

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

25th November

2016

SCHEDULE 1

Application Number

SSD 6519

Applicant

Upper Hunter Holdings Pty Ltd

Consent Authority:

Minister for Planning

Land:

Lot 1 DP 1160936
Lot 2 DP 1160936
Lot 3 DP 1160936
Lot 4 DP 1160936
Lot 1 DP 1178562

Development

Dolwendee Quarry Project

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DEFINITIONS

Aboriginal item or object	Any item or object that provides evidence of the use of an area by Aboriginal people, as defined under the <i>National Parks and Wildlife Act 1974</i>
AHD	Australian Height Datum
Annual Review	The review required by condition 9 of Schedule 5
Applicant	Upper Hunter Holdings 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
Biodiversity offset strategy	The conservation and enhancement strategy described in the EIS and depicted conceptually in Appendix 5
CCC	Community Consultative Committee
Conditions of consent	Conditions contained in Schedules 2 to 5 inclusive
Construction	The demolition of buildings or works, carrying out of works and erection of buildings covered by this consent
Council	Muswellbrook Shire Council
Date of commencement	The date notified to the Department by the Applicant under condition 9 of Schedule 2
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(a) of Schedule 2
DPI Water	Department of Primary Industries - Water
DRE	Division of Resources and Energy within the NSW Department of Industry
EIS	Environmental Impact Statement titled <i>Dolwende Quarry Project</i> dated 3 December 2015, the Applicant's <i>Response to Submissions Report</i> dated 6 July 2016 and <i>Supplementary Response to Submissions Report</i> dated 17 October 2016
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
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 consent <i>NSW Industrial Noise Policy</i> (NSW EPA, 2000)
INP	
Laden trucks	Trucks (including truck and dog combinations) transporting quarry products from the site
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
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
Mitigation	Activities associated with reducing the impacts of the development
Negligible	Small and unimportant, such as to be not worth considering
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
OEH	Office of Environment and Heritage
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 (including its directors or subsidiaries), another quarry-owning, or mine-owning company
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, stockpiling and transportation of extractive materials carried out 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
RFS	Rural Fire Service
RMS	Roads and Maritime Services
Secretary	Secretary of the Department, or nominee
Site	The land identified in Schedule 1

SCHEDULE 2 ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

1. In addition to meeting the specific performance measures and criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent and/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:
 - (a) generally in accordance with the EIS; and
 - (b) in accordance with the Development Layout Plans and the conditions of this consent.

Note: The Development Layout Plans are shown in Appendix 2.
3. If there is any inconsistency between the documents in condition 2(a), the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail over all documents in condition 2(a) to the extent of any inconsistency.
4. The Applicant must comply with any 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 (including any stages of these documents);
 - (b) any reviews, reports or audits undertaken or commissioned by the Department regarding compliance with this consent; and
 - (c) the implementation of any actions or measures contained in these documents.

LIMITS ON CONSENT

Quarrying Operations

5. The Applicant may carry out quarrying operations on the site for a period of 21 years from the date of commencement.

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.
6. The Applicant must not undertake quarrying operations below a level of 130 m AHD.
7. The Applicant must not extract more than 250,000 tonnes of quarry products from the site in any calendar year.

Quarry Product Transport

8. The Applicant must not:
 - (a) transport more than 250,000 tonnes of quarry products from the site in any calendar year; and
 - (b) dispatch more than 30 laden trucks from the site on any day.

NOTIFICATION OF COMMENCEMENT

9. Prior to commencing any development under this consent, the Applicant must notify the Department in writing of the date it will commence development under this consent.

STRUCTURAL ADEQUACY

10. 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.

PROTECTION OF PUBLIC INFRASTRUCTURE

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

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

OPERATION OF PLANT AND EQUIPMENT

12. 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.

PRODUCTION DATA

13. The Applicant must:
- (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 9 of Schedule 5).

IDENTIFICATION OF APPROVED EXTRACTION LIMITS

14. Prior to commencing quarrying operations under this consent, 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.
15. 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.
16. The Applicant must ensure that:
- (a) no extraction of extractive materials takes place outside the approved limits of the extraction area; and
 - (b) no infrastructure is constructed outside the approved limits of the infrastructure area.

SCHEDULE 3 ENVIRONMENTAL PERFORMANCE CONDITIONS

NOISE

Hours of Operation

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

Table 1: Operating Hours

Activity	Permissible Hours
Construction and quarrying operations including loading and dispatch of laden trucks	<ul style="list-style-type: none">• 7 am to 6 pm Monday to Friday• 8 am to 1 pm Saturday• At no time on Sundays or public holidays
Blasting	9 am to 5 pm Monday to Friday (except public holidays)
Maintenance	At any time, provided that these activities are not audible at any privately-owned residence

2. The following activities may be carried out on the site outside the hours specified in condition 1:
 - (a) delivery or dispatch of materials as requested by Police or other authorities; and
 - (b) 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

3. The Applicant must ensure that the noise generated by the development does not exceed 35 dB(A) L_{Aeq} (15 minute) at any residence on privately-owned land (see Figure 7 in Appendix 3).

Noise generated by the development is to be measured in accordance with the relevant requirements and exemptions (including certain meteorological conditions) of the *NSW Industrial Noise Policy*. Appendix 4 sets out the meteorological conditions under which these criteria apply and the requirements for evaluating compliance with these criteria.

However, the noise criteria above 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

4. The Applicant must:
 - (a) implement best practice management to minimise the construction, operational and road transportation noise of the development;
 - (b) minimise the noise impacts of the development during meteorological conditions when the noise criteria in this consent do not apply (see Appendix 4);
 - (c) carry out noise monitoring at least every three months, or as otherwise agreed with the Secretary to determine whether the development is complying with the relevant conditions of this consent; and
 - (d) regularly assess noise monitoring data and modify and/or stop operations on site, as required, 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:
 - (a) be prepared in consultation with the EPA;
 - (b) be submitted to the Secretary for approval prior to the commencement of development under this consent, unless otherwise agreed by the Secretary;
 - (c) describe the measures that would be implemented to ensure:
 - compliance with the noise criteria in this consent;
 - best practice noise management is being employed; and

- noise impacts of the development are minimised during meteorological conditions under which the noise criteria in this consent do not apply (see Appendix 4).

The Applicant must implement the approved Noise Management Plan as approved from time to time 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 2.

Table 2: 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	No more than once in a calendar year

However, these criteria do not apply if the Applicant has a written agreement with the relevant owner to exceed the limits in Table 2, 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 month, unless with the prior approval of the Secretary or 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 quarry.

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:
- be prepared in consultation with the EPA;
 - be submitted to the Secretary for approval 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 blast criteria and operating conditions of this consent;
 - establish a consultation protocol to avoid simultaneous blasting events with the nearby Mangoola coal mine;
 - include measures to manage flyrock;
 - include a monitoring program for evaluating and reporting on compliance with the blasting criteria in this consent;
 - include a protocol for investigating and responding to complaints; and
 - include community notification procedures for blasting, particularly to nearby residences on privately-owned land.

The Applicant must implement the approved Blast Management Plan as approved from time to time 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 3 at any residence on privately-owned land.

Table 3: Air quality criteria

Pollutant	Averaging Period	Criterion	
Particulate matter < 10 µm (PM ₁₀)	Annual	a,d 30 µg/m ³	
Particulate matter < 10 µm (PM ₁₀)	24 hour	b 50 µg/m ³	
Total suspended particulates (TSP)	Annual	a,d 90 µg/m ³	
^c Deposited dust	Annual	^b 2 g/m ² /month	a,d 4 g/m ² /month

Notes to Table 3:

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:
- implement all best practice management to minimise dust emissions of the development, including using water carts, water sprays or other suitable controls to minimise dust generation on haul roads, stockpiles and processing areas;
 - 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;
 - minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note d under Table 3);
 - monitor and report on compliance with the relevant air quality conditions in this consent; and
 - minimise the surface disturbance of the site by the development and undertake progressive rehabilitation;
- 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:
- be prepared in consultation with the EPA;
 - be submitted to the Secretary for approval prior to the commencement of development under this consent, unless otherwise agreed by the Secretary;
 - 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;
 - describe the air quality management system in detail;
 - include an air quality monitoring program that:
 - is capable of evaluating the performance of 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 approved Air Quality Management Plan as approved from time to time 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

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.

