

**Preliminary Assessment
Yammacoona Estate
Sand Project**

Claystone Masonry Pty Ltd

October 2010

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Project Description

SUMMARY

Claystone Masonry Pty Ltd proposes to expand production of the Yammacoona Sand Mine at Koloona in northern New South Wales. The mine contains unique coloured sands that are used to manufacture decorative building products such as building facades, pavers and ornamental features without the need to use oxides and artificial colouring agents. Sand will be extracted at a rate of up to 500,000 tonnes per annum to meet both local and export demand. The sand will be screened and packed into shipping containers on site and then transported to the Brisbane bulk handling terminal for distribution or export.

BACKGROUND

Mr. William Clift, the owner of Claystone Masonry Pty Ltd received development consent to extract, screen, and transport sand and rock and to construct and operate a concrete batching plant on Lots 5, 6, and 7 in Deposited Plan 264346 on the Yammacoona Estate at Koloona in northern New South Wales on the 15th of January, 1988. The purpose of the concrete batching plant was to process sand and sandstone extracted from the site for the casting on-site of building materials such as bricks, tiles, clip-on facades, pavers and the like.

On the 15th of June, 1989, application was made for a Pollution Control Approval and on the 15th of September, 1989, Pollution Control Approval No. 89/487W was obtained from the then State Pollution Control Commission to construct the concrete batching plant. A subsequent agreement to supply the extractive materials to Boral and T.N.T for manufacture into the above building products meant that on-site manufacture was no longer required.

Boral and T.N.T are no longer involved with Claystone Masonry Pty Ltd in the manufacture of these products and extraction was placed on hold while Mr. Clift sought alternative markets and manufacturers for the materials. Due to the unique nature of the sands produced at the Yammacoona mine a number of overseas manufacturers have shown an interest in importing these products for use in their manufacturing facilities.

Demand is expected to commence at the rate of 200,000 tonnes per annum and increase to up to 500,000 tonnes per annum over several years.

SITE LOCATION

The Yammacoona sand mine is located in northern New South Wales approximately 19 kilometres west of the village of Delungra and ten kilometres southeast of the village of Warialda Rail. The land is owned by Mr. Clift.

Road access to the Yammacoona mine from Koloona is via Adams Scrub Road and Yammacoona Estate Road. Primary access to Koloona is via the Gwydir Highway. Discussions are underway with Gwydir Shire Council about upgrading an access track from the Yammacoona mine to Warialda Rail via Kellys Gully Road which would keep mine traffic away from residential dwellings.

