

Project Approval

Section 75J of the *Environmental Planning & Assessment Act 1979*

As delegate of the Minister for Planning and Infrastructure, I approve the project 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 project.

**Deputy Director-General
Development Assessment and Systems Performance**

Sydney

2012

SCHEDULE 1

Application Number:

08_0212

Proponent:

The Austral Brick Company Pty Limited

Approval Authority:

Minister for Planning and Infrastructure

Land:

Lot 1 DP 414246

Project:

New Berrima Shale Quarry Project

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DEFINITIONS

Annual Review	The review required by condition 4 of schedule 5
BCA	Building Code of Australia
CCC	Community Consultative Committee
Conditions of this approval	Conditions contained in schedules 1 to 5 inclusive
Council	Wingecarribee Shire Council
CPI	Australian Bureau of Statistics Consumer Price Index
Department	Department of Planning and Environment
DPI – Water	Department of Primary Industries – Water
DRE	Division of Resources and Energy within the NSW Department of Industry
EA	Environmental assessment of the project titled <i>Environmental Assessment for the New Berrima Clay/Shale Quarry Project, Specialist Consultant Studies Compendium</i> , dated December 2010, <i>Response to Submissions for the New Berrima Clay/Shale Quarry</i> , dated April 2011, and <i>Response to the Submission from the Sydney Catchment Authority for the New Berrima Clay/Shale Quarry</i> , dated May 2011, prepared by R. W. Corkery and Co Pty Limited
EA (MOD 1)	Environmental Assessment titled <i>‘Environmental Assessment to Support a Section 75W Modification of PA08_0212 for the New Berrima Clay/Shale Quarry’</i> , dated May 2015 and prepared by RW Corkery & Co Pty Limited, including the Response to Submissions documents dated September 2015 and additional information dated 30 October 2015, both prepared by RW Corkery & Co Pty Limited
EPA	NSW Environmental 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 <i>POEO Act</i>
Feasible	Feasible relates to engineering considerations and what is practical to build
Haul route	The route along which quarry product may be hauled from the site to the Bowral Brick Works as described in the EA and depicted in Figure 3 in APPENDIX A
Incident	A set of circumstances that: <ul style="list-style-type: none"> ▪ causes or threatens to cause material harm to the environment; and/or ▪ breaches or exceeds the limits or performance measures/criteria in this approval
Land	As defined in the EP&A Act, except for where the term is used in the noise and air quality conditions in schedules 3 and 4 of this approval 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 approval
m AHD	metres Australian Height Datum
Material harm to the environment	Actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial
Minister	Minister for Planning, or delegate
Negligible	Small and unimportant, such as to be not worth considering
OEH	NSW Office of Environment and Heritage
Privately-owned land	Land that is not owned by a public agency or the Proponent (or its subsidiary)
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Project	The development as described in the EA
Proponent	The Austral Brick Company Pty Limited, or any other person who seeks to carry out the development approved under this approval
Quarrying operations	Includes the removal of overburden and extraction, processing, handling, storage and transportation of extractive materials on site
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 project to a good condition, and ensure it is safe, stable and non-polluting

RMS
SCA
Secretary
Statement of commitments
Site
Truck
Visibility Barriers

Roads and Maritime Services
Sydney Catchment Authority
Secretary of the Department, or nominee
The Proponent's commitments in APPENDIX B
The land listed in Schedule 1
A vehicle with a Gross Vehicle Mass of 5 tonnes or more
The Northern, Central and Southern Visibility Barriers shown on
Figure 1 in Appendix A

SCHEDULE 2 ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

1. In addition to meeting the specific performance criteria established under this approval, the Proponent shall 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 project.

TERMS OF APPROVAL

2. The Proponent shall carry out the project generally in accordance with the:
 - (a) EA;
 - (b) EA (MOD 1);
 - (c) statement of commitments; and
 - (d) conditions of this approval.

Notes:

- The general layout of the project is shown in APPENDIX A; and
- The statement of commitments is reproduced in APPENDIX B.

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 approval shall prevail to the extent of any inconsistency.
4. The Proponent shall comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of:
 - (a) any reports, strategies, plans, programs, reviews, audits or correspondence that are submitted in accordance with this approval; and
 - (b) the implementation of any actions or measures contained in these documents.

LIMITS ON APPROVAL

Quarrying Operations

5. The Proponent may carry out quarrying operations on the site until 31 December 2045.

Note: Under this approval, the Proponent is required to rehabilitate the site and carry out additional undertakings to the satisfaction of the Secretary or DRE. Consequently, this approval 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 Extraction

6. The Proponent shall not carry out any development in the extraction area below a level of 640 m AHD.

Note: This condition does not apply to the construction of any bores approved by DPI - Water or pollution and sediment control structures described in the EA or EA (MOD 1).

7. The Proponent shall not extract more than 150,000 tonnes of extractive materials from the site in any calendar year.

Extractive Material Transport

8. The Proponent shall not transport more than:
 - (a) 150,000 tonnes of product from the site in any calendar year;
 - (b) 68 laden trucks from the site in a day; and
 - (c) 8 laden trucks from the site in an hour.
9. The Proponent may only transport extractive material on the haul route.

STRUCTURAL ADEQUACY

10. The Proponent shall 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 Proponent 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 project.*

DEMOLITION

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

PROTECTION OF PUBLIC INFRASTRUCTURE

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

OPERATION OF PLANT AND EQUIPMENT

13. The Proponent shall ensure that all 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.

STAGED SUBMISSION OF ANY STRATEGY, PLAN OR PROGRAM

14. With the approval of the [Secretary](#), the Proponent may submit any strategy, plan or program required by this approval on a progressive basis.

Notes:

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

PRODUCTION DATA

15. The Proponent shall:
- (a) provide annual quarry production data to DRE 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).

**SCHEDULE 3
ENVIRONMENTAL PERFORMANCE CONDITIONS**

IDENTIFICATION OF BOUNDARIES

1. Prior to carrying out any development on site under this approval, the Proponent shall:
 - (a) engage a registered surveyor to mark out the boundaries of the approved limits of extraction; and
 - (b) submit a survey plan of these boundaries to the [Secretary](#).
2. During the project, the Proponent shall ensure that these boundaries are clearly marked at all times in a permanent manner that allows operating staff and inspecting officers to clearly identify the limits of extraction.

NOISE

Bund Construction

3. The Proponent shall construct the [Visibility Barriers](#) prior to carrying out any quarrying operations on site under this approval to the satisfaction of the [Secretary](#). This condition does not prohibit the winning of extractive material on site to be used in the construction of the [Visibility Barriers](#).

Note: [Visibility Barriers](#) are shown on the project layout plans in Figure 1 of APPENDIX A.

Visibility Barrier and Stockpile Dimensions

- 3A. The [Visibility Barriers](#) and surplus overburden stockpile (refer Figure 1 Appendix A) must be constructed to meet the dimensions specified in Table 1A, unless the [Secretary](#) agrees otherwise.

Table 1A - Visibility Barriers and Surplus Overburden Stockpile Dimensions

Structure	Height	Base Width (m)	Length (m)	Surface Area (ha)
Central Barrier (<i>minimum</i>)	675 (m AHD)	30 - 45	420	1.5
Northern Barrier (<i>minimum</i>)	672 (m AHD)	35 - 50	160	0.7
Southern Barrier (<i>minimum</i>)	4 metres above the natural land surface	20	350	0.7
Overburden Stockpile (<i>maximum</i>)	683 (m AHD)	-	-	-

Noise Criteria – Bund Construction

4. During the construction of the [Visibility Barriers](#), the Proponent shall ensure that the noise generated on site does not exceed the criteria in Table 1.

