

COUNCIL ASSESSMENT REPORT

Panel Reference	2018NTH011
DA Number	DA2018/0188
LGA	Richmond Valley Council
Proposed Development	Expansion of existing extractive industry from 70,000 tonnes to 490,000 tonnes per annum for up to 25 years
Street Address	65 Broadwater Quarry Road Broadwater
Applicant/Owner	Applicant: Quarry Solutions P/L c/- Groundworks plus Owner: W McGeary
Date of DA lodgement	23 March 2018
Number of Submissions	17
Recommendation	That Development Application (DA2018/0188) (JRPP Reference No 2018NTH011) be approved subject to conditions contained in Appendix A
Regional Development Criteria (Schedule 7 of the SEPP (State and Regional Development) 2011)	
List of all relevant s4.15(1)(a) matters	<ul style="list-style-type: none"> • State Environmental Planning Policy No 33 – Hazardous and Offensive Development • State Environmental Planning Policy No 44 – Koala Habitat Protection • State Environmental Planning Policy No 55 – Remediation of Land • State Environmental Planning Policy (Infrastructure) • State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 • State Environmental Planning Policy (Rural Lands) 2008 • Richmond Valley Local Environmental Plan 2012 • Richmond Valley Development Control Plan 2012
List all documents submitted with this report for the Panel's consideration	<ul style="list-style-type: none"> • Development Application Assessment Report • Submissions received during exhibition periods • NSW Roads and Maritime Services comments dated 27 April 2018 • NSW Office of Environment & Heritage dated 28 May 2018 • NSW Office of Environment & Heritage additional comments dated 19 November 2018 • EPA General Terms of Approval dated 25 Jan 2019 • Additional Information dated August 2018
Report prepared by	Debra Manendis Development Assessment Planner, Richmond Valley Council
Report date	26 March 2019

Legislative clauses requiring consent authority satisfaction

Have relevant clauses in all applicable environmental planning instruments where the consent authority must be satisfied about a particular matter been listed, and relevant recommendations summarized, in the Executive Summary of the assessment report?

e.g. Clause 7 of SEPP 55 - Remediation of Land, Clause 4.6(4) of the relevant LEP

Yes / No / Not
Applicable

Clause 4.6 Exceptions to development standards

If a written request for a contravention to a development standard (clause 4.6 of the LEP) has been received, has it been attached to the assessment report?

Yes / No / Not
Applicable

Special Infrastructure Contributions

Does the DA require Special Infrastructure Contributions conditions (S7.24)?

Note: Certain DAs in the Western Sydney Growth Areas Special Contributions Area may require specific Special Infrastructure Contributions (SIC) conditions

Yes / No / Not
Applicable

Conditions

Have draft conditions been provided to the applicant for comment?

Note: in order to reduce delays in determinations, the Panel prefer that draft conditions, notwithstanding Council's recommendation, be provided to the applicant to enable any comments to be considered as part of the assessment report

Yes / No

EXECUTIVE SUMMARY

1. Overview

Development Application DA2018/188 (JRPP Ref 2018NTH011) seeks consent for the expansion of an existing extractive industry from 70,000 tonnes per annum to 490,000 tonnes per annum for a total of five years after which the annual limit reverts to the original limit of 70,000 tonnes for a further period of twenty years. The additional material is to be obtained using a top down approach which will allow for safe access to the maximum volume of resource, rather than increase the existing footprint of approximately 45,000m². Use of the top down methodology to gain access to the resource will allow for safe access to the maximum volume of resource whilst the higher levels of the existing hill shields views to the quarry from the town and existing highway.

The extraction of 490,000 tonnes in any one year has been identified as being necessary for a period of five years only and is necessary to fulfil the need for additional material required for the Woolgoolga to Ballina upgrade of the Pacific Highway project. Mobile screening, washing stockpiling and transportation activities are proposed.

If this application is approved, the existing development consent over the land will be surrendered.

The project is not classified as a State Significant Development as the extraction volume is less than 500,000 tonnes and the total available resources is less than 5million tonnes and extraction will not occur from an environmentally sensitive area of State significance.

1.2 Reason for consideration by Regional Planning Panel

The proposal development constitutes 'regional development' requiring referral to the Joint Regional Planning Panel (JRPP Northern Region) for determination as an extractive industry which meets the requirements for designated development under clause 19 Schedule 3 to the Environmental Planning and Assessment Regulation 2000 and cl 2.15 of the Environmental Planning and Assessment Act 1979.

1.3 Location, History and Permissibility

The development is located on Lots 1 DP1216612 (quarry activities) & Lot 8 DP1216612 (access) with a street address of 65 Broadwater Quarry Road Broadwater. The total site cover of the quarry is 23.8 hectares (Lot 1: 22 hectares and Lot 8: 1.8 hectares) and is located approximately 800m east of the Broadwater township. The lands adjacent to the site are used for rural production, primarily sugar cane. Residential properties are located 550m to the north, 250m to the south-west and 650m to the west.

The site is licenced under Environmental Protection Licence (EPL) number 20770. The EPL authorises the following:

- Crushing, grinding or separating 30,000 – 100,000 tonnes processed
- Land based extractive activity >30,000 tonnes – 100,000 tonnes extracted, processed or stored.

1.4 Integrated Development

The application is identified as Integrated Development. An Environmental Protection Licence (EPL20770) was issued for the existing operations on 9 September 2016.

1.5 Public Exhibition and Notification

The application was placed on public exhibition for 30 days being from 12 April 2018 to 11 May 2018. Written notification to all adjoining land owners and properties within a one (1) kilometre radius of the site was undertaken and a published notice appeared in the local paper on 11 April 2018 and 25 April 2018.

Seventeen public submissions were received during the exhibition period. All submissions contained similar issues.

1.6 Recommendation

That development application (DA2018.0188) (JRPP Reference No 2018NTH011) be approved subject to the conditions of consent and form part of the Attachments.

