

# Development Consent

## Section 89E of the *Environmental Planning and Assessment Act 1979*

As delegate of the Minister for Planning, I approve the development application referred to in Schedule 1, subject to the conditions in Schedules 2 to 5.

These conditions are required to:

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

Oliver Holm  
**Executive Director**  
**Resource Assessments and Compliance**

Sydney

2015

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### SCHEDULE 1

<b>Application Number</b>	SSD-6084
<b>Applicant</b>	Hy-Tec Industries Pty Ltd
<b>Consent Authority:</b>	Minister for Planning
<b>Land:</b>	Lots 1 and 2 DP 1000511 Lot 31 DP 1009967 Lot 4 DP 876394
<b>Development</b>	Austen Quarry Extension

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August 2018 modification in red type

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## DEFINITIONS

<b>AHD</b>	<b>Australian Height Datum</b>
Annual Review	The review required by condition 4 of Schedule 5
Applicant	Hy-Tec Industries Pty Ltd, or any other person/s who rely on this consent to carry out the development that is subject to this consent
BCA	Building Code of Australia
<b>BC Act</b>	<b>Biodiversity Conservation Act 2016</b>
<b>BCT</b>	<b>NSW Biodiversity Conservation Trust</b>
Conditions of consent	Conditions contained in Schedules 2 to 5 inclusive
Conservation Area H	The 2.2 ha conservation area shown as 'easement for conservation maintenance work' in Appendix 6 and established in accordance with condition 7b of DA 103/94
Construction	The demolition of buildings or works, carrying out of works and erection of buildings covered by this consent
Council	Lithgow City Council
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Department	Department of Planning and Environment
Development	The development as described in the documents listed in condition 2 of Schedule 2
<b>Dol</b>	<b>Department of Industry - Lands and Water</b>
<b>DRG</b>	<b>Division of Resources and Geoscience within the Department</b>
EIS	Environmental Impact Statement titled <i>Environmental Impact Statement for the Austen Quarry Stage 2 Extension Project</i> , dated October 2014, as modified by the Response to Submissions titled, <i>Austen Quarry Stage 2 Extension Project Response to Submissions</i> dated January 2015
EPA	NSW Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPL	Environment Protection Licence under the POEO Act
Evening	The period from 6pm to 10pm
Feasible	Feasible relates to engineering considerations and what is practical to build
GPS	Global Positioning System
<b>Incident</b>	<b>An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance</b>
Land	As defined in the EP&A Act, except where the term is used in the noise and air quality conditions in Schedules 3 and 4 of this consent, where it is defined as 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
Laden trucks	Trucks transporting quarry products from the site
<b>Material harm</b>	<b>Is harm that:</b> <ul style="list-style-type: none"> <li>• involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial, or</li> <li>• results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000, (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment)</li> </ul> <b>This definition excludes "harm" that is authorised under either this consent or any other statutory approval'</b>
<b>Minister</b>	<b>NSW Minister for Planning or delegate</b>
Mitigation	Activities associated with reducing the impacts of the development
<b>Morning Shoulder</b>	<b>The period between 4 am and 7 am</b>
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Privately-owned land	Land that is not owned by a public agency or the Applicant (or its subsidiary)
Public infrastructure	Linear and other infrastructure that provides services to the general public, such as roads, railways, water supply, drainage, sewerage, gas supply, electricity, telephone, telecommunications, etc.
Quarrying operations	The extraction, processing and transportation of extractive materials on the site and the associated removal of vegetation, topsoil and overburden
Quarry products	Includes all saleable quarry products, but excludes tailings and other wastes

Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Rehabilitation	The restoration of land disturbed by the development to a good condition and for the purpose of establishing a safe, stable and non-polluting environment
RMS	Roads and Maritime Services
Secretary	Planning Secretary under the EP&A Act, or nominee
SEE (Mod 1)	Statement of Environmental Effects titled <i>Austen Quarry Stage 2 Extensions Project (MOD 1 – SSD 6084) Statement of Environmental Effects</i> , prepared by RW Corkery & Co Pty Limited, dated March 2018; including the Response to Submissions titled <i>Austen Quarry Stage 2 Extension Project (MOD 1 – SSD 6084) Response to Submissions</i> , prepared by RW Corkery & Co Pty Limited, dated June 2018
Site	The land described in Schedule 1
Stage 2 Extraction Area	The area within the Extraction Boundary shown in Appendix 2
Statement of commitments	The Applicant's commitments in Appendix 3
Weekday	Any day from Monday to Friday

## SCHEDULE 2 ADMINISTRATIVE CONDITIONS

### OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

1. In addition to meeting the specific performance criteria established under this consent, the Applicant **must** implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, or rehabilitation of the development.

### TERMS OF CONSENT

2. The Applicant **must** carry out the development generally in accordance with the:
  - (a) EIS, **SEE (Mod 1); and**
  - (b) Statement of Commitments.

*Note: The statement of commitments is reproduced in Appendix 3.*

#### **2A. The Applicant must carry out the development in accordance with the conditions of this consent.**

3. If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail to the extent of any inconsistency.
4. The Applicant **must** comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of:
  - (a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this consent;
  - (b) any reviews, reports or audits undertaken or commissioned by the Department regarding compliance with this consent; or
  - (c) the implementation of any actions or measures contained in these documents.

### LAPSING OF CONSENT

5. If the development has not been physically commenced within 5 years of the date of this consent, then this development consent shall lapse.

### LIMITS ON CONSENT

#### Quarrying Operations

6. The Applicant **must** not extract extractive materials below a level of 685 m AHD.
7. The Applicant may carry out quarrying operations on the site until 30 June 2050.

*Note: Under this consent, the Applicant is required to rehabilitate the site and carry out additional undertakings to the satisfaction of the Secretary. Consequently, this consent will continue to apply in all other respects other than the right to conduct quarrying operations until the rehabilitation of the site and those undertakings have been carried out to a satisfactory standard.*

#### Extractive Material Transport

8. The Applicant **must** not:
  - (a) transport more than **1.6** million tonnes of quarry products from the site during any financial year;
  - (b) dispatch more than **300** laden trucks from the site on **weekdays** and **167 laden trucks from the site on Saturdays**; and
  - (c) dispatch more than **200** laden trucks from the site per **weekday**, averaged over the total number of dispatch **weekdays** in any calendar month.

### SURRENDER OF EXISTING DEVELOPMENT CONSENTS

9. Within 12 months of the date of this consent, or as otherwise agreed by the Secretary, the Applicant **must** surrender the development consent (DA 103/94) for the existing operations on the site in accordance with Section **4.63** of the EP&A Act.

*Note: This requirement does not extend to the surrender of construction and occupation certificates for existing and proposed building works under Part 4A of the EP&A Act. Surrendering of consent should not be understood as implying that works legally constructed under a valid consent can no longer be legally maintained or used.*

10. Prior to the surrender of development consent DA 103/94, the conditions of this consent shall prevail to the extent of any inconsistency with the conditions of development consent DA 103/94.

## STRUCTURAL ADEQUACY

11. The Applicant **must** ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.

*Notes:*

- Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works; and
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the development or project.

## DEMOLITION

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

## PROTECTION OF PUBLIC INFRASTRUCTURE

13. The Applicant **must**:
- (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and
  - (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.

*Note: This condition does not apply to damage to roads caused as a result of general road usage.*

## OPERATION OF PLANT AND EQUIPMENT

14. The Applicant **must** ensure that all the plant and equipment used at the site is:
- (a) maintained in a proper and efficient condition; and
  - (b) operated in a proper and efficient manner.

## UPDATING AND STAGING OF STRATEGIES, PLANS OR PROGRAMS

15. To ensure that strategies, plans and programs required under this consent are updated on a regular basis, and that they incorporate any appropriate additional measures to improve the environmental performance of the development, the Applicant may at any time submit revised strategies, plans or programs for the approval of the Secretary. With the agreement of the Secretary, the Applicant may also submit any strategy, plan or program required by this consent on a staged basis.

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

*Notes:*

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

16. Until they are replaced by an equivalent strategy, plan or program approved under this consent, the Applicant **must** implement the existing strategies, plans or programs for the site that have been approved under DA 103/94.

## PRODUCTION DATA

17. The Applicant **must**:
- (a) provide annual quarry production data to **DRG** using the standard form for that purpose; and
  - (b) include a copy of this data in the Annual Review (see condition 4 of Schedule 5).

