forming and potentially acid forming materials	<ul> <li>Emplacement, encapsulation, treatment and/or capping to prevent the migration of pollutants beyond the pit shell</li> <li>Adequate freeboard within the pit void to minimise the risk of discharge to surface waters</li> </ul>
Overburden emplacements	<ul> <li>Design, install and maintain emplacements to encapsulate and prevent migration of acid forming and potentially acid forming materials, and saline and sodic material</li> <li>Design, install and maintain out-of-pit emplacements to prevent and/or manage long term saline seepage</li> </ul>
Chemical and hydrocarbon storage	Chemical and hydrocarbon products to be stored in bunded areas in accordance with the relevant Australian Standard
Creek diversions	<ul> <li>Diverted creek lines are hydraulically and geomorphologically stable</li> <li>Incorporate erosion control measures based on vegetation and engineering revetments</li> <li>Incorporate water features such as persistent/permanent pools for aquatic habitat</li> <li>Revegetate with suitable riparian vegetation</li> </ul>
Aquatic and riparian ecosystems	<ul> <li>Negligible environmental consequences beyond those predicted in the document/s listed in condition A2(c)</li> <li>Maintain or improve baseline channel stability</li> <li>Develop site-specific in-stream water quality objectives in accordance with the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC &amp; ARMCANZ, 2000) and Using the ANZECC Guidelines and Water Quality Objectives in NSW (DEC, 2006)</li> </ul>

B52. The performance measures in Table 8 do not apply to water management structures constructed under previous consents.

# **Water Management Plan**

- B53. The Applicant must prepare a Water Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:
  - (a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
  - (b) be prepared in consultation with DPIE Water and the EPA;
  - (c) be submitted to the Planning Secretary for approval prior to carrying out construction under this consent;
  - (d) describe the measures to be implemented to ensure that the Applicant:
    - (i) complies with the water management performance measures (see Table 8); and

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(ii) addresses the recommendations for surface and groundwater monitoring programs by the Commonwealth Independent Expert Scientific Committee on Coal Seam Gas and Large Mining Development (IESC) (IESC 2018-099: Vickery Extension Project (EPBC 2016/7649 and SSD 7480) – Expansion);

- (e) incorporate recent meteorological and climate data and describe the periodic review of new and relevant input data, including sensitivity analysis of variations from climate projections and trends;
- (f) utilise existing data from nearby mines and build on existing monitoring programs, where practicable; and
- (g) 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);
    - prioritisation strategy for water sources, including the strategy to maximise the reuse of mine water and dirty water for the development;
    - · water storage capacity;
    - water use and management on the site, including any water transfers or sharing with neighbouring
      mines and opportunities to improve the efficiency of site water use and minimise the use of clean
      water on the site:
    - contingency licenced sources of external water supply for the development which could be utilised
      in the event of extreme climatic conditions
    - · licensed discharge points and limits; and
    - · reporting procedures, including the annual preparation of an updated site water balance;
  - (ii) Salt Balance that includes details of:
    - sources of saline material on the site:
    - saline material and saline water management on the site;
    - measures to minimise discharge of saline water from the site; and
    - reporting procedures, including the annual preparation of an updated salt balance;

#### (iii) Erosion and Sediment Control Plan that:

- is consistent with the best management practice 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;
- includes a program to review the adequacy of flood protection works, and ensure they comply with the relevant performance measures listed in Table 8;
- 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;

# (iv) Surface Water Management 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, including the separation of water captured on the site and uses associated with the:
  - clean water capture and diversion system;
  - dirty water system (including sediment detention basins); and
  - mine water capture system;
- detailed plans, design objectives and performance criteria for water management infrastructure, including:
  - any approved creek diversions or restoration works associated with the development;
  - water run-off diversions and catch drains;
  - clean water storages, mine water storages and sediment dams;
  - emplacement areas;
  - backfilled pits and any final voids for the development (see also Table 12); and
  - reinstated drainage networks on rehabilitated areas of the site;

- detailed performance criteria, including trigger levels for identifying and investigating any potentially adverse impacts (or trends) associated with the development, for:
  - downstream surface water flows and quality;
  - channel stability;
  - downstream flooding impacts;
  - stream and riparian vegetation heath;
  - water supply for other water users; and
  - post-mining water pollution from rehabilitated areas of the site;
- a program to monitor and evaluate:
  - compliance with the relevant performance measures listed in Table 8 and the performance criteria in this plan;
  - water quality in sediment dams prior to discharge into the environment;
  - controlled and uncontrolled discharges and seepage/leachate from the site;
  - impacts on water supply for other water users;
  - surface water inflows, outflows and storage volumes, to inform the Site Water Balance;
  - the effectiveness of the surface water management system, including contingency measures to be implemented during a potential failure of the water management system infrastructure, and
  - the effectiveness of 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 performance measures or performance criteria, and repair, mitigate and/or offset any adverse surface water impacts of the development;

# (v) Groundwater Management Plan that includes:

- detailed baseline data of groundwater levels, yield and quality for groundwater resources 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 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 8 and the performance criteria in this plan;
  - inputs and outputs from water storages (groundwater, surface water and atmospheric water), including any final void;
  - geochemical characteristics of groundwater flows to the open cut, to inform the progressive development of the final landform and optimise the final void dimensions, to be described in the rehabilitation strategy required by condition B104.
  - groundwater inflows, outflows and storage volumes, to inform the Site Water Balance;
  - the likelihood of any indirect impacts from the development on nearby alluvial aquifers;
  - the hydrogeological properties used in the groundwater modelling, including the basement volcanics; and
  - 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 groundwater performance criteria, and repair, mitigate and/or offset any adverse groundwater impacts of the development; and
- a program to periodically validate the groundwater model for the development, including an independent review of the model every 5 years, and at least annual comparison of monitoring results with modelled predictions; and
- (vi) a protocol to report on the measures, monitoring results and performance criteria identified above, in the Annual Review referred to in condition E9.
- B54. The Applicant must implement the Water Management Plan as approved by the Planning Secretary.

#### **BIODIVERSITY**

#### **Translocation of Threatened Species**

B55. The Applicant shall use its best endeavours to successfully translocate the Winged Peppercress located within the disturbance boundary.

# Biodiversity Offset Strategy – transferred obligations from Vickery Coal Project as modified by the Vickery Extension Project

B56. The Applicant shall implement the biodiversity offset strategy described in the EIS, summarised in Table 9 and shown conceptually in Appendix 4, to the satisfaction of the Planning Secretary.

Table 9: Summary of the biodiversity offset strategy - Vickery Coal Project

Area	Offset Type	Minimum Size (hectares)
Willeroi East Offset Area	Existing vegetation to be enhanced, and additional vegetation to be established with the restoration of at least 156 ha of Box Gum Woodland EEC, as listed under the BC Act	1,671
Areas 2, 3, 4 & 5	Existing vegetation to be enhanced with the restoration of at least 127 ha of Poplar Box Woodland and 45 ha of Box Gum Woodland EEC, as listed under the BC Act	404.5
Rehabilitation Area	Re-establishment of native vegetation communities for a biodiversity conservation land use objective.	1,360

#### Notes:

- For the purposes of this consent Box Gum Woodland refers to the EEC listed as White Box Yellow Box Blakely's Red Gum Woodland under the TSC Act, or similar EEC as may be updated from time to time.
- Any area of the offset strategy in Table 9 may be substituted with an alternative offset area subject to demonstration of
  equivalent biodiversity outcomes and to the satisfaction of the Secretary

#### **Long Term Security of Offset**

- B57. The Applicant shall make suitable arrangements to provide appropriate long term security for the offset areas in Table 9:
  - (a) within 2 years of the date of commencement of development under this consent unless otherwise agreed by the Planning Secretary, for the Willeroi East Offset Area and Offset Areas 2, 3, 4 and 5; and
  - (b) within 6 months of cessation of mining operations, unless otherwise agreed by the Planning Secretary, for the woodland to be established in the Rehabilitation Area, as identified in Table 9,

to the satisfaction of the Planning Secretary.

**Note**: The Department acknowledges that the Applicant is investigating the potential to transfer part or all of the Willeroi East Offset Area directly to the national park estate, and accepts that interim conservation measures may be implemented prior to this transfer.

# Additional Biodiversity Offsets Required - Vickery Extension Project

- B58. In addition to the biodiversity offset requirements in Table 9, within 2 years of the date of commencement of development under this consent, unless otherwise agreed by the Planning Secretary the Applicant must retire biodiversity credits of a number and class specified in Table 10 and Table 11 below to offset the biodiversity impacts of the development.
- B59. The retirement of these credits must be carried out in accordance with the NSW Biodiversity Offsets Policy for Major Projects and can be achieved by acquiring or retiring 'biodiversity credits' within the meaning of the BC Act.