- Draft Proposed Conditions of Consent
- General Terms of Approval Environmental Protection Authority
- General Terms of Approval NSW Office of Heritage and Environment
- Plans
- Copy of Submissions
- Appendix E Original Development Consent (DA123/95)

2. Broadwater Quarry (Gittoes) Development Proposal

Development Application DA2018/188 (JRPP Ref 2018NTH011) seeks consent for the expansion of an existing extractive industry from 70,000 tonnes per annum to 490,000 tonnes per annum for a total of five years after which the annual limit reverts to the original limit of 70,000 tonnes for a further period of 20 years. The development is located on Lots 1 DP1216612 (quarry activities) & Lot 8 DP1216612 (access). The additional material is to be obtained volumetrically rather than increase the existing pit footprint of approximately 45,000m².

It is anticipated that >800,000m³ (1,928,000 tonnes) of in situ resource remains within the deposit to a floor level of RL 7h AHD with the majority of the resource being exhausted after five years. However, should any resources remain the extraction rate per annum will continue to occur in accordance with the current development approval of 70,000 tonnes per annum.

The quarry will produce a number of products including (but not limited to) road base, drainage aggregates and select fill.

The application involves the following key components and activities:

- Maximum extraction rate of 490,000 tonnes per annum for a maximum of five years then 70,000 tonnes per annum for a period of 20 years
- Material extracted is suitable only for general fill and sub grade purposes (road base, drainage aggregates and select fill)
- Screening, washing, stockpiling and transportation activities are proposed
- Hours of operation being 7.00am to 6.00pm Monday to Friday and 8.00am to 12.00pm Saturday. No work is proposed on Sundays or Public Holidays
- The haulage route identified from the site access includes the internal haul road and Broadwater Quarry Road to Broadwater Evans Head Road.
- Transportation being a maximum of 102 movements per day inclusive of both incoming and outgoing. As Saturday operating hours are only for half a day the number of truck movements will be reduced to 56 movement (incoming and outgoing).

2.1 Location

The total site cover of the quarry is 23.8 hectares (Lot 1: 22 hectares and Lot 8 1.8 hectares) and is located approximately 800 metres east of the Broadwater township. The lands adjacent to the site are used for rural production, primarily sugar cane. Residential properties are located 550 metres to the north, 250 metres to the south-west and 650 metres to the west (refer Figures 1 and 2)



Figure 1: Location of Site

Source: RV GIS

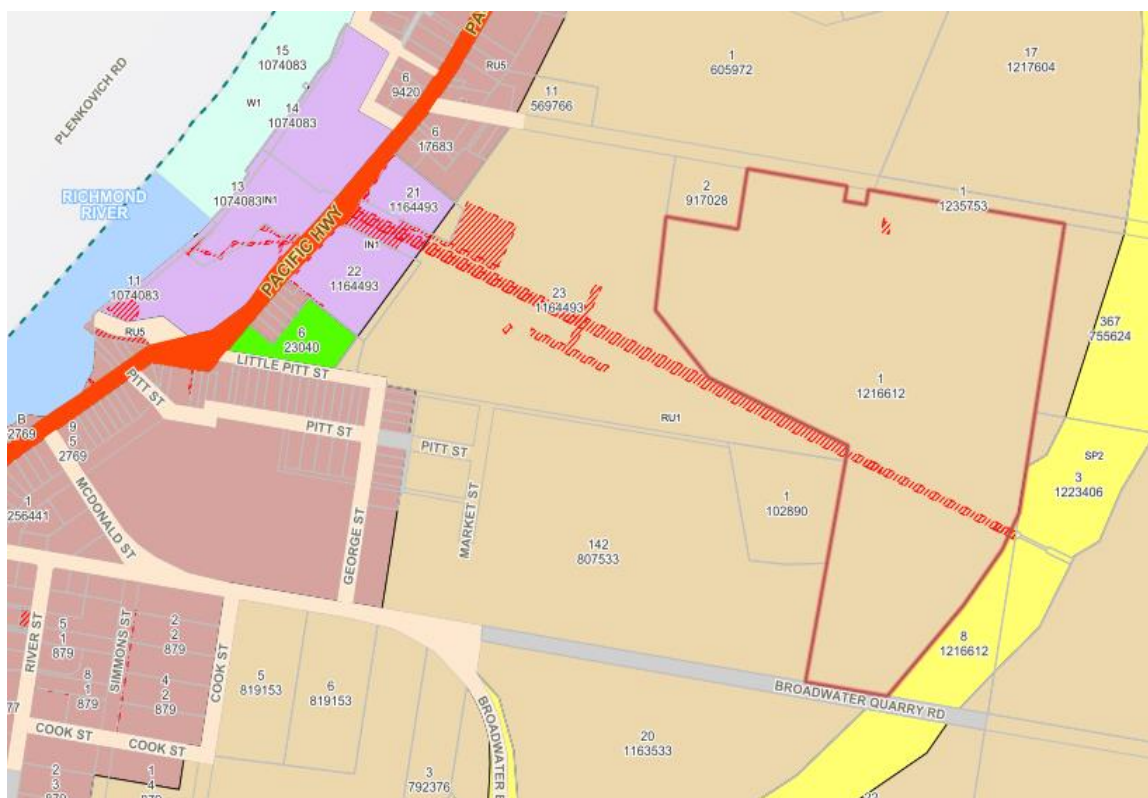


Figure 2: Cadastral Locations showing Lot and DP

Source: EIS (Groundworks plus)

2.2 Quarry Site and recent operations

The site was approved for use by the former Richmond River Shire Council (now Richmond Valley Council) as a quarry (extractive industry) on Lot 124 DP755624 by DA123/95 on 18 May 1999 for a maximum volume of 70,000 tonnes per annum. Since being approved the quarry has been intermittently worked on a campaign basis, for the supply of local projects. Since mid-2014 until the issue of the EPL, limited extraction occurred with activities largely confined to removal of previously stockpiled material. Since the issue of the EPL, extraction has recommenced, however, has been limited by the current upper limit thresholds. As part of the Pacific Highway upgrade project a section of the original lot (L124 DP755624) was resumed by TMR and the lot reconfigured into the lots identified below.

Lot 1 is zoned RU1 Primary Production under Richmond Valley Local Environmental Plan 2012 and is in the ownership of W&M McGeary who lease the quarry operations to Quarry Solutions. Lot 8 is zoned SP2 Infrastructure Zone (Classified Road) and is in the ownership of Roads and Maritime Services.