Table 1- Noise Criteria - Bund Construction

Receiver	L_{Aeq} (15 min) dB(A)
R2	43
All other receivers	38

Notes:

- *Receiver locations are shown in Figure 4 of APPENDIX A.*
- *Noise generated by the project is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.*

Noise Criteria

5. Except for the period when the [Visibility Barriers](#) are being constructed, the Proponent shall ensure that the noise generated by the project does not exceed 38dB(a) L_{Aeq} (15min) at any residence on privately-owned land.

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

Hours of Operation

6. The Proponent shall comply with the operating hours in Table 2.

Table 2 - Operating Hours

Day	Transport	Quarrying Operations	Construction
Monday – Friday	7 am to 4 pm	7 am to 5 pm	7 am – 5 pm
Saturday	8 am to 1 pm	8 am to 1 pm	8 am – 1 pm
Sundays and Public Holidays	None	None	None

Note: Maintenance activities may occur at any time provided they are inaudible at privately-owned residences.

Operating Conditions

7. The Proponent shall:
- implement best practice noise management to minimise the construction, operational, low frequency and traffic noise of the project;
 - minimise the noise impacts of the project during meteorological conditions when the noise limits in this approval do not apply;
 - maintain the effectiveness of any noise suppression equipment on plant at all times and ensure defective plant is not used operationally until fully repaired; and
 - regularly assess noise monitoring data and relocate, modify, and/or stop operations on site to ensure compliance with the relevant conditions of this approval, to the satisfaction of the [Secretary](#).

Noise Management Plan

8. The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the [Secretary](#). This plan must:
- be prepared in consultation with the EPA, and submitted to the [Secretary](#) for approval prior to the construction of the [Visibility Barriers](#);
 - describe the measures that would be implemented to ensure:
 - best management practice is being employed on site;
 - the noise impacts of the project are minimised during meteorological conditions when the noise limits in this approval do not apply; and
 - compliance with the relevant conditions of this approval;
 - describe the proposed noise management system in detail; and
 - include a monitoring program that:
 - that is capable of evaluating the performance of the project;
 - includes a protocol for determining exceedances of the relevant conditions in this approval; and
 - evaluates and reports on the effectiveness of the noise management system on site.

AIR QUALITY

Air Quality Criteria

9. The Proponent shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated on site do not exceed the criteria in Table 3, Table 4 and Table 5 at any residence on privately-owned land, or on more than 25% of any privately-owned land.

Table 3 - Long-Term Impact Assessment Criteria for Particulate Matter

Pollutant	Averaging period	^d Criterion
Total suspended particulates (TSP)	Annual	^a 90 µg/m ³
Particulate matter < 10 µm (PM ₁₀)	Annual	^a 30 µg/m ³

Table 4 - Short Term Impact Assessment Criteria for Particulate Matter

Pollutant	Averaging period	^d Criterion
Particulate matter < 10 µm (PM ₁₀)	24 hour	^a 50 µg/m ³

Table 5 - Long-Term Impact Assessment Criteria for Deposited Dust

Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level
^c Deposited dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month

Notes to Tables:

- ^a Total impact (ie incremental increase in concentrations due to the project plus background concentrations due to all other sources);
- ^b Incremental impact (ie incremental increase in concentrations due to the project on its own);
- ^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, illegal activities or any other activity agreed by the [Secretary](#) in consultation with EPA.

Operating Conditions

10. The Proponent shall:
- implement best management practice to minimise the dust emissions of the project;
 - regularly assess air quality monitoring data and relocate, modify, and/or stop operations on site to ensure compliance with the relevant conditions of this approval,
 - minimise the air quality impacts of the project during adverse meteorological conditions and extraordinary events (see Note d under Table 5 above);
 - minimise any visible off-site air pollution; and
 - minimise the surface disturbance of the site generated by the project.

Air Quality Management Plan

11. The Proponent shall prepare and implement an Air Quality Management Plan for the project to the satisfaction of the [Secretary](#). This plan must:
- be prepared in consultation with the EPA, and submitted to the [Secretary](#) for approval prior to the construction of the [Visibility Barriers](#);
 - describes the measures that would be implemented to ensure:
 - best management practice is employed;
 - the air quality impacts of the project are minimised during adverse meteorological conditions and extraordinary events; and
 - compliance with the relevant conditions of this approval;
 - describes the proposed air quality management system; and
 - includes an air quality monitoring program that:
 - is capable of evaluating the performance of the project;
 - includes a protocol for determining any exceedances of the relevant conditions of approval;
 - adequately supports the air quality management system; and
 - evaluates and reports of the adequacy of the air quality management system.

METEOROLOGICAL MONITORING

12. During the life of the project, the Proponent shall ensure that there is a suitable meteorological station 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.

SOIL AND WATER

Note: The Proponent is required to obtain the necessary water licences for the project under the Water Act 1912 and/or Water Management Act 2000.

Riparian Buffer Distance

13. The Proponent shall maintain a minimum buffer distance of **515 metres** (measured from the top of bank) between extraction area and Wingecarribee River.

Surface Water Discharges

14. The Proponent shall ensure that all surface water discharges from the site comply with section 120 of the POEO Act or, if an EPL has been issued regulating water discharges from the site, the discharge limits (both volume and quality) set for the project in the EPL.

Surface Water Supply

15. The Proponent shall ensure it has sufficient water for all stages of the project, and if necessary, adjust the scale of quarrying operations on site to match its available supply.

On-Site Sewage Management

16. The Proponent shall manage on-site sewage to the satisfaction of Council and EPA.

Storage of Chemicals & Petroleum Products

17. The Proponent shall ensure all chemicals and/or petroleum products on site are stored in accordance with Australian Standard AS1940-2004, *The Storage and Handling of Flammable and Combustible Liquids*, and in appropriately bunded areas with impervious flooring and of sufficient capacity to contain 110% of the largest container stored within the bund. The flooring and bund(s) shall be designed in accordance with:
 - the requirements of relevant Australian Standards; and
 - DECC's *Storing and Handling Liquids: Environmental Protection – Participants Manual*.

Water Management Plan

18. The Proponent shall prepare and implement a Water Management Plan for the project to the satisfaction of the **Secretary**. This plan must be prepared in consultation with the EPA, **WaterNSW** and **DPI – Water** by suitably qualified and experienced persons whose appointment has been approved by the **Secretary**, and be submitted to the **Secretary** for approval prior to the construction the **Visibility Barriers** on site.

In addition to the standard requirements for management plans (see condition 3 of schedule 5), this plan must include a:

- (a) Site Water Balance that:
 - includes details of:
 - sources and security of water supply, including contingency planning for future reporting periods;
 - water use on site;
 - water management on site;
 - reporting procedures, including comparisons of the site water balance each calendar year; and
 - describes the measures that would be implemented to minimise clean water use on site;
- (b) Surface Water Management Plan, that includes:
 - detailed baseline data on surface water flows and quality in the water-bodies that could be affected by the project;
 - a detailed description of the surface water management system on site, including the:
 - clean water diversion systems;
 - erosion and sediment controls; and
 - water storages;
 - a plan for identifying, extracting, handling, and the long-term storage of potentially acid forming material on site;
 - detailed plans, including design objectives and performance criteria, for:
 - the water storage dams;
 - reinstatement of drainage lines on the rehabilitated areas of the site;
 - control of water pollution from rehabilitated areas of the site;
 - performance criteria for the following, including trigger levels for investigating any potentially adverse impacts, for the following:

- the water management system;
 - surface water quality of local water ways; and
 - ecosystem health of local water ways;
 - performance criteria for surface water quality attributes relevant to water quality impacts on biological diversity and aquatic ecological integrity, including salinity, heavy metals, sediment load, pH, hardness and biological oxygen demand;
 - a program to monitor
 - the effectiveness of the water management system;
 - surface water flows and quality in local water ways; and
 - ecosystem health of local water ways;
 - a plan to respond to any exceedances of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the project; and
- (c) Groundwater Management Plan, which includes:
- detailed baseline data on groundwater levels, yield and quality in the area, that could be affected by the project;
 - groundwater assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts;
 - a program to monitor:
 - groundwater inflows to the quarrying operations;
 - the impacts of the project on:
 - local alluvial aquifers;
 - any groundwater bores on privately-owned land that could be affected by the project;
 - the seepage/leachate from water storages or backfilled voids on site; and
 - groundwater dependent ecosystems;
 - a plan to respond to any exceedances of the groundwater assessment criteria;

Groundwater Monitoring

18A. The Proponent shall install 3 pairs of nested piezometers prior to the quarry pit floor reaching 660 m AHD, in consultation with DPI – Water and to the satisfaction of the Secretary.