## IDENTIFICATION OF APPROVED EXTRACTION LIMITS

18. By 30 September 2015, unless otherwise agreed with the Secretary, the Applicant **must**:
- (a) engage a registered surveyor to mark out the boundaries of the approved limits of extraction within the development area; and
  - (b) submit a survey plan of these boundaries with applicable GPS coordinates to the Secretary.
19. While quarrying operations are being carried out, the Applicant **must** ensure that these boundaries are clearly marked at all times in a manner that allows operating staff to clearly identify the approved limits of extraction.

## COMMUNITY ENHANCEMENT

20. Within 6 months of the date of this consent, unless otherwise agreed by the Secretary, the Applicant **must** enter into a planning agreement with the Council in accordance with;
- Division 7.1 of Part 7 of the EP&A Act; and
  - the terms specified in Appendix 7.

If there is any dispute between the Applicant and Council on the planning agreement, then either party may refer the matter to the Secretary for resolution.

## EVIDENCE OF CONSULTATION

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

## APPLICABILITY OF GUIDELINES

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

## COMPLIANCE

24. 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.

### SCHEDULE 3 ENVIRONMENTAL PERFORMANCE CONDITIONS

#### NOISE

##### Hours of Operation

- The Applicant **must** comply with the operating hours set out in Table 1.

*Table 1: Operating Hours*

<b>Activity</b>	<b>Permissible Hours</b>
<ul style="list-style-type: none"> <li>Extraction operations</li> <li>Processing operations</li> <li>Overburden Management</li> <li>Stockpile Management</li> </ul>	<ul style="list-style-type: none"> <li>6 am to 10 pm Monday to Friday;</li> <li>6 am to 3 pm Saturday; and</li> <li>At no time on Sundays or public holidays.</li> </ul>
<ul style="list-style-type: none"> <li>Blasting</li> </ul>	<ul style="list-style-type: none"> <li>10 am to 3 pm Monday to Friday (except public holidays).</li> </ul>
<ul style="list-style-type: none"> <li>Loading and dispatch</li> </ul>	<ul style="list-style-type: none"> <li>4 am to 10 pm Monday to Friday;</li> <li>5 am to 3 pm Saturdays; and</li> <li>At no time on Sundays or public holidays.</li> </ul>
<ul style="list-style-type: none"> <li>Maintenance</li> </ul>	<ul style="list-style-type: none"> <li>Anytime.</li> </ul>

- The following activities may be carried out on the site outside the hours specified in condition 1:
  - delivery or dispatch of materials as requested by Police or other authorities; and
  - emergency work to avoid the loss of lives, property and/or to prevent environmental harm.

In such circumstances, the Applicant **must** notify the Secretary and affected residents prior to undertaking the activities, or as soon as is practical thereafter.

##### Noise Impact Assessment Criteria

- The Applicant **must** ensure that the noise generated by the development does not exceed the criteria in Table 2 at any residence on privately-owned land

*Table 2: Noise criteria dB(A)*

<b>Receiver</b>	<b>Day dB(A)<math>L_{Aeq}(15\ min)</math></b>	<b>Evening dB(A)<math>L_{Aeq}(15\ min)</math></b>	<b>Morning Shoulder dB(A)<math>L_{Aeq}(15\ min)</math></b>	<b>Morning Shoulder (Sleep Disturbance) <math>L_{A\ max}</math></b>
All privately-owned residences	35	35	35	52

Noise generated by the development must be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the *NSW Noise Policy for Industry (EPA, 2017)*.

However, the noise criteria in Table 2 do not apply if the Applicant has an agreement with the relevant landowner to exceed the noise criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

##### Operating Conditions

- The Applicant **must**:
  - implement best practice management to minimise the operational and road transportation noise of the development;
  - minimise the noise impacts of the development during **noise-enhancing** meteorological conditions;
  - carry out **attended** noise monitoring (at least every 6 months) to determine whether the development is complying with the relevant conditions of this consent; and
  - regularly assess noise monitoring data and modify and/or stop operations on site to ensure compliance with the relevant conditions of this consent, to the satisfaction of the Secretary.

*Note: Required frequency of noise monitoring may be reduced if approved by the Secretary.*

## Noise Management Plan

5. The Applicant **must** prepare a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with EPA;
  - be submitted to the Secretary at least 3 months prior to the commencement of quarrying operations under this consent, unless otherwise agreed by the Secretary;
  - describe the measures that would be implemented to ensure:
    - compliance with the noise criteria in this consent;
    - best practice management is being employed; and
    - the noise impacts of the development are minimised during **noise-enhancing** meteorological conditions;
  - describe the proposed noise management system; and
  - include a monitoring program:**
    - to be implemented to measure noise from the development against the noise criteria in Table 2;**
    - that includes annual noise monitoring at R24A, unless otherwise agreed with the Secretary; and**
    - which evaluates and reports on the effectiveness of the noise management system on site.**

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

## BLASTING

### Blasting Impact Assessment Criteria

6. The Applicant **must** ensure that blasting on site does not cause any exceedance of the criteria in Table 3.

Table 3: Blasting Criteria

Receiver	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance
Any residence on privately-owned land	120	10	0%
	115	5	5% of the total number of blasts over a period of 12 months

However, these criteria do not apply if the Applicant has a written agreement with the relevant owner to exceed the limits in Table 3, and the Applicant has advised the Department in writing of the terms of this agreement.

### Blasting Frequency

7. The Applicant may carry out a maximum of 1 blast per calendar week, unless an additional blast is required following a blast misfire. This condition does not apply to blasts required to ensure the safety of the quarry or workers on site.

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

### Operating Conditions

8. During blasting operations, the Applicant **must**:
- implement best practice management to:
    - protect the safety of people and livestock in the areas surrounding blasting operations;
    - protect public or private infrastructure/property in the surrounding area from damage from blasting operations and
    - minimise the dust and fume emissions of blasting;
  - operate a suitable system to enable the local community to get up-to-date information on the proposed blasting schedule on site; and
  - carry out regular monitoring to determine whether the development is complying with the relevant conditions of this consent, to the satisfaction of the Secretary.

### Blast Management Plan

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

- (a) be submitted to the Secretary for approval at least 3 months prior to the commencement of quarrying operations under this consent, unless otherwise agreed by the Secretary;
- (b) describe the measures that would be implemented to ensure compliance with the blast criteria and operating conditions of this consent;
- (c) include a monitoring program for evaluating and reporting on compliance with the blasting criteria in this consent;
- (d) include community notification procedures for the blasting schedule; and
- (e) include a protocol for investigating and responding to complaints.

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

## AIR QUALITY

### Air Quality Impact Assessment Criteria

10. 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 in Table 4 at any residence on privately-owned land.

Table 4: Air quality criteria

Pollutant	Averaging Period	Criterion	
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	a,d 25 µg/m <sup>3</sup>	
Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	b 50 µg/m <sup>3</sup>	
Particulate matter < 2.5 µm (PM <sub>2.5</sub> )	Annual	a,d 8 µg/m <sup>3</sup>	
Particulate matter < 2.5 µm (PM <sub>2.5</sub> )	24 hour	b 25 µg/m <sup>3</sup>	
Total suspended particulates (TSP)	Annual	a,d 90 µg/m <sup>3</sup>	
<sup>c</sup> Deposited dust	Annual	<sup>b</sup> 2 g/m <sup>2</sup> /month	a,d 4 g/m <sup>2</sup> /month

Notes to Table 4:

a Cumulative impact (ie increase in concentrations due to the development plus background concentrations due to all other sources).

b Incremental impact (ie increase in concentrations due to the development alone, with zero allowable exceedances of the criteria over the life of the development).

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

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

e "Reasonable and feasible avoidance measures" includes, but is not limited to, the operational requirements in conditions 11 and 12 to develop and implement an air quality management system that ensures operational responses to the risks of exceedance of the criteria.

### Operating Conditions

11. The Applicant **must**:
  - (a) implement best practice management to minimise the dust emissions of the development;
  - (b) regularly assess meteorological and air quality monitoring data and relocate, modify and/or stop operations on site to ensure compliance with the air quality criteria in this consent;
  - (c) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note d under Table 4);
  - (d) monitor and report on compliance with the relevant air quality conditions in this consent; and
  - (e) minimise the area of surface disturbance and undertake progressive rehabilitation of the site, to the satisfaction of the Secretary.