No extraction, processing or construction of buildings or structures are proposed within the SP2 Zoned area. This area reflects the alignment of the new Pacific Highway, east of the quarry, and is used for the existing access road to the quarry.

The proposed application seeks to expand production capacity to a total of 490,000 tonnes per annum for a period of five years after which it will revert to the original approval of 70,000 tonnes per annum for a period of twenty years.

2.3 Proposed expansion of extraction areas and stockpiling

The proposed development involves two associated stages:

- Stage 1: Continue with the current development with an upper bench of RL37m AHD being pushed back to the west to allow for development of the subsequent and lower benches.
- Stage 2: Extraction of the bench to RL 7m AHD and the removal of the resource underlying the existing stockpile area.
- Long Term Development: Resultant of the development will be water storage surrounding by a series of rehabilitated quarry benches with a maximum height of 15m and a minimum width of 8metres. Stockpile areas and quarry floor not forming part of the water storage areas will be stabilised and grassed with appropriate species to provide for long term stability.

Plans of the proposed quarry layout are shown in Figure 3.

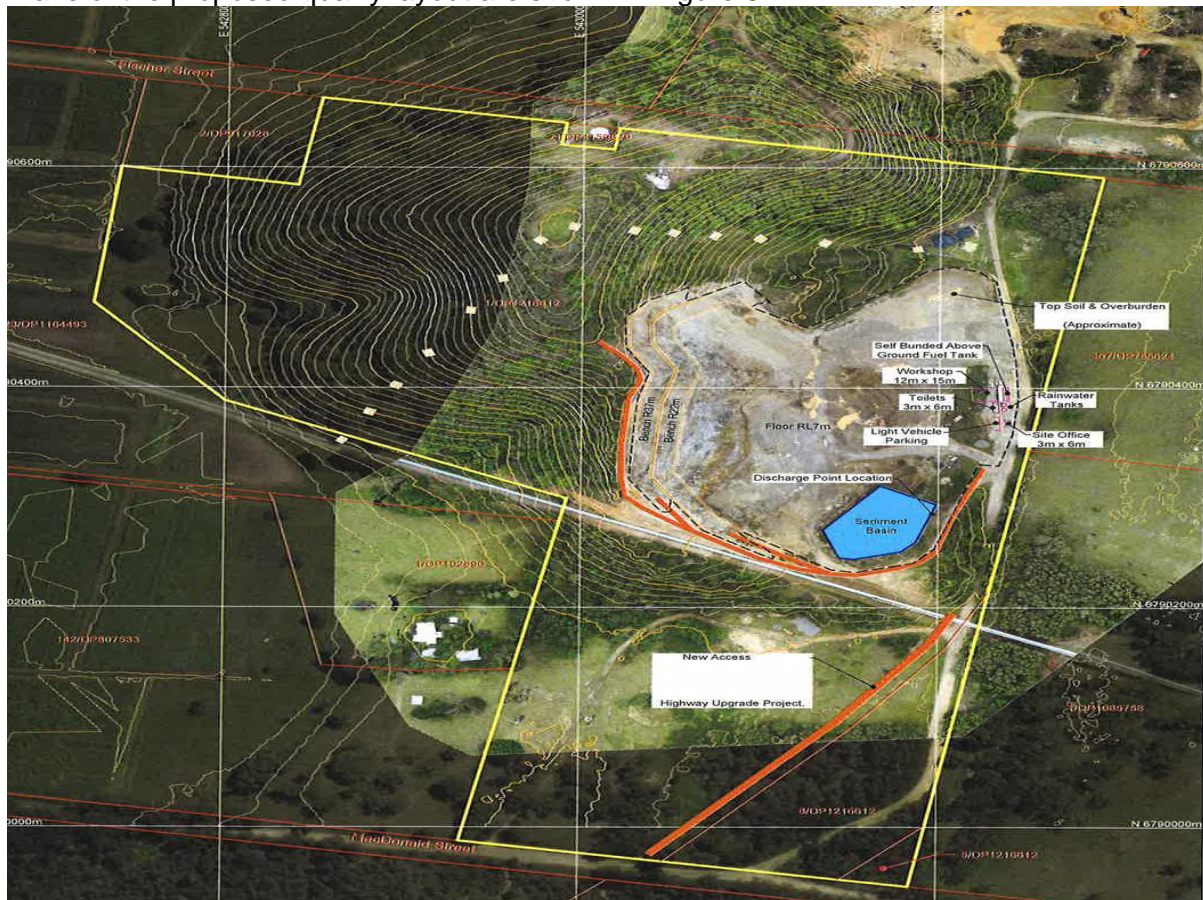


Figure 3 Conceptual Quarry Site Plan

Source: EIS

The additional material is to be sourced from a top down methodology extending to a depth of RL7.0m AHD within the existing footprint rather than increase the size of the current area.

Consent is sought to increase the limit by 420,000 tonnes per annum to 490,000 tonnes for a period of 5 years after which the annual limit reverts to the existing limit of 70,000 tonnes per annum. It is not anticipated that the full extent of the increased limit will be sourced every year.

Bench heights are proposed to be used are RL37m AHD RL 22m AHD and RL 7m AHD. Blasting is currently used to source the resource from the current bench levels and this method will continue to be used to access the resource in the lower bench levels. The quarry operation is to be carried out in response to demand from the Pacific Highway upgrade

2.4 Operational Parameters

(a) Hours of Operation

Quarry operations and transportation Monday to Friday 7am – 6pm
 Saturday 8am – 12pm

No operations are to occur on Sundays or Public Holidays

(b) Blasting

Blasting is to occur Monday to Friday 9am-3pm

No blasting is to occur on Saturday, Sunday or Public Holidays

(c) Transport Activities

Transport operations are an integral part of the development and have the potential to impact other road users and land uses along the haulage route. Transport movements were a major concern raised in submissions with issues being noise, dust and emissions, and traffic safety. These are further discussed in Section 6.