Table 10: Ecosystem credit requirements

Ecosystem credits	Code (BVT)	Code (PCT)	Credits Required
Poplar Box Woodland on Alluvial Clay Soils	NA185	101	3,540
Pilliga Box – Poplar Box Shrubby Woodland	NA324	397	6,955
White Box – Silver-leaved Ironbark Shrubby Open Forest	NA349	594	1,795
Narrow-leaved Ironbark – White Box Shrubby Forest	NA311	459	4,025

Ecosystem credits	Code (BVT)	Code (PCT)	Credits Required
Mixed Marsh Sedgeland	NA201	53	46
River Red Gum Riparian Tall Woodland	NA193	78	40

Table 11: Species credit requirements

Species	Credits Required
Regent Honeyeater (Anthochaera phrygia)	3,703
Squirrel Glider (Petaurus norfolcensis)	1,672
Koala (Phascolarctos cinereus)	1,308

#### Notes:

- The credits in Table 10 and Table 11 were calculated in accordance with Framework for Biodiversity Assessment of the NSW Biodiversity Offset Policy for Major Projects (OEH, 2014) and would need to be converted to reasonably equivalent 'biodiversity credits', within the meaning of the BC Act, if the credits are to be retired in accordance with the Biodiversity Offsets Scheme of the BC Act. Under this conversion the species credits for the Regent Honeyeater would be converted to ecosystem credits,
- Following repeal of the Threatened Species Conservation Act 1995 on 25 August 2017, credits created under that Act are taken to be "biodiversity credits" under the Biodiversity Conservation Act 2016 by virtue of clause 22 of the Biodiversity Conservation (Savings and Transitional) Regulation 2017

#### **Ecological Rehabilitation Ecosystem Credits**

B60. Retirement of the ecosystem credits in Table 10 can include undertaking ecological rehabilitation at the site in accordance with Section 12.2 of the *Framework for Biodiversity Assessment of the NSW Biodiversity Offsets Policy for Major Projects* (OEH, 2014), as identified in the approved Rehabilitation Management Plan required under condition B106.

Note: Under the FBA, the ecosystem credits are considered retired once the credits and information requirements under Section 12.2 of the FBA are documented in the Rehabilitation Management Plan.

B61. Within 12 months of triggering remedial action under the Rehabilitation Management Plan for alternative mechanism for retirement of ecological rehabilitation credits, unless otherwise agreed by the Planning Secretary, the Applicant must acquire or retire the relevant biodiversity credits within the meaning of the BC Act.

#### **Retirement of Credits Status Reports**

B62. From the date of commencement of development under this consent until the credit requirements have been retired, the Applicant must submit a six monthly report to the Department on progress towards retirement of credits required in Table 10 and Table 11.

# **Biodiversity Management Plan**

- B63. The Applicant must prepare a Biodiversity Management Plan to the satisfaction of the Planning Secretary. This plan must:
  - (a) be prepared by a suitably qualified and experienced person/s;
  - (b) be prepared in consultation with BCD and North West LLS;
  - (c) be submitted to the Planning Secretary for approval prior to carrying out construction under this consent;
  - (d) describe the short, medium, and long-term measures to be undertaken to manage vegetation and fauna habitat on the site and in the biodiversity offset strategy areas required under Condition B56 (see note below the table);
  - (e) include detailed performance and completion criteria for evaluating the performance of the biodiversity offset strategy required under Condition B56, and triggering remedial action (if necessary);
  - (f) describe how biodiversity management would be integrated with similar measures within other management plans, including the Rehabilitation Management Plan referred to in condition B106;
  - (g) describe the measures to be implemented within the approved disturbance areas to:
    - (i) minimise the amount of clearing;
    - (ii) minimise impacts on fauna, including undertaking pre-clearance surveys;
    - (iii) translocate and protect the population of Winged Peppercress located on the site, including detailed description of a monitoring and maintenance program; and
    - (iv) maximise the salvage of resources, including tree hollows, vegetation and soil resources, for beneficial reuse, including fauna habitat enhancement;

- (h) describe the measures to be implemented on the site to:
  - minimise impacts on fauna habitat resources such as hunting and foraging areas, habitat trees, fallen timber and hollow-bearing trees;
  - (ii) enhance the quality of vegetation, vegetation connectivity and wildlife corridors through the planting of scattered trees, corridor enhancement measures and/or targeted revegetation associated with the Project Rail Spur of appropriate canopy, sub-canopy, understorey and ground strata;
  - (iii) introduce naturally scarce fauna habitat features such as salvaged tree hollows and logs and promote the use of these introduced habitat features by threatened fauna species;
  - (iv) manage any potential conflicts with Aboriginal heritage values;
  - (v) protect vegetation and fauna habitat outside of the approved disturbance areas;
  - (vi) manage the collection and propagation of seed from the local area;
  - (vii) control weeds, including measures to avoid and mitigate the spread of noxious weeds;
  - (viii) control feral pests with consideration of actions identified in relevant threat abatement plans;
  - (ix) control erosion;
  - (x) manage any grazing and agriculture;
  - (xi) control access to vegetated or revegetated areas; and
  - (xii) manage bushfire hazards;
- (i) include a seasonally-based program to monitor and report on the effectiveness of the above measures, progress against the detailed performance indicators and completion criteria, and improvements that could be implemented to improve biodiversity outcomes; and
- (j) include details of who would be responsible for monitoring, reviewing, and implementing the plan.

**Note:** Any Biodiversity Offset Strategy Areas required under Condition B56 secured through a Biodiversity Stewardship Agreement under the BC Act do not require to be included in the Biodiversity Management Plan

B64. The Applicant must implement the Biodiversity Management Plan as approved by the Planning Secretary.

#### Koala Plan of Management

- B65. The Applicant shall prepare and implement a Koala Plan of Management for the development to the satisfaction of the Planning Secretary. This plan must:
  - (a) be prepared by suitably qualified and experienced person/s in consultation with BCD, NSC and GSC;
  - (b) be submitted to, and approved by, the Planning Secretary prior to the commencement of construction under this consent:
  - (c) be prepared generally in accordance the *Gunnedah Comprehensive Koala Plan of Management* and the draft Koala Plan of Management in the EIS;
  - (d) include detailed performance and completion criteria for evaluating the performance of the plan, and triggering remedial action (if necessary):
  - (e) detail the implementation of the Applicant's commitments to indirect koala mitigation measures, which must include measures at least equivalent to those identified in the EIS:
  - (f) identify the potential risks to the successful implementation of the plan, and include a description of the contingency measures that would be implemented to mitigate against these risks; and
    - include details of who would be responsible for monitoring, reviewing, and implementing the plan.

Note: The Koala Plan of Management should be integrated with similar measures in the Biodiversity Management Plan.

# **Conservation Bond**

(g)

B66. Within 6 months of approval of the Biodiversity Management Plan, the Applicant shall lodge a Conservation Bond with the Department to ensure that the biodiversity offset strategy required by condition B56 is implemented in accordance with the performance and completion criteria of the Biodiversity Management Plan.

The sum of the bond shall be determined by:

- (a) calculating the full cost of implementing the biodiversity offset strategy (other than land acquisition costs); and
- (b) employing a suitably qualified quantity surveyor to verify the calculated costs,

to the satisfaction of the Planning Secretary.

B67. The calculation of the Conservation Bond must be submitted to the Department for approval at least 1 month prior to lodgement of the bond.

If the offset strategy is completed generally in accordance with the completion criteria in the Biodiversity Management Plan to the satisfaction of the Planning Secretary, the Planning Secretary will release the bond.

NSW Government Department of Planning, Industry and Environment If the offset strategy is not completed generally in accordance with the completion criteria in the Biodiversity Management Plan, the Planning Secretary will call in all, or part of, the conservation bond, and arrange for the satisfactory completion of the relevant works.

#### Notes:

- Alternative funding arrangements for long term management of the biodiversity offset strategy required under Condition B56, such as provision of capital and management funding as part of a Stewardship Agreement or transfer to conservation reserve estate can be used to reduce the liability of the conservation and biodiversity bond.
- The sum of the bond may be reviewed in conjunction with any revision to the biodiversity offset strategy.
- Offset areas secured via Stewardship Agreement do not require lodgement of a conservation bond.