### Air Quality Management Plan

12. The Applicant **must** prepare an Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must:
  - (a) be submitted to the Secretary for approval at least 3 months prior to the commencement of quarrying operations under this consent, unless otherwise agree by the Secretary;

- (b) describe the measures that would be implemented to ensure:
  - compliance with the relevant conditions of this consent;
  - best practice management is being employed; and
  - the air quality impacts of the development are minimised during adverse meteorological conditions and extraordinary events;
- (c) describe the proposed air quality management system;
- (d) include an air quality monitoring program that:
  - is capable of evaluating the performance of the development;
  - includes a protocol for determining any exceedances of the relevant conditions of consent;
  - effectively supports the air quality management system; and
  - evaluates and reports on the adequacy of the air quality management system.

**The Applicant must implement the Air Quality Management Plan as approved by the Secretary.**

### **Meteorological Monitoring**

- 13. For the life of the development, the Applicant **must** ensure that there is a suitable meteorological station operating in the vicinity of the site that complies with the requirements in the *Approved Methods for Sampling of Air Pollutants in New South Wales* guideline.

### **Greenhouse Gas Emissions**

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

### **SOIL AND WATER**

*Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain the necessary water licences for the development, including in respect of the extraction and/or interception of groundwater.*

#### **Water Supply**

- 15. The Applicant **must** ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of operations under the consent to match its available water supply, to the satisfaction of the Secretary.

#### **Water Discharges**

- 16. The Applicant **must** comply with the discharge limits in any EPL, or with section 120 of the POEO Act.

### **Surface Water Audit and Water Management Improvement Program**

- 17. Within three months of the date of this consent, the Applicant **must** commission independent surface water expert/s, approved by the Secretary, to undertake an audit of current and proposed surface water management practices and infrastructure on the site. The audit **must**:
  - (a) be undertaken in consultation with EPA and WaterNSW;
  - (b) fully describe and audit existing site water management practices and consider the EIS's proposed water management practices;
  - (c) identify all reasonable and feasible measures to improve surface water management on the site, with particular reference to opportunities to divert clean water away from the site; and
  - (d) recommend design parameters for proposed water management systems on the site.
- 18. Unless otherwise agreed with the Secretary, the Applicant **must** submit the Surface Water Audit report to the Secretary within six months of commissioning the audit. The report must be accompanied by a Water Management Improvement Program, based on the report's recommendations, to improve surface water management practices on the site, including a program of proposed timeframes for implementation.
- 19. The Applicant must implement the Water Management Improvement Program to the satisfaction of the Secretary.

### **Water Management Plan**

- 20. The Applicant **must** prepare a Water Management Plan for the development to the satisfaction of the Secretary. This plan must:
  - (a) be prepared by suitably qualified person/s approved by the Secretary;
  - (b) be prepared in consultation with the EPA, **Dol** and WaterNSW;

- (c) be submitted to the Secretary for approval at least 3 months prior to the commencement of quarrying operations under this consent, unless otherwise agreed by the Secretary;
- (d) include a:
  - (i) Site Water Balance that includes:
    - details of:
      - sources and security of water supply;
      - water use and management on site;
      - any off-site water transfers; and
      - reporting procedures.
    - measures that would be implemented to minimise clean water use on site;
  - (ii) Surface Water Management Plan, that includes:
    - detailed baseline data on surface water flows and quality in water bodies that could potentially be affected by the development;
    - a detailed description of the surface water management system on site including the:
      - clean water diversion system;
      - erosion and sediment controls;
      - dirty water management system; and
      - water storages; and
    - a program to monitor and report on:
      - any surface water discharges;
      - the effectiveness of the water management system; and
      - surface water flows and quality in local watercourses;
  - (iii) Groundwater Management Plan, that includes:
    - baseline data on groundwater levels, yield and quality in local aquifers and privately-owned groundwater bores that could be potentially affected by the development;
    - a program to monitor and report on groundwater inflows to the quarry pit and the impacts of the development on surrounding aquifers and privately-owned groundwater bores; and
    - an analysis of these monitoring results to predict long-term water levels within the quarry void; and
  - (iv) Surface and Ground Water Contingency Strategy, that includes:
    - a protocol for the investigation, notification and mitigation of identified impacts on surface water flows and quality in water bodies and/or groundwater levels, yield and quality in local aquifers and privately-owned groundwater bores that could be potentially affected by the development; and
    - the procedures that would be followed if any unforeseen impacts are detected during the development.

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

## TRANSPORT

### Monitoring of Product Transport

- 21. The Applicant **must** keep accurate records of all laden truck movements to and from the site (hourly, daily, weekly, monthly and annually) and publish a summary of records on its website every 6 months.

### Operating Conditions

- 22. The Applicant **must** ensure that:
  - (a) all reasonable measures are taken such that laden trucks have appropriate signage, including a contact phone number, so they can be easily identified by road users;
  - (b) all laden trucks entering or exiting the site have their loads covered;
  - (c) all laden trucks exiting the site are cleaned of material that may fall on the road, before leaving the site; and
  - (d) no trucks queue at the entrance to the quarry access road before **4 am on weekdays and 5 am on Saturday**.

- 22A. In 2022, and every 2 years thereafter, unless RMS directs otherwise, the Applicant must, in consultation with RMS, undertake monitoring of intersection performance at the Jenolan Caves Road and Great Western Highway intersection. Within 2 months of completing this monitoring, the results must be provided to RMS.

### Transport Management Plan

- 23. The Applicant **must** prepare a Transport Management Plan for the development to the satisfaction of the Secretary. This plan must:

- (a) be submitted to the Secretary for approval at least 3 months prior to the commencement of quarrying operations under this consent, unless otherwise agreed by the Secretary;
- (b) describe the measures that would be undertaken to monitor the **intersection performance** at the Jenolan Caves Road and Great Western Highway intersection and maintain an acceptable level of service at this intersection;
- (c) include a Drivers' Code of Conduct **that includes:**
  - details of the safe and quiet driving practices that must be used by drivers travelling to and from the quarry, with a particular focus on the morning shoulder period;
  - a map of the primary haulage route;
  - safety initiatives for haulage during peak periods and along school bus routes;
  - an induction process for vehicle operators and regular toolbox meetings; and
  - complaints resolution and disciplinary procedures;
- (d) describe the measures that would be put in place to ensure compliance with the Drivers' Code of Conduct.

The Applicant must implement the Transport Management Plan as approved by the Secretary.

## ABORIGINAL HERITAGE

24. If any item or object of Aboriginal heritage significance is identified on site, the Applicant **must** ensure that:
  - (a) all work in the immediate vicinity of the suspected Aboriginal item or object ceases immediately;
  - (b) a 10 m buffer area around the suspected item or object is cordoned off; and
  - (c) the OEHL is contacted immediately.
 Work in the vicinity of the Aboriginal item or object may only recommence in accordance with the provisions of Part 6 of the *National Parks and Wildlife Act 1974*.

## LANDSCAPE AND REHABILITATION

### Biodiversity Credits Required

25. Within 12 months of the approval of Modification 1, or other timeframe agreed by the Secretary, the Applicant must retire the biodiversity credits specified in Table 4A below.

Table 4A: Biodiversity credits to be retired

Credit Type	Offset Type	Number of Credits
Ecosystem Credit	PCT 1093 – Red Stringybark – Brittle Gum – Inland Scribbly Gum dry open forest of the tablelands, South Eastern Highlands Bioregion	649
Ecosystem Credit	PCT 649 – Apple Box – Broad-leaved Peppermint dry open forest of the South Eastern Highlands Bioregion	131
Ecosystem Credit	PCT 840 – Forest Red Gum – Yellow Box woodland of dry gorge slopes, southern Sydney Basin Bioregion and South-Eastern Highlands Bioregion	60
Species Credit	Silver-leaved Mountain Gum ( <i>Eucalyptus pulverulenta</i> )	10,784

The retirement of the credits in Table 4A must be carried out in consultation with OEHL and in accordance with the Biodiversity Offsets Scheme of the BC Act, to the satisfaction of the BCT.

**Note:** The credits in Table 4A were calculated in accordance with the Framework for Biodiversity Assessment of the NSW Biodiversity Offset Policy for Major Projects (OEHL, 2014) and may need to be converted to reasonably equivalent 'biodiversity credits', within the meaning of the BC Act, to facilitate retirement.

26. **Deleted**

### Rehabilitation Objectives

27. The Applicant must rehabilitate the site to the satisfaction of the Secretary. This rehabilitation must be generally consistent with the rehabilitation strategy in the **documents listed in condition 2 of Schedule 2** and the conceptual final landform in Appendix 4 and must comply with the objectives in Table 5.