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

Water Discharges

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

Soil and Water Management Plan

17. The Applicant must prepare a Soil and Water Management Plan for the development to the satisfaction of the Secretary. This plan must:
 - (a) be prepared by suitably qualified and experienced person/s endorsed by the Secretary;
 - (b) be prepared in consultation with the EPA and DPI Water;
 - (c) be submitted to the Secretary for approval prior to commencement of development 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; and
 - measures that would be implemented to minimise clean water use on site;
 - ii) Erosion and Sediment Control Plan that:
 - is consistent with the requirements of the Landcom's Managing Urban Stormwater: Soils and Construction manual (Volume 2E Mines and Quarries);
 - identifies activities that could cause soil erosion and generate sediment;
 - describes measures to minimise soil erosion and the potential for the transport of sediment to downstream waters;
 - describes the location, function and capacity of erosion and sediment control measure structures; and
 - describes what measures would be implemented to maintain (and if necessary decommission) the structures over time.
 - iii) 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;
 - surface water impact assessment criteria;
 - a protocol for managing any exceedances of the surface water impact assessment criteria;
 - a description of any water licences used to account for take from surface water sources;
 - a detailed description of the surface water management system on site including the:
 - clean water diversion system;
 - dirty water management system;
 - water storages, including their capacity to contain dirty water during flood events;

- irrigation areas; and
 - design of creek and stream crossings; and
- a program to monitor and report on:
 - the effectiveness of the water management system;
 - any surface water discharges, including overflows from the sediment dam;
 - the quality of water discharged from the site to the environment, if any;
 - surface water flows and quality in local watercourses, if required; and
 - the quantity, duration and weather conditions under which water is obtained from the supplementary water supply; and
 - a procedure including trigger levels to inform decisions to scale back operations and/or stop extraction, processing and/or the transport of material to and from the site as may be required by condition 15 above;
- (e) Groundwater Management Plan that includes:
 - i) a description of water licences used to account for take from a ground water source;
 - ii) a monitoring program of groundwater levels and quality that includes:
 - threshold water level criteria (and warning trigger levels);
 - contingency measures in the event of a breach of warning trigger levels and/or threshold criteria; and
 - a program to regularly report on the monitoring results, including any exceedances; and
 - (iii) a requirement for the Applicant to consult with DPI Water in the event of any unforeseen groundwater inflows from the quarry face or floor and if required, obtain appropriate water licence(s) to cover the volume of water take.

The Applicant must implement the approved Soil and Water Management Plan as approved from time to time by the Secretary.

TRANSPORT

Construction Traffic Management Plan

18. The Applicant must prepare a Construction Traffic Management Plan to the satisfaction of the Secretary. This plan must:
- (a) be prepared in consultation with Council and the RMS;
 - (b) be submitted for approval to the Secretary prior to the commencement of development under this consent, unless otherwise agreed by the Secretary;
 - (c) detail the management of all vehicle movements associated with the construction phase of the quarry, including the construction of the haul road and the intersection on the Golden Highway; and
 - (d) address:
 - movement of oversized loads (if any) to and from the site;
 - management of construction traffic;
 - any necessary restrictions in the hours of heavy vehicle movements to avoid potential road use conflicts; and
 - transport of construction waste materials.
- to the satisfaction of the RMS.

The Applicant must implement the approved Construction Traffic Management Plan as approved from time to time by the RMS, until the completion of the road construction works to the satisfaction of the RMS and Council.

Construction of the intersection to the Golden Highway

19. Prior to the commencement of quarrying operations under this consent, the Applicant must, at its own expense, design and construct a BAR/AUL type treatment at the proposed intersection of the haul road and the Golden Highway:
- (a) in consultation with Council and the RMS;
 - (b) in accordance with the Austroads *Guide to Road Design 2010* (or its latest version) and any other relevant supplementary document, unless otherwise agreed by the RMS;
 - (c) in accordance with the specific requirements of the RMS, including that:
 - adequate stormwater drainage capacity is provided to contain runoff within the site;
 - the intersection design accommodates the turning path of the largest vehicles that will access the haul road;
 - adequate sight distances are provided for vehicles entering and exiting the site; and
 - advanced intersection and truck turning warning signs and all other necessary road signs must be installed on the Golden Highway;
- to the satisfaction of the RMS.

Notes:

- The Applicant should continue to consult with the RMS to coordinate the design and construction of the new intersection with RMS plans to upgrade the existing intersection of Rosemount Road and the Golden Highway;
- The design of the haul road must include permanent measures to minimise the tracking of material onto the public road network, as required under condition 22(d) below.

Construction of haul road

20. Prior to the commencement of quarrying operations under this consent, the Applicant must design and construct the proposed haul road:
- (a) in accordance with any applicable requirements of the *Guidelines for Controlled Activities on Waterfront Land* (DPI 2012) for the design of waterway crossings for access roads and any associated in stream works;
 - (b) to be aligned to intersect the Golden Highway at a 90 degree angle and be suitably paved for a minimum distance of 50 m extending from the boundary of the site;
 - (c) to ensure adequate stormwater drainage is provided to contain stormwater runoff within the site; and
 - (d) to ensure adequate measures are installed to contain sediment from entering Lynch's Gully.

Monitoring of Product Transport

21. The Applicant must keep accurate records of all laden truck movements to and from the site (including time of arrival and dispatch) and publish a summary of records on its website every 6 months.

Operating Conditions

22. The Applicant must:
- (a) ensure that all laden trucks entering or exiting the site have their loads covered;
 - (b) ensure that all laden trucks exiting the site are cleaned of material that may fall on the road, before leaving the site;
 - (c) use its best endeavours to ensure that appropriate signage is displayed on all trucks used to transport product from the development so they can be easily identified by road users; and
 - (d) allow for the parking of early-arriving trucks (ie before 7 am) to avoid queuing on public roads.

Traffic Management Plan

23. Prior to the commencement of quarrying operations under this consent, unless otherwise agreed by the Secretary, the Applicant must prepare a Traffic Management Plan for the development to the satisfaction of the Secretary. This plan must:
- (a) be prepared in consultation with the RMS and Council;
 - (b) include a Drivers' Code of Conduct that details the safe and quiet driving practices that must be used by drivers transporting products to and from the quarry, with a particular focus on:
 - road safety, including, but not limited to turning from/onto the Golden Highway and passing through the town of Denman;
 - informing drivers of the primary haul route via the Golden Highway and to avoid Wybong and Reedy Creek Roads unless these routes are required to supply local deliveries; and
 - minimising the potential for fauna strike;
 - (c) describe the measures that would be put in place to ensure compliance with the Drivers' Code of Conduct; and
 - (d) propose measures to minimise the transmission of dust and tracking of material onto the surface of the public road from vehicles leaving the quarry.

The Applicant must implement the approved Traffic Management Plan as approved from time to time by the Secretary.

HERITAGE

Unexpected Finds Procedure

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 OEH 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*.

25. If any object of non-Aboriginal heritage significance is identified on site, the Applicant must ensure that:
- All work in the immediate vicinity of the suspected item or object ceases immediately; and
 - A suitably qualified and experienced heritage professional or archaeologist is engaged to assess the find and identify if it has significance and how to manage this item within the development

All employees, workers and/or contractors involved in construction and/or excavation are to be made aware of this procedure as part of the site induction, including appropriate examples of what may be considered an unexpected find.

Aboriginal Cultural Heritage Management Plan

26. The Applicant must prepare an Aboriginal Cultural Heritage Management Plan to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with OEH and the Aboriginal community;
 - be submitted to the Secretary for approval prior to the commencement of development under this consent, unless otherwise agreed by the Secretary;
 - include:
 - a description of any additional management or mitigation measures required in response to cultural information relevant to the development and provided to the Applicant during consultation with the Aboriginal community;
 - a description of the measures that would be implemented to protect Aboriginal sites, including any visually significant areas of outcropping sandstone near the project that may be affected by airblast overpressure and/or vibration from blasting activities;
 - a description of the measures that would be implemented if any new Aboriginal objects or human remains are discovered during construction and/or quarry operations;
 - a protocol for ensuring any sites impacted by the development are appropriately recorded and submitted to OEH's AHIMS register;
 - a description of an Aboriginal Cultural Education Induction Program for the induction of all personnel and contractors involved in construction and quarrying operations to be implemented for the life of the development; and a
 - protocol for the ongoing consultation and involvement of the Aboriginal community in the conservation and management of Aboriginal cultural heritage on the site, particularly any Aboriginal objects discovered as part of extraction activities.

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

BIODIVERSITY AND REHABILITATION

Biodiversity Offset Strategy

27. The Applicant must implement the Biodiversity Offset Strategy, described in the EIS and shown conceptually in Appendix 5, to the satisfaction of the Secretary.