#### **HERITAGE**

#### **Protection of Aboriginal Heritage**

B68. The Applicant must ensure that the development does not cause any direct or indirect impact on any identified heritage items located outside the approved disturbance area, beyond those predicted in the document/s listed in condition A2(c).

**Note:** Identified heritage items are shown in the figure in Appendix 5.

B69. The Applicant must ensure that all known Aboriginal objects or Aboriginal places on the site and within any offset areas 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**

- B70. The Applicant must prepare an Aboriginal Cultural Heritage Management Plan for the development. The plan must:
  - (a) be prepared by suitably qualified and experienced persons;
  - (b) be prepared in consultation with BCD and Registered Aboriginal Parties;
  - (c) be submitted to the Planning Secretary for approval prior to carrying out construction under this consent;
  - (d) describe the measures to be implemented on the site to:
    - (i) comply with the heritage-related operating conditions of this consent;
    - (ii) ensure all workers receive suitable Aboriginal cultural heritage 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/or manage identified Aboriginal objects and Aboriginal places (including proposed archaeological investigations 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) protect Aboriginal objects and Aboriginal places located outside the approved disturbance area from impacts of the development;
    - (v) manage the discovery of suspected human remains and any new Aboriginal objects or Aboriginal places, including provisions for burials, over the life of the development;
    - (vi) maintain and manage reasonable access for relevant Aboriginal stakeholders to Aboriginal objects and Aboriginal places (outside of the approved disturbance area); and
    - (vii) facilitate ongoing consultation and involvement of Registered Aboriginal Parties in the conservation and management of Aboriginal cultural heritage on the site; and
  - (e) include a strategy for the care, control and storage of Aboriginal objects salvaged on the site, both during the life of the development and in the long term.
- B71. The Applicant must implement the Aboriginal Cultural Heritage Management Plan approved by the Planning Secretary.

# **Historic Heritage**

- B72. Prior to commencing blasting operations on the site, the Applicant must commission a suitably qualified structural engineer to inspect the condition of the main residence at the Kurrumbede Homestead Complex to confirm measures to minimise damage due to blasting, advise appropriate blasting criteria and recommend works to protect the structural integrity of the homestead.
- 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 prepared by a suitably qualified and experienced person/s;
  - (b) be prepared in consultation with the Heritage NSW, GSC and the Dorothea Mackellar Memorial Society and in accordance with the relevant Heritage Branch guidelines;
  - (c) describe how historic heritage values of the site would be recorded and preserved;
  - (d) identify all heritage items in the vicinity of the site and include a statement of significance for each item;
  - (e) for the Kurrumbede Homestead Complex, describe the measures to:

- (i) manage appropriate future uses, including appropriate physical intervention in the heritage structures to facilitate those uses and potential wear and tear as a result of the use;
- (ii) maintain and enhance historic landscaping around the Kurrumbede residence (especially screen planting) and manage any new landscaping;
- (iii) verify the condition of the Kurrumbede residence and outbuildings prior to commencing construction;
- (iv) monitor the physical condition of the Kurrumbede residence and outbuildings in response to dust and vibration impacts due to the development;
- (v) ensure that the Kurrumbede residence and the outbuildings are made safe and weatherproof to prevent deterioration beyond normal wear and tear;
- (vi) ensure that an appropriate use of the Kurrumbede Homestead Complex (including the residence) is maintained throughout the life of the development, including consideration of its use for cultural events and facilitating controlled public access;
- (vii) minimise disturbance to the naturally occurring vegetation on the flood plain to the north of the Kurrumbede Homestead Complex, including the existing mature eucalyptus trees and historic screen plantings; and
- (viii) ensure the end-of-mine remediation measures include a consideration for the Kurrumbede Homestead Complex to return to an open rural setting, including revegetation of waste rock emplacements and dam bunds; and
- (f) describe the measures to be implemented on the site or within any offset areas to:
  - 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 predicted in the document/s listed in condition A2(c);
  - (iii) undertake photographic/archival recording of the Weatherboard Home (Site 22), prior to disturbance; and
  - (iv) manage any new heritage items discovered during the life of the development;
- B74. The Applicant must not commence construction 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.

#### **TRANSPORT**

# **Monitoring of Coal Transport**

- B76. The Applicant must:
  - (a) keep accurate records of the:
    - (i) amount of coal transported from the site (on a daily basis); and
    - ii) date and time of each train movement generated by the development; and
  - (b) publish these records in the Annual Review.

# **Road Maintenance**

B77. The Applicant shall maintain the existing road maintenance agreement with GSC for the maintenance of public roads affected by the development, to the satisfaction of GSC. The Applicant and GSC shall review and/or renew the agreement once cumulative road haulage exceeds 3.5 Mtpa or ceases following commissioning of the Project rail spur. If there is any dispute in relation to these agreements, then either party may refer the matter to the Planning Secretary for resolution.

# **Restriction on Transport Routes**

- B78. The Applicant must ensure that
  - (a) all over-dimensional vehicle access to and from the site is via Blue Vale Road and Hoad Lane; and
  - (b) all heavy vehicle access to and from the site is via Blue Vale Road and Hoad Lane,

unless the applicable roads authority agrees otherwise.

#### Note:

 The Applicant is required to obtain relevant permits under the Heavy Vehicle National Law (NSW) for the use of overdimension vehicles on the road network.

# **Braymont Road**

B79. No development-related traffic shall use Braymont Road to get to or from the site, except in an emergency to avoid the loss of lives, property and/or environmental harm.

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This condition does not apply to any employees that may reside on Braymont Road, or to the infrequent use of the road for consultation, environmental monitoring, and inspection and maintenance of nearby infrastructure.

# **Road Upgrades**

- B80. The Applicant shall:
  - (a) construct the Blue Vale Road and Hoad Lane re-alignments as described and shown conceptually in the EIS;
  - (b) construct all roads and intersections in accordance with Austroad guidelines; and
  - (c) install appropriate lighting and advance warning signs at entry points to the private haul road and mine access road.

to the satisfaction of the relevant roads authority.

**Note:** Under the Roads Act 1993, the Applicant may require separate approvals from TfNSW, and/or the relevant Councils as the appropriate roads authorities prior to construction of, closure of or conducting mining operations within public roads.

- B81. If there is any dispute between the Applicant and the relevant roads authority in implementing these requirements, then any of the parties may refer the matter to the Planning Secretary for resolution.
- B82. The Applicant shall design, construct and maintain the Kamilaroi Highway Project Rail Spur overpass to the satisfaction of TfNSW and GSC, and shall bear all costs associated with the construction, maintenance and decommissioning of the overpass.
- B83. The Applicant shall design, construct and maintain the Kamilaroi Highway haul road overpass to the satisfaction of TfNSW and GSC, and shall bear all costs associated with the construction, maintenance and decommissioning of the overpass.
- B84. If the Kamilaroi Highway overpass or Project Rail Spur have not been commissioned within 5 years of the date of commencement of development under this consent, and every 5 years thereafter, the Applicant shall commission an Independent Traffic Audit of haulage operations on the Kamilaroi Highway and its intersections with Blue Vale Road and the CHPP access road, unless the Planning Secretary agrees otherwise. This audit must:
  - (a) be prepared by a suitably qualified person whose appointment has been approved by the Planning Secretary;
  - (b) review haulage records;
  - recommend measures to reduce or mitigate any adverse (or potentially adverse) impacts in the event that the road network is not performing satisfactorily; and
  - (d) be submitted to the Planning Secretary within 2 months of being commissioned.

**Note:** The Planning Secretary may agree to alternative timing for the audits if the development has not commenced prior to December 2025.

- B85. If the Independent Traffic Audit demonstrates that the intersections and section of haul route on the Kamilaroi Highway are not performing satisfactorily, the Applicant shall:
  - implement any reasonable and feasible recommendations from the audit to reduce or mitigate adverse impacts until the overpass is commissioned; or
  - (b) construct and commission the Kamilaroi Highway overpass within 3 years of the date of the audit, unless the Planning Secretary agrees otherwise.