Table 5: Rehabilitation Objectives

Feature	Objective
Site (as a whole)	<ul style="list-style-type: none"> <li>• Safe, stable and non-polluting</li> </ul>

	<ul style="list-style-type: none"> <li>Final landform integrated with surrounding natural landforms as far as is reasonable and feasible, and minimising visual impacts when viewed from surrounding land</li> </ul>
Surface Infrastructure	<ul style="list-style-type: none"> <li>Decommissioned and removed, unless DRG agrees otherwise</li> </ul>
Quarry Benches	<ul style="list-style-type: none"> <li>Landscaped and vegetated using native tree and understorey species</li> </ul>
Quarry Pit Floor	<ul style="list-style-type: none"> <li>Landscaped and revegetated using native tree and understorey species</li> </ul>
Final Void	<ul style="list-style-type: none"> <li>Minimise the size, depth and slope of the batters of the final void</li> <li>Minimise the drainage catchment of the final void</li> </ul>

### Progressive Rehabilitation

28. The Applicant **must** rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim stabilisation measures must be implemented where reasonable and feasible to control dust emissions in disturbed areas that are not active and which are not ready for final rehabilitation.

*Note: It is accepted that parts of the site that are progressively rehabilitated may be subject to further disturbance in future.*

### Landscape and Rehabilitation Management Plan

29. The Applicant **must** prepare a Landscape and Rehabilitation Management Plan for the development to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with OEH and be submitted to the Secretary for approval at least 3 months prior to the commencement of quarrying operations under this consent, unless the Secretary agrees otherwise;
  - provide details of the conceptual final landform and associated land uses for the site;
  - describe how the implementation of **any land based offset (including Conservation Area H, shown in Appendix 6)** would be integrated with the overall rehabilitation of the site;
  - include detailed performance and completion criteria for evaluating the performance of **any land based offset** and rehabilitation of the site, including triggers for any necessary remedial action;
  - describe the short, medium and long term measures that would be implemented to:
    - manage remnant vegetation and habitat on site, including within **any land based offset**; and
    - ensure compliance with the rehabilitation objectives and progressive rehabilitation obligations in this consent;
  - include a detailed description of the measures that would be implemented over the next 3 years (to be updated for each 3 year period following initial approval of the plan) including the procedures to be implemented for:
    - maximising the salvage of environmental resources within the approved disturbance area, including tree hollows, vegetative and soil resources, for beneficial reuse in the enhancement of the offset area or site rehabilitation;
    - restoring and enhancing the quality of native vegetation and fauna habitat in the biodiversity and rehabilitation areas through assisted natural regeneration, targeted vegetation establishment and the introduction of fauna habitat features;
    - protect, conserve, propagate, plant and/or regenerate **Silver-leaved Mountain Gum (*Eucalyptus pulverulenta*)** (including the propagation and planting of at least 1,000 individuals of this species);
    - protecting vegetation and fauna habitat outside the approved disturbance area on-site;
    - minimising the impacts on native fauna, including undertaking pre-clearance surveys;
    - establishing vegetation screening to minimise the visual impacts of the site on surrounding receivers;
    - ensuring minimal environmental consequences for threatened species, populations and habitats;
    - collecting and propagating seed;
    - controlling weeds and feral pests;
    - controlling erosion;
    - controlling access; and
    - managing bushfire risk;
  - include a program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria;
  - identify the potential risks to the successful implementation of **any land based offset**, and include a description of the contingency measures that would be implemented to mitigate these risks; and
  - include details of who would be responsible for monitoring, reviewing, and implementing the plan.

The Applicant must implement the Landscape and Rehabilitation Management Plan as approved by the Secretary.

### Conservation and Rehabilitation Bond

30. Within 6 months of the approval of the Landscape Management Plan, the Applicant **must** lodge a Conservation and Rehabilitation Bond with the Department to ensure that **any land based offset** and rehabilitation of the site are implemented in accordance with the performance and completion criteria set out in the plan and relevant conditions of this consent. The sum of the bond **must** be determined by:
- (a) calculating the **full** cost of implementing **any land based offset** over the next 3 years;
  - (b) calculating the cost of rehabilitating the site, taking into account the likely surface disturbance over the next 3 years of quarrying operations; and
  - (c) employing a suitably qualified quantity surveyor or other expert to verify the calculated costs, to the satisfaction of the Secretary.

#### Notes:

- *Alternative funding arrangements for long term management of **any land based offset**, can be used to reduce the liability of the conservation and rehabilitation bond.*
- *If capital and other expenditure required by the Landscape Management Plan is largely complete, the Secretary may waive the requirement for lodgement of a bond in respect of the remaining expenditure.*
- *If **any land based offset** and rehabilitation of the site area are completed to the satisfaction of the Secretary, then the Secretary will release the bond. If **any land based offset** and rehabilitation of the site are not completed to the satisfaction of the Secretary, then the Secretary will call in all or part of the bond, and arrange for the completion of the relevant works.*

31. Within 3 months of each Independent Environmental Audit (see condition 8 of Schedule 5), the Applicant **must** review, and if necessary revise, the sum of the Conservation and Rehabilitation Bond to the satisfaction of the Secretary. This review must consider the:
- (a) effects of inflation;
  - (b) likely cost of implementing **any land based offset** and rehabilitating the site (taking into account the likely surface disturbance over the next 3 years of the development); and
  - (c) performance of the implementation of **any land based offset** and rehabilitation of the site to date.

### VISUAL

32. The Applicant **must** implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development to the satisfaction of the Secretary.

### WASTE

33. The Applicant **must**:
- (a) manage on-site sewage treatment and disposal in accordance with the requirements of its EPL, and to the satisfaction of the EPA and Council;
  - (b) minimise the waste generated by the development;
  - (c) ensure that the waste generated by the development is appropriately stored, handled, and disposed of; and
  - (d) report on waste management and minimisation in the Annual Review, to the satisfaction of the Secretary.
34. Except as expressly permitted in an EPL, the Applicant must not receive waste at the site for storage, treatment, processing, reprocessing or disposal.

### LIQUID STORAGE

35. The Applicant **must** ensure that all tanks and similar facilities for storage of liquids (other than for water) are protected by appropriate bunding, which must exceed 110% of the stored volume of the liquid.

### DANGEROUS GOODS

36. The Applicant **must** ensure that the storage, handling, and transport of dangerous goods is done in accordance with the relevant *Australian Standards*, particularly AS1940 and AS1596, and the *Dangerous Goods Code*.

### BUSHFIRE

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

- (c) prepare a Bush Fire Emergency Evacuation Plan in accordance with the NSW Rural Fire Service document, *Guide for Developing a Bush Fire Emergency Evacuation Plan*, to the satisfaction of the Secretary.

## **SCHEDULE 4 ADDITIONAL PROCEDURES**

### **NOTIFICATION OF LANDOWNERS**

1. As soon as practicable after obtaining monitoring results showing:
  - (a) an exceedance of any relevant criteria in Schedule 3, the Applicant **must** notify the affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the development is again complying with the relevant criteria; and
  - (b) an exceedance of any relevant air quality criteria in Schedule 3, the Applicant **must** send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the affected landowners and current tenants of the land (including the tenants of land which is not privately-owned).

### **INDEPENDENT REVIEW**

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

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

- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to:
  - consult with the landowner to determine his/her concerns;
  - conduct monitoring to determine whether the development is complying with the relevant criteria in Schedule 3; and
  - if the development is not complying with these criteria, then identify measures that could be implemented to ensure compliance with the relevant criteria; and
- (b) give the Secretary and landowner a copy of the independent review.

**SCHEDULE 5**  
**ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING**

**ENVIRONMENTAL MANAGEMENT**

**Environmental Management Strategy**

1. The Applicant **must** prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:
  - (a) be submitted to the Secretary for approval within 6 months of the date of this consent;
  - (b) provide the strategic framework for environmental management of the development;
  - (c) identify the statutory approvals that apply to the development;
  - (d) **set out** the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
  - (e) **set out** the procedures **to** be implemented to:
    - keep the local community and relevant agencies informed about the operation and environmental performance of the development;
    - receive, record, handle and respond to complaints;
    - resolve any disputes that may arise during the course of the development;
    - respond to any non-compliance **and any incident**;
    - respond to emergencies; and
  - (f) include:
    - **references to** any strategies, plans and programs approved under the conditions of this consent; and
    - a clear plan depicting all the monitoring to be carried out under the conditions of this consent.

**The Applicant must implement the Environmental Management Strategy as approved by the Secretary.**

**Management Plan Requirements**

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

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

**Adaptive Management**

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

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

- (a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not reoccur;

- (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
- (c) implement remediation measures as directed by the Secretary; to the satisfaction of the Secretary.