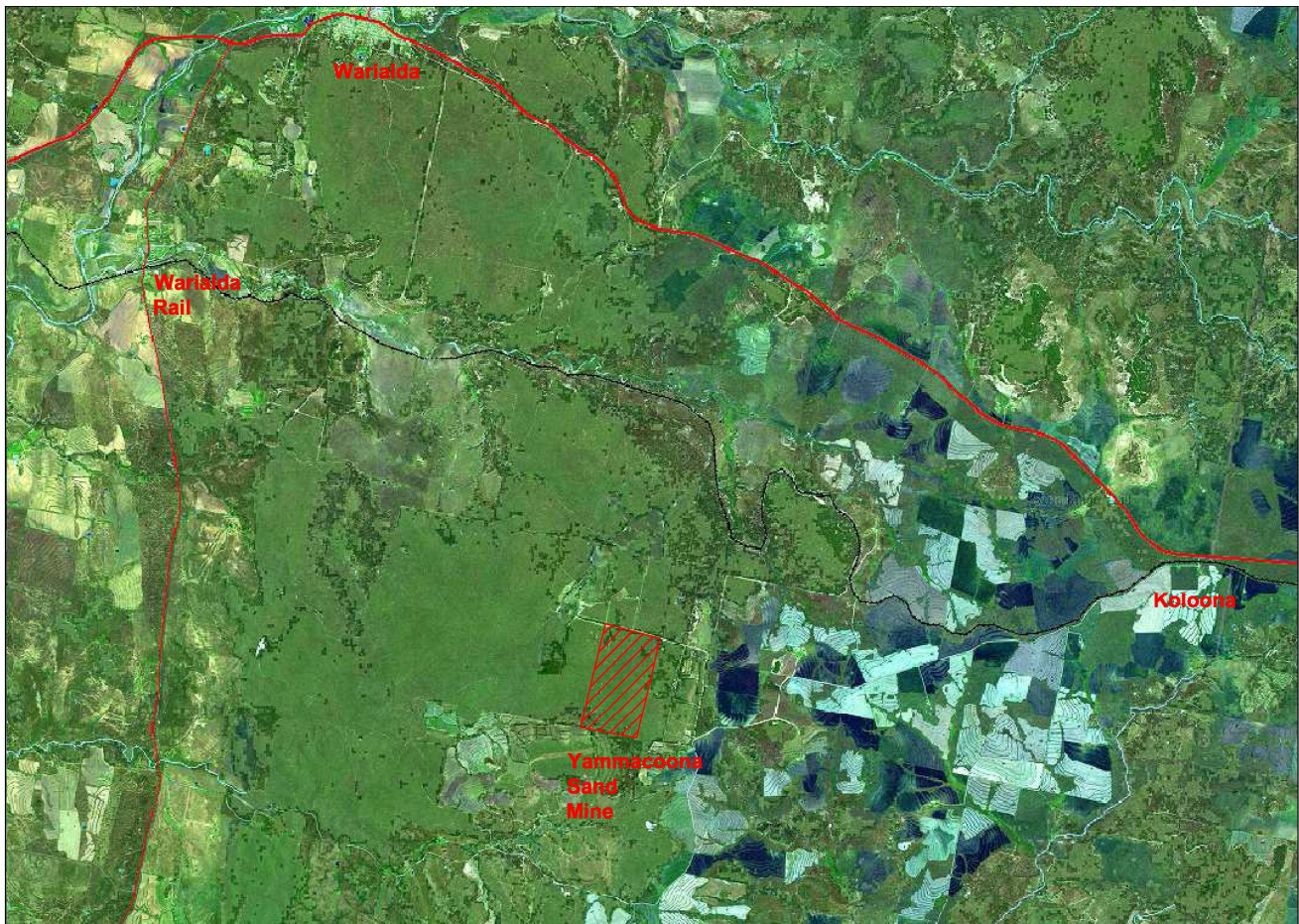


Figure 1 Locality plan of Yammacoona sand mine

OVERVIEW OF PROPOSED OPERATIONS

A sand and sandstone resource has been identified with volumes expected to be greater than 100,000,000 tonnes. The sand and sandstone is commercially unique due to its colour, extent and consistency. Testing undertaken in 2004, to a depth of 15 metres without reaching sandstone, estimated 50,000,000 tonnes of commercially unique materials suitable to be used in the manufacture of terrazzo type products. It has been estimated that these materials extend to a depth of 139 metres. At the proposed extraction rate the mine could have a productive life estimated to be up to 200 years but 25 years is a more realistic estimate for the purpose of this proposal.

The sand is friable and can be extracted by a loader or excavator. The sandstone is relatively soft and can also be extracted by an excavator after ripping with a bulldozer. Blasting is unlikely to be required. The sand would be screened and loaded into containers for transport from the mine by B-double trucks.

Initially, production would increase to 200,000 tonnes per year for the first several years and thereafter be increased in stages to a maximum of 500,000 tonnes per year as demand warrants.

Prior to sand or sandstone extraction, trees will be felled and chipped and stockpiled for respreading on batters of pits and in the regeneration of exhausted areas. Topsoil would be removed and stockpiled for later respreading on the batters and floors of pits to assist regeneration using the seed bank contained therein. Significant habitat trees would be avoided where practical and nest boxes substituted where habitat trees must be removed.

The mine area would be fenced to exclude stock, wildlife, feral animals and persons not associated with the mining operation.

No more than a few hectares will be exposed at any one time as mining is progressive and conducted in

a series of pits, which are progressively rehabilitated as each pit is excavated. This ensures that only a small area of land is disturbed at any one time. Excavated sand would be delivered to a lay down area towards the northern end of the site where it would be screened and loaded into containers ready for dispatch. Oversize or organic material that resulted from the screening operation would be used in rehabilitation of the site.

Sand would be hauled from the mine on B-double trucks each carrying two containers weighing around 25 tonnes each.

GEOLOGY AND RESOURCE ASSESSMENT

The site comprises gently sloping north dipping terrain with a low hill located towards its southern boundary, there is a steep scarp along the southern side of the hill. Total relief over the 135 hectare site is around 50 metres. The sand is homogenous with a massive structure with a high degree of friability with persistence of colour both laterally and vertically (Dept. of Minerals and Energy).

Laboratory testing has revealed particle size distribution of 42% between 1.16mm and 6.7mm, 39% between 150µm and 600µm, the remainder being less than 150µm. The samples tested were from 22 test pits to 15 metre depth over the site and the uniformity of the samples and field observations suggest that the resource is relatively consistent over the entire site. Grid sampling for the planning and scheduling of extraction is incomplete at this stage. However, it is expected that excavation would start at the northern end of the site and proceed in a southerly direction.

A 30,000 tonne bulk sample is to be extracted under the existing development consent to be used in a trial production run.

WORKFORCE

The sand mine would work two shifts per day six days per week, each shift comprising of 12 hours duration. The following tables provide an estimate of employee numbers per shift, excluding administrative employees, for the 200,000 tonne and 500,000 tonne operations.

Table 1 Estimated direct employment per shift at 200,000 tonnes per annum.