Security of Offsets

28. Within 12 months of the date of commencement of development under this consent, unless otherwise agreed with the Secretary, the Applicant must make suitable arrangements to provide appropriate long-term security for the Biodiversity Offset Strategy, to the satisfaction of the Secretary.

Note: Mechanisms to provide appropriate long-term security to the land within the Biodiversity Offset Strategy in accordance with the NSW Biodiversity Offset Policy for Major Projects 2014, include a Biobanking Agreement, Conservation Agreement or an alternative mechanism that provides for a similar conservation outcome. Any mechanism must remain in force in perpetuity.

Rehabilitation Objectives

29. The Applicant must rehabilitate the site to the satisfaction of the Secretary. This rehabilitation must be generally consistent with the rehabilitation strategy in the EIS and the conceptual rehabilitation plan in Appendix 5 and must comply with the objectives in Table 4.

Table 4: Rehabilitation Objectives

Feature	Objective
Site (as a whole)	<ul style="list-style-type: none"> Safe, stable and non-polluting Final landform integrated with surrounding natural landforms as far as is reasonable and feasible, and minimising visual impacts when viewed from surrounding land

<i>Surface Infrastructure</i>	<ul style="list-style-type: none"> Decommissioned and removed, unless otherwise agreed by the Secretary; and Landscaped and revegetated using native flora species
<i>Quarry benches and pit floor</i>	Landscaped and revegetated using native flora species
<i>Final Void</i>	<ul style="list-style-type: none"> Minimise the size, depth and slope of the batters of the final void Minimise the drainage catchment of the final void

Progressive Rehabilitation

30. 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.

Biodiversity and Rehabilitation Management Plan

31. The Applicant must prepare a Biodiversity and Rehabilitation Management Plan for the development to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with Council and OEH;
 - be submitted to the Secretary for approval prior to the commencement of development under this consent, unless otherwise agreed;
 - provide details of the conceptual final landform and associated land uses for the site;
 - describe how the implementation of the Biodiversity Offset Strategy would be integrated with the overall rehabilitation of the site;
 - include detailed performance and completion criteria for evaluating the performance of the Biodiversity Offset Strategy 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 the Biodiversity Offset Strategy area; 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 offset and rehabilitation areas through assisted natural regeneration, targeted vegetation establishment and the introduction of fauna habitat features;
 - protecting native vegetation and fauna habitat outside the approved disturbance area onsite;
 - minimising the impacts on native fauna, including undertaking pre-clearance surveys for the quarry site, haul road and the supplementary water supply pipeline;
 - establishing vegetation screening to minimise the visual impacts of the site on surrounding receivers;
 - ensuring minimal environmental consequences for threatened species, populations and habitats, including for the quarry site, haul road and supplementary water supply pipeline;
 - avoiding and minimising the spread of Myrtle Rust, *Phytophthora cinnamomi* (Phytophthora) and Chytrid fungus;
 - collecting and propagating seed;
 - controlling weeds and feral pests;
 - controlling erosion;
 - 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 the Biodiversity Offset Strategy and include a description of the contingency measures that would be implemented to mitigate these risks;
 - include details of who would be responsible for monitoring, reviewing and implementing the plan.

The Applicant must implement the approved Biodiversity and Rehabilitation Management Plan as approved from time to time by the Secretary.

Biodiversity and Rehabilitation Bond

32. Within 6 months of the date of approval of the Biodiversity and Rehabilitation Management Plan, the Applicant must lodge a Biodiversity and Rehabilitation Bond with the Department to ensure that the Biodiversity Offset Strategy and rehabilitation of the site is implemented in accordance with the performance and completion criteria set out in the plan (Figure 9 in Appendix 6) and relevant conditions of this consent. The sum of the bond must be determined by:
- (a) calculating the cost of implementing the Biodiversity Offset Strategy over the next 3 years;
 - (b) calculating the cost of rehabilitating all disturbed areas of 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:

- *If capital and other expenditure required by the Biodiversity and Rehabilitation Management Plan is largely complete, the Secretary may waive the requirement for lodgement of a bond in respect of the remaining expenditure.*
- *If the Biodiversity Offset Strategy and/or rehabilitation of the site area are completed (or partially completed) to the satisfaction of the Secretary, then the Secretary will release the bond (or relevant part of the bond). If the Biodiversity Offset Strategy 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.*

33. Within 3 months of each Independent Environmental Audit (see condition 10 of Schedule 5), the Applicant must review, and if necessary revise, the sum of the Rehabilitation and/or Conservation Bonds to the satisfaction of the Secretary. This review must consider the:
- (a) effects of inflation;
 - (b) likely cost of implementing the Biodiversity Offset Strategy 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 the Biodiversity Offset Strategy and rehabilitation of the site to date.

VISUAL

34. 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

35. 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.
36. Except as expressly in an EPL, the Applicant must not receive waste at the site for storage, treatment, processing, reprocessing or disposal.

LIQUID STORAGE

37. The Applicant must ensure that all tanks and similar storage facilities (other than for water) are protected by appropriate bunding or other containment, in accordance with the relevant Australian Standards

DANGEROUS GOODS

38. 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

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

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

The Applicant must implement any Environmental Management Strategy as approved from time to time 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) 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 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.

Revision of Strategies, Plans & Programs

3. Within 3 months of the submission of an:
 - (a) Annual Review under condition 9 below;
 - (b) incident report under condition 7 below;
 - (c) audit report under condition 10 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.

Updating and Staging of Strategies, Plans or Programs

4. To ensure that strategies, plans or programs 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 operations associated with the development 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.*

Adaptive Management

5. 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.

COMMUNITY CONSULTATIVE COMMITTEE

6. If directed by the Secretary, the Applicant must establish and operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Secretary. Any such CCC must be operated in general accordance with the *Guidelines for Establishing and Operating Community Consultative Committees for Mining Developments* (Department of Planning, 2007, or its latest version).

Notes:

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

REPORTING

Incident Reporting

7. 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

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

Annual Review

9. By the end of September each year following the commencement of development under this consent, or other timing as may be agreed by the Secretary, the Applicant must submit a report to the Department reviewing the environmental performance of the development to the satisfaction of the Secretary. This review must:
 - (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(a) of Schedule 2;
 - (c) identify any non-compliance over the past calendar 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 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.

The Applicant must ensure that copies of the Annual Review are submitted to Council and are available to the Community Consultative Committee (see condition 6 of Schedule 5) and any interested person upon request.

INDEPENDENT ENVIRONMENTAL AUDIT

10. Within a year of the date of commencing development under 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 and (if established) the CCC;
 - (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.

11. Within 12 weeks of commencing of this audit, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary, Council, the EPA and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report. The Applicant must implement these recommendations, to the satisfaction of the Secretary.

ACCESS TO INFORMATION

12. Within 6 months of the commencement of development under this consent, the Applicant must:
 - (a) make the following information publicly available on its website:
 - the documents listed in condition 2(a) 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