(d) Haulage Routes

The three haulage routes proposed are:

- i. Internal haulage road direct to the Pacific Highway upgrade project
- ii. Broadwater Quarry Road to the Broadwater-Evans Head Road
- iii. McDonald St to the Pacific Highway – (temporary)

The re-alignment of the Pacific Highway upgrade has provided a direct internal route to the upgrade project. Until the roundabout to the upgrade project is completed those vehicles requiring access to the southern part of the Pacific Highway upgrade will access McDonald Street to the existing Pacific Highway. This route is a temporary one only. The secondary route for all haulage vehicles not accessing the internal haulage route is the Broadwater Evans Heads Road via the Broadwater Quarry Road. Broadwater Quarry Road is a constructed gravel road. The upgrading of the intersection with Broadwater Evans Head Road was a condition of the original development consent (DA123/95). This condition has been completed and inspected by Council officers. Those vehicles requiring access to the existing highway

Further upgrade of the Broadwater Quarry Road to a bitumen surface, although considered by Council, was reduced to ongoing maintenance of the existing surface due to the distance of the nearest residential dwelling from the Broadwater Quarry Road, road reserve and Little Pitt Street being the vehicle access point to the residential dwelling. Maintenance is to include the general road maintenance including grading, fill of potholes to reduce vehicle noise and watering of the gravel surface on a regular basis to reduce dust.

(e) Truck Movements

Transportation of quarry products will be by truck and truck and dog trailer combinations. Truck and dog trailer combinations have a capacity of approximately 36 tonnes.

Volumes transported would be subject to demand for materials associated with the Pacific Highway upgrade. The quarry operator has identified a maximum of 102 truck movements per day inclusive of all incoming and outgoing movements. This is equivalent to 1,632 tonnes per day or 51 truck and dog loads outgoing.

At this restricted rate, the hourly rate traffic generation is 13.2 vehicle movements.

3. Legislative Requirements under the Environmental Planning and Assessment Act 1979

3.1 Consent Authority

The JRPP is the consent authority for an application being an Extractive Industry that is Designated Development pursuant to Division 4.2 Section 4.5

3.2 Designated Development

Section 4.10 provides for development to be declared to be designated development by the regulations. Schedule 3 of the EPA Regulation identifies Extractive Industries that obtain or process for sale more than 30,000 cubic metres per annum, or that will disturb a surface area greater than two hectares, or in an area of acid sulphate soil as designated development.

The proposed development triggers two of the criteria.

3.3 Integrated Development Approvals

S4.46 identifies development that requires both consent and one or more approvals under certain legislation as Integrated Development. Before granting consent General Terms of Approval must be obtained and a consent must be consistent with those terms.

The proposed development requires the following approval:

- An Environmental Protection Licence under Section 48 of the Protection of the Environment Operations Act

The agency has provided their General Terms of Approval and are included within the recommended consent conditions.

3.4 Public Participation

Schedule 1 clause 8 identifies the public exhibition and notification requirements for

The Development Application was placed on Public Exhibition for 30 days from 12 April 2018 to 11 May 2018. Written notification to land owners was undertaken and published notices appeared in a local newspaper on 11 April 2018 and 25 April 2018.

3.5 Evaluation

S4.15 details matters the consent authority is to take into consideration in determining an application. Consideration of the matters is provided below:

- (i) The provisions of any environmental planning instrument.
The relevant environmental planning instruments are addressed in Section 4 and 5.
- (ii) Any proposed instrument that is or has been the subject of public consultation No proposed instruments are relevant to the application
- (iii) Any development control plan.
Richmond Valley Council Development Control Plan 2012 applies to the land. There are no specific requirements for Extractive Industries under the Development Control Plan. Part H Environmental Sensitivity and Hazards provides for consideration of flooding, bushfire, acid sulphate soils and natural resources, and these matters are considered throughout the EIS and this report.

Part I contains guidance on Noise Impacts, Heritage and land use risk assessments matters, these are also adequately considered in the EIA and other sections of this report.

- (iiia) Any planning agreement or draft planning agreements There are no planning agreements relating to the application
- (iv) The regulations:
The proposed development is consistent with the regulations
- (v) Any coastal zone management plan
No coastal zone management plan applies to the land
- (b) The likely impacts of the development, including environmental impacts on both the natural and built environment and social and economic impacts in the locality.
The likely impacts of the development are discussed in detail within Section 6.
- (c) The suitability of the site for the development.
The site is considered suitable for the purpose of an extractive industry.
- (d) Any submissions made in accordance with this Act or the regulations.
The application was notified and publicly exhibited with seventeen submissions being received. Issues raised in the submission are considered in detail within Section 7.
- (e) The public interest
Broadwater Quarry (Gittoes) propose to increase the extraction for a maximum 5 years period primarily to supply material required for the Pacific Highway upgrade project. The site has a long history of quarrying activities and the development is permissible with consent in the zone and complies with the relevant Environmental Planning instruments.

The application has been referred to relevant government agencies for comments and recommendations, and the development is not considered to be inconsistent with the public interest subject to operation in accordance with the Environmental Impact Statement, amending reports and recommended consent conditions.

4. Richmond Valley Council Local Environmental Plan 2012

4.1 Objectives of the zone

The site is zoned RU1 Primary Production, extractive industries are permissible with consent.

The zone objectives are:

- To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.
- To encourage diversity in primary industry enterprises and systems appropriate for the area.
- To minimise the fragmentation and alienation of resource lands.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.
- To ensure that development does not unreasonably increase the demand for public services or public facilities.

4.2 Development within the Coastal Zone

Clause 5.5 requires the consent authority to consider the suitability of the development in terms of protecting the coastal foreshore and coastal ecosystems.

The proposed development satisfies the aims and objectives of this Clause which are similar to those considerations pursuant to Clause 3 of the State Environmental Planning Policy (Coastal Management) 2018 and are addressed in Section 5.8 of this report.

4.3 Clause 4.3 Height of Buildings

Clause 4.3 requires all buildings to have a maximum height of 8.5m. The development may require a temporary site office. If required, this building will be a single storey demountable and relocatable building which will have a height of less than 8.5m. It is considered that the operation areas of the site are well screened topographically from nearby sensitive receptors

4.4 Development land intended to be acquired for public purposes

Clause 5.1A limits development on land intended to be acquired for a public purpose. Lot 8, which is utilised to provide access to the project, is included in the SP2 Infrastructure Zone, specifically marked as classified road. Clause 5.1A limits development on land within this zone for the intended public purpose.