VISUAL

Establishment of Effective Vegetative Screens

19. The Proponent shall vegetate (with grasses, shrubs and trees) the **Visibility Barriers** as soon as practicable after the completion of the construction of the bunds, to the satisfaction of the Secretary.

19A. Prior to transporting any product from the site, the Proponent shall establish a 0.68 ha tree screen adjacent to the Northern Visibility Barrier, as shown on Figure 1 in Appendix A. The screen shall include native plant species from the *Southern Highlands Shale Woodland Endangered Ecological Community*.

Advertising

20. The Proponent shall not erect or display any advertising structure(s) or signs on the site without the written approval of the Secretary.

Note: This condition does not require approval for any business identification, traffic management, and/or safety or environmental signs.

Operating Conditions

21. The Proponent shall
- (a) implement all reasonable and feasible measures to minimise the visual impacts and any off-site lighting impacts of the project; and
 - (b) maintain and improve the effectiveness of the bunds and vegetative screens over the life of the project.
22. Deleted.

TRANSPORT

Road upgrades (local roads)

23. Prior to transporting any extractive material from the site, the Proponent shall:

- (a) construct the junction of the site access road with Berrima Road to Basic Right Turn and Basic Left Turn Treatment standard for a 19m semi-trailer;
- (b) construct a raised concrete median in Berrima Road on the south bound approach to its junction with MR372;
- (c) provide appropriate traffic signage and line-marking, in accordance with AUSTRROADS *Guide to Road Design* and to the satisfaction of the Council.

Road upgrades (main roads)

24. Prior to transporting any extractive material from the site, the Proponent shall:
- (a) construct the Berrima Road/Taylor Avenue junction to give priority to MR372 incorporating Rural BA Left and Right turn treatments for a 19m semi-trailer;
 - (b) provide appropriate traffic signage and line-marking, in accordance with AUSTRROADS *Guide to Road Design* and to the satisfaction of the Council and the RMS.

If the Council undertakes or proposes to undertake a superior treatment of this intersection upgrade, then this condition may be fulfilled by the Proponent paying a monetary contribution to the Council equivalent to the cost of the upgrades specified under this condition, as assessed by a qualified independent valuer or quantity surveyor appointed by the Secretary. The costs of the valuation are to be paid by the Proponent.

Any dispute over the interpretation of this condition or a satisfactory valuation can be referred by any party to the Secretary for resolution. The decision of the Secretary in any such dispute shall be final.

Transport Route

25. The Proponent shall ensure heavy vehicles associated with the Project travel along haulage routes specified in the EA and the haulage route diagram in Figure 3 of APPENDIX A to this approval to the satisfaction of the Secretary.

Road Maintenance Contribution

26. The Proponent shall pay to Council an annual contribution of 91.2 cents per cubic metre of extractive material exported from the site (indexed annually to Consumer Price Index) for the life of the Project. The volume of extractive material exported from the site must be established by way of a volumetric survey of the site carried out by a registered surveyor. Each annual volumetric survey must be provided to Council to allow verification of the contribution amount. The first annual payment falls due 12 months from the commencement of operation.

Note: The Proponent must provide a base-line survey of the site to the Council prior to the commencement of operations.

Parking

27. The Proponent shall provide sufficient parking for all project-related traffic, in accordance with Council's parking code.

Operating Conditions

28. The Proponent shall ensure that:
- (a) vehicles on site do not exceed a speed limit of 30 kilometres per hour;
 - (b) all loaded vehicles entering or leaving the site have their loads covered; and
 - (c) all loaded vehicles leaving the site are cleaned of sand and other materials before they leave the site so they do not track dirt onto the public roads.

Transport Management Plan

29. The Proponent shall prepare and implement a Transport Management Plan for the project to the Secretary. This plan must:
- (a) be submitted prepared in consultation with the RMS and Council, and submitted to the Secretary for approval prior to carrying out any quarrying operations on site;
 - (b) include a drivers' code of conduct for the project;
 - (c) describe the measures that would be implemented to ensure:

- establishing a CB radio communication protocol with the local bus companies, to improve driver awareness of quarry truck and school bus locations along haulage routes;
 - the drivers of project-related vehicles comply with the drivers' code of conduct for the project; and
 - compliance with the relevant conditions of this approval; and
- (d) include a program to monitor the effectiveness of the implementation of these measures.
30. Should the Traffic Management Plan (TMP) for the proposed works require a reduction of the speed limit on Berrima Road and/or Taylor Avenue, a Speed Zone Authorisation shall be obtained from RMS Traffic Operations Unit (TOU) prior to commencing work within the road reserve.

WASTE

31. The Proponent shall:
- (a) monitor the amount of waste generated by the project;
 - (b) investigate ways to minimise waste generated by the project;
 - (c) implement reasonable and feasible measures to minimise waste generated by the project;
 - (d) ensure that all waste generated by the project is lawfully disposed of to an appropriate facility; and
 - (e) report on waste management and minimisation in the annual review, to the satisfaction of the [Secretary](#).

ABORIGINAL HERITAGE

Aboriginal Heritage Management Plan

32. The Proponent shall prepare and implement an Aboriginal Heritage Management Plan for the project to the satisfaction of the [Secretary](#). This plan must:
- (a) be prepared in consultation with OEH and the relevant Local Aboriginal Land Council;
 - (b) be submitted to the [Secretary](#) for approval prior to any ground disturbance; and
 - (c) include a:
 - protocol for the engagement of an Aboriginal Site Officer for any necessary ground disturbance monitoring;
 - program for the recording, notifying, salvage and surface collection of any Aboriginal objects/sites that may be encountered within the project area;
 - description of the measures that would be implemented if any Aboriginal skeletal remains are discovered during the project; and
 - protocol for the ongoing consultation and involvement of the Aboriginal community in the conservation and management of the Aboriginal heritage of the objects/sites.

LANDSCAPE

Rehabilitation Objectives

33. The Proponent shall rehabilitate the site to the satisfaction of the [DRE](#). This rehabilitation must be consistent with the proposed rehabilitation strategy in the [EA \(MOD 1\)](#), and comply with the objectives in Table 6

Table 6 - Rehabilitation Objectives

Feature	Objective
Site (as a whole)	Safe, stable & non-polluting
Surface Infrastructure	To be decommissioned and removed, unless the DRE agrees otherwise
Quarry Walls	Final slopes of 1:3 (vertical : horizontal), except the southwestern wall of Bench 1 Vegetated with native endemic flora species to be consistent with surrounding landscape and to minimise visual impacts
Quarry Pit Floor	Suitable for grazing or other agricultural activities
Other Land affected by the project	Restore ecosystem function, including maintaining or establishing self-sustaining eco-systems comprised of: <ul style="list-style-type: none"> • local native species: and • a landform consistent with the surrounding environment

Progressive Rehabilitation

34. The Proponent shall 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 rehabilitation strategies shall be employed when areas prone to dust generation cannot yet be permanently rehabilitated.