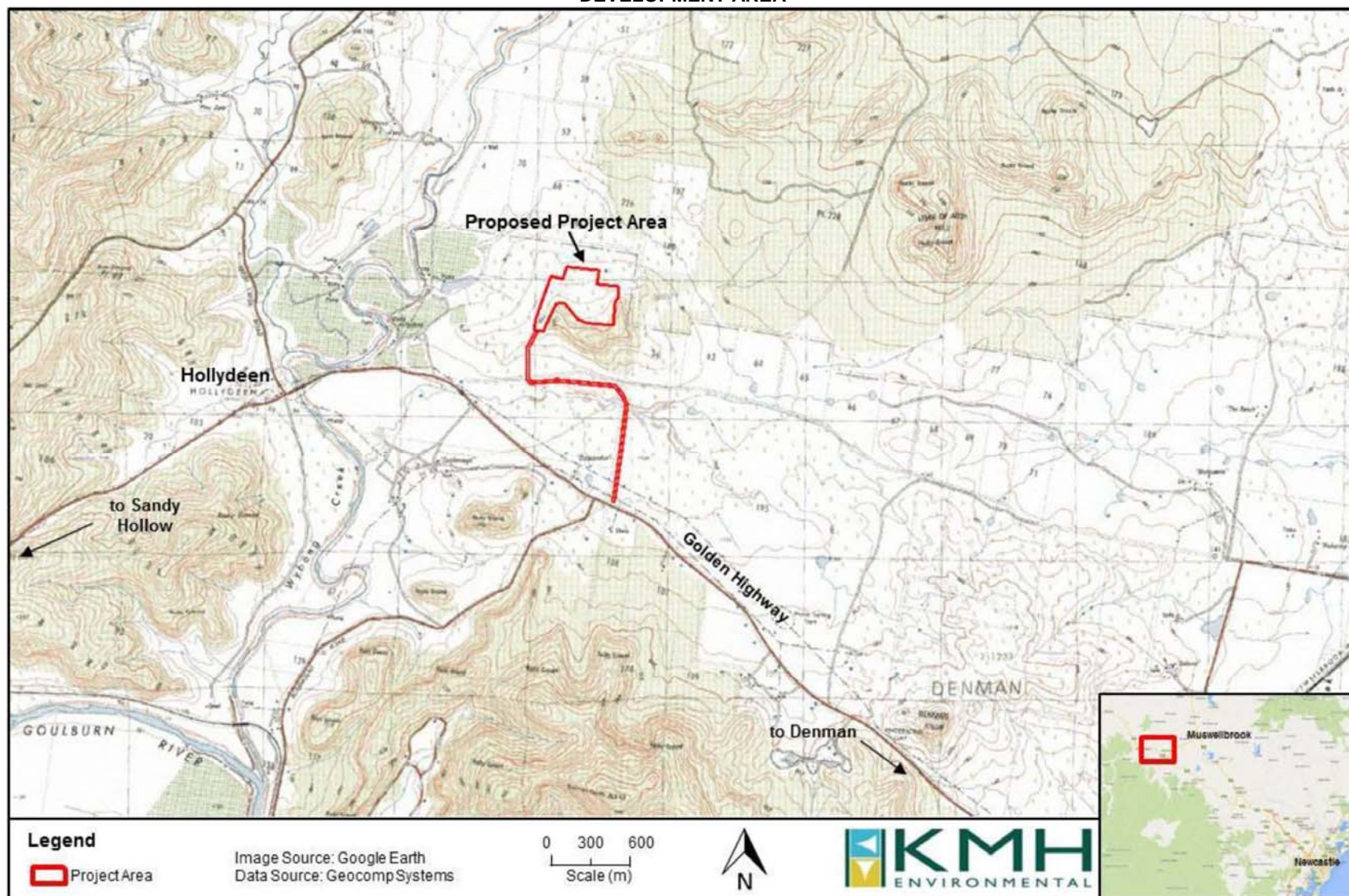


Figure 1: Location of the Dolwende Quarry Project

APPENDIX 2 DEVELOPMENT LAYOUT

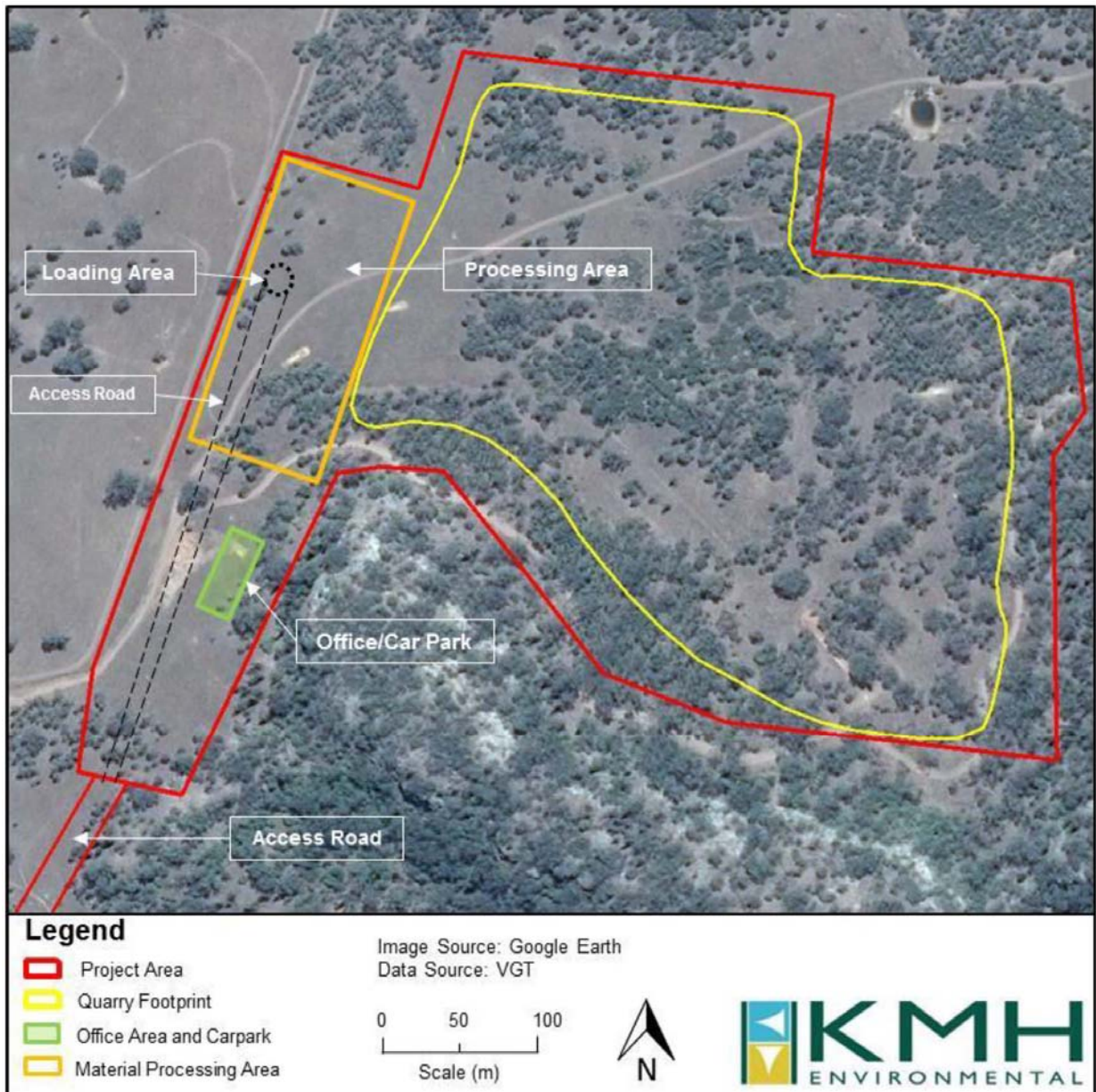


Figure 2: Development layout area