Excavator/loader operator	1
On-site truck driver	2
Screen operator/container loader operator	1
Delivery driver	12
Unloader operator	1
Total	17

Table 2 Estimated direct employment per shift at 500,000 tonnes per annum.

Excavator/loader operator	2
On-site truck driver	4
Screen operator/container loader operator	2
Delivery driver	32
Unloader operator	1
Total	41

At a production output of 200,000 tonnes per annum direct employment would be 34 employees over the two shift operation and for 500,000 tonnes per annum this would rise to 82 workers. Flow on employment would be created in the service industries, equipment providers and in the sectors that

utilise the product to manufacture and supply the final product. Wages spent by employees would create further employment throughout the local economy and export earnings would enhance Australia's balance of payments through the generation of export income.

CAPITAL COST

The predicted capital cost for the project is \$250,000, covering exploration, design, obtaining the necessary approvals, and start up project management.

Excavation, processing, and transport is to be undertaken by specialised contractors supervised by the mine superintendent.

Planning

ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

The project falls under the classification of a "Major Project" in Part 3A of the Environmental Planning and Assessment Act, 1979 (EP&A Act) and State Environmental Planning Policy (Major Projects) 2005.

The Department of Environment, Climate Change and Water (DECCW) has specified that the "Draft Guidelines for Threatened Species Assessment (July 2005)" must be considered by proponents and consultants when assessing potential impacts on threatened species, populations, or ecological communities, or their habitats for development applications assessed under Part 3A.

The "Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation (July 2005)" identify the important factors and/or heads of consideration that need to be considered by proponents and consultants when assessing potential impacts on Aboriginal cultural heritage for development applications assessed under Part 3A of the EP&A Act.

The "Aboriginal Cultural Heritage Standards and Guidelines Kit" contain standards and guidelines to help promote predictability, transparency and best practice in Aboriginal heritage management. Guidelines on consultation with Aboriginal people and communities are found in the document "Interim Aboriginal Community Consultation Guidelines". The above guidelines will be followed when carrying out the environmental assessment.

STATE ENVIRONMENTAL PLANNING POLICY (MAJOR PROJECTS) 2005

The proposal is classified as a Major Project in this SEPP as it intends (a) to extract more than 200,000 tonnes of extractive material per annum (b) from a total resource of more than five million tonnes (*Schedule 1, Group 2, clause 7*).

STATE ENVIRONMENTAL PLANNING POLICY (MINING, PETROLEUM PRODUCTION AND EXTRACTIVE INDUSTRIES) 2007

This SEPP applies to the proposal.

Clause 5(2) provides that paragraph (m) of Schedule 1 of State Environmental Planning Policy No. 11 – Traffic Generating Developments does not apply to this proposal. Accordingly, the application no longer has to be referred to the RTA.

Clause 7(3)(a) provides that development for the purposes of an extractive industry may be carried out with development consent on land on which development for the purposes of agriculture or industry may be carried out.

Clause 7(4) provides that if an extractive industry is being carried out with development consent on any land then (a) the processing of extractive material and (c) facilities for processing or the transport of extractive material can be co-located on that land with development consent.

Clause 8 provides:

(1) If a local environmental plan provides that development for the purposes of mining, petroleum production or extractive industry may be carried out on land with development consent if provisions of the plan are satisfied:

- (a) development for that purpose may be carried out on that land with development consent without those provisions having to be satisfied, and*
- (b) those provisions have no effect in determining whether or not development for that purpose may be carried out on that land or on the determination of a development application for consent to carry out development for that purpose on that land.*

(2) Without limiting subclause (1), if a local environmental plan provides that development for the purposes of mining, petroleum production or extractive industry may be carried out on land with development consent if the consent authority is satisfied as to certain matters specified in the plan, development for that purpose may be carried out on that land with development consent without the consent authority having to be satisfied as to those specified matters.

This clause continues the effect, in relation to mining, of State Environmental Planning Policy No 45--Permissibility of Mining. (That Policy is repealed by clause 5 of this Policy.)

This clause negates the requirement under clause 22 of the Yallaroi Local Environmental Plan 1991 for Council to consult with the Soil Conservation Service and to be satisfied in relation to the matters in subclause 22(3) before granting development consent to the application.

Clause 10 provides for certain development to be exempt from the need to obtain development consent. Exempt development can include the construction and/or alterations or demolition of car parking, paving, fencing, lighting structures, buildings, pumps, water and electricity supply, drainage and environmental protection structures.

Clause 11 provides that certain development is complying development including boundary adjustments, the use of mobile crushing and screening plant, the reconstruction or alteration of, or addition to a building.

STATE ENVIRONMENTAL PLANNING POLICY (INFRASTRUCTURE) 2007

This policy repealed SEPP 11 and adopted Schedules 1 and 2 from that policy, but did not reinstate the repealed subsection (m) of Schedule 1 of the repealed policy.