Landscape Management Plan

35. The Proponent shall prepare and implement a Landscape Management Plan for the project to the satisfaction of the [Secretary](#). This plan must:
- (a) be prepared in consultation with OEH and Council, and submitted to the [Secretary](#) for approval prior to carrying out any development on site under this approval;
 - (b) describe the short, medium and long term measures that would be implemented to:
 - manage the remnant vegetation and habitat on site;
 - rehabilitate the riparian land adjacent to the Wingecarribee River on site; and
 - ensure compliance with the rehabilitation objectives and progressive rehabilitation obligations in this approval;
 - (c) include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, including triggering remedial action (if necessary);
 - (d) include a detailed description of the measures that would be implemented over the next 3 years, including the procedures to be implemented for:
 - ensuring compliance with the rehabilitation objectives and progressive rehabilitation obligations in this approval;
 - enhancing the quality of existing vegetation and fauna habitat;
 - restoring native endemic vegetation and fauna habitat within the biodiversity areas and rehabilitation area;
 - maximising the salvage of resources within the approved disturbance area – including vegetative and soil resources – for beneficial reuse in the enhancement of the biodiversity areas or rehabilitation area;
 - collecting and propagating seed;
 - minimising the impacts on fauna on site, including undertaking pre-clearance surveys;
 - controlling weeds and feral pests;
 - controlling erosion;
 - managing grazing and agriculture on site;
 - controlling access; and
 - bushfire management;
 - (e) a program to monitor the effectiveness of these measures, and progress against the performance and completion criteria;
 - (f) identify the potential risks to successful implementation of the rehabilitation of the site, and include a description of the contingency measures that would be implemented to mitigate against these risks; and
 - (g) include details of who would be responsible for monitoring, reviewing, and implementing the plan.
36. [Deleted.](#)
37. [Deleted.](#)

SCHEDULE 4 ADDITIONAL PROCEDURES

NOTIFICATION OF LANDOWNERS

1. As soon as practicable after obtaining monitoring results showing an:
 - (a) exceedance of any relevant criteria in schedule 3, the Proponent shall notify affected landowners in writing of the exceedance, and provide regular monitoring results to each of affected landowner until the project is again complying with the relevant criteria; and
 - (b) an exceedance of the relevant air quality criteria in schedule 3, the proponent shall send a copy of the NSW Health fact sheet entitled “*Mine Dust and You*” (as may be updated from time to time) to the affected landowners and/or existing tenants of the land.

INDEPENDENT REVIEW

2. If an owner of privately-owned land considers the project 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 project 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 Proponent shall:

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

If the independent review determines that the project is not complying with the relevant criteria in schedule 3, then the Proponent shall:

- (a) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent expert, and conduct further monitoring until the project complies with the relevant criteria; or
- (b) secure a written agreement with the landowner to allow exceedances of the relevant criteria,
to the satisfaction of the [Secretary](#).

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

ENVIRONMENTAL MANAGEMENT

Environmental Management Strategy

1. The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the [Secretary](#). The strategy must:
 - (a) be submitted for approval to the [Secretary](#) prior to the commencement of construction activities;
 - (b) provide the strategic framework for environmental management of the project;
 - (c) identify the statutory approvals that apply to the project;
 - (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project;
 - (e) describe the procedures that would be implemented to:
 - keep the local community and relevant agencies informed about the operation and environmental performance of the project;
 - receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise during the course of the project;
 - respond to any non-compliance; and
 - respond to emergencies; and
 - (f) include:
 - copies of the various strategies, plans and programs that are required under the conditions of this approval once they have been approved; and
 - a clear plan depicting all the monitoring to be carried out in relation to the project.

Adaptive Management

2. The Proponent shall assess and manage project-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 approval 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 Proponent shall, at the earliest opportunity:

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

Management Plan Requirements

3. The Proponent shall ensure that the Management Plans required under this approval are prepared in accordance with any relevant guidelines, and include:
 - (a) detailed baseline data;
 - (b) a description of:
 - the relevant statutory requirements (including any relevant 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 project 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 project; and
 - effectiveness of any management measures (see (c) above);
 - (e) a contingency plan to manage any unpredicted impacts and their consequences;
 - (f) a program to investigate and implement ways to improve the environmental performance of the project over time;
 - (g) a protocol for managing and reporting any:
 - incidents;

- complaints;
 - non-compliances with statutory requirements; and
 - exceedances of the impact assessment criteria and/or performance criteria; and
- (h) a protocol for periodic review of the plan.

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

Annual Review

4. By the end of **December 2016**, and annually thereafter, the Proponent shall review the environmental performance of the project to the satisfaction of the **Secretary**. This review must:
- (a) describe the development (including rehabilitation) that were carried out in the previous calendar year, and the works that are proposed to be carried out over the next year;
 - (b) include a comprehensive review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against:
 - the relevant statutory requirements, limits or performance measures/criteria;
 - the monitoring results of previous years; and
 - the relevant predictions in the EA;
 - (c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
 - (d) identify any trends in the monitoring data over the life of the project;
 - (e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and
 - (f) describe what measures will be implemented over the next year to improve the environmental performance of the project.

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 7 below;
 - (c) audit report under condition 9 below; and
 - (d) any modifications to this approval,
- the Proponent shall review, and if necessary revise, the strategies, plans, and programs required under this approval to the satisfaction of the **Secretary**.

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

Community Consultative Committee

6. The Proponent shall establish and operate a CCC for the project to the satisfaction of the **Secretary**. This CCC must be operated in general accordance with the *Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects* (Department of Planning, 2007, or its latest version), and be operating prior to any development being carried out on site under this approval.

Notes:

- *The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Proponent complies with this approval.*
- *In accordance with the guideline, the Committee should comprise an independent chair and appropriate representation from the Proponent, Council, recognised environmental groups and the local community.*

REPORTING

Incident Reporting

7. The Proponent shall notify, at the earliest opportunity, the **Secretary** and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment. For any other incident associated with the project, the Proponent shall notify the **Secretary** and any other relevant agencies as soon as practicable after the Proponent becomes aware of the incident. Within 7 days of the date of the incident, the Proponent shall provide the **Secretary** and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.

Regular Reporting

8. The Proponent shall provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval.

INDEPENDENT ENVIRONMENTAL AUDIT

9. Within a year of the commencement of development on site under this approval, and every 3 years thereafter, unless the [Secretary](#) directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:
 - (a) be conducted by 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 project and whether it is complying with the relevant requirements in this approval and any relevant EPL and/or Water License (including any assessment, plan or program required under these approvals);
 - (d) review the adequacy of any approved strategy, plan or program required under the these approvals; and
 - (e) recommend measures or actions to improve the environmental performance of the project, and/or any assessment, plan or program required under these approvals.

Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the [Secretary](#).