4.5 Acid Sulfate Soils

Clause 6.1 requires the consent authority to ensure that development does not disturb, expose or drain Acid Sulfate Soils (ASS) and cause environmental damage. The area of mapped ASS is located beyond the ridge line, west of the proposed quarry extent and will not be disturbed as part of the quarry operations. The project will occur on land with areas mapped as Class 5 on the Acid Sulfate Soils Map which has the lowest risk with regards to ASS and relate to works within 500metres of adjacent Class 1, 2, 3 or 4. It is not intended to alter or lower the pit floor below RL7m AHD, and no interaction with groundwater is anticipated. Therefore, the remainder of this clause is not applicable to the proposed developed. No ASS Management Plan has been submitted with the application.

4.6 Essential Services

Clause 6.2 requires the consent authority consider that essential services are available or that adequate arrangements have been made.

Water supply for operations needs is available from onsite detention dams. Facilities for workers will be required with portable toilets indicated as being provided to the site by a contractor.

4.7 Terrestrial Biodiversity

Clauses 6.6 aims to protect terrestrial biodiversity by requirement the consent authority to consider likely impacts on ecological values, significant flora and fauna, habitat values, connectivity and any potential to diminish biodiversity.

The Flora and Fauna Assessment has been evaluated. Identified impacts to terrestrial biodiversity are mitigated where possible however cannot be avoided. No offsets are proposed as the proposed increase does not impact on any vegetation and the subject site is devoid of any vegetation.

The development is considered consistent with the objectives as it does not impede primary production, cause fragmentation or increase public demands. It proposes mitigating measures to alleviate impacts and manage land use conflicts as detailed within the SEE, this report and as recommended consent conditions.

4.7 Landslide Risk

Clause 6.7 applies to land identified as landslide risk on the Landslide Risk Map. This map identified Cooks Hill as being subject to landslide risk. The site excavation is outside of the base of the hill and will have no direct impact on the vegetation, soil or immediate environs of Cooks Hill. As the quarry has been operating for several years with the same landslide risk applicable, the project has been designed and will be managed to ensure that any landslide risk or significant adverse impact is avoided.

4.8 Wetlands

Clause 6.10 applies to land identified as wetland on the Riparian Land and Wetlands Map. It aims to ensure that wetlands are preserved and protected from the impacts of development. No wetlands occur on the site. The nearest wetland is 650m from the site. No vegetation removal or extraction processes are proposed within the area of the site mapped as containing wetlands. The Biodiversity Assessment Report considers the wetland values and states that no biodiversity offset is necessary. Further surface water will be managed as proposed by the Surface Water Management Plan. No groundwater seepage has been encountered at the current minimum floor level of RL 7m AHD.

Council is satisfied that the development is designed, sited and will be managed to minimise any significant adverse environmental impact.

5. State Environmental Planning policies

5.1 State Environmental Planning Policy 33 – Hazardous and Offensive Development

Requires consideration of various guidelines where the operations of industries or storages of dangerous goods are considered potentially hazardous or offensive. The development being an extractive industry falls outside the definition of an industry as provided under the SEPP.

The application proposed an above ground diesel storage tank with a 10,000 litres capacity. This has since been withdrawn with all refuelling now to be undertaken to by mobile trucks however, small amounts of diesel will be kept on site for the purpose of refuelling machinery. Diesel, is listed as a dangerous good pursuant to the Australian Dangerous Goods Code, however, the amount proposed to be stored does not require further assessment pursuant to the Department of Planning and Environment's SEP33 guidelines. The existing Environmental Protection Licence (20770) will need to be amended to reflect the changed conditions.

5.2 State Environmental Planning Policy 44 – Koala Protection

The Biodiversity Assessment Report confirms the limited habitat values for koalas due to the low diversity of eucalypt species, lantana dominated portions on the site and poor connectivity. Local records indicate that koalas are within 1km of the site and species could be present within the vegetated portion of the site. As the operation will occur within the existing disturbance areas and not impact on the species viability, all potential feeding and movement habitat will be retained, and no loss of habitat is expected. Therefore, preparation of a koala plan of management is not required under SEPP 44.

5.3 State Environmental Planning Policy 55 – Remediation of Land

Provides for consideration of whether land is contaminated and requires remediation of any contaminated land prior to being development. The subject land is unlikely to be contaminated due to the historical use of the land for extractive industries and cropping activities. Only resources excavated on site are to be stockpiled therefore no contamination of the site will result.

5.4 State Environmental Planning Policy (Infrastructure) 2007

Clause 104 requires referral to the Roads and Maritime Services for traffic generating development specified in Schedule 3. Extractive industries are not listed in the Schedule however, the application was referred to Roads and Maritime Services pursuant to State Environmental Planning Policy (Mining, Petroleum and Extractive Industries) 20007.

5.5 State Environmental Planning Policy – Mining, Petroleum Production and Extractive Industries) 2007

Extractive industries are permitted with consent in certain zones by the SEPP, and require consideration of a range of matters as detailed below:

Clause 12 Compatibility with other land uses

The site is surrounded by primary production allotments, and a number of rural allotments that, given their relatively small size, are typically suited for rural dwellings and not any large-scale agricultural activity. The site is bounded by the Broadwater National Park, the sugar mill and its co-generation plant and the Pacific Highway road upgrade. The nearest residential dwellings to the north and south west will maintain their existing obstructed views of the extraction stockpiling and haul route areas.

The EIS has considered and implemented measures to avoid and minimise impacts upon adjoining land uses. Impacts related to transportation, being noise, dust and traffic safety are the most likely incompatibilities with other land uses and are discussed in detail in Sections 6 and 7.

Clause 13 Compatibility with mining, petroleum production or extractive industry

The land is not in the vicinity of an existing mine, petroleum production facility or extractive industry or identified as being the location of State or regionally significant resources of minerals, petroleum or extractive materials.