# **Traffic Management Plan**

- B86. The Applicant must prepare a Traffic Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:
  - (a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
  - (b) be prepared in consultation with TfNSW, GSC and NSC;
  - (c) include details of all transport routes and traffic types to be used for development-related traffic;
  - (d) include details of the measures to be implemented to minimise traffic safety issues and disruption to local road users during construction or decommissioning works, including:
    - (i) temporary traffic controls, including detours and signage;
    - (ii) notifying the local community about development-related traffic impacts;
    - (iii) minimising potential for conflict with school buses and stock movements;
    - (iv) responding to any emergency repair requirements or maintenance during construction and/or decommissioning; and
    - (v) a traffic management system for managing over-dimensional vehicles;
  - (e) include arrangements to comply with cumulative coal haulage limits from the development and the Tarrawonga Coal Project;
  - (f) a protocol to facilitate graziers access to the Travelling Stock Route from Blue Vale Road, subject to site safety and operational requirements;

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- (g) include a monitoring program to audit vehicle movements, including the origin and destination of employees and contractors, against predictions in the EIS; and
- (h) 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.
- B87. If the construction and/or decommissioning of the development is to be staged, the obligations in this condition apply to each stage of construction and/or decommissioning.
- B88. The Applicant must not commence construction until the Traffic Management Plan is approved by the Planning Secretary.
- B89. The Applicant must implement the Traffic Management Plan as approved by the Planning Secretary.

#### **VISUAL**

#### Visual Amenity and Lighting

- B90. The Applicant must:
  - take all reasonable steps to minimise the visual and off-site lighting impacts of the development and shield public views of the development;
  - (b) minimise the lighting impacts of the development on the Siding Springs Observatory;
  - (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) implement a landscaping strategy to shield public views of the development that includes a road-side tree planting and maintenance schedule;
  - (g) provide for the establishment of trees and shrubs and/or the construction of vegetated mounding or bunding:
    - along the re-aligned Blue Vale Road
    - along the access road to the mine site; and
    - at other areas identified as necessary for the maintenance of satisfactory visual amenity; and
  - (h) ensure that the visual appearance of all new buildings, structures, facilities or works (including paint colours and specifications) is aimed at blending as far as possible with the surrounding landscape.

# **Additional Visual Impact Mitigation**

B91. Upon receiving a written request from the owner of any residence on privately-owned land which has, or would have, significant direct views of the mining operations and on-site infrastructure during the development, the Applicant shall implement additional visual impact mitigation measures (such as landscaping treatments or vegetation screens) to reduce the visibility of the mining operations and infrastructure from the residences on the privately-owned land.

These mitigation measures must be reasonable and feasible, and must be implemented within a reasonable timeframe.

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

# Notes:

- The additional visual impact mitigation measures must be aimed at reducing the visibility of the mining operations on site from affected residences, and do not require measures to reduce the visibility of the mining operations from other locations on the affected properties.
- The additional visual impact mitigation measures do not necessarily have to include the implementation of measures on the affected property itself (ie. the additional measures could involve the implementation of measures outside the affected property boundary that provide an effective reduction in visual impacts).
- Except in exceptional circumstances, the Secretary will not require additional visual impact mitigation to be undertaken for residences that are more than 7.5 kilometres from the mining operations.

#### **WASTE**

- B92. The Applicant must:
  - (a) take all reasonable steps to minimise the waste (including coal rejects) 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;

- (d) manage on-site sewage treatment and disposal in accordance with the requirements of GSC and NSC; and
- (e) monitor and report on the effectiveness of the waste minimisation and management measures in the Annual Review referred to in condition E9.
- B93. Except for the receipt and disposal of coal reject from the Whitehaven CHPP and 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.
- B94. The Applicant must ensure that biosolids used on the site are managed in accordance with the *Environmental Guidelines: Use and Disposal of Biosolids Products* (EPA, 1997) (or its latest version).

#### **Waste Management Plan**

- B95. The Applicant must prepare a Waste Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:
  - (a) be prepared in consultation with EPA, GSC and NSC;
  - (b) identify all waste types generated by the development; and
  - (c) describe the measures to ensure the management of waste generated by, and received at, the development complies with the requirements of conditions B92 to B94.
- B96. The Applicant must implement the Waste Management Plan as approved by the Planning Secretary.

#### **DANGEROUS GOODS**

- B97. The Applicant must ensure that the storage, handling, and transport of:
  - (a) dangerous goods is done 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**

B98. The Applicant must:

(b)

- (a) ensure that the development:
  - (i) provides for asset protection in accordance with the relevant requirements in the *Planning for Bushfire Protection* (RFS, 2006) guideline; and
  - (ii) ensure that there is suitable equipment to respond to any fires on the site; and
  - assist the RFS and emergency services to the extent practicable if there is a fire in the vicinity of the site.
- B99. Prior to commencing mining operations 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 Development Planning: A Guide to Developing a Bushfire Emergency Management and Evacuation Plan (RFS, 2014) and Australian Standard AS3745 Planning for Emergencies in Facilities.
- B100. The Applicant must implement the Bushfire Management Plan in consultation with RFS.

#### **REHABILITATION**

#### **Rehabilitation Objectives**

B101. The Applicant must rehabilitate the site in accordance with the conditions imposed on the mining leases(s) associated with the development under the *Mining Act 1992*. The rehabilitation must be generally consistent with the proposed rehabilitation objectives described in the documents listed in condition A2(c) (and shown conceptually in the figure in Appendix 6), and must comply with the objectives in Table 12.

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Table 12: Rehabilitation objectives

Feature	Objective
All areas of the site affected by the development	<ul> <li>Safe, stable and non-polluting</li> <li>Fit for the intended post-mining land use/s</li> <li>Establish the final landform and post-mining land use/s as soon as practicable after cessation of mining operations</li> <li>Minimise post-mining environmental impacts</li> </ul>
Areas proposed for native ecosystem re-establishment	<ul> <li>Establish/restore self-sustaining native open woodland ecosystems</li> <li>Establish local plant community types</li> <li>Establish:         <ul> <li>riparian vegetation, within any diverted and/or re-established creek lines and retained water features;</li> <li>habitat, feed and foraging resources for threatened fauna species; and</li> <li>vegetation connectivity and wildlife corridors, as far as is reasonable and feasible</li> </ul> </li> </ul>
Areas proposed for agricultural land	<ul> <li>Establish/restore grassland areas to support sustainable agricultural activities</li> <li>Use species found in the local area that are suitable for pasture production</li> <li>Achieve land and soil capabilities that are equivalent or better than premining</li> <li>Locate adjacent to surrounding agricultural land, where practicable</li> </ul>
Final Landform	<ul> <li>Stable and sustainable for the intended post-mining land use/s</li> <li>Integrated with surrounding natural landforms and other mine rehabilitated landforms, to the greatest extent practicable</li> <li>Incorporate macro-relief and micro-relief and drainage features that mimic natural topography and mitigate erosion, to the greatest extent practicable</li> <li>Maximise surface water drainage to the natural environment, excluding final void catchment (i.e. free draining)</li> <li>Reduce highwall slopes to a maximum of 18 degrees (excluding slopes below the post-mining standing water level in any final void)</li> <li>Minimise visual impacts, where practicable</li> </ul>
Final void	<ul> <li>Designed as long term groundwater sink to prevent the release of polluting 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 B104)</li> <li>Optimise the size and depth of final voids to ensure the final landform is stable and non-polluting</li> <li>Minimise to the greatest extent practicable:         <ul> <li>the drainage catchment of final voids;</li> <li>any high wall instability risk; and</li> <li>the risk of flood interaction</li> </ul> </li> <li>Maximise potential for beneficial reuse, where practicable</li> </ul>
Surface infrastructure of the development	<ul> <li>To be decommissioned and removed, unless the Resources Regulator agrees otherwise</li> <li>Structures over the Kamilaroi Highway to be demolished and removed, unless TfNSW agrees otherwise</li> </ul>
Rehabilitation materials	<ul> <li>Materials from areas disturbed under this consent (including topsoils, substrates and seeds) are to be recovered, managed and reused as rehabilitation resources, to the greatest extent practicable</li> <li>Maximise use of biosolids (or similar organic recycled material) to enhance soil quality for revegetation</li> </ul>
Water quality	<ul> <li>Water retained on the site is fit for the intended post-mining land use/s</li> <li>Water discharged from the site is suitable for receiving waters and fit for aquatic ecology and riparian vegetation</li> </ul>
Community	<ul><li>Ensure public safety</li><li>Minimise adverse socio-economic effects associated with mine closure</li></ul>

B102. The rehabilitation objectives in Table 12 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.

# **Progressive Rehabilitation**

B103. The Applicant must rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable steps must be taken to minimise the total area exposed at any time. Interim stabilisation and temporary vegetation strategies must be employed when areas prone to dust generation, soil erosion and weed incursion cannot be permanently rehabilitated.

> This condition does not prevent further disturbance at some later stage of the development of areas that have been Note: rehabilitated.