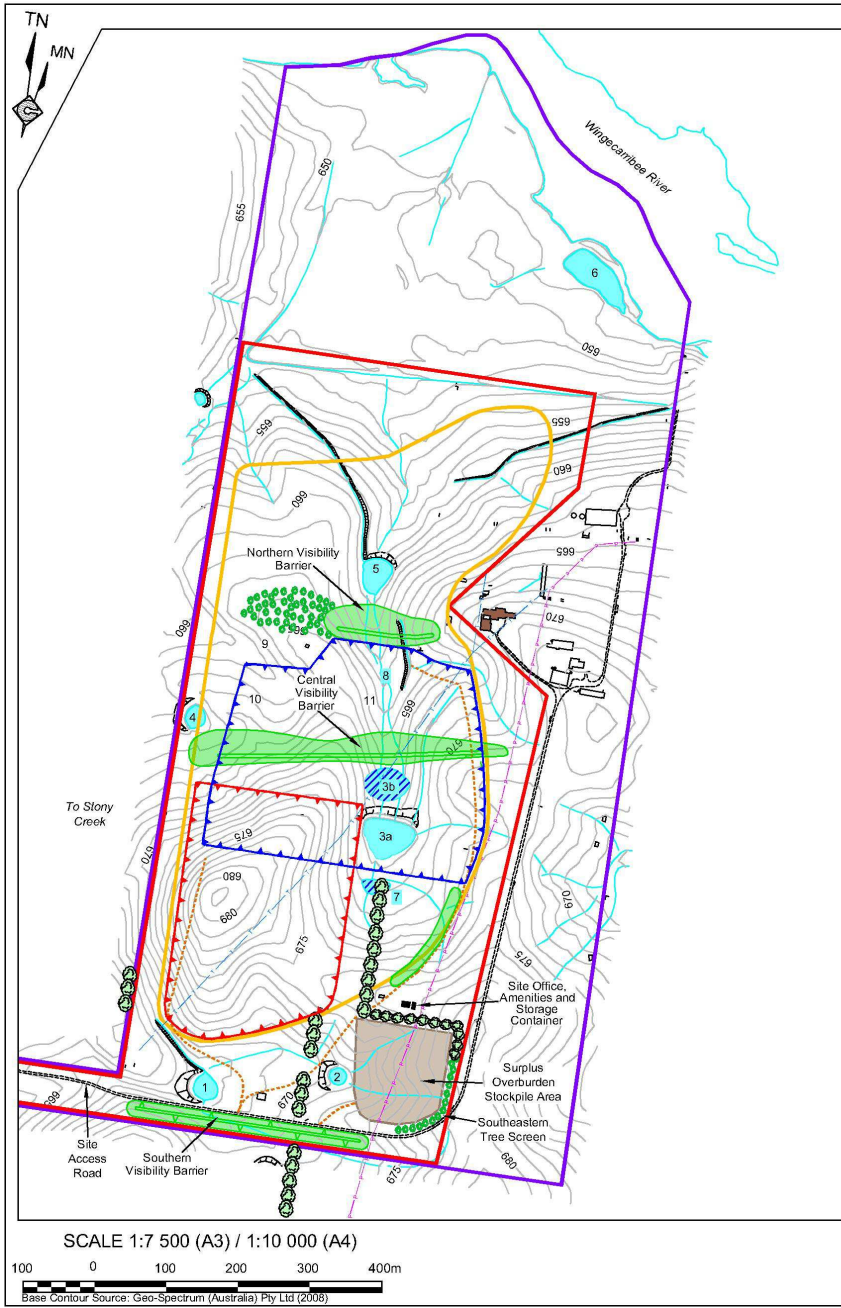
10. Within 3 months of commissioning this audit, or as otherwise agreed by the [Secretary](#), the Proponent shall submit a copy of the audit report to the [Secretary](#), together with its response to any recommendations contained in the audit report.

ACCESS TO INFORMATION

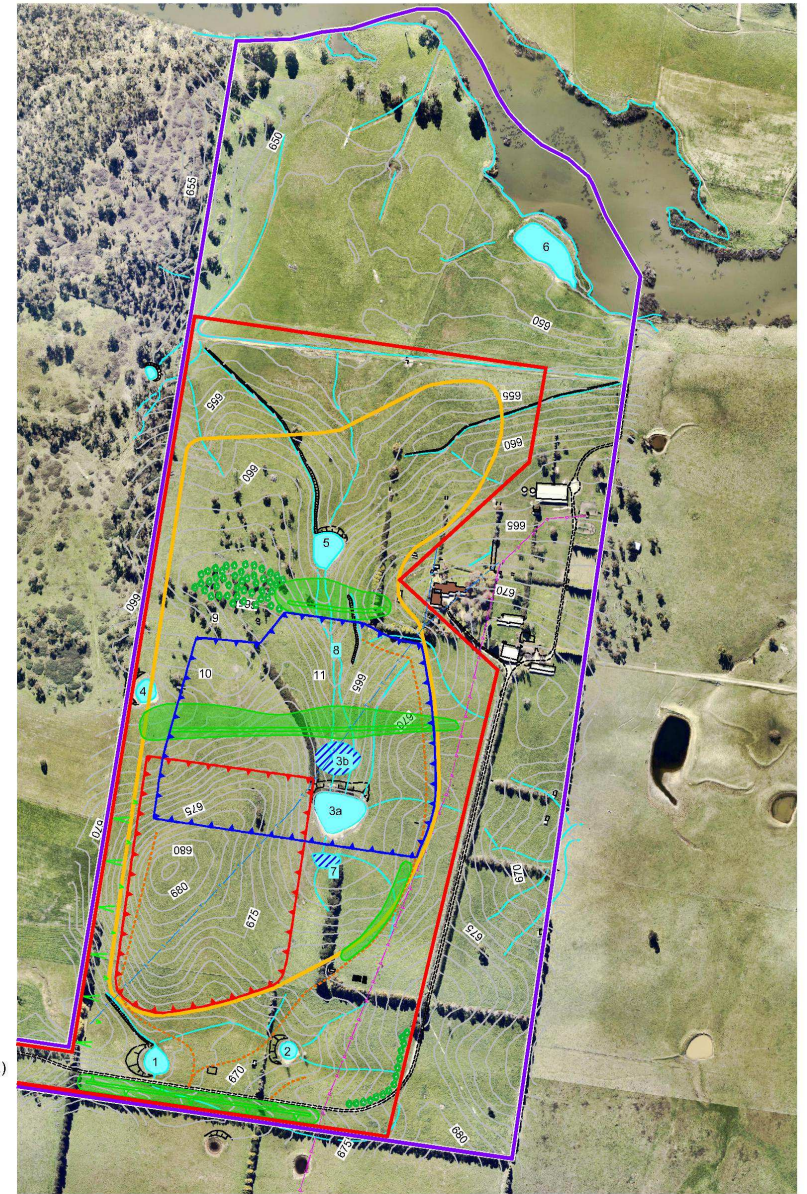
11. Following the commencement of development on site under this approval, the Proponent shall:
 - (a) make the following information publicly available on its website:
 - the EA;
 - current statutory approvals for the project;
 - approved strategies, plans or programs;
 - a summary of the monitoring results of the project, which have been reported in accordance with the various plans and programs approved under the conditions of this approval;
 - a complaints register, updated on a quarterly basis;
 - minutes of CCC meetings;
 - copies of any annual reviews (over the last 5 years);
 - any independent environmental audit, and the Proponent'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 A: PROJECT PLANS

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- REFERENCE
- Property Boundary
- Project Site Boundary
- Approved Limit of Extraction
- Limit of Extraction
- Clay/Shale Resource Boundary
- Contour (m AHD)(Interval = 1m)
- Watercourse / Drainage Line
- Existing Dam (and Reference No.)
- Proposed Dam (and Reference No.)
- Unsealed Road / Track
- Proposed Access Road
- Residence / Building
- Existing Power Line
- Existing Telephone Line
- Existing Trees
- Proposed Visibility Barrier
- Proposed Tree Screen