### Annual Review

4. By the end of September each year, or other timing as may be agreed by the Secretary, the Applicant **must** review the environmental performance of the development to the satisfaction of the Secretary. This review must:
  - (a) describe the development (including any rehabilitation) that was carried out in the previous financial year, and the development that is proposed to be carried out over the current financial year;
  - (b) include a comprehensive review of the monitoring results and complaints records of the development over the previous financial year, which includes a comparison of these results against the:
    - relevant statutory requirements, limits or performance measures/criteria;
    - requirements of any plan or program required under this consent;
    - monitoring results of previous years; and
    - relevant predictions in the **documents listed in condition 2 of Schedule 2**;
  - (c) identify any non-compliance over the past financial year, and describe what actions were (or are being) taken to **rectify the non-compliance and avoid reoccurrence**;
  - (d) identify any trends in the monitoring data over the life of the development;
  - (e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
  - (f) describe what measures will be implemented over the current financial year to improve the environmental performance of the development.

### Revision of Strategies, Plans & Programs

5. Within 3 months of the submission of an:
  - (a) annual review under condition 4 above;
  - (b) incident report under condition 6 below;
  - (c) audit report under condition 8 below; and
  - (d) any modifications to this consent,
 the Applicant **must** review the strategies, plans and programs required under this consent, to the satisfaction of the Secretary. Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted for the approval of the Secretary.

*Note: The purpose of this condition is to ensure that strategies, plans and programs are regularly updated to incorporate any measures recommended to improve environmental performance of the development.*

## REPORTING

### Incident Reporting

6. The Applicant **must** immediately notify the Secretary and any other relevant agencies of any incident. Within 7 days of the date of the incident, the Applicant **must** provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.

### Regular Reporting

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

## INDEPENDENT ENVIRONMENTAL AUDIT

8. Within a year of the date of this consent, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant **must** commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:
  - (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
  - (b) include consultation with the relevant agencies;
  - (c) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant EPL or necessary water licences for the development (including any assessment, strategy, plan or program required under these approvals);
  - (d) review the adequacy of strategies, plans or programs required under the abovementioned approvals;

- (e) recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, strategy, plan or program required under the abovementioned approvals; and
- (f) be conducted and reported to the satisfaction of the Secretary.

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

- 9. Within 6 weeks of completion of this audit, or as otherwise agreed by the Secretary, the Applicant **must** submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.

#### **ACCESS TO INFORMATION**

- 10. Within 6 months of the date of this consent, the Applicant **must**:
  - (a) make the following information publicly available on its website:
    - the documents listed in condition 2 of Schedule 2;
    - current statutory approvals for the development;
    - all approved strategies, plans and programs required under the conditions of this consent;
    - 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;
    - a complaints register, updated monthly;
    - the annual reviews of the development;
    - any independent environmental audit, and the Applicant's response to the recommendations in any audit; and
    - any other matter required by the Secretary; and
  - (b) keep this information up-to-date, to the satisfaction of the Secretary.

## APPENDIX 1 DEVELOPMENT AREA

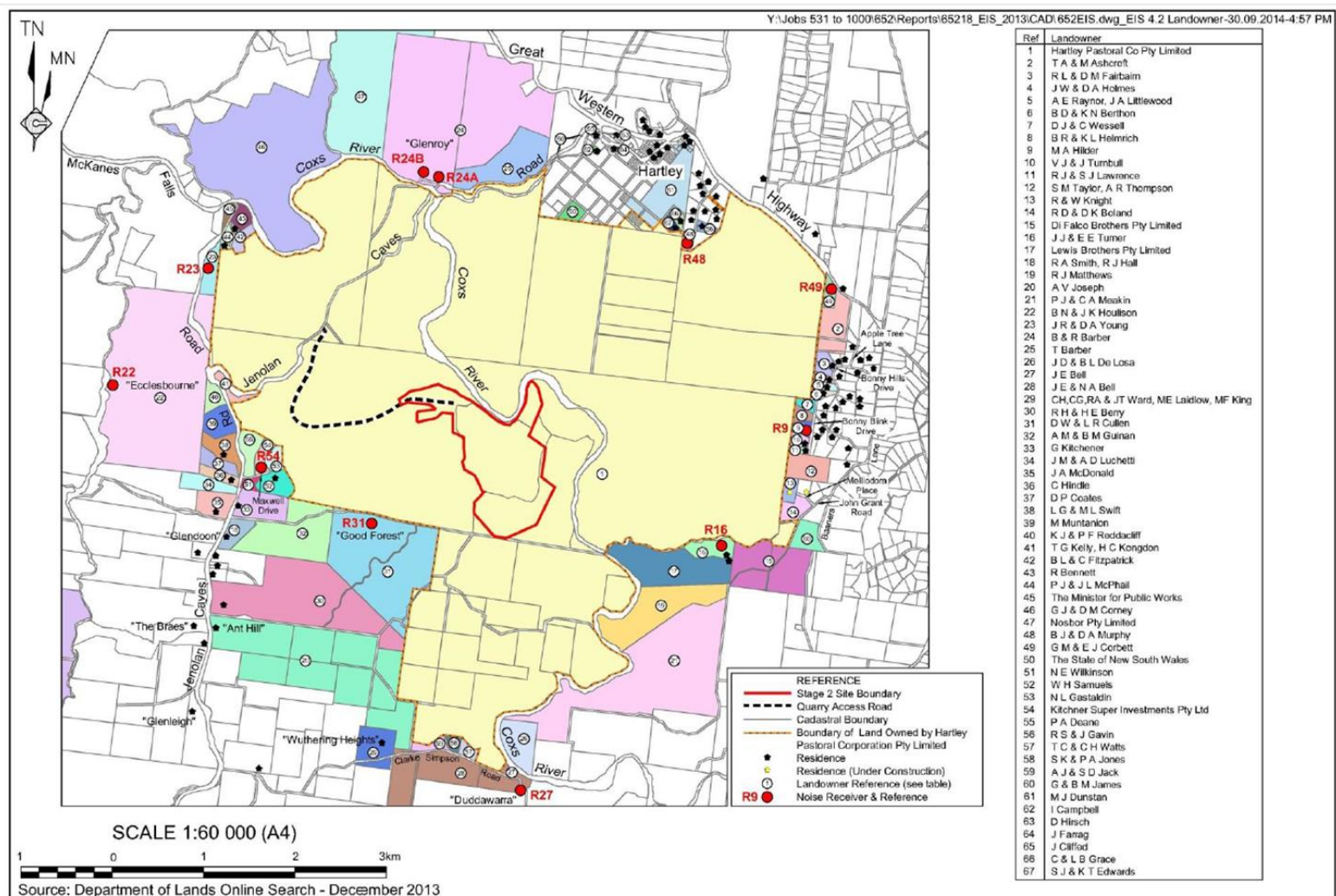
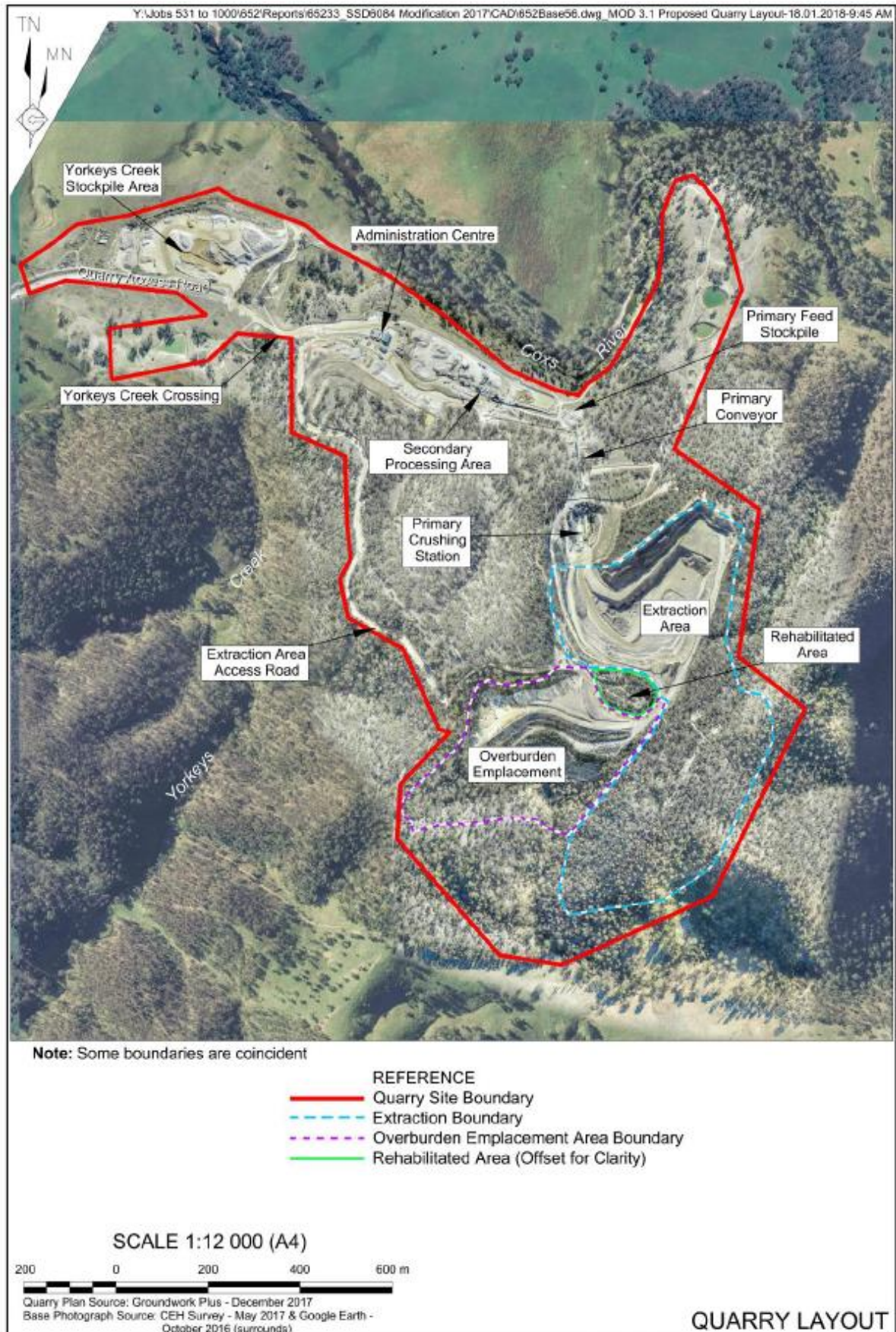