Clause 14 Natural resource management and environmental management

Key natural resource and environmental issues must be addressed including:

- Impacts on biodiversity – the proposal requires no clearing of vegetation and will have minimal biodiversity impacts. Referral to the Office of Environment and Heritage has been undertaken and no Biodiversity Offset is proposed. Detailed consideration of impacts on biodiversity is further discussed in Section 6.4.
- Greenhouse gas emissions – emissions are generated by on site vehicles and transportation activities. Such emissions may be minimised by use of efficient plant and vehicles, and potential use of biodiesel where possible and feasible. Additionally, the quarry is located in proximity to where the materials are required, being the Pacific Highway Upgrade corridor, therefore transportation is reduced.

Clause 15 Resource Recovery

The resource recovery rate is considered to be efficient. There is considered to be little if any waste material from the development as virtually all extracted materials have a market demand.

Clause 16 Transport

Required consideration of conditions in respect of roads and traffic safety and referral of the application to the Roads and Maritime Services. Detailed consideration of transport and traffic impacts has been undertaken in consultation with the Roads and Maritime Services. A Traffic and Pavement Impact Assessment Report was submitted with the application with recommendations of the audit to be reflected in the conditions of consent where appropriate.

Conditions are recommended to undertake ongoing road maintenance, restrict the number of trucks per day, implement a Truck Management Plan and Driver Code of Conduct. Further discussion of transport impacts is made within Sections 6 and 7.

Clause 17 Rehabilitation

The ecological report undertook a detailed biodiversity assessment as part of the SEARs for the project and concluded that overall none of the vegetation within or in close proximity to the existing pit is likely to constitute a threatened ecological community and found no evidence of koalas or their presence despite thorough searches. However, despite no identified ecological (flora and fauna) threats, rehabilitation of the land is considered and conditioned appropriately. The proposed rehabilitation aims to return the areas of the quarry to its pre-quarrying conditions after quarrying activities have ceased. A draft condition of consent has been prepared to require a detailed Rehabilitation Plan that addresses the entire area of the site and consideration of rehabilitating the excavation and hard stand areas, and any other additional matters as determined by Richmond Valley Council.

5.7 Protection of the Environment Operations Act 1997

The Protection of the Environment Operations Act 1997 sets the framework for environment protection during both the construction and operation of a development or scheduled activity. Under Schedule 1 of the POEO Act the project is a scheduled activity and required an EPL under Chapter 3 of the POEO Act.

5.8 Protection of the Environment Administration Act 1991

This Act established the Environment Protection Authority (now part of the Office of Environment and Heritage (OEH)). It enables the OEH to provide administration for protection of the environment, carry out environmental audits and prepare reports on the state of the environment.

5.9 National Parks and Wildlife Act 1974

This Act aims to conserve the State's natural and cultural heritage, foster public appreciation, understanding and enjoyment of the State's natural and cultural heritage and manage any lands reserved for the purposes of conserving and fostering public appreciation and enjoyment of the State's natural and/or cultural heritage. The impact of the proposal on native flora and fauna and the requirement for further assessment and referral is identified in the Biodiversity Assessment Report of the EIS and the Aboriginal Cultural Heritage Assessment Report.

5.10 Heritage Act 1977

This Act aims to protect and preserve items of non-Aboriginal heritage significance. A search of the State Heritage Inventory was undertaken, with no items identified within proximity to the site. Heritage items are discussed in the Aboriginal Cultural Heritage Assessment Report.

5.11 Roads Act 1993

This Act provides for the classification of roads and for the declaration of the Roads and Maritime Services and other public authorities as roads authorities for both classified and unclassified roads. It also regulates the carrying out of various activities in on and over public roads. The Traffic and Pavement Impact Assessment of the EIS addresses potential traffic impacts associated with the proposed development.

6. The Likely Impacts of the Development

The development application includes an Environmental Impact Statement however, detailed operational plans and mitigation measures are identified within the Quarry Environmental Management Plan (QEMP).

6.1 Noise

The EIS includes a Noise Impact Assessment addressing both onsite (operational) noise and noise generated by transportation activities. Additional comments in relation to the documents have been submitted by the applicant in response to Councils requests for clarification of potential impacts on sensitive receivers.

Onsite operation noise has been assessed against the Industrial Noise Policy while transport noise is assessed against the NSW Road Traffic Noise Guidelines.

Under Schedule 1 of the Protection of the Environment Operations Act extractive industries that extract, process or store more than 30,000 tonnes per year of material are required to be licenced by the NSW Environment Protection Authority (EPA). An EPA licence regulates air, noise, water and waste impacts from an activity or operation. The current proposed to increase operations to 490,000 tonnes per annum will require an amendment to the existing EPA licence. As a licenced premise, all noise related activities within the quarry site including operation of plant and equipment and the internal haulage route, will be regulated by the EPA. Importantly, noise generated between Broadwater Quarry Road and the Broadwater- Evans Heads Road is not regulated by the EPA.

The current EPS regulates that noise from the premises must not have a continuous sound level equal to a sound level of 55.6dB(A) for a period greater than 15 minutes from 7.00am onwards and 48.8dB(A) before 7.00am, except where written permission has been obtained from nearby sensitive receptors. It is anticipated that noise generated by the project will not exceed the currently prescribed levels.

A noise assessment was undertaken by consultants in October 2017 and eight residential dwellings were identified as the most potentially affected by noise emissions from the quarry and determining the existing noise environment by measuring the existing ambient noise level. The nearest sensitive receiver is approximately 250metres from the proposed extraction areas and 60 metres from the access road. A noise logger (M1) (refer Figure 4) was installed approximately 50m east of the residence at 55 Broadwater Quarry Road as it was identified as the most potentially affected receiver and ambient noise levels measured at this located are considered representative of the existing acoustic environment in the absence of current extraction activities.

Operational Noise

The primary noise sources of the existing environment were found to be compromised by intermittent traffic on Woodburn-Evans Head Road and sporadic traffic along MacDonald Street from the Pacific Highway upgrade project, sugar mill and natural sources such as insect, bird and wind noise in trees/foilage. The background or ambient noise level at the closest affect residential premises determined as a result of monitoring is 39dB(A). This figure is significantly lower than the 45dB(A) corresponding with Noise Category R1 under AS1055 – the lowest category.

Noise sources were identified as being earth moving machinery, generator, screening plant and light vehicles. Noise emissions from private haulage roads are also considered under the NSW Industrial Noise Policy criteria therefore transport on the private road is assessed as operational noise.