# **Rehabilitation Strategy**

- B104. The Applicant must prepare a Rehabilitation Strategy for the development to the satisfaction of the Planning Secretary. This strategy must:
  - 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 Resources Regulator, DPIE Water, NSC, BCD and GSC; (b)
  - be submitted to the Planning Secretary for approval within six months of the date of commencement of development under this consent;
  - (d) build on the Rehabilitation Objectives in Table 12, describe the overall rehabilitation outcomes for the site, and address all aspects of rehabilitation including mine closure, final landform (including final void), postmining land use/s and water management;
  - align with strategic rehabilitation and mine closure objectives and address the principles of the Strategic (e) Framework for Mine Closure (ANZMEC and MCA, 2000);
  - describe how the rehabilitation measures would be integrated with the measures in the Biodiversity (f) Management Plan referred to in condition B63;
  - describe how rehabilitation will be integrated with the mine planning process, including a plan to address (g) premature mine closure;
  - include details of target vegetation communities and species to be established within the proposed (h) revegetation areas:
  - (i) investigate opportunities to refine and improve the final landform and final void outcomes over time;
  - include a risks and opportunities assessment and risk register; (i)
  - include a post-mining land use strategy to investigate and facilitate post-mining beneficial land uses for the (k) site (including the final void), that:
    - align with regional and local strategic land use planning objectives and outcomes; (i)
    - (ii) support a sustainable future for the local community;
    - utilise existing mining infrastructure, where practicable; (iii)
    - (iv) avoid disturbing self-sustaining native ecosystems, where practicable; and
    - includes a description of long-term land management objectives, including bushfire management, weed and feral animal control, water quality and public safety.
  - include a stakeholder engagement plan to guide rehabilitation and mine closure planning processes and (I) outcomes:
  - investigate ways to minimise adverse socio-economic effects associated with rehabilitation and mine closure; (m)
  - (n) include a program to review and refine the final landform and final void outcomes every five years, in consultation with the Resources Regulator and GSC, NSC, to meet the relevant Rehabilitation Objectives in
- B105. The Applicant must implement the Rehabilitation Strategy approved by the Planning Secretary.

# **Rehabilitation Management Plan**

- B106. The Applicant must prepare and implement a Rehabilitation Management Plan in accordance with the conditions imposed on the mining lease(s) associated with the project under the Mining Act 1992. The plan must:
  - (a) be prepared in accordance with the relevant requirements specified under the Mining Act 1992;
  - be prepared in consultation with the Department, MEG, DPIE Water, BCD, GSC and NSC; (b)
  - include a detailed plan for the reinstatement and review of the proposed: (c)
    - ecological rehabilitation and native woodland areas, including a protocol for progressive reviews to (i) demonstrate that the target vegetation communities are being achieved; and
    - (ii) agricultural land rehabilitation;
  - (d) include a life of mine rehabilitation and mining schedule which outlines key progressive rehabilitation milestones from the commencement of operations through to decommissioning and mine closure;

- (e) include Rehabilitation Objectives, Rehabilitation Completion Criteria and a Final Landform and Rehabilitation Plan:
- (f) for ecological rehabilitation used for retiring ecosystem credits in Table 10, include all information as required under section 12.2 of the Framework for Biodiversity Assessment of the NSW Biodiversity Offsets Policy for Major Projects (OEH, 2014), including triggers for determining whether ecological rehabilitation credits should alternatively be retired as per Condition B60;
- (g) Include an overview of the identified risks to achieving successful rehabilitation and the type of rehabilitation strategies to be implemented to address the identified risks;
- (h) describe the measures to be implemented on the site to achieve the Rehabilitation Objectives in Table 12, the requirements of the Rehabilitation Strategy referred to in condition B104;
- (i) include procedures for the reasonable use of interim stabilisation and temporary vegetation strategies to minimise the area exposed for dust generation (see condition B103);
- (j) include a program to monitor, audit and report on the progress against the Rehabilitation Objectives and Rehabilitation Completion Criteria and the Final Landform and Rehabilitation Plan:
- (k) describe further studies, work, research or consultation that will be undertaken to expand the site-specific rehabilitation knowledge base, reduce uncertainty and improve rehabilitation outcomes; and
- (I) outline intervention and adaptive management techniques to ensure rehabilitation remains on a trajectory of achieving the Rehabilitation Objectives, Rehabilitation Completion Criteria and the Final Landform and Rehabilitation Plan as soon as reasonably practical

#### Note:

 The Rehabilitation Management Plan may be combined with a Mining Operations Plan, or similar plan, required under the mining lease granted for the development.

# **SOCIAL**

# **Social Impact Management Plan**

- B107. The Applicant must prepare a Social Impact Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:
  - (a) be prepared by a suitably qualified and experienced person/s;
  - (b) be prepared in consultation with GSC, NSC, the CCC and the local affected community and other interested stakeholders (to the greatest extent practicable);
  - (c) be submitted to the Planning Secretary for approval within six months of the date of commencement of development under this consent;
  - (d) identify both positive and negative social impacts resulting from the development and following mine closure, both locally and regionally;
  - (e) specify adaptive management and mitigation measures to avoid, minimise, and/or mitigate negative social impacts;
  - (f) identify opportunities to secure and enhance positive social impacts from the development, including opportunities to assist in maintaining community services and facilities;
  - (g) include a stakeholder engagement plan to guide the evaluation and implementation of social impact management and mitigation measures, and
  - (h) include a program to monitor, review and report on the effectiveness of these measures, including updating the plan 3 years prior to mine closure.

B108. The Applicant must implement the Social Impact Management Plan as approved by the Planning Secretary.

#### PART C CONSTRUCTION SPECIFIC ENVIRONMENTAL CONDITIONS

#### CONSTRUCTION

#### **Construction Hours**

- C1. Approved construction works for the Project Rail Spur, Kamilaroi Highway Overpass and road realignments must be undertaken between the hours of 7 am to 6 pm, Monday to Sunday and at no time on Public Holidays, unless the Planning Secretary agrees otherwise.
- C2. The following activities may be carried out outside the hours in Condition C1:
  - (a) construction work that causes L<sub>Aeq(15min)</sub> noise levels that are:
    - (i) No greater than the noise impact criteria in Table 1; and
    - (ii) no more than the noise management levels in Table 2 of the *Interim Construction Noise Guideline* (Department of Environment and Climate Change, 2009) at other sensitive land uses;
  - (b) delivery of plant, equipment and materials which is required to be delivered outside standard construction hours by Police and/or other authorities for safety reasons;
  - (c) emergency work to avoid loss of life, damage to property and/or environmental harm; or
  - (d) works approved under an Out of Hours Work Protocol in accordance with condition B6.

#### **Construction Noise**

C3. The Applicant must ensure that construction noise does not exceed the operational noise criteria in Table 1, except where an alternative temporary limit has been approved by the Planning Secretary for specific works or where the Applicant has an agreement with the owner/s of the relevant residence/land to generate higher noise levels, and the Applicant has advised the Department in writing of the terms of this agreement.

# Kamilaroi Highway Overpass and Project Rail Spur Overpass

C4. The proposed Kamilaroi Highway Overpass and Project Rail Spur Overpass must both be designed and constructed in accordance with the relevant Austroads guidelines, Australian Standards and TfNSW specifications, in consultation with and to the satisfaction of TfNSW.

Note: Additional approval may be required under the Roads Act 1993.

C5. The Applicant must enter into a Works Authorisation Deed (WAD) prior to undertaking the road works.

**Note:** TfNSW can exercise its powers and functions of the roads authority, to undertake road works in accordance with sections 64 and 71 of the Roads Act 1993, as applicable, for all works under the WAD.

C6. All road works must be undertaken at full cost to the Applicant and at no cost to the relevant roads authority.

# **Construction Traffic Management Plan**

- C7. The Applicant must prepare a Construction Traffic Management Plan for construction of the Kamilaroi Highway Overpass to the satisfaction of TfNSW. This plan must:
  - (a) describe the measures to be implemented to minimise traffic and road safety issues and disruption to other road users:
  - (b) include a risk assessment to identify hazards to traffic control, the level of risk posed and control measures to be implemented:
  - (c) include a vehicle movement plan for:
    - (i) managing light, heavy and over-dimensional vehicles during construction works;
    - (ii) transporting construction waste materials; and
    - (iii) restricting construction or transportation hours to avoid road user conflicts; and
  - (d) include a traffic control plan prepared in accordance with Traffic Control at Work Sites (RMS, 2018).
- C8. The Applicant must not commence construction works associated with the Kamilaroi Highway Overpass until the Construction Traffic Management Plan is approved by TfNSW

#### PART D ADDITIONAL PROCEDURES

#### **ACQUISITION UPON REQUEST**

D1. Upon receiving a written request for acquisition from the owner of the privately-owned land<sup>a</sup> listed in Table 13, the Applicant must acquire the land in accordance with the procedures in conditions D11 to D18, inclusive.