STATE ENVIRONMENTAL PLANNING POLICY NO. 33 HAZARDOUS AND OFFENSIVE DEVELOPMENT

This SEPP does not apply to the proposal as discussed below.

State Environmental Planning Policy No. 33 – Hazardous and Offensive Development - was enacted in 1992 to standardise the definition of hazardous and offensive industries in Environmental Planning Instruments and to ensure consistency in assessment of industries considered hazardous or offensive. Clause 8 of the SEPP sets out that in determining whether a development is a hazardous or offensive industry or storage establishment, or a potentially hazardous or offensive industry or storage establishment, consideration must be given to current circulars or guidelines published by the Department of Planning.

In 1994 the Department published its revised ‘Applying SEPP 33: Hazardous and Offensive Development Application Guidelines’. In determining whether SEPP 33 applies to a project the first step is to consider whether the proposed development is an ‘industry’.

Question 2.1 on page 3 of the guideline states:

Consent authorities should firstly consider whether the proposed use falls within the definition of

‘industry’ adopted by the planning instrument which applies.

Figure 1 on page 4 of the guideline provides a graphical outline of the process.

In this case the appropriate planning instrument is the Yallaroi Local Environmental Plan 1991 (the LEP).

Clause 6 of the LEP adopts the Environmental Planning and Assessment Model Provision 1980, except for the definitions of ‘arterial road’ and ‘map’ and clauses 13, 15, 17, 18, 20, 21, 22, 23, 24, 27, 28, 29, 32 and 34, for the purposes of the LEP. Apart from the foregoing exemptions the Model Provisions therefore form an integral part of the LEP.

Clause 4(1) of the Model Provisions contains a number of definitions including a definition of industry as follows:

Industry means:

- (a) any manufacturing process within the meaning of the Factories, Shops and Industries Act, 1962;*
- or*
- (b) the breaking up or dismantling of any goods or any article for trade or sale or gain or as ancillary to any business;*

but does not include an extractive industry.

Clause 3 of State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 also defines an extractive industry separately from an industry.

Accordingly, the proposed extractive industry is not an industry for the purposes of State Environmental Planning Policy No. 33 Hazardous and Offensive Development.

Based on the foregoing, State Environmental Planning Policy No. 33 – Hazardous and Offensive Development does not apply to the proposal as by definition an ‘*extractive industry*’ is not an ‘*industry*’ for the purposes of the policy.

STATE ENVIRONMENTAL PLANNING POLICY NO. 44 – KOALA HABITAT PROTECTION

An inspection of the site did not discover any Koalas nor find any evidence of Koalas having used the site. No Koala food trees, as listed in Schedule 2 of the SEPP, are present on the land. No scats or scratch marks that could be attributed to koalas were present.

The land does not comprise ‘core Koala habitat’ or ‘potential Koala habitat’ as defined in the SEPP and the land owner advised that there had been no sighting of Koalas in the time he had owned the land.

Accordingly, it is concluded that there are no SEPP 44 issues in respect of this proposal.

STATE ENVIRONMENTAL PLANNING POLICY NO. 55 – REMEDIATION OF LAND

Under the Environmental Planning and Assessment Act 1979 the consent authority must consider whether land which is the subject of a development application is suitable for its intended purpose in its present state or whether the land is contaminated and must be remediated.

The publication *Managing Land Contamination: Planning Guidelines* lists a number of land uses which trigger the requirement for investigation under the Contaminated Land Management Act 1997. ‘Agriculture’ is a land use which triggers that requirement.

Although the land is zoned for agriculture its classification under the Department of Agriculture’s *Agricultural Land Classification* system would be Class 5 due to its low fertility. As a result of this low fertility the land has not been used for agriculture other than occasional light grazing.

THREATENED SPECIES CONSERVATION ACT 1995

The “Threatened Biodiversity Survey and Assessment: Guidelines for Development and Activities

(Working Draft, November 2004)” guidelines have been primarily developed for use by decision makers when considering a development, activity or action pursuant to Parts 4 and 5 of the EP&A Act, and Part 6 of the Threatened Species and Conservation Act 1995 (TSC Act).

The guidelines may also provide information and assistance to any other individuals or organisations that may be required to consider the effect of a proposal on threatened biodiversity or critical habitat. While originally designed for Part 4 and 5 EP&A Act assessments, these guidelines remain useful for assessments being prepared under Part 3A and are referred to within the draft threatened species assessment guidelines for Part 3A noted above.

THE NATIONAL PARKS AND WILDLIFE ACT 1974

The DECCW guidelines are being followed to ensure the survey and consultation requirements are compliant with the National Parks and Wildlife Act 1974. The specific guidelines are: the *Interim Community Consultation Requirements for Applicants*, and the *Aboriginal Cultural Heritage Standards and Guidelines Kit*.