Base Photograph Source: Neamap - Date of Photography: 22 May 2014

Figure 2.2 - Amended SITE LAYOUT

Figure 1 - Project Layout

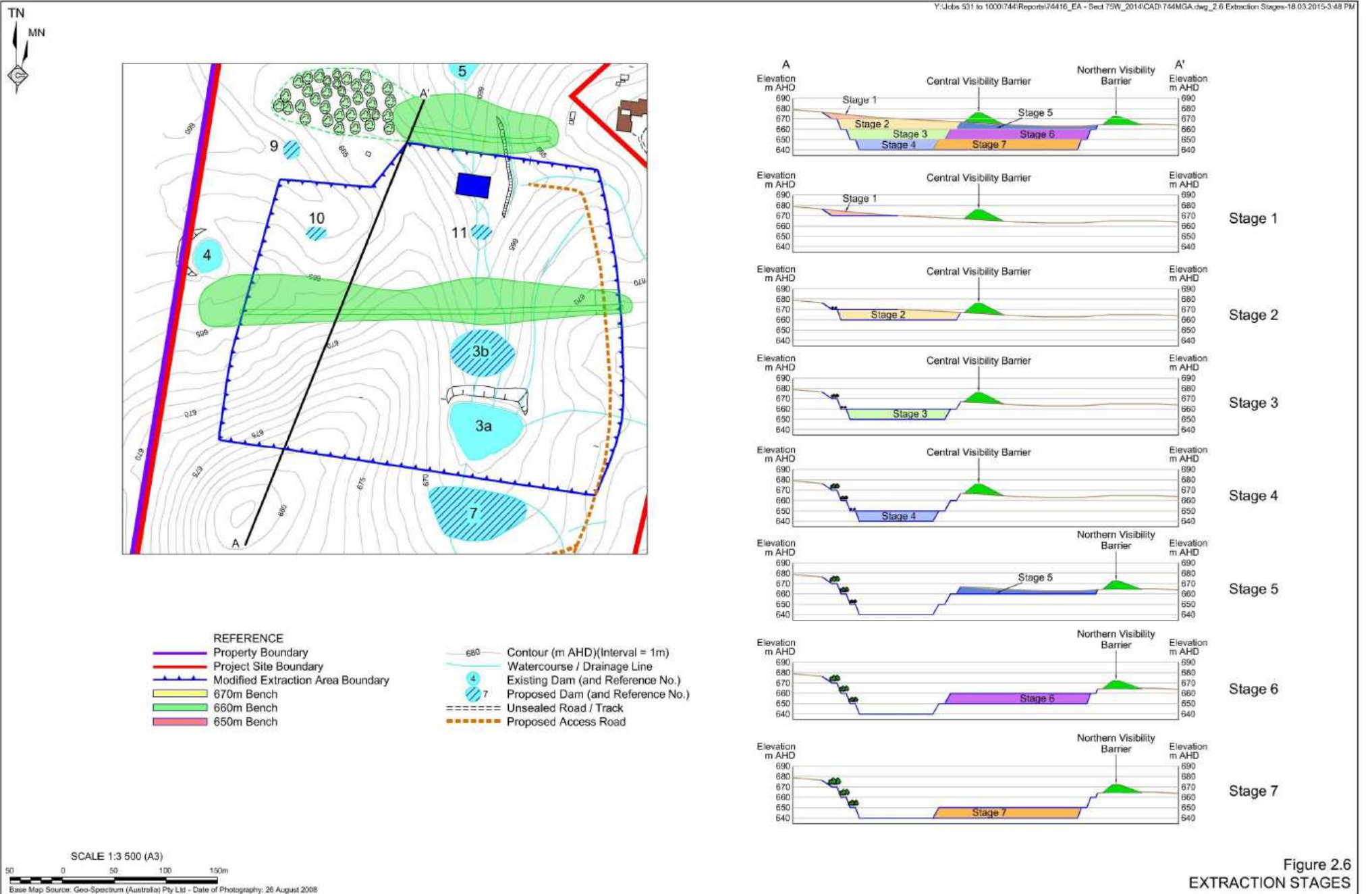


Figure 2 - Extraction Stages

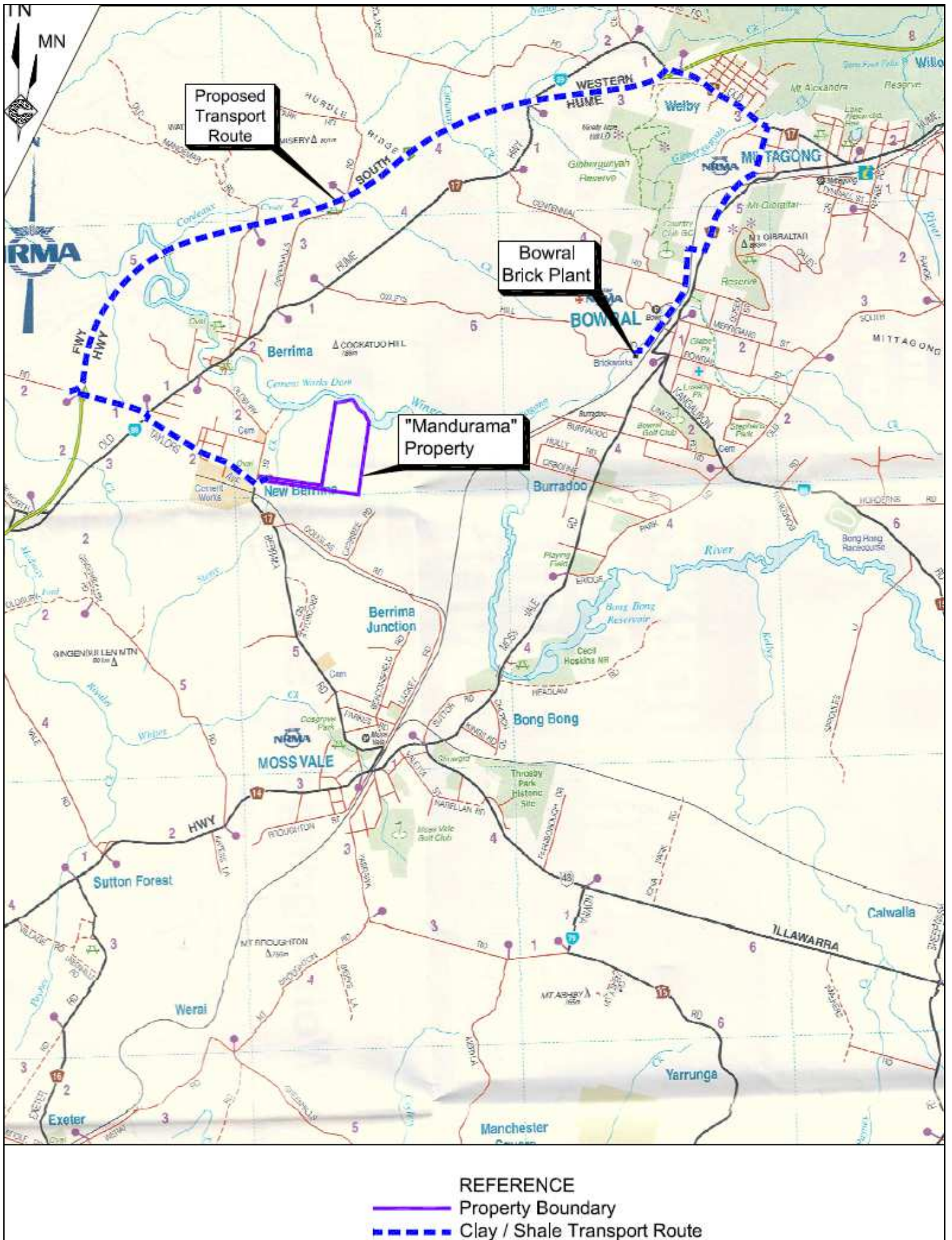


Figure 3 - Haul route

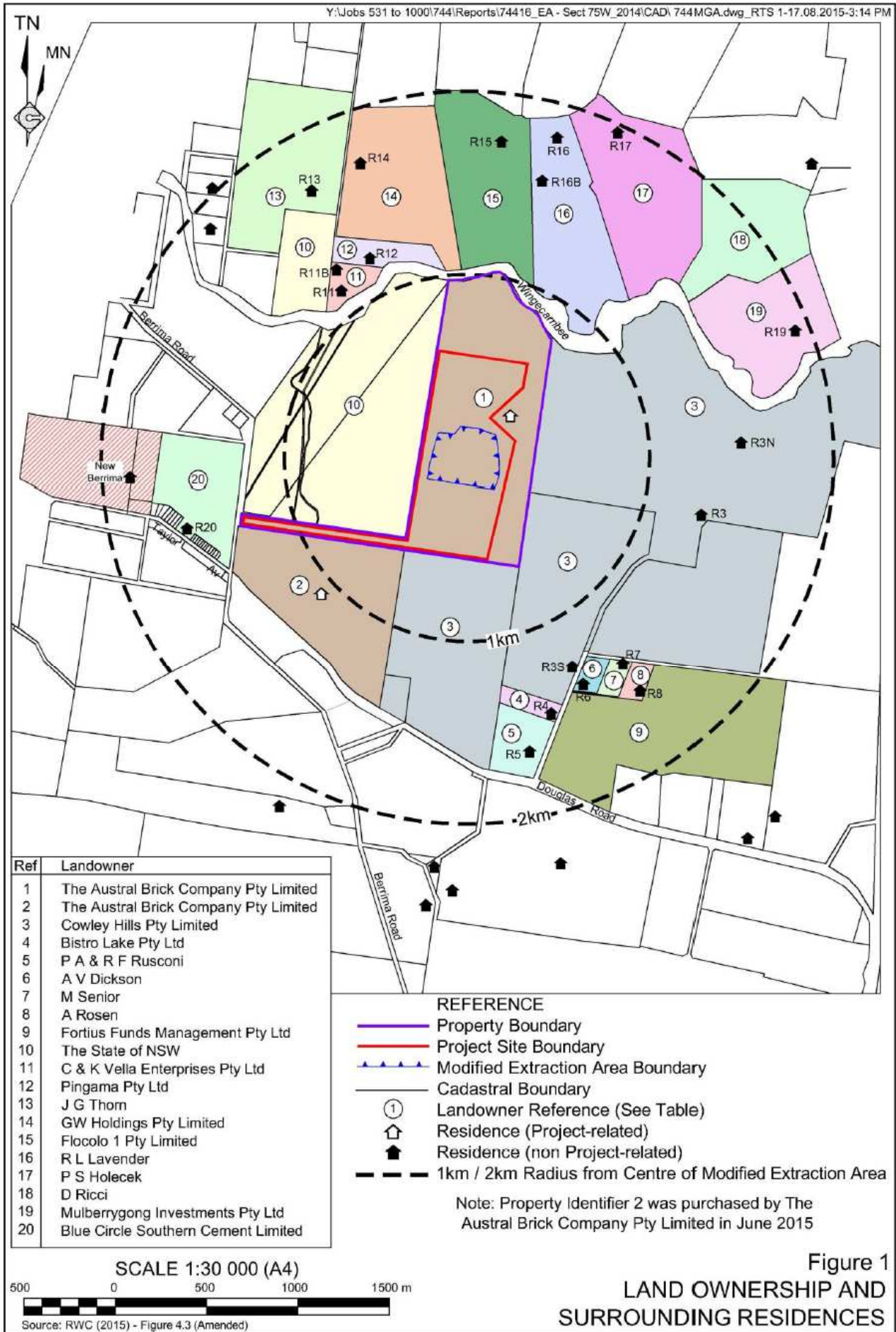


Figure 1
LAND OWNERSHIP AND
SURROUNDING RESIDENCES

Figure 4 - Surrounding residences

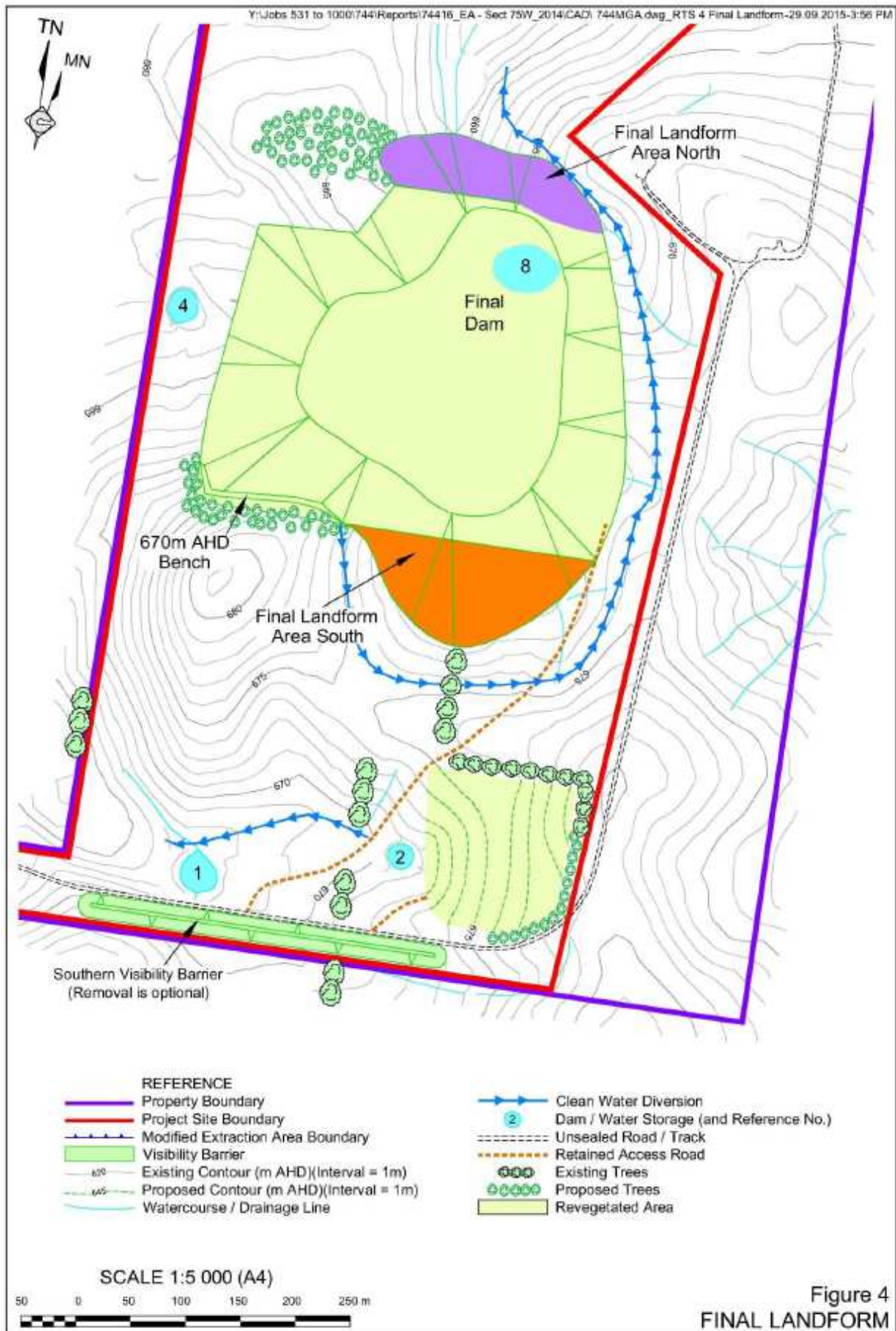


Figure 5 - Rehabilitation Plan

APPENDIX B: STATEMENT OF COMMITMENTS

Desired Outcome	Action	Timing
1. Area of Activities and Operations		
All approved activities are undertaken in the area(s) nominated on the approved plans and figures (unless moved slightly to avoid individual trees).	1.1 Survey and mark the boundaries of the areas of disturbance on the ground.	Prior to any vegetation clearing.
Satisfaction of the requirement of NSW Department of Industry for production data.	1.2 Provide annual production data to NSW Department of Industry - Resources & Energy (and include in the AEMR).	Annually (July).
2. Operating Hours		
Management of operations in accordance with the approved operating hours.	2.1 Design and implement a Notification Protocol to alert all potentially affected residents of the intention to undertake activities outside of normal hours of operation.	During operations.
	2.2 Institute a complaints telephone line for the reporting of complaints (if any) on activities undertaken outside of normal hours of operation.	During operations.
	2.3 Maintain a Complaints Register to record complaints received and actions taken by the Proponent to address the complaints.	During operations.
3. Traffic		
Minimisation of traffic impacts, including road safety.	3.1 Seal the last 400m of the Quarry Access Road from the entrance to the Quarry.	During the construction periods.
	3.2 Cover all loads.	Ongoing.
	3.3 Ensure truck drivers adhere to the existing Austral Bricks Drivers Code of Conduct which identifies the required safety and courtesy requirements for drivers travelling to and from all Austral Bricks quarries.	Ongoing.
	3.4 Adopt all safety procedures during the Berrima Road / access driveway intersection construction and incorporate in the Section 138 Permit sought under the Roads Act 1993.	During the construction periods.
4. Surface Water		
Minimisation of potential impacts on surface water quality and supply of the local watercourse system, particularly the Wingecarribee River.	4.1 Ensure early and progressive revegetation of visibility barriers and rehabilitation of completed extraction areas.	Ongoing.
	4.2 Use of any water sourced from the sedimentation basins for dust suppression within the upslope catchment of a sedimentation basin.	As required.
	4.3 Install sediment control fencing around the visibility barriers under construction and other areas of exposed soil until vegetation has been established.	As required.

Desired Outcome	Action	Timing	
4. Surface Water (Cont'd)			