Table 13: Land subject to acquisition upon request

Acquisition Basis	Property ID
Noise	127

<sup>&</sup>lt;sup>a</sup> The locations of the land referred to in Table 13 is shown in Appendix 1.

# **ADDITIONAL MITIGATION UPON REQUEST**

- D2. Upon receiving a written request from the owner of any residence on the privately-owned land<sup>a</sup> listed in Table 13, 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 Developments* (NSW Government, 2018). They must also be reasonable and feasible, proportionate to the level of predicted impact and directed towards reducing the relevant noise 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.
- D3. 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.

# **NOTIFICATION OF LANDOWNERS/TENANTS**

- D4. Within one month of the date of this consent, the Applicant must:
  - (a) notify in writing the owner of:
    - the land listed in Table 13 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 13 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 NSW Health 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 criterion in PART B of this consent at any time during the life of the development.
- D5. Prior to entering into any tenancy agreement for any land owned by the Applicant that is predicted to experience exceedances of the recommended dust and/or noise criteria, the Applicant must:
  - (a) advise the prospective tenants of the potential health and amenity impacts associated with living on the land, and give them a copy of the NSW Health fact sheet entitled "Mine Dust and You" (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**

- D6. 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.
- D7. For any exceedance of any air quality criterion in PART B, the Applicant must also provide to any affected land owners and/or tenants a copy of the NSW Health fact sheet entitled "Mine Dust and You" (NSW Health, 2017).

#### INDEPENDENT REVIEW

- D8. If a landowner considers the development to be exceeding any relevant air quality, noise or blasting 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.
- D9. 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.

- D10. If the Planning Secretary is satisfied that an independent review is warranted, within three months, or other timeframe agreed by the Planning Secretary and the landowner, 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

- D11. 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:
    - 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 D2;
  - (b) the reasonable costs associated with:
    - (i) relocating within the Gunnedah, Narrabri or Tamworth local government areas, 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.
- D12. If, within two months of the binding written offer being made under condition D11, 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.
- D13. Upon receiving a request under condition D12, 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 D11;
  - (c) prepare a detailed report setting out the reasons for any determination; and
  - (d) provide a copy of the report to both parties.
- D14. 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.
- D15. 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 D11, the independent valuer's report, the detailed report of the party that disputes the independent valuer's determination and any other relevant submissions.
- D16. 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.
- D17. 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.
- D18. The Applicant must pay all reasonable costs associated with the land acquisition process described in conditions D11 to D17 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 E ENVIRONMENTAL MANAGEMENT. REPORTING AND AUDITING

#### **ENVIRONMENTAL MANAGEMENT**

#### **Environmental Management Strategy**

- E1. The Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary. This strategy must:
  - (a) be submitted to the Planning Secretary for approval prior to commencing construction under this consent;
  - (b) provide the strategic framework for environmental management of the development:
  - (c) identify the statutory approvals that apply to the development;
  - set out the role, responsibility, authority and accountability of all key personnel involved in the environmental (d) management of the development:
  - (e) set out the procedures to be implemented to:
    - 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;
    - resolve any disputes that may arise during the course of the development; (iii)
    - (iv) respond to any non-compliance and any incident; and
    - respond to emergencies; and (v)
  - (f) include:
    - references to any strategies, plans and programs approved under the conditions of this consent; and (i)
    - (ii) a clear plan depicting all the sites where monitoring is to be carried out under the conditions of this consent.
- The Applicant must implement the Environmental Management Strategy as approved by the Planning Secretary. E2.

# **Adaptive Management**

The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the E3. 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

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

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

# **Management Plan Requirements**

- E4. Management plans required under this consent must be prepared in accordance with relevant guidelines, and include where relevant:
  - summary of relevant background or baseline data; (a)
  - (b) details of:
    - (i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);
    - any relevant limits or performance measures and criteria; and (ii)
    - the specific performance indicators that are proposed to be used to judge the performance of, or guide (iii) the implementation of, the development or any management measures;
  - any relevant commitments or recommendations identified in the document/s listed in condition A2(c); (c)
  - a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or (d) 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 paragraph (d);
  - a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing (f) 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 measure;

- (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.

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

- E5. Within three months of:
  - (a) the submission of an incident report under condition E7;
  - (b) the submission of an Annual Review under condition E9;
  - (c) the submission of an Independent Environmental Audit under condition E10; or
  - (d) the modification of the conditions of this consent (unless the conditions require otherwise),

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

E6. If necessary, to either improve the environmental performance of the development or cater for a modification, 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**

E7. The Applicant must immediately notify the Department and any other relevant agencies after it becomes aware of an incident. The notification must identify the development (including the development application number and name) and set out the location and nature of the incident.

### **Non-Compliance Notification**

E8. Within seven days of becoming aware of a non-compliance, the Applicant must notify the Department of the non-compliance. The notification must 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**

- E9. By the end of March each year, after the date of commencement of development under this consent, or other timeframe agreed by the Planning Secretary, 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;
  - report on the progress of biodiversity credits retirements and the associated actual versus proposed surface disturbance for each stage;
  - (c) 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);
  - (d) 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;
  - (e) evaluate and report on:
    - (i) the effectiveness of the noise and air quality management systems; and
    - (ii) compliance with the performance measures, criteria and operating conditions of this consent;
  - (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

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(h) describe what measures will be implemented over the next calendar year to improve the environmental performance of the development.

### **Independent Environmental Audit**

- E10. Within one year of the date 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.
- E11. Within three months of commencing an Independent Environmental Audit, or other timeframe agreed by the Planning Secretary, 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 to the satisfaction of the Planning Secretary.

### **Monitoring and Environmental Audits**

- E12. 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.
  - For the purposes of this condition, as set out in the EP&A Act, "monitoring" means monitoring of the development to provide data on compliance with the consent or on the environmental impact of the development, and an "environmental audit" means 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.
- E13. 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**

- E14. Within three months of the date of 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 document/s listed in condition A2(c);
    - (ii) all current statutory approvals for the development;
    - (iii) all approved strategies, plans and programs required under the conditions of this consent;
    - (iv) minutes of CCC meetings;
    - 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;
    - (vi) 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;
    - (vii) a summary of the current progress of the development;
    - (viii) contact details to enquire about the development or to make a complaint;
    - (ix) a complaints register, updated monthly;
    - (x) the Annual Reviews of the development;
    - (xi) 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; and

(xii) 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 TABLE A1 - PROJECT MINING AREA SCHEDULE OF LANDS

LOT	DP	OWNERSHIP
1	219923	Freehold
2	219923	Freehold
33	553903	Freehold
1	570414	Freehold
2	570414	Freehold
21	754929	Freehold
22	754929	Freehold
23	754929	Freehold
25	754929	Freehold
36	754929	Freehold
37	754929	Freehold
39	754929	Freehold
1	1015797	Freehold
2	1015797	Freehold
1	1018347	Freehold
2	1018347	Freehold
3	1018347	Freehold
5	1018347	Freehold
7	1018347	Freehold
1	1038308	Freehold
2	1038308	Freehold
3	1038308	Freehold
1	1102940	Freehold
2	1102940	Freehold
4	1145592	Freehold
4	1182289	Freehold
5	1182289	Freehold
11	1182290	Freehold

OTHER		
Gunnedah Shire Council, Narrabri Shire Council or Crown	Roads located between or adjacent to the above parcels of land	
Crown	Creeks or streams located between or adjacent to the above parcels of land	

TABLE A2 - PROJECT RAIL SPUR ALIGNMENT SCHEDULE OF LANDS

LOT	DP	OWNERSHIP
15	113293	Freehold
9	754929	Freehold
38	755495	Freehold
64	755495	Freehold
79	755495	Freehold
83	755495	Freehold
85	755495	Freehold
93	755495	Freehold
113	755495	Freehold
120	755495	Freehold
137	755495	Freehold
142	755495	Freehold
217	755495	Freehold
222	755495	Freehold
301	755495	Freehold
304	755495	Freehold
1	929979	Freehold
7004	1029299	Crown
1	1115618	Freehold
1	1160899	Freehold
2	1160899	Freehold
1	1172361	Freehold