Operational noise will be generated by the operation of machinery associated with the extraction of the resource material. Background noise monitoring indicated the rating background levels are approximately 39dB(A), which is considered extremely low even for a rural area, and in accordance with the intrusiveness criteria a project specific noise level of 45dB(A) has been determined.



Figure 4: Location of Ambient Noise Logger

Source: EIS

Modelling of the noise from the operation of machinery was undertaken to determine impacts on nearby residential premises. Results revealed that noise associated with haul trucks, the loader and screen plant are the dominant source at most receivers

The following noise mitigation measures are proposed to ensure compliance with the required criterion of 45 dB(A)

- Ensure operations do not begin before 7am or continue after 6pm including vehicles arriving on site and leaving the site
- Replace reverse beepers with broad ban beepers
- Maintenance of the Broadwater Quarry Road to ensure all uneven surfaces are levelled
- Machines found to produce excessive noise compared to industry best practice should be removed from site or stood down until repairs or modifications can be made.

The EPA has required a number of General Terms of Approval to ensure mitigation measures are implemented as they are the Regulatory Authority for operational noise from the quarry. As stated, the EPA regulates operational activities associated with the winning and transporting material from the quarry to the Broadwater Quarry Road. The Broadwater Quarry Road to Broadwater Evans Head Road is outside of the area regulated by the EPA therefore noise mitigation measure required along this section will be regulated by Council not the EPA. Council has recommended conditions to ensure this section of the access is also addressed.

	Day	Evening	Night
Acceptable Noise Level (ANL)	50	45	40
Existing industrial noise level	49	51	43
Modification	ANL minus 6	Existing minus 10	Existing minus 10
Noise Amenity criteria	44	41	33

Figure 5: Calculation of Noise Amenity Criteria (levels in dB(A) L_{eq})

Source: EIS

Noise from operation activities is forecast generally below criteria, except for a minor exceedance during the initial stage of extraction. Given the Pacific Highway upgrade, noise levels in the locale are not expected to decrease any time in the future. Activities are therefore not considered an undue risk to acoustic amenity at the affected residence or those within the village.

Blasting

As the production rates at the quarry are not established, it is predicted that 2-3 blasts per month will occur. Increasing the number of blast holes within a pattern will reduce the number of blasts without any noticeable change in the level of vibration. Blasts will be restricted to between 9.00am and 3.00pm Monday to Friday to reduce impacts from noise or vibration on surrounding residences. Blasts are to be undertaken in accordance with the guidelines of Australian and New Zealand Environment Conservation Council (ANZECC). No more than 1 blast is permitted during any one day excluding misfires. Council will require that all residents within a 1 kilometre radius and Council are to be notified of each scheduled blast occurrence, including details of the time, date and located of the blast. Notification of each blast is to be undertaken a minimum of 24 hours prior to the occurrence of each blast.

Additional strategies and mitigation measures identified in the QEMP include:

- Blasting is limited to one blast per day, on any day during which blasting is permitted.
- Except in circumstances where an urgent blast is required for safety or emergency reasons, the quarry operator is to provide notification of each blast to all properties within a 900 metre (m) radius of the site. The notification is to be made by telephone, email or mail prior to the blast occurring at the site. In the event that an urgent blast has to take place at the site for safety or emergency reasons, the quarry operator is to notify Council in writing within 24 hours of the blast occurring, outlining the reasons for the blast.
- Handling, transport and use of explosives shall be carried out in accordance with the requirements of Australian Standard AS2187, and applicable legislation.
- Only suitably experienced and qualified blasting personnel shall be employed or contracted to provide blasting services.
- Recommended Blast Exclusion Zones will be established for flyrock protection.
- All blasts shall be face profiled, surveyed and bore tracked to ensure airblast overpressure compliance, combined with the ability to control face burst that can cause flyrock incidents.
- Blast volumes shall be maximised to reduce the frequency of disturbances to the neighbouring properties. Shot sizes should be limited to a maximum of 3 rows deep initially, to minimise vibration reinforcement if utilising a non-electric initiation system. Once actual blast vibration data has been collected and analysed shot sizes may be increased, if the data supports increasing the blast Maximum Instantaneous Charge (MIC) and remaining under 5mm/s.
- Orientate blasts with free faces not directly facing the sensitive receivers, to assist with airblast overpressure control.
- Initiation sequencing for initial blasts, targeting an MIC of 1 blast hole maximum, until the vibration attenuation can be accurately assessed.
- A blast plan shall be prepared for each blast, containing blast hole layout, initiation sequence, charging, stemming type and height, charge weight and any other design element, required for good blasting practice.
- A blast vibration equation shall be developed specific to the Boradwater Quarry.
- Blast areas may be dampened down prior to blasting to minimise dispersion of dry and fine materials where practicable, or where it is identified as a source of potential dust nuisance.

Figure 6: Blasting strategies/mitigation measures

Source: QEMP

Monitoring strategies to be undertaken by the quarry manager include:

Monitoring of blasting activities must be undertaken in accordance with the *NSW Industrial Noise Policy* and the Australian and New Zealand Environmental Council (ANZECC, 1990) *Technical Basis for Guidelines to Minimise Annoyance Due to Blasting Overpressure and Ground Vibration*. Permanent blast monitoring locations will be established at the two closest neighbouring properties.

Airblast overpressure and ground vibration monitoring

For the purposes of checking compliance with the airblast overpressure conditions and ground vibration conditions and for investigating complaints of noise and vibration annoyance, monitoring must be undertaken and at least the following descriptors, characteristics and conditions determined:

1. maximum instantaneous charge (MIC) in kg
2. location of the blast within the quarry (including which bench level)
3. airblast overpressure level, dB (linear) peak
4. peak particle velocity (mms⁻¹)
5. location, date and time of recording
6. meteorological conditions (including temperature, relative humidity, temperature gradient, cloud cover, wind speed and direction)
7. distance/s from the blast site to noise-affected building/s, structure/s or the boundary of any noise-sensitive place.