An initial search of the Aboriginal Heritage Information Management System (AHIMS) conducted on the 18th of October 2010 has indicated that no Aboriginal sites or places have been recorded on or near the subject land.

PROTECTION OF THE ENVIRONMENT OPERATIONS ACT 1997

The DECCW administers this Act, and as the proposal is to extract more than 30,000 tonnes of material per annum an Environmental Protection Licence must be obtained.

YALLAROI LOCAL ENVIRONMENTAL PLAN 1991

The subject land is zoned 1(a) (General Rural) under Yallaro Local Environmental Plan 199 (the LEP). Extractive industries and ancillary infrastructure is permissible in the zone with the consent of Council.

OTHER APPROVALS

If a bore is to be used to access water for dust suppression, a bore licence would be required.

Stakeholder Engagement

IDENTIFYING STAKEHOLDERS

Government agencies that have planning responsibilities have been identified as key stakeholders along with the Aniwana Local Aboriginal Land Council.

GOVERNMENT AGENCIES

The following government agencies were identified and will be invited to a focus meeting to be held on site on a date to be mutually agreed:

- The Department of Planning (DoP);
- The Department of the Environment, Climate Change and Water (DECCW);
- The Department of Industry and Investment (DII);
- Department of Sustainability, Environment, Water, Population and Communities; and
- Gwydir Shire Council (Council).

This site meeting would assist relevant agencies in their assessment of the project.

NEIGHBOURING LANDOWNERS

Neighbouring land owners have been identified would be notified by letter by Gwydir Shire Council and

newspaper advertisement. The Department of Planning would publish the proposal and supporting documents on its Major Projects web site.

ABORIGINAL COMMUNITY

The Anaiwan Local Aboriginal Land Council, 29 Ruby Street, Tingha is the relevant Land Council for the local area.

Two principal pieces of legislation provide automatic statutory protection for Aboriginal heritage and the requirements for its management in New South Wales. These are the National Parks and Wildlife Act 1974 and the Environmental Planning and Assessment Act 1979.

The implications of these statutory controls (specifically the NPW Act) within the context of the development proposal are outlined below.

The National Parks and wildlife Act 1974 provides statutory protection for all Aboriginal ‘objects’ under section 90 of the Act and Aboriginal ‘places’ under section 84.

Aboriginal objects and places are afforded automatic statutory protection in NSW where it is an offence (without the consent of the Director General) to destroy, deface or damage, or knowingly cause or permit the destruction or defacement of or damage to, an Aboriginal object or Aboriginal place.

The protection provided to Aboriginal objects applies irrespective of the level of their significance or issues of land tenure. However, areas are only gazetted as Aboriginal places if the Minister is satisfied that sufficient evidence exists to demonstrate that the place is of special significance to Aboriginal people.

The Environmental Planning and Assessment Act 1979 is designed more specifically to cater for heritage issues within the context of new development. The Act has four main parts of relevance to Aboriginal heritage. Part three governs plan making, Part 3A concerns Major Projects, Part four relates to development assessment for local development and Part five, which relates to activity approvals by approval authorities. Part 3A has relevance to this proposal.

Under section 79C(1) of the Act a consent authority must consider, amongst other things, the heritage values of the proposed development site. These heritage values include historic, scientific, social, aesthetic, anthropological, cultural, archaeological, Aboriginal and non-aboriginal heritage.

Two guidelines are also relevant to Aboriginal consultation, the “Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation” and the “Aboriginal Cultural Heritage Standards and Guidelines Kit”.

The “Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation” identify the important factors and/or heads of consideration that need to be considered by proponents and consultants when assessing potential impacts on Aboriginal cultural heritage for development applications assessed under Part 3A of the EP&A Act.

The “Aboriginal Cultural Heritage Standards and Guidelines Kit” contain standards and guidelines to help promote predictability, transparency and best practice in Aboriginal heritage management. Guidelines on consultation with Aboriginal people and communities are found in the document “Interim Aboriginal Community Consultation Guidelines”.

The guidelines listed above will be used as the basis for an archaeological and cultural survey to be carried out by a suitably qualified archaeologist engaged by the proponent.

Environmental Issues

OVERVIEW

Claystone Masonry is an Australian owned family company founded and owned by Mr William Clift.

The company was formed to develop a commercially unique deposit of coloured sand on the subject land.

The proposal is to extract between 200,000 and 500,000 tonnes of unique oxide rich sand per annum from Lots 7 and 8 in DP 264346, once development approval for this project has been granted.

ALTERNATIVES TO THE PROJECT

The quartz-rich coloured sands are quite unique and are believed to have a limited geographical distribution. The natural colouring of these sands can not be reproduced using chemical or oxide colourants. There are no alternatives presently available to these naturally coloured sands.

PIT DESIGN AND REHABILITATION

The sand would be extracted using open cut strip mining methods, however, the selection of the final design parameters and scheduling are a complex suite of decisions that are based on economic, environmental and mining engineering principles. Pit design and operation would be dependent on further sampling however a conceptual pit design is provided as Appendix 'C'.