Minimisation of potential impacts on surface water quality and supply of the local watercourse system, particularly the Wingecarribee River. (Cont'd)	4.4	Construct and operate various surface water management controls such as diversion structures and sedimentation basins in accordance with the Water Management Plan.	During the construction periods.
	4.5	Armour potential scour points (e.g. channel inlets/outlets and bends) with rock.	During the construction periods
	4.6	Inspect diversion structures monthly and within 24 hours following any rain event that generates flow in the drains to identify areas of erosion, scour or damage. Repair any problem areas and/or take appropriate stabilising action.	Ongoing.
5. Noise			
Minimisation of the noise impacts attributable to extraction and transportation of clay /shale product from the Quarry.	5.1	Retain the existing tree screen on the eastern side of the extraction area.	Ongoing.
	5.2	Regularly service all equipment to ensure sound power levels of each item remains at or below that nominated for noise modelling purposes.	Ongoing.
	5.3	Ensure all earth-moving equipment are fitted with mid-frequency band reversing alarms.	Ongoing.
6. Flora			
Minimisation of the spread of weeds, on and off Site.	6.1	Quick establishment of a selected cover crop.	During the construction periods.
	6.2	Spray weeds with an authorised herbicide.	As required.
	6.3	Ensure all earthmoving equipment is appropriately cleaned prior to being brought to the Quarry for each campaign.	Prior to each campaign.
7. Visual Amenity			
Reduce visible amenity impacts.	7.1	Plant trees screenings at the eastern side of the surplus overburden stockpile area to screen stockpiles from the east.	During the construction periods
	7.2	Commence progressive rehabilitation of completed faces and all other completed disturbed areas as soon as possible after completion of extraction. Rehabilitation of the southern extraction area wall would be very advanced (13-18 years) and protect against views of extraction faces during Stages 5 to 7.	Ongoing.
8. Air Quality			
Limit the generation of dust and other emissions from Quarry activities.	8.1	Construct vegetated visibility barriers to provide barriers to minimise the spread of dust from the Quarry.	During the construction periods
	8.2	Commence progressive rehabilitation of all disturbed areas as soon as possible after the completion of excavation in that area.	Ongoing.
	8.3	Use water truck to routinely spray unsealed roads, tracks and stockpile areas.	Ongoing, if required.
	8.4	Cover and effectively seal tailgates of trucks leaving the Quarry.	Ongoing.

Desired Outcome	Action	Timing
8. Air Quality (Cont'd)		
Limit the generation of dust and other emissions from Quarry activities. (Cont'd)	8.5 Prohibit all vehicles and machinery from idling unnecessarily.	Ongoing.
	8.6 Maintain all vehicles and machinery in accordance with manufacturers' specifications.	Ongoing.
	8.7 Amend extraction practices as required during adverse wind conditions to minimise the generation and spread of dust from the Quarry.	As required.
	8.8 Minimise drop heights between front-end loader buckets and truck trays through operator training and education on the management of dust.	Ongoing.