Figure 1: Development Area and nearby residences

## APPENDIX 2 DEVELOPMENT LAYOUT



**APPENDIX 3  
STATEMENT OF COMMITMENTS**

Desired Outcome	Action	Timing
<b>1. Environmental Management</b>		
Compliance with all conditional requirements in all approvals licences and leases.	1.1 Comply with commitments recorded in this table.	Continuous and as required.
	1.2 Comply with all conditional requirements included in the: <ul style="list-style-type: none"> <li>• Development Consent;</li> <li>• Environment Protection Licence;</li> <li>• Approval under the EPBC Act;</li> <li>• Water Access Licence; and</li> <li>• any other approvals.</li> </ul>	Ongoing.
<b>2. Waste Management</b>		
Minimisation of general waste creation and maximisation of recycling, wherever possible.	2.1 Place all paper and general wastes originating from the site office, together with routine maintenance consumables from the daily servicing of equipment in waste skip bins located adjacent to the site office and workshop.	Ongoing.
	2.2 Segregate waste into recyclables and non-recyclable materials for removal by a licensed contractor.	Ongoing.
Minimisation of the potential risk of environmental impact due to waste creation, storage and/or disposal.	2.3 Ensure the appropriate storage and regular collection of industrial wastes including waste oils and scrap metal.	Monthly or on an as needs basis.
<b>3. Rehabilitation and Biodiversity Offset Management</b>		
The creation of a stable final landform, available for the proposed future use(s) of nature conservation and low intensity agriculture.	3.1 Retain all soil and suitable cleared vegetation resources for use in rehabilitation of the final landform.	Ongoing.
	3.2 Include <i>Eucalyptus pulverulenta</i> in the revegetation of the Stage 2 Site.	During rehabilitation activities.
	3.3 Re-instate the pre-disturbance soil and land capability in the area used for the secondary processing area and Yorkeys Creek stockpile area.	Ongoing and prior to quarry closure.
Establish and manage a Biodiversity Offset Area.	3.4 Mark, and where appropriate fence, boundaries relevant to the Biodiversity Offset Area.	Within 6 months of approval of the Biodiversity Offset Area.
<b>4. Land Resources</b>		
Ensure sections of the Site with higher land capability are returned to agricultural use.	4.1 Provide for rehabilitation of the secondary processing area and Yorkeys Creek stockpile area back to agricultural land.	Ongoing as available.
<b>5. Traffic and Transport</b>		
	5.1 All transport contractors required to complete the Hy-Tec Chain of Responsibility: Driver Vehicle Check system.	Ongoing.

Desired Outcome	Action	Timing
Transport operations are undertaken with minimal impact on other road users and residents.	5.2 Maintain a complaints management system to appropriately respond to any complaints received through investigation and implementation of corrective treatments.	Ongoing.
	5.3 Monitor the delays for vehicles turning right onto the Great Western Highway at two-yearly intervals from 2022 onwards.	To begin in 2022.
<b>6. Visibility</b>		
Reduce the area of the Stage 2 Site exposed to surrounding vantage points.	6.1 Implement design and sequencing measures to minimise exposure of the Quarry, namely: <ul style="list-style-type: none"> <li>a) undertake the extraction area and overburden emplacement extensions in accordance with the limits noted on <b>Figure 3.2 of the SEE (Mod 1)</b> and sequence generally as presented on <b>Figure 3.3 of the SEE (Mod 1)</b>;</li> <li>b) retain the primary crusher in its current location within the Stage 1 extraction area;</li> <li>c) retain the visual screen provided by the Northern Ridge; and</li> <li>d) restrict further extension of the secondary processing area and Yorkeys Creek stockpile area.</li> </ul>	Ongoing.  Ongoing.  Ongoing.  Ongoing.
Reduce the impact of the areas of quarry disturbance visible from surrounding vantage points.	6.2 Implement management measures to limit impacts to visual amenity including the following. <ul style="list-style-type: none"> <li>a) Complete a trial of short-term visual mitigation measures for the Yorkeys Creek stockpile area.</li> <li>b) Implement short-term visual mitigation measures for the Yorkeys Creek stockpile area.</li> <li>c) Progressive revegetation or rehabilitation of terminal faces of the extraction area and overburden emplacement and profiled slopes between the administration area and the extraction area.</li> <li>d) Maintain existing visual barriers including retained northern face of extraction area and tree-lined visual barriers.</li> <li>e) Apply a bituminous film to reduce the contrast between the pale rhyolite and darker background vegetation on completed western facing slopes where necessary.</li> <li>f) Minimise dust emissions through suppression measures such as regular watering of areas.</li> <li>g) Maintain the Site in a tidy and orderly manner.</li> <li>h) Minimise the impacts of lighting by directing lights away from critical receptors (to the south and east) and minimise the 'lume' created by the lights.</li> </ul> <p>Note: If superseded by more effective measures, or no longer required due to progressive development of the Quarry Site, the above will cease to be implemented.</p>	Prior to November 2015. Prior to November 2016. Ongoing.  Ongoing.  Ongoing.  Ongoing. Ongoing.
Monitor the progressive visual changes from nearby receptors.	6.3 Monitor the sequence of visual impacts using a series of annual photographs from vantage points surrounding the Quarry Site. These photos, along with a discussion as to compliance with the impact predicted, would be included in annual reporting.	Annually.