The basic design is for one or a series of east west oriented pits located across the slope that would progress from commencement in the north in a southward direction. The design of the pits, which would include bunding, would ensure that any uncontaminated run on surface water is diverted around the pit and any incident water remains in the pit where it would either be evaporated or infiltrated.

As the pit face progresses in a southerly direction topsoil, and mulch generated from the clearing and chipping of vegetation, would be spread on batters and on the pit floor to facilitate regeneration utilising the seed bank present in the topsoil as well as pasture seeding and fertilisation.

The pit design would incorporate the following elements:

- Vegetation would be chipped and stockpiled for use in regeneration;
- Topsoil would be stockpiled for spreading on batters and the pit floor as the mine face proceeds. This would encourage regeneration of indigenous vegetation contained in the seed bank within the topsoil. Additional seeding with grass species would be undertaken to increase the potential of the land for agricultural purposes once mining is complete;
- Pits would be oriented with the contours to help prevent erosion, topsoil bunds would aid the diversion of stormwater away from batters and the pit face, bunds may have to be placed over access ramps to ensure that water does not flow down ramps. This would be covered in an erosion and sediment control plan submitted as part of the development application process;
- Each pit would have a small catchment and mining would progress into rising terrain. This would direct incident rainfall on the pit floor downhill into rehabilitated areas where it will infiltrate and provide soil moisture to aid revegetation;
- Ramps would be located at each end of a pit to provide 'drive through' access for trucks and machinery. As the pit face would proceed away from the lay down area machine and vehicle access to the pit would be over defined, previously disturbed land;
- Significant habitat trees would be identified, recorded in a database and retained where possible;
- Rehabilitation would be progressive with batters recontoured 7:1, topsoil and mulch respread, and grass seed and fertiliser applied to ensure rapid groundcover establishment. Undisturbed land between the pits would act as a further seed source and help stabilise the area. Rehabilitated pits would hold water for a short time which would increase the establishment of pasture plants and native vegetation.

ACCESS AND TRANSPORT

Access to the site is presently via the Gwydir Highway, Adams Scrub Road at Koloona and then Yammacoona Estate Road. In their present state Adams Scrub Road and Yammacoona Estate Roads are not suitable to accommodate the traffic that would be created by the project so the proponent is in discussion with Gwydir Shire Council to develop an alternative route to Warialda Rail that would avoid farm residences.

SOCIO-ECONOMIC

The sand extraction project would employ up to 82 workers directly and through contractors. Additional employment would be created throughout the community through suppliers of goods and services to the project and from wages spent locally. The project would also contribute positively to Australia's terms of trade through the generation of export income.

AIR QUALITY

Air quality goals for dust and particulate matter emissions would be established in accordance with the NSW EPA *Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in New South Wales* and other relevant legislation.

Laboratory analysis of the sand on site suggests that it is comprised of larger particle sizes with very little fine material. Should water be required for dust suppression then a bore licence application would be submitted.

WATER QUALITY

The topography and permeability of the soils determine that there would be no run-on of stormwater onto the project site and rain that falls on the site infiltrates rapidly. The proposed method of sand extraction would ensure that any incident rainfall onto the pit floor would remain within the pit. Bunds around active pits would be created from topsoil and mulch and would be utilised in progressive rehabilitation of the pit as mining progresses.

NOISE AND VIBRATION

The project would operate 24 hours per day, seven days per week. It is proposed initially that an area would be cleared by bulldozer which would also form the topsoil into bunds, cleared timber would be chipped and the mulch placed on the bunds. An excavator would work at the pit, and two rigid tippers would transport the material to the lay down area for screening and loading into containers on B-double trucks. As production increases additional machinery would be incorporated as required.

Noise impact assessment would be guided by the *NSW Industrial Noise Manual* and the *Environmental Criteria for Road Traffic Noise*.

FLORA AND FAUNA

An assessment of flora and fauna would be conducted in accordance with the provisions of Section 5A of the Environmental Planning and Assessment Act 1979 and the Protection of the Environment Operations Act 1997. The specific aims of the flora and fauna assessment would be to:

- Identify and describe all flora species, including rare and threatened flora, and vegetation communities present within the subject site and assess their conservation significance with regard to relevant Federal, State and Local Government environmental legislation;
- Identify and describe all fauna species, including rare and threatened fauna, and their habitats present within the subject site and assess their conservation significance with regard to relevant Federal, State and Local Government environmental legislation;
- Determine, based on the foregoing, whether the proposed development was likely to have a

significant effect on threatened species, populations or ecological communities, or their habitats and provide recommendations which would mitigate those effects.

VISUAL AMENITY

The sand mine would not be visible from any homesteads or public roads.