Where a nuisance complaint regarding airblast overpressure or ground vibration is received, consideration will be given to available monitoring results and locations, and if required or advantageous, a monitor will be installed at an appropriate location in consultations with the administering authority. All monitoring and reporting shall be undertaken by a person or body possessing both the qualifications and the experience appropriate to perform the required measurements.

If the monitoring program indicates unacceptable blast overpressure or ground vibration levels are occurring, then the blast program is to be modified (e.g. reduced instantaneous charge, revised blast geometry) to ensure future blasts satisfy the EPA criteria.

Figure 7: Blasting Monitoring Criteria

Source: QEMP

Transport Noise

The NSW Road Noise Policy outlines the assessment criteria for particular road categories. The anticipated haulage route is directly from the site to the project alignment for the Pacific Highway upgrade. This is an internal haul route which will not involve the use of public roads. Vehicle activity on site and on private roads are not considered under the NSW Road Noise Policy and have been included in assessment under the NSW Industrial Noise Policy. The principal haulage route is Broadwater Quarry Road to Broadwater Evans Heads Road. The use of MacDonald Street onto the existing Pacific Highway is a temporary haul route to be used only until the roundabout permitting direct access to the Pacific Highway has been completed.

The EIS states that truck and dog combinations have a capacity to haul approximately 36 tonnes and the proposal therefore is expected to generate a maximum of about 51 truck and dog loads which is 102 trucks movements per day including return journeys.

The Noise Impact Assessment submitted with the application assessed existing and future levels of road traffic noise will vary by residential receiver, as potentially affected dwellings existing in both rural areas along Broadwater Evans Head Road, and suburban areas along the Pacific Highway.

Where the existing noise level from industrial source is close the acceptable noise level, emissions from any new source(s) must be controlled to preserve the amenity of the area. During an onsite survey no sources of significant industrial noise emissions were identified. As a conservative methodology, it is assumed that noise from unidentified industrial sources were of equal contributed to measured noise levels as non -industrial sources.

	Day	Evening	Night
Acceptable Noise Level (ANL)	50	45	40
Existing industrial noise level	49	51	43
Modification	ANL minus 6	Existing minus 10	Existing minus 10
Noise Amenity criteria	44	41	33

Figure 8: Calculation of Noise Amenity Criteria (Levels are in dB(A) L_{eq})

Source: EIS

The NSW Road Noise Policy provides criteria for assessment of additional traffic along existing local roads generated by land use development. These criteria (refer Figure 8) are an 'expected worst case scenario of significant haulage along public roads and are assessed at the most exposed residential receiver(s). Noise from haul truck passes have been calculated as 42.9 dB(A) which is significantly lower than the Road Traffic Noise Criteria and Relevant Increase Criteria.

Road category	Type of project/land use	Assessment criteria – dB(A)	
		Day (7am -10pm)	Night (10pm – 7am)
Local roads	Existing residences affected by additional traffic on existing local roads generated by land use developments	$L_{Aeq, (1 \text{ hour})}$ 55 (external)	$L_{Aeq, (1 \text{ hour})}$ 50 (external)

Figure 9: Road Traffic Noise Assessment criteria for residential land uses.

Source: EIS

In addition to the criteria above, any increase in the total traffic noise level at a sensitive location due to proposed activities needs to be considered. The relevant criteria amount to an increase of 12dB(A) above existing traffic noise levels (refer Figure 7). On this basis it is assumed that noise from the additional vehicle movement generated by the project is in accordance with the NSW Road Noise Policy.

Road category	Type of project/development	Total traffic noise level increase – dB(A)	
		Day (7am -10pm)	Night (10pm – 7am)
Freeway/arterial/ sub-arterial roads and transitways	New road corridor/redevelopment of existing road/land use development with the potential to generate additional traffic on existing road	Existing traffic $L_{Aeq, (15 \text{ hour})} + 12 \text{ dB}$ (external)	Existing traffic $L_{Aeq, (9 \text{ hour})} + 12 \text{ dB}$ (external)

Figure 10: Relative Increase criteria for residential land uses

Source: EIS

Existing levels of road traffic noise will vary by residential receiver, as dwellings that may be affected exist in both rural areas along Broadwater Evans Head Road and residential areas along the Pacific Highway therefore, existing levels of road traffic noise are assumed to be compatible with the measured Rating Background Levels.

In all these instances the current predicted noise level is assumed to be compatible with the measured Rating Background Levels as it is considered that application of a rating background level (RBL) 6dB(A) represents a conservative assumption that effectively considers acoustic amenity into design horizons.

Nevertheless, draft conditions of consent include the requirement to implement a Truck Management Plan and Driver Code of Conduct to maintain the peace and quiet amenity of surrounding sensitive environments.

The consultant has identified that there is potential for “annoyance” to sensitive receivers from bumps and pot holes in the roads that may cause short term increase in noise as vehicles pass by. As Broadwater Quarry Road is a gravel road, the ongoing maintenance of the road to address these issues has been included as a Council condition.

6.2 Traffic Safety

The development proposes to generate up to 102 truck movements per day inclusive of both incoming and outgoing trucks along the haul route. The haulage route passes through a rural area before entering the outer edges of Broadwater township and the intersection with Broadwater Evans Head Road. Use of the McDonald Street intersection is to be used at a minimal rate with the primary routes being the internal haul road and the Broadwater Quarry Road to Broadwater-Evans Head Road.

Truck movements have the potential to impact on traffic safety. A Traffic Impact Assessment was submitted with the application and consultation with RMS undertaken.

Conditions of consent are recommended to address Traffic Safety including:

- Truck movements re to be within the approved operating hours Monday to Friday 7am - 6pm and Saturday 8am – 12pm with no work on Sundays or Public Holidays.
- Total truck movement (incoming and outgoing) limited to 102 movements
- Preparation of a Truck Management Plan and Driver Code of Conduct

Additional strategies and mitigation (refer Figure 9) measures include:

The *Industrial Noise Policy (EPA, 2000)* (INP) provides the following measures for managing potential exceedance of approved noise levels:

- Controlling noise at its source (e.g. applying muffler systems, and limiting operating hours;
- Controlling the transmission of noise (e.g. use of barriers); and
- Controlling noise at the receiver (e.g. double glazing).

The INP specifically provides for measures that