	8.9 Apply dust suppressants (e.g. Gluon or TerraControl) on unsealed roads used for product transport.	In the event that sufficient water is not available on Site for dust suppression.
9. Soils, Land Capability and Agricultural Sustainability		
Conservation of topsoil resources.	9.1 Strip all available topsoil to a depth of approximately 0.15m from the surface of each extraction stage.	Ongoing.
	9.2 Wherever practicable, place stripped topsoil directly onto the constructed visibility barriers or areas prepared and awaiting rehabilitation.	Ongoing.
	9.3 Stockpile topsoil around the perimeter of the surplus overburden stockpile area for later reclamation if no areas are available. Limit topsoil stockpiles to no more than 2.0m in height to minimise adverse impacts upon the biological activity of the topsoil.	Ongoing.
	9.4 Broadcast a pasture seed mix to assist with temporary stabilisation if topsoil stockpiles are likely to remain for extended periods.	As required.
	9.5 Avoid excessive handling of soil during the stripping and stockpiling operation and handling when the soils are wet to protect soil structure.	Ongoing.
	9.6 Restrict driving of machinery on the topsoil stockpiles, as well as the respread soil, to maximise soil aggregation and prevent compaction, particularly when the stockpiles are moist.	Ongoing.
	9.7 Place silt-stop fencing or similar immediately down-slope of stockpiles and visibility barriers where required, until a stable vegetation cover is established.	During the construction periods

Desired Outcome	Action	Timing
9. Soils, Land Capability and Agricultural Sustainability (Cont'd)		
Minimise the potential for soil contamination.	9.8 Restrict all refuelling and vehicle maintenance activities to designated areas which are either sealed, bunded or located with access to spill control kits.	Ongoing.
	9.9 Complete regular housekeeping and maintenance of vehicle maintenance areas.	Ongoing.
10. Heritage		
Comply with the provisions of the <i>National Parks and Wildlife Act 1974</i> (as amended).	10.1 Instruct employees, earthmoving contractors, subcontractors, machine operators and their representatives, whether working in the survey area or elsewhere, that in the event of any bone or stone artefacts, or discrete distributions of shell, or any objects of cultural association, being unearthed during earthmoving, work would cease immediately in the area of the find.	Ongoing.
	10.2 Immediately report the find to the Office of Environment and Heritage (OEH) and the relevant Local Aboriginal Land Councils.	As required.
	10.3 In the event that any bone cannot be clearly identified by a qualified archaeologist as being of animal remains, inform the police of its discovery, inform OEH, and inform officials and/or their representatives of the Illawarra Local Aboriginal Land Council, Wodi Wodi Elders Corporation, and Korewal Elouera, Jerrungarugh.	As required.
	10.4 Do not recommence work in the area of the find, until both the police (if unidentified bone has been found) and those officials or representatives have given their permission to do so.	As required.