OTHER			
State Rail Authority (Crown)	Railway lands located between or adjacent to the above parcels of land		
Gunnedah Shire Council, Narrabri Shire Council or Crown	Other roads located between or adjacent to the above parcels of land		
Crown	Creeks or streams located between or adjacent to the above parcels of land		

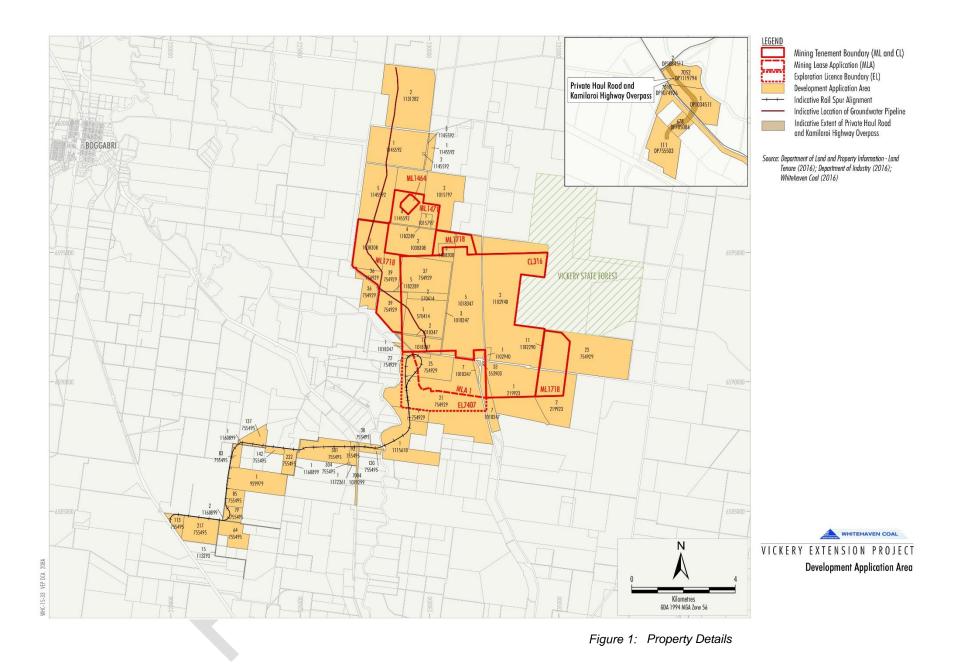
### TABLE A3 - PROJECT PRIVATE HAUL ROAD AND KAMILAROI HIGHWAY OVERPASS SCHEDULE OF LANDS

LOT	DP	OWNERSHIP
678	705086	Freehold
111	755503	Freehold
1	1034511	Freehold
2	1034511	Gunnedah Shire Council
7010	1074926	State of New South Wales
7052	1119794	State of New South Wales

## TABLE A4 – GROUNDWATER BORES AND PIPELINE SCHEDULE OF LANDS

LOT	DP	OWNERSHIP
2	1131282	Freehold
1	1145592	Freehold
2	1145592	Freehold
3	1145592	Freehold
5	1145592	Freehold

OTHER		
Narrabri Shire Council or Crown	Other roads located between or adjacent to the above parcels of land	
Crown	Creeks or streams located between or adjacent to the above parcels of land	