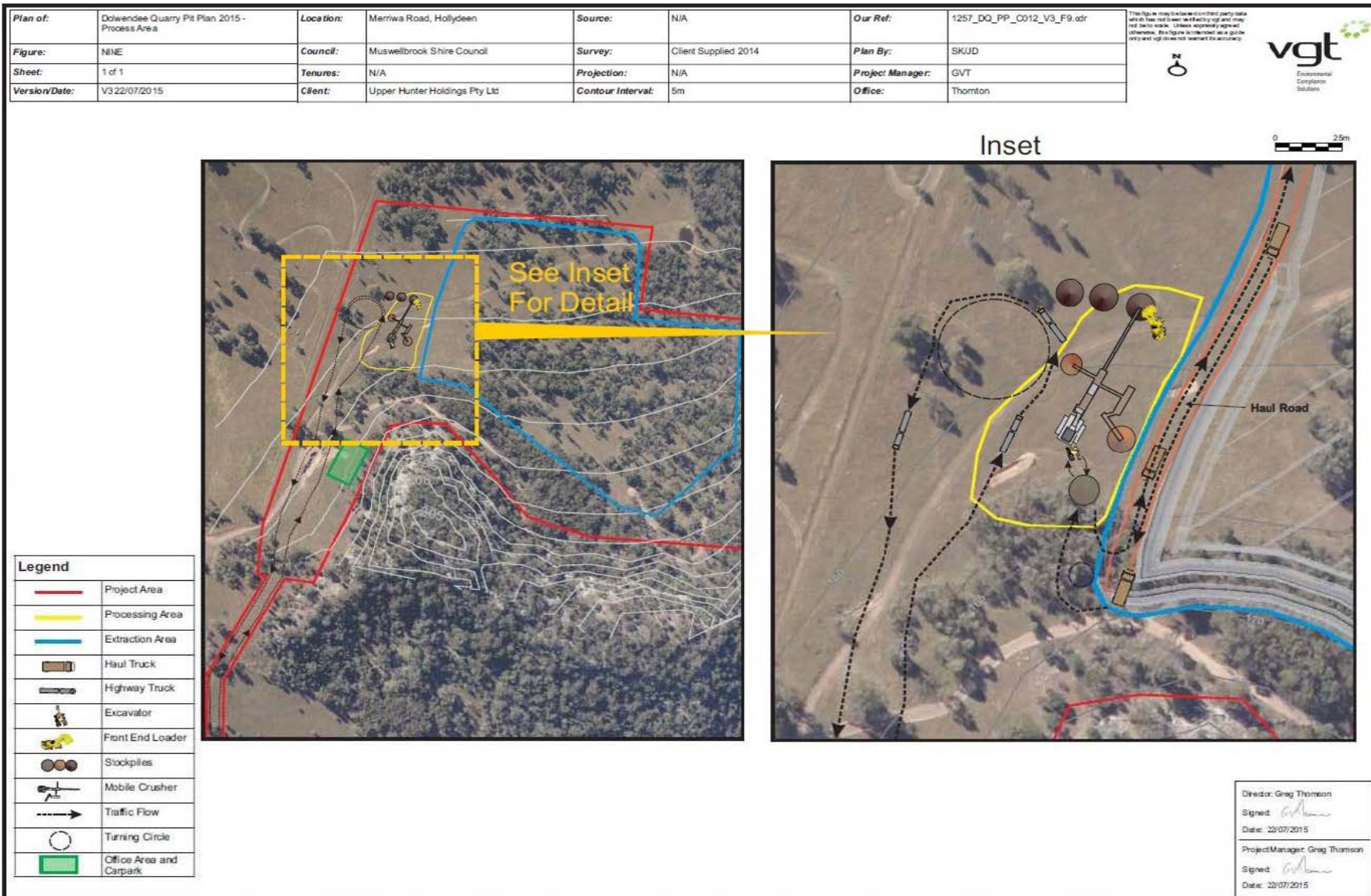


Figure 3: Processing area layout

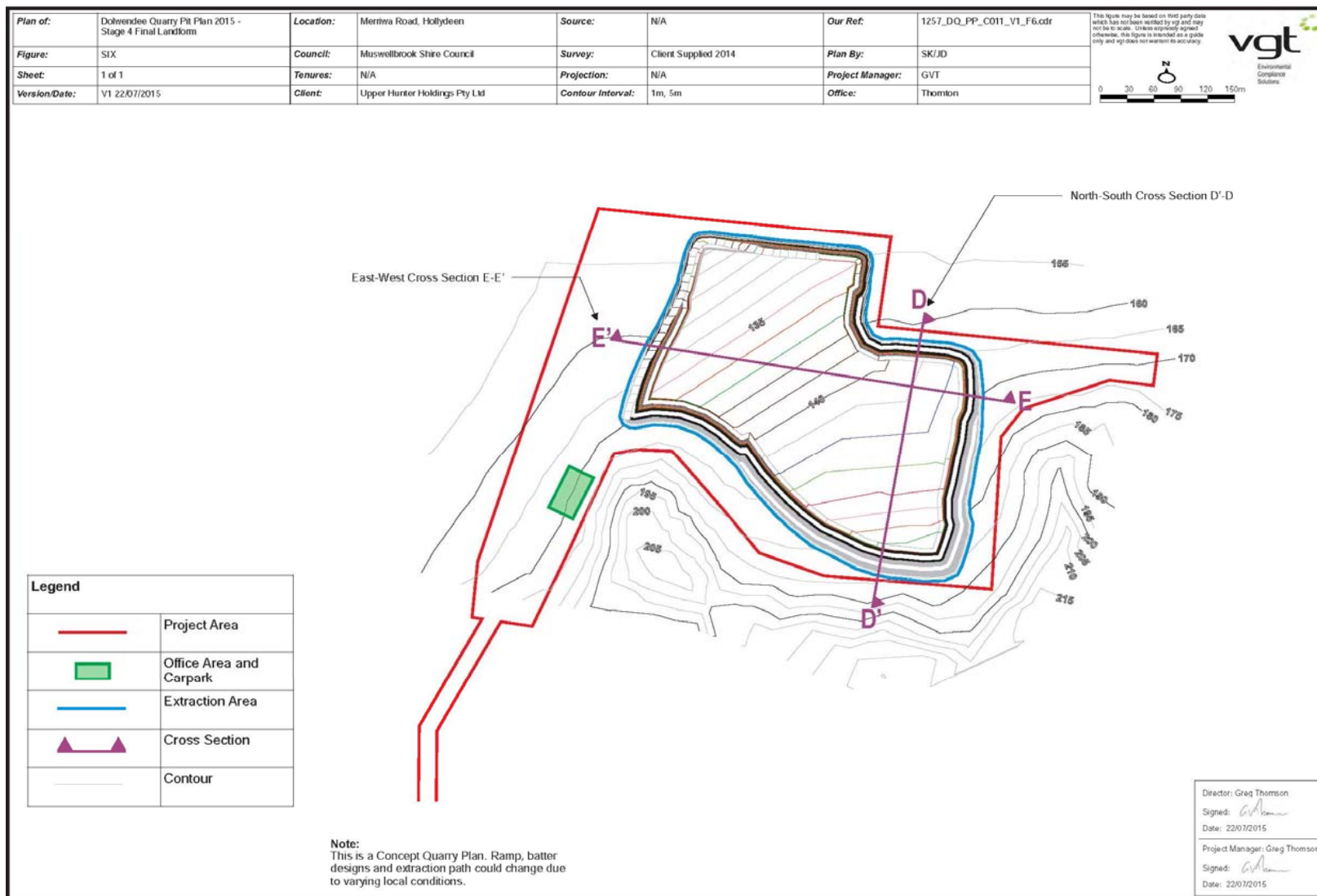


Figure 4: Extraction area (Stage 3)

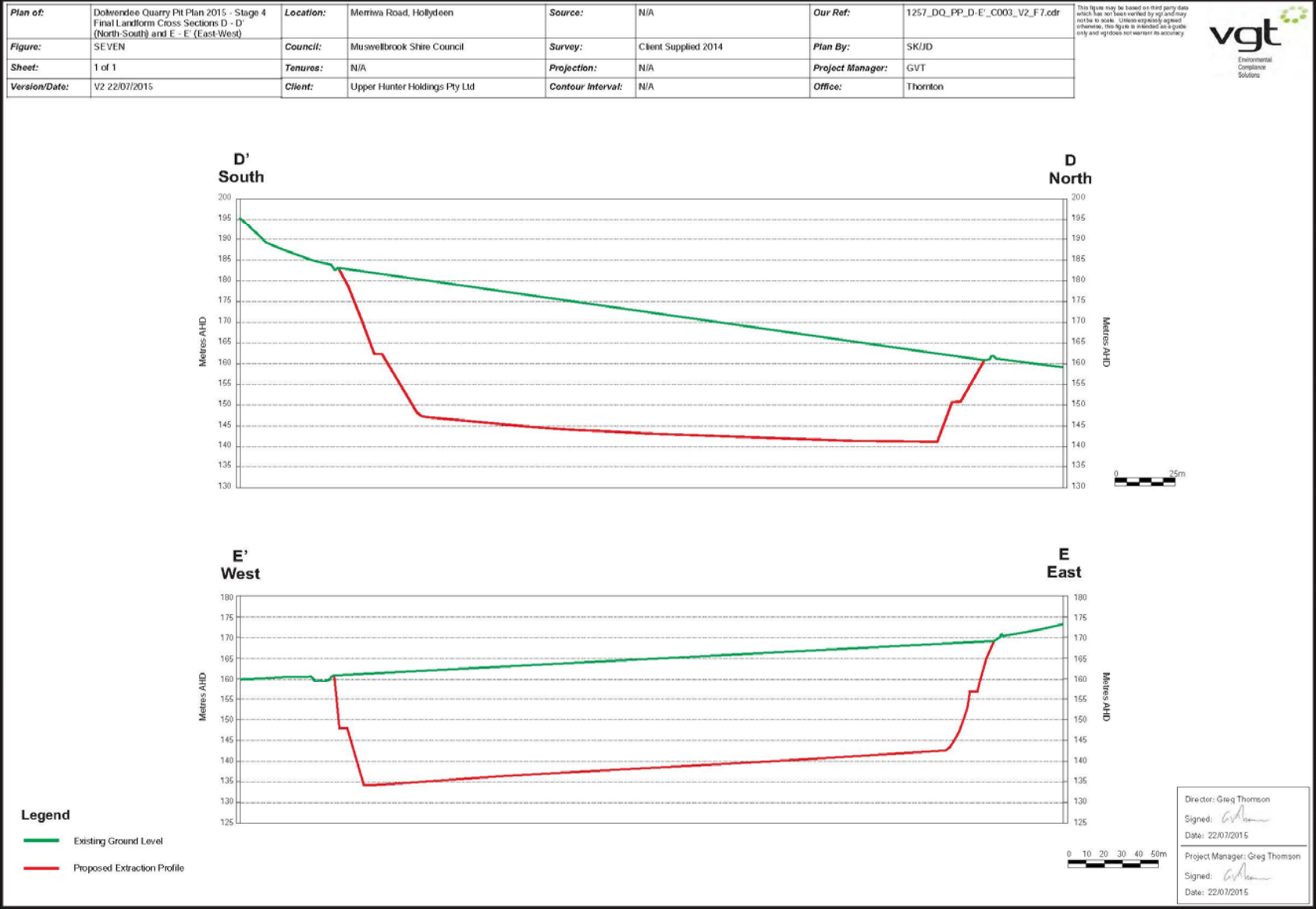


Figure 5: Depth of extraction (Stage 3)