Conclusion

This preliminary assessment has been prepared to outline the proposed increase in capacity of the Claystone Masonry sand mine in the Yammacoona area in the Gwydir Shire of northern New South Wales and to provide an overview of the potential environmental issues associated with the project. The report will be submitted to the Department of Planning to accompany a Major Project application under Part 3A of the Environmental Planning and Assessment Act 1979 and will assist the Director General to specify requirements for the completion of the environmental assessment for the proposal.

An environmental assessment will be undertaken based on the Director General's requirements in conjunction with the requirements of other relevant government agencies.

Appendices

APPENDIX 1 – LOCALITY PLAN

APPENDIX 2 – SITE PLAN

APPENDIX 3 – CONCEPTUAL PIT DESIGN



Warialda

Warialda
Rail

Koloona

Yammacoona
Sand
Mine

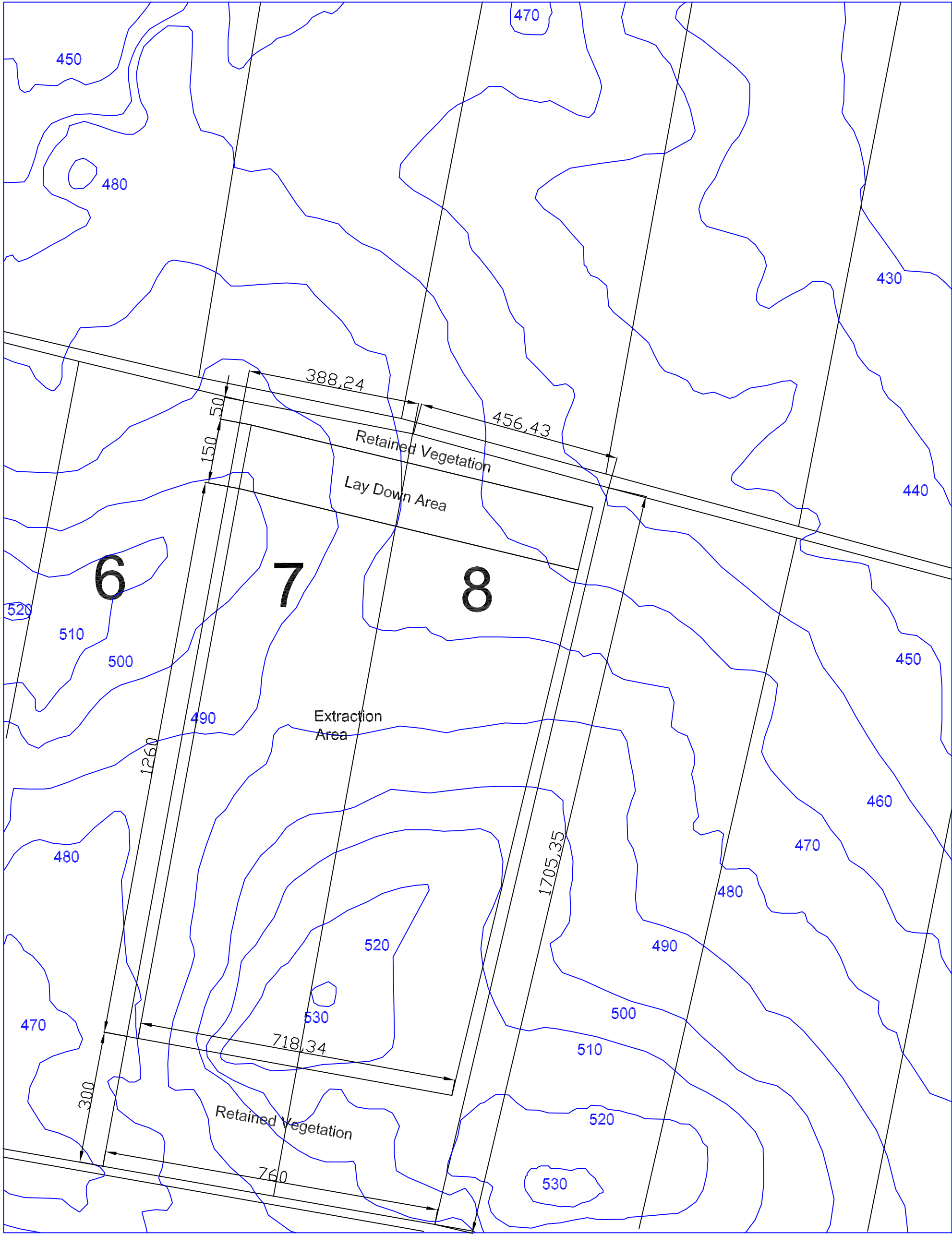
SCALES : HORIZ NTS (A3)
VERT NTS
DATUM : A.H.D. CONTOUR INTERVAL :