### APPENDIX 2 DEVELOPMENT LAYOUT

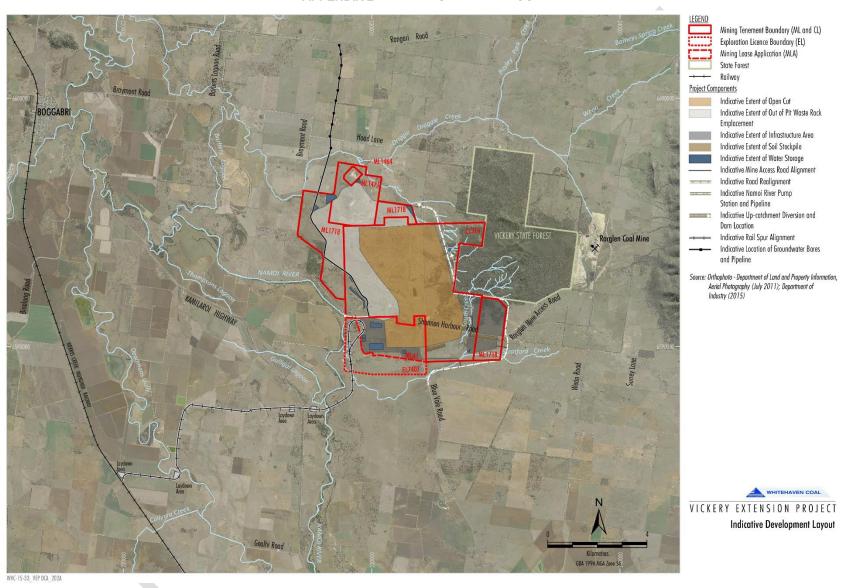


Figure 2: Development Layout

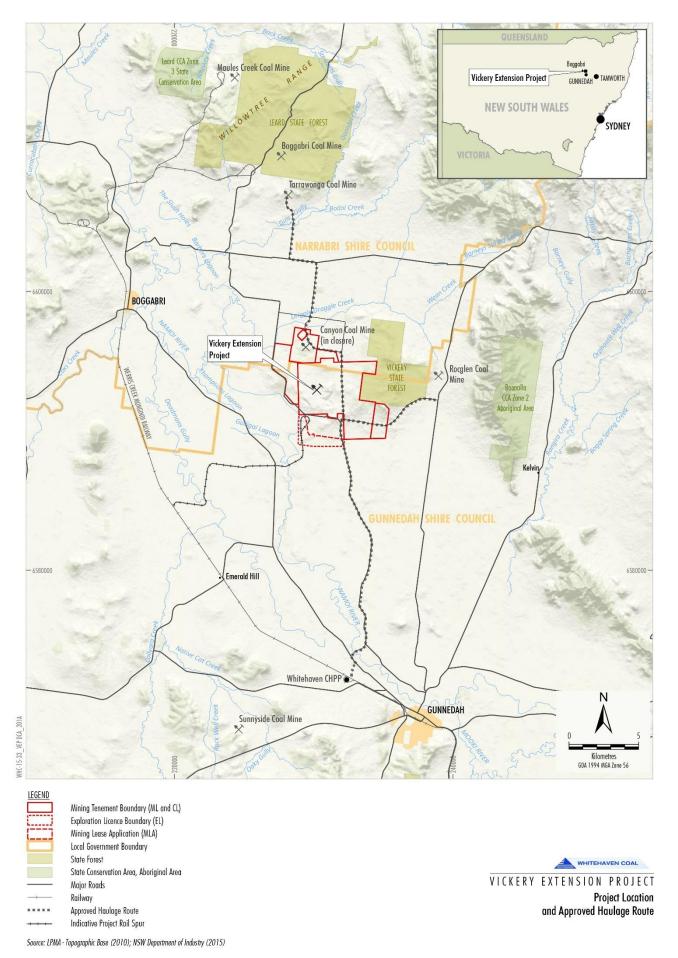


Figure 3: Approved Haulage Route

### APPENDIX 3 RECEIVER LOCATIONS

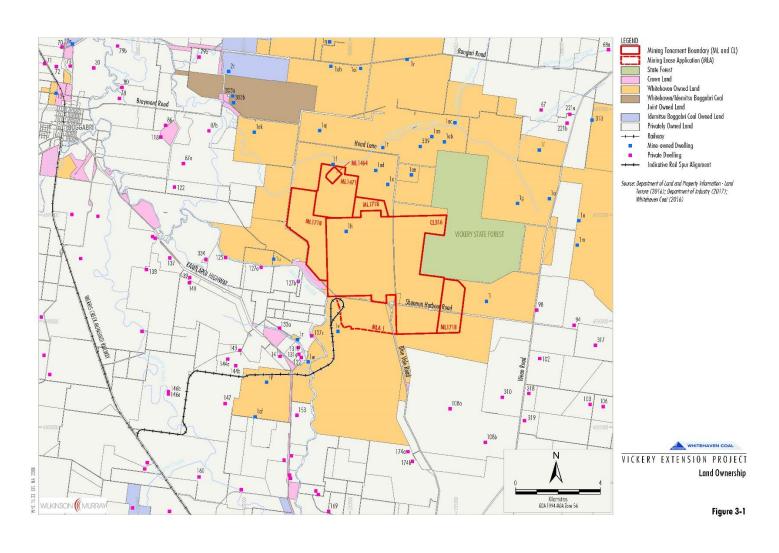


Figure 4: Receiver locations

#### **APPENDIX 4 BIODIVERSITY OFFSETS**

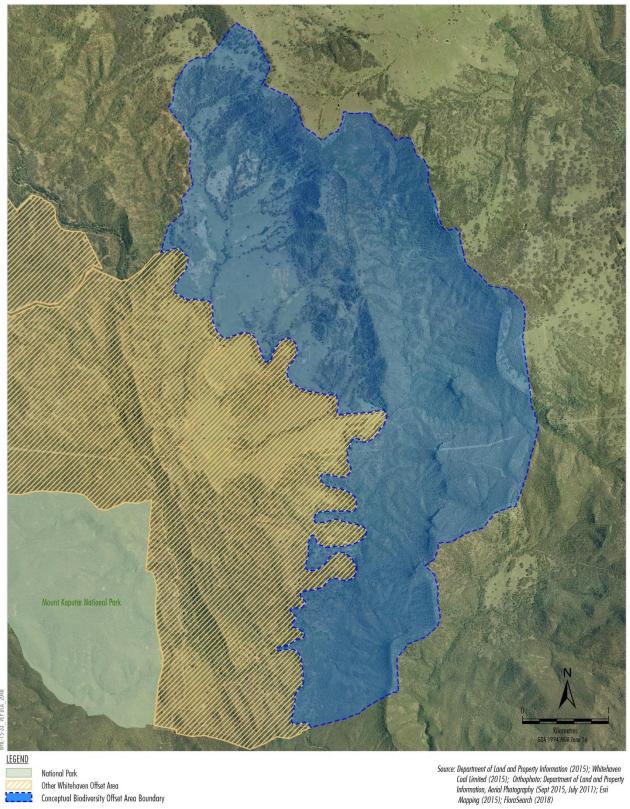




Figure 5: Willeroi East Offset Area

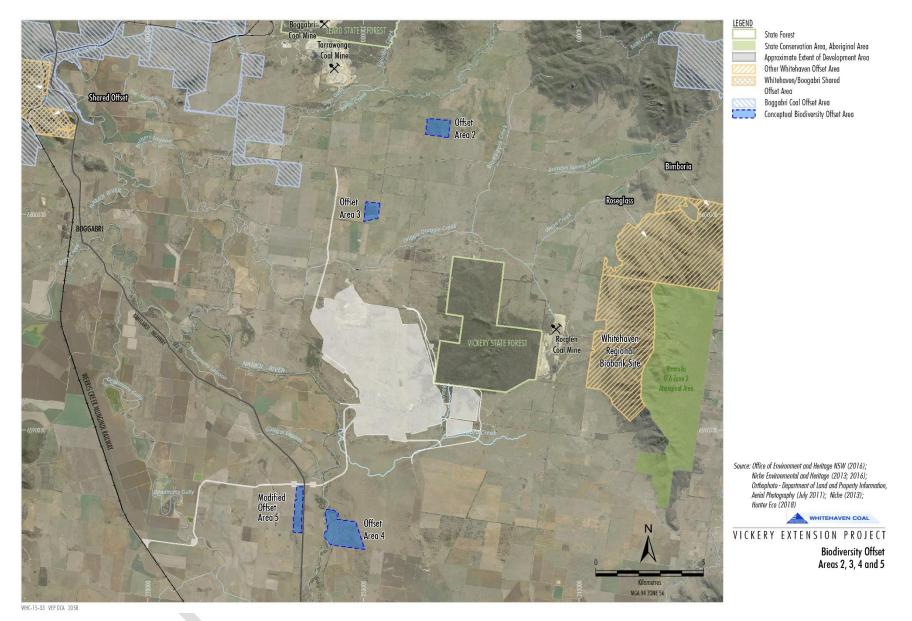


Figure 6: Biodiversity Offset Strategy

### **APPENDIX 5 HERITAGE SITES**

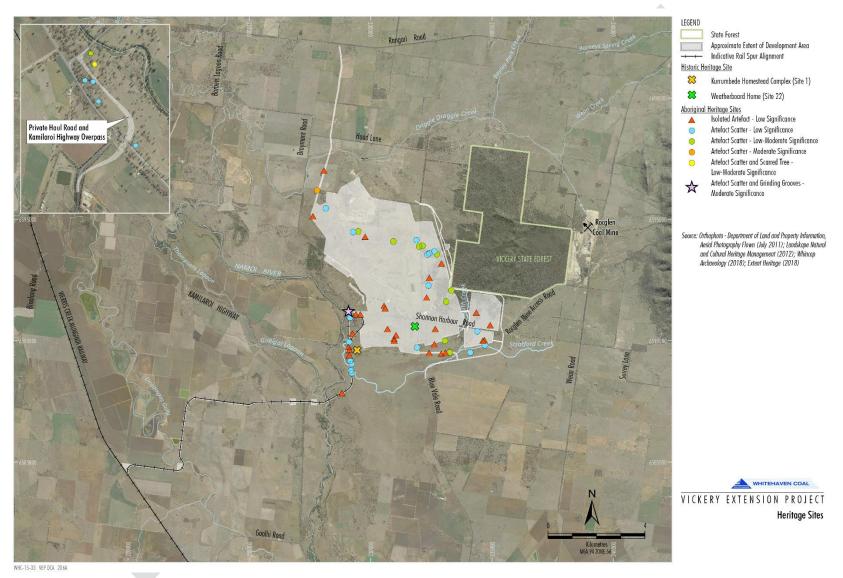
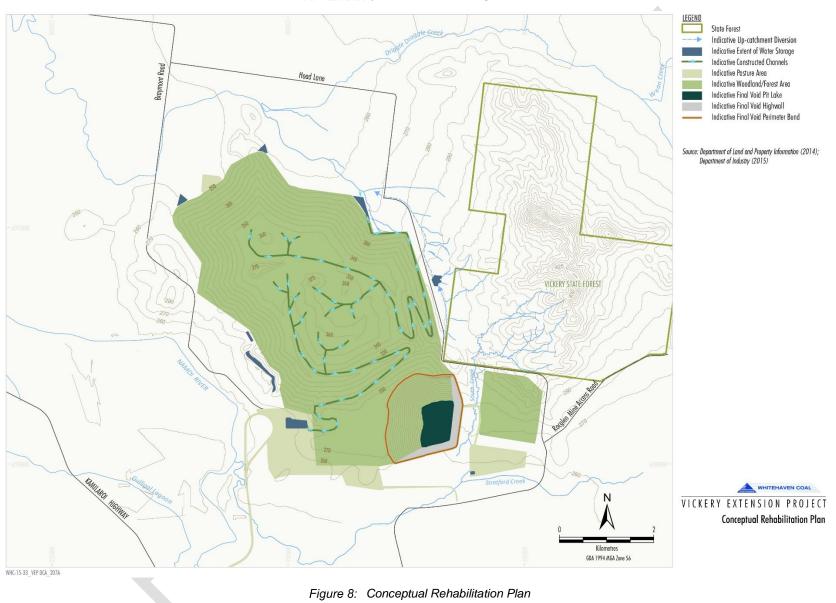


Figure 7: Heritage sites

### APPENDIX 6 REHABILITATION PLAN



### APPENDIX 7 GENERAL TERMS OF APPLICANT'S VPA OFFER

### NARRABRI SHIRE COUNCIL

Applicant's Contribution	Intended Use	Payment Details	
\$500,000	Contribution to Upgrade of Boggabri Pool		
\$500,000	Contribution to Community Meeting Space in Boggabri	On commencement of construction of the intended use, recruitment of role or other agreed timing	
\$850,000	Contribution to Retirement Units in Boggabri		
\$500,000	Boggabri Merton Street Streetscape Project		
\$750,000	Contribution to Boggabri Showground Improvements		
\$100,000	Contribution to Community Development Role for Boggabri		

### **GUNNEDAH SHIRE COUNCIL**

Applicant's Contribution	Intended Use	Payment Details
\$500,000	Funding community initiatives and projects	On granting of development consent <sup>1</sup>
\$500,000	Funding community initiatives and projects	On the date of commencement of development under this consent
70% of \$0.065 per tonne of Product Coal produced during a financial year	Funding community initiatives and projects	Not more than three (3) months after the end of the financial year for the mine life

This contribution is refundable if this consent is revoked, for example, if there is successful legal challenge of the determination of the consent.