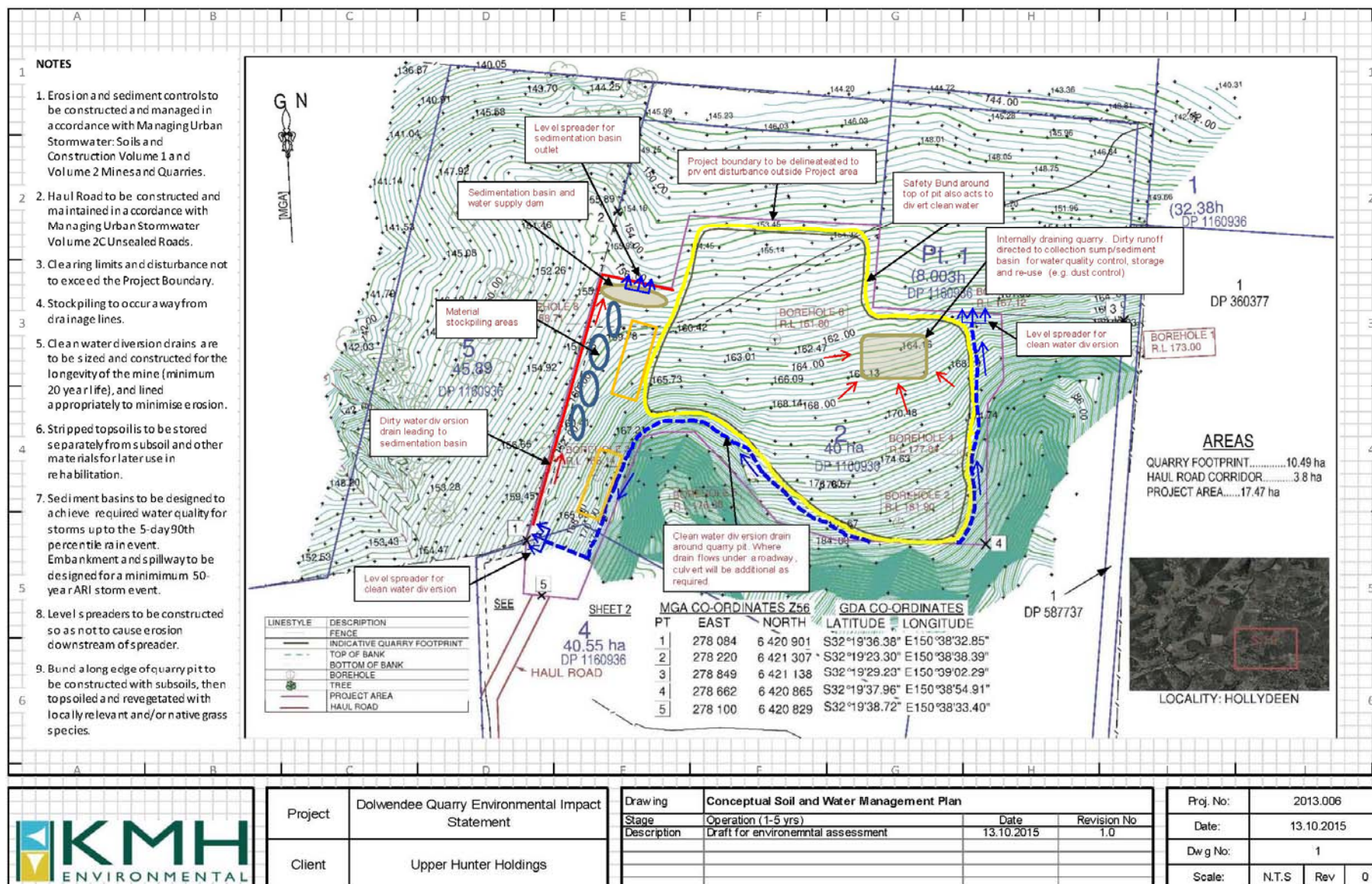


Figure 6: Conceptual soil and water management plan

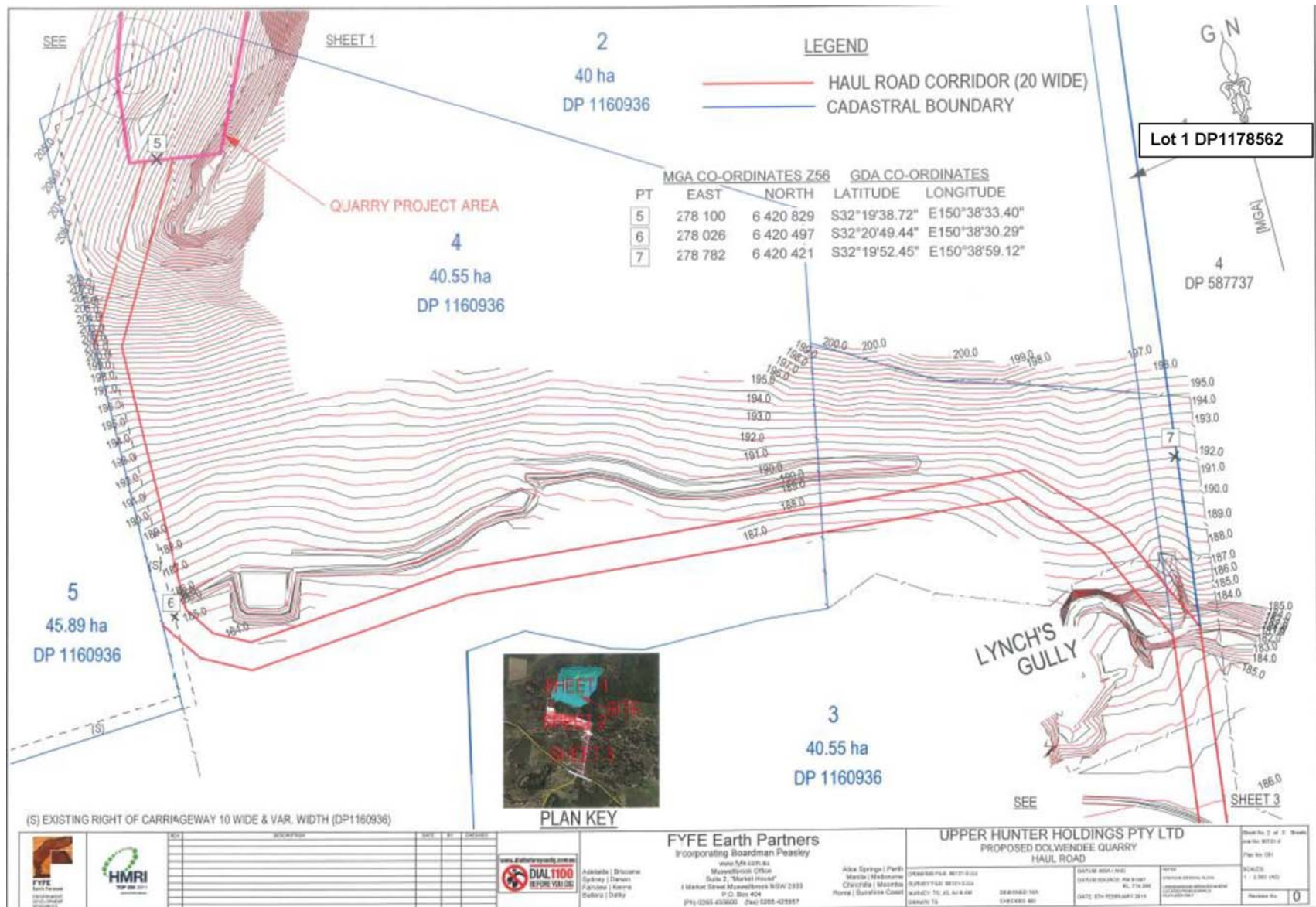
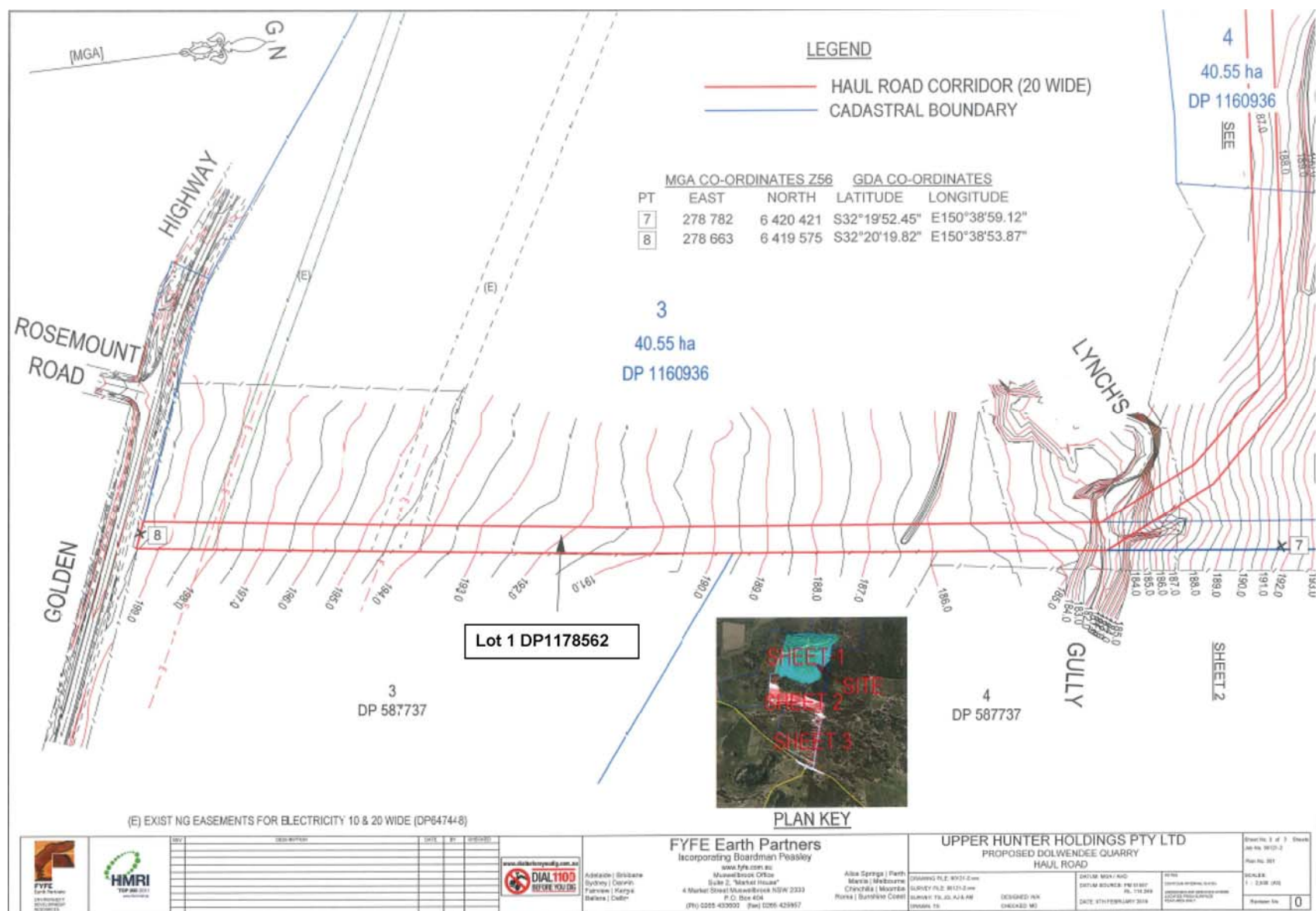


Figure 7: Layout of haul road from quarry



APPENDIX 3
LOCATION OF RECEIVERS

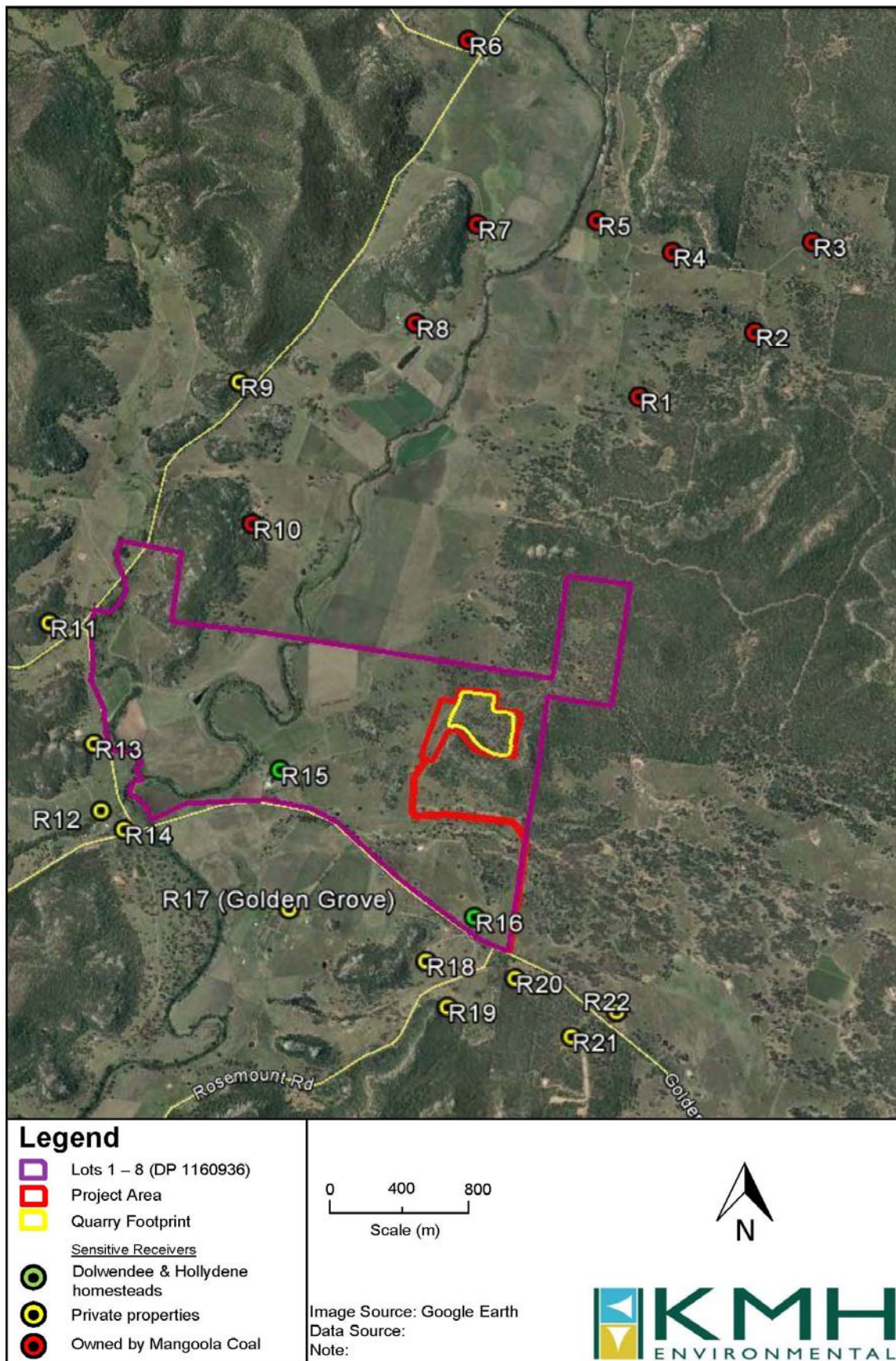


Figure 9: Location of residential receivers

APPENDIX 4 NOISE COMPLIANCE ASSESSMENT

Applicable Meteorological Conditions

1. The noise criteria in condition 3 of Schedule 2 are to apply under all meteorological conditions except the following:
 - (a) wind speeds greater than 3 m/s at 10 m above ground level; or
 - (b) temperature inversion conditions between 1.5°C and 3°C/100 m and wind speed greater than 2 m/s at 10 m above ground level; or
 - (c) temperature inversion conditions greater than 3°C/100 m.

Determination of Meteorological Conditions

2. Except for wind speed at microphone height, the data to be used for determining meteorological conditions must be that recorded by the meteorological station required under condition 13 of Schedule 3.

Compliance Monitoring

3. A noise compliance assessment must be undertaken within two months of commencement of the proposed quarrying operations. The assessment must be conducted by a suitably qualified and experienced acoustical practitioner and must assess compliance with noise criteria presented above. A report must be provided to the EPA within 1 month of the assessment.
4. Unless the Secretary agrees otherwise, this monitoring is to be carried out in accordance with the relevant requirements for reviewing performance set out in the *NSW Industrial Noise Policy* (as amended from time to time), in particular the requirements relating to:
 - (a) monitoring locations for the collection of representative noise data;
 - (b) equipment used to collect noise data, and conformity with Australian Standards relevant to such equipment;
 - (c) modifications to noise data collected, including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration; and
 - (d) the use of an appropriate modifying factor for low frequency noise to be applied during compliance testing at any individual residence if low frequency noise is present (in accordance with the INP) and before comparison with the specified noise levels in the consent.

APPENDIX 5
BIODIVERSITY OFFSET STRATEGY

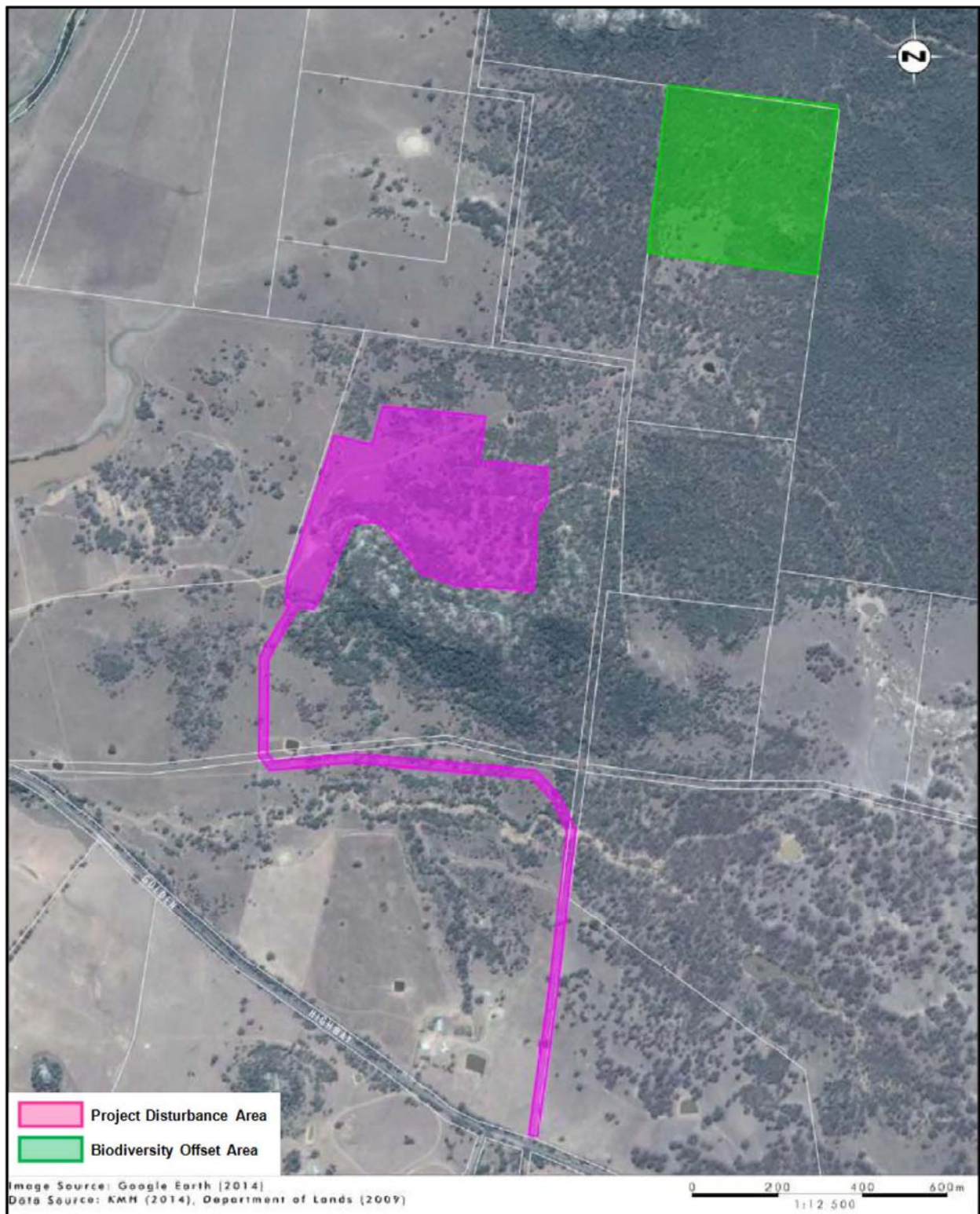


Figure 10: Location of Biodiversity Offset area

APPENDIX 6 CONCEPTUAL REHABILITATION PLAN

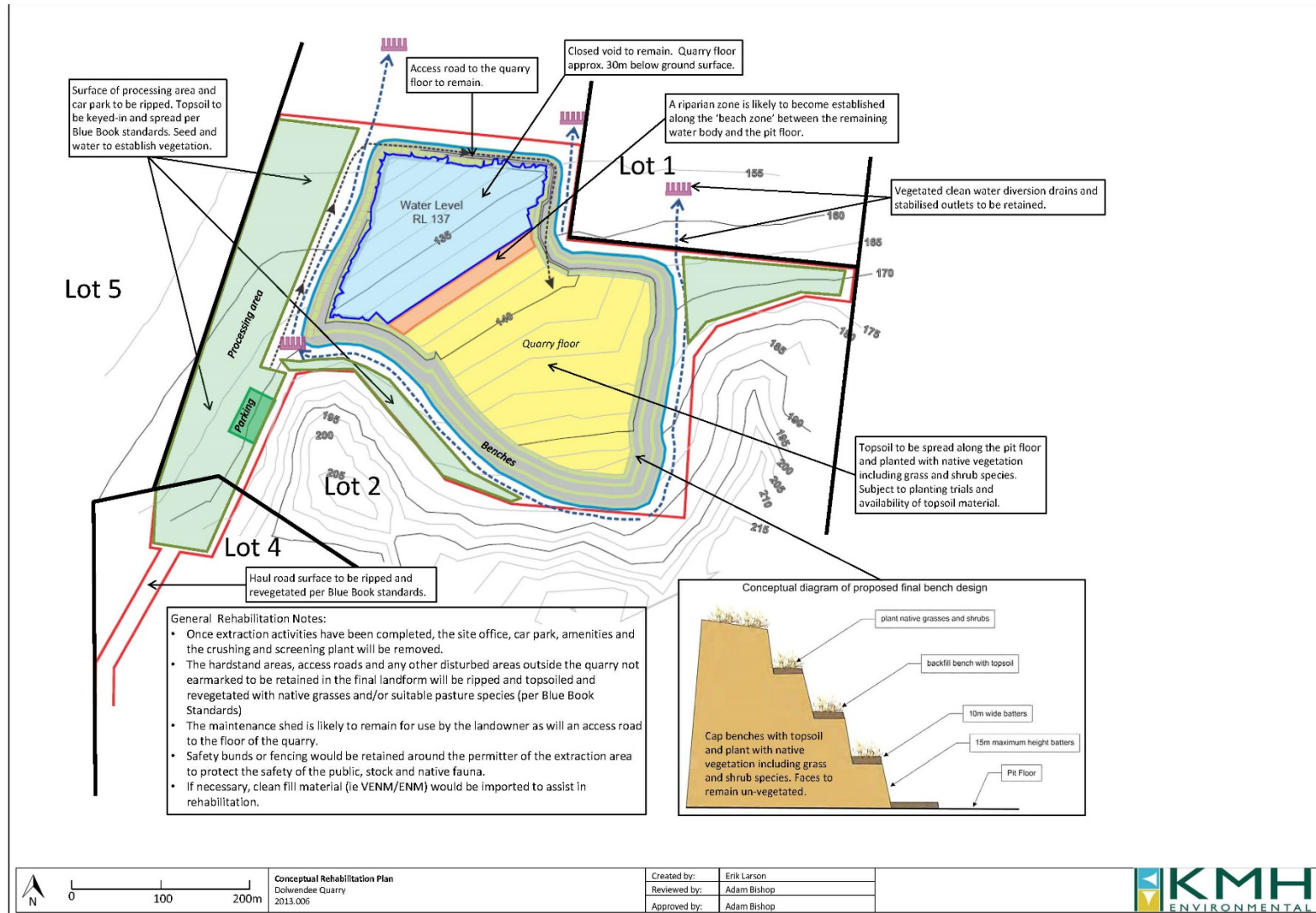


Figure 11: Conceptual rehabilitation plan