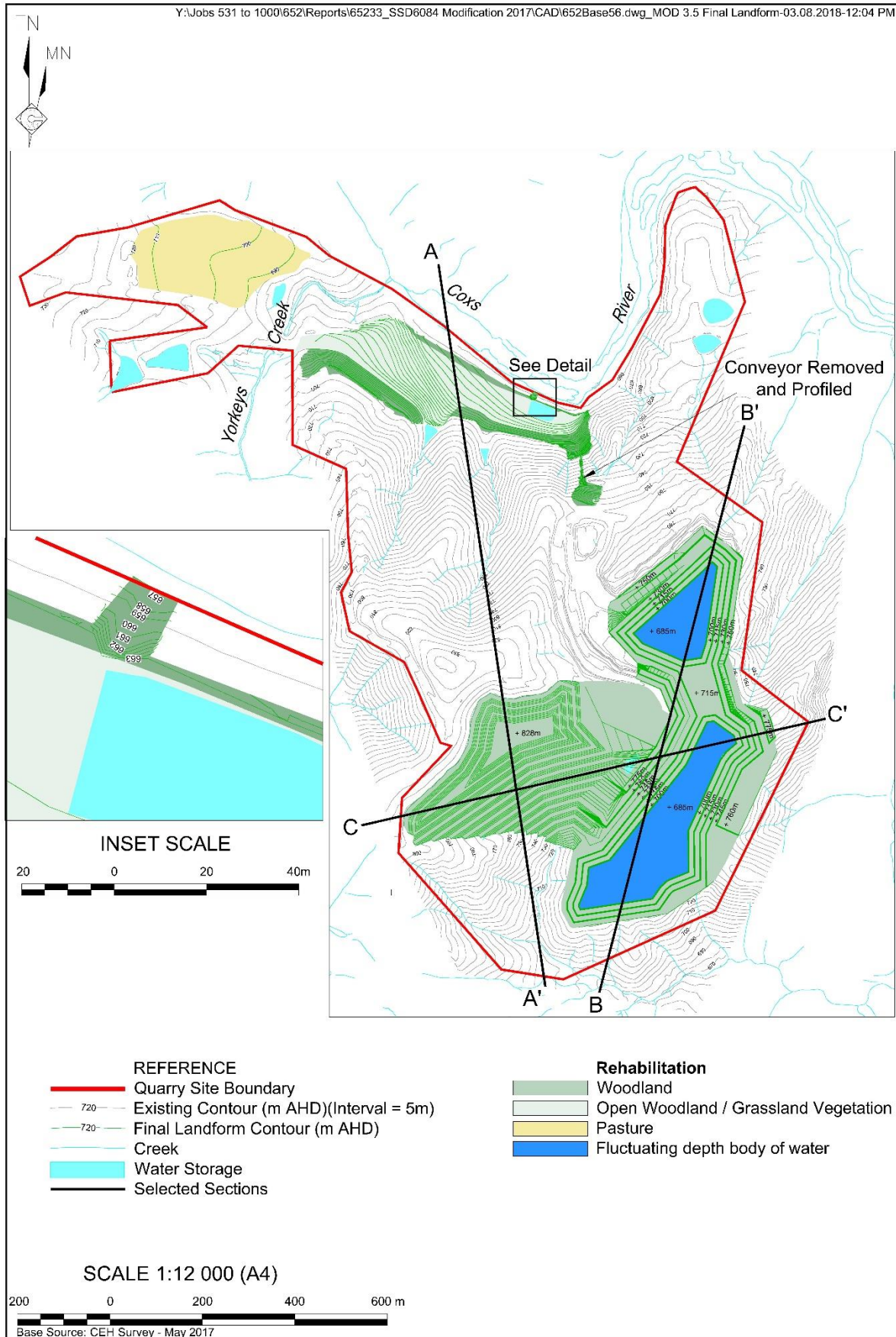
Desired Outcome	Action	Timing
<b>7. Surface Water</b>		
Appropriately document water management measures including erosion and sediment control.	7.1 Ensure any off-site discharge is monitored and reported in accordance with EPL 12323.	In the event of off-site discharge.
Capture of sediment-laden water flows from Proposal-related disturbance.	7.2 Ensure the capacity of the various sediment basins and water storages of the Site provides the required water settlement and sediment storage volumes for a 5-day 95 <sup>th</sup> percentile rainfall event.	Ongoing.
Manage the discharge of water from the various sediment basins and storage dams.	7.3 Apply procedures established in the Water Management Plan for the appropriate treatment of water that is to be discharged to natural drainage.	In the event off-site discharge is required.
Prevention of hydrocarbon contamination of water on the Site.	7.4 Securely store all hydrocarbon products within designated and bunded areas.	Ongoing.
	7.5 Refuel and maintain all equipment within designated areas of the Site, i.e. workshop area.	Ongoing.
<b>8. Groundwater</b>		
Prevention of groundwater contamination.	8.1 Securely store all hydrocarbon products within designated and bunded areas.	Ongoing.
	8.2 Refuel and maintain all equipment within designated areas of the Site, i.e. workshop area.	Ongoing.
Appropriately license any removal of groundwater.	8.3 Obtain and maintain a Water Access Licence(s) for the volume of groundwater seepage into the extraction area annually.	Prior to commencement of development consent.
	8.4 Report annual and projected groundwater extraction to the <b>Dol</b> .	Annual.
<b>9. Terrestrial Ecology</b>		
Avoid impacts on native flora and fauna.	9.1 Locate primary crushing station within extraction footprint.	Ongoing.
	9.2 Limit extent of extraction area as nominated in the development consent.	Ongoing.
Minimise or mitigate unavoidable impacts on native flora and fauna.	9.3 Operate a conveyor between the primary crushing station and secondary processing area to limit transportation of raw materials.	Ongoing.
	9.4 Maintain a 10m buffer and exclusion zone around the proposed area of disturbance.	Ongoing.
	9.5 Fence, as appropriate, sections of the Stage 2 Site not required for ongoing operations.	Ongoing as needed.
	9.6 Include the Silver-leafed mountain gum in progressive revegetation of the final landform.	Ongoing.
	9.7 Install appropriate erosion and sediment control measures prior to vegetation clearing activities (to reduce the potential for pollution of downstream riparian and aquatic habitat).	Ongoing.

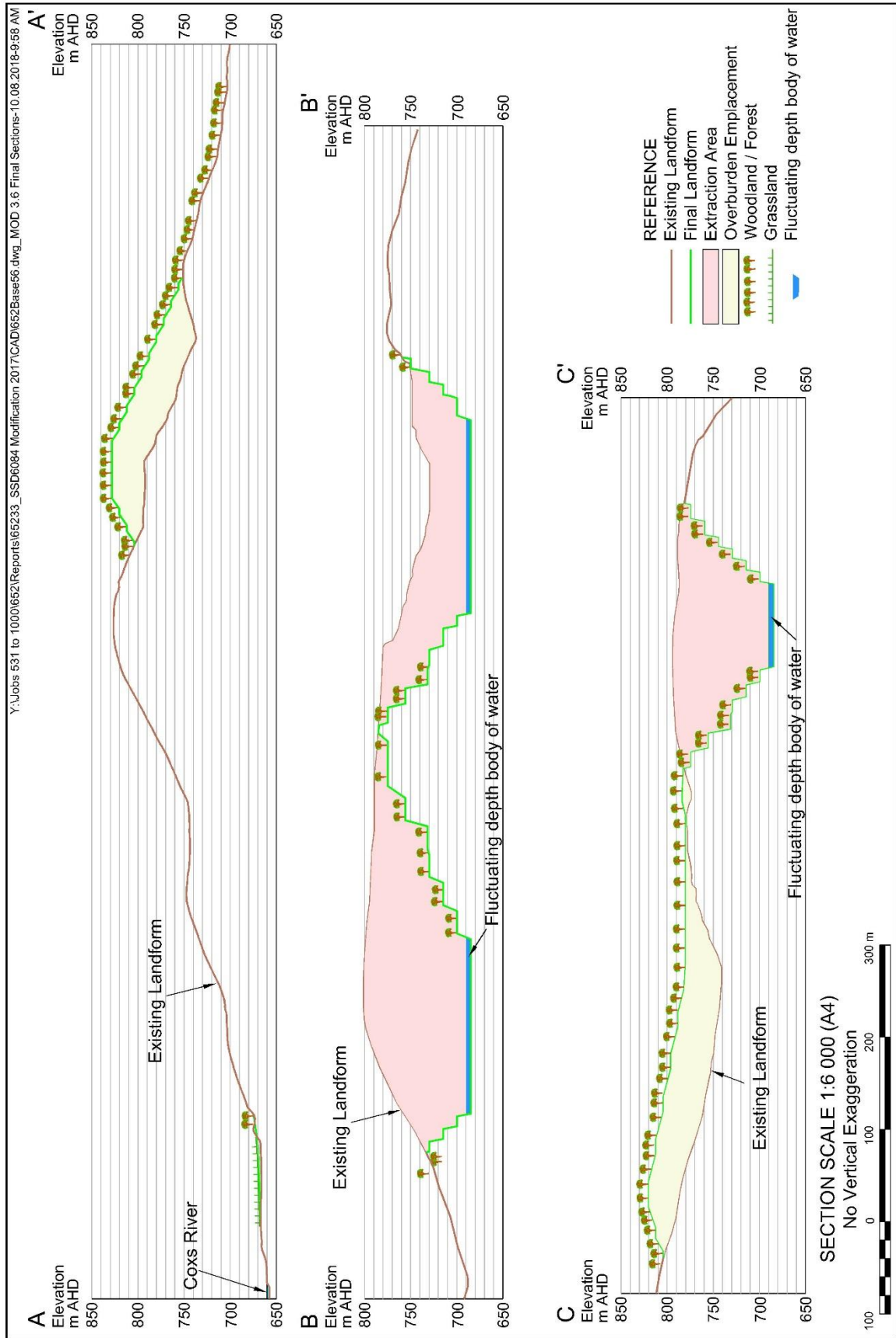
Desired Outcome	Action	Timing
	9.8 Limit vehicle speeds within the Site to limit the potential for vehicle trauma to wildlife.	Ongoing.
<b>10. Aquatic Ecology</b>		
Avoid, minimise or mitigate impacts as a result of operational activities on aquatic biota and habitats.	10.1 Design and construct any ancillary development works, e.g. access roads, in the vicinity of watercourses in accordance with the NSW DPI Policy and <i>Guidelines for Fish Habitat Conservation and Management</i>	As required.
	10.2 Minimise the occurrence of uncontrolled discharges of water by managing water in accordance with a Water Management Plan.	Ongoing.
	10.3 Maintain a bunded area for storage of fuels, oils, refuelling and appropriate maintenance of vehicles and mechanical plant.	Ongoing.
	10.4 Procedures would be implemented to manage handling of hazardous material and spill response protocols.	Ongoing.
	10.5 Install and maintain scour protection at pipe outlet points.	Ongoing.
<b>11. Noise</b>		
Noise emissions do not exceed intrusiveness criteria nor significantly impact on neighbouring landowners and/or residents.	11.1 Undertake processing operations with the current or equivalent crushing and screening plant.	Ongoing.
	11.2 Ensure all equipment on Site has sound power levels at or below that nominated for noise modelling purposes (see <i>Table 5-1</i> of Benbow, 2014a).	Ongoing.
	11.3 Limit transportation noise by ensuring: a) All trucks under control of Hy-Tec, or accredited contractors would comply at all times with RMS noise limits.	Ongoing.
	b) All truck drivers would be required to sign a Code of Conduct that includes noise limiting behaviour. c) Comply with conditional limits on truck movements. d) The internal road network would be graded, as required, to limit body noise from empty trucks	Ongoing. Ongoing. Ongoing.
	11.4 Maintenance work would be confined to standard daytime hours where practicable.	Ongoing.
<b>12. Air Quality</b>		
Site activities are undertaken without exceeding the nominated air quality criteria.	12.1 Undertake operations in accordance with an Air Quality Management Plan.	Ongoing.
Minimise greenhouse gas emissions from Site related activities.	12.2 Minimise the impacts of greenhouse gases relating to diesel consumption by: a) minimising use of haul trucks through use of an overland conveyor; b) minimising rehandling of overburden and products; c) maintaining and servicing equipment to ensure efficiency; d) minimising the quarry footprint to reduce land disturbance and travel distances; and e) optimising the design of the Processing Plant to	Ongoing. Ongoing. Ongoing. Ongoing.