SURVEYED
DESIGNED Richard Clowes
CHECKED

S.M.K. CONSULTANTS Pty Ltd
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PLAN : **Locality Plan**
Claystone Masonry Pty Ltd
Yammacoona Estate Mine Site

FILE No. <u>10-222</u>	SHEET No. <u>1</u>	No.OF SHEETS <u>3</u>
PLAN No. <u>1</u>		
DATE <u>Oct 2010</u>		
DRAWING FILE : CALC. FILE :		



S.M.K. CONSULTANTS Pty Ltd
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PLAN : Claystone Masonry Pty Ltd
Yammacoona Estate Mine Site
Lots 7 & 8 DP 264346

SCALES : HORIZ NTS (A3)
VERT NTS
DATUM : A.H.D. CONTOUR INTERVAL :

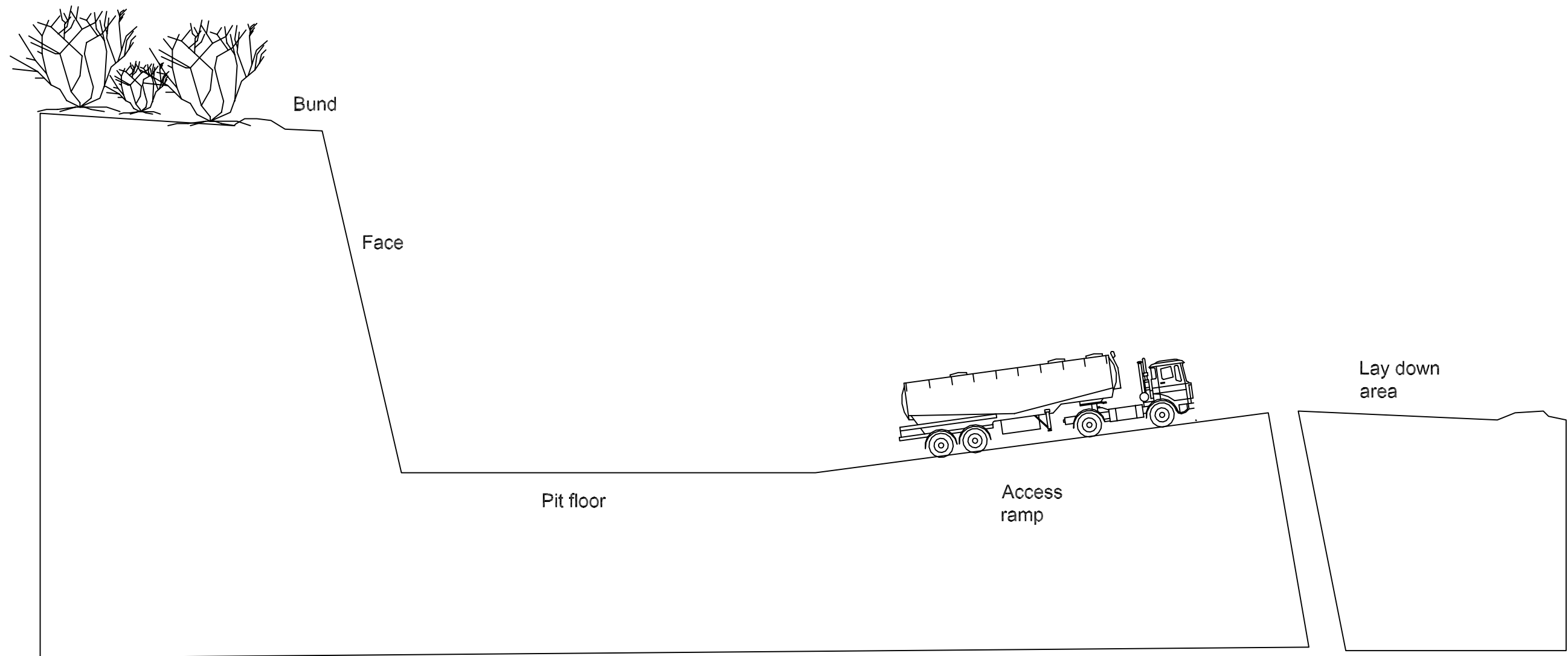
SURVEYED _____
DESIGNED Richard Clowes
CHECKED _____

FILE No. 10-222
PLAN No. 1
DATE Aug 2010

SHEET No. 2

No. OF SHEETS 3

DRAWING FILE :
CALC. FILE :



SCALES : HORIZ NTS (A3)
VERT NTS
DATUM : A.H.D. CONTOUR INTERVAL :

SURVEYED _____
DESIGNED Richard Clowes
CHECKED _____

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PLAN : Claystone Masonry Pty Ltd
Pit Concept Plan

FILE No. <u>10-222</u>	SHEET No. <u>3</u>	No.OF SHEETS <u>3</u>
PLAN No. <u>3</u>		
DATE <u>Oct 2010</u>		

DRAWING FILE :
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