Desired Outcome	Action	Timing
	f) maximise the use of gravity to move material throughout the plant and maximise energy efficient motors in major equipment.	Ongoing.
Record and monitor the local environment regarding dust impacts.	12.3 Continue to monitor dust impacts through: a) the existing deposited dust gauges; and b) on-site meteorological monitoring to record relevant parameters.	Ongoing. Ongoing.
<b>13. Indigenous Heritage</b>		
Minimise the potential for adverse Proposal-related impacts on indigenous heritage sites.	13.1 Include Indigenous heritage protocols and obligations within training and induction processes for the quarry.	Ongoing.
	13.2 Halt all works in the immediate area if cultural objects are found and contact a suitably qualified archaeologist and Aboriginal community representative.	Ongoing.
	13.3 Halt all works in the immediate area if human remains are found and contact NSW Police, Aboriginal community representative and OEH.	Ongoing.
	13.4 Maintain reasonable efforts to avoid impacts to Aboriginal cultural heritage values at all stages of the development works	Ongoing.
Maintain appropriate records of identified indigenous heritage sites.	13.5 Complete an Aboriginal Site Impact Recording Form and submit it to the Aboriginal Heritage Management Information Management System (AHIMS) Registrar, for each AHIMS site that is harmed through the proposed development.	Upon discovery of a site of heritage significance.
<b>14. Historic Heritage</b>		
Minimise the potential for adverse Proposal-related impacts on historic heritage sites.	14.1 Halt all works in the immediate area if cultural object(s) are found.	Ongoing.
	14.2 Secure the location, e.g. through the installation of protective fencing, flagging with high visibility tape.	
	14.3 Contact a suitably qualified archaeologist to determine the significance of the object(s).	
	14.4 Report discovery of relic (if advised of validity by archaeologist) in accordance within Section 146 of the <i>Heritage Act 1977</i> .	
	14.5 Do not recommence works within the secured area until advised by archaeologist.	
	14.6 Include the commitments of 14.1 to 14.4 within training and induction processes for the Site.	On induction of new personnel.
<b>15. Hazards</b>		
Manage bush fire risks on site to minimise the potential for property damage or personnel injury.	15.1 Ensure refuelling is undertaken within designated fuel bays and vehicles are turned off during refuelling.	Ongoing.
	15.2 Ensure no smoking policy is enforced in designated areas of the Site.	Ongoing.
	15.3 Ensure fire extinguishers are maintained within site vehicles and refuelling areas.	Ongoing.
	15.4 Ensure that a water cart is available to assist in extinguishing any fire ignited.	Ongoing.
	15.5 Establish and maintain an Outer Protection Area around the administration area.	Ongoing.

Desired Outcome	Action	Timing
	15.6 Maintain the access road to the extraction area such that safe passage is guaranteed should an emergency evacuation be required.	Ongoing.
	15.7 Maintain access to water contained within SD1 to SD6, as well as SB1 for use in fighting ember attack.	Ongoing.
	15.8 Complete appropriate training with site personnel in relation to fire-fighting tasks and procedures.	Ongoing.
	15.9 Ensure access is provided for Rural Fire Service and its and other emergency services' authority is recognised and assistance offered in the event of a bush fire.	Ongoing.
Reduce risks of traffic accidents on roads used by Proposal-related traffic.	15.10 Ensure route selection for delivery of quarry products follows routes designated in the EIS for entry and exit to the Site, transportation through the Blue Mountains and local deliveries of products.	Ongoing.
	15.11 Operate a Traffic Management Plan for all trucks entering and exiting Austen Quarry.	Within 6 months of receipt of approval.
	15.12 Continue to implement the Chain of Responsibility – Driver Vehicle Check system for all transportation activities undertaken at the Site.	Ongoing.
All members of the public are safe when near the Austen Quarry.	15.13 Implement measures to ensure the safety of public including visitors, contractors and employees through recruitment, induction and training programs.	Ongoing.
Measures to be put in place to, where possible, restrict unauthorised entry and reduce the risk of accident to any trespasser on the Site.	15.14 Ensure gate at entrance on Jenolan Caves Road is locked outside standard operating hours.	Ongoing.
	15.15 Use of locks on equipment when site personnel are not working on or with this equipment or plant.	Ongoing.
	15.16 Installation and maintenance of safety signage around the Site and perimeter fencing, where necessary.	Ongoing.
	15.17 Instruct all visitors entering and departing the Site to visit either the Site office or weighbridge for registration including time of arrival and departure, and an induction, if required.	Ongoing.
	15.18 Install appropriate controls to ensure the stability of the open cut, overburden emplacement and stockpiles.	Ongoing.
<b>16. Socio-economic Setting</b>		
Continue to proactively consult with members of the community affected by the Proposal.	16.1 Maintain the existing 'open door' policy for community members to approach the management staff of the Austen Quarry.	Ongoing.
	16.2 Maintain the existing community complaints and response system.	Ongoing.
Consider local sources of service and supply contractors	16.3 Seek local supply and service contractors from within the Lithgow LGA where it is practicable to do so.	Ongoing.

# **APPENDIX 4** **CONCEPTUAL FINAL LANDFORM**





## APPENDIX 5

*Deleted*

## APPENDIX 6 CONSERVATION AREA H



**APPENDIX 7**  
**PLANNING AGREEMENT**

1. The Applicant **must** pay Council \$0.025 per tonne of quarry product extracted and transported from the Stage 2 Extraction Area on a quarterly basis. Each payment **must** be:
  - (a) based on weighbridge records of the quantity of extraction material transported from the site in the relevant quarter;
  - (b) paid within 21 days of the end of the relevant quarter;
  - (c) adjusted in line with the Consumer Price Index calculated from the date of approval and applied annually from the first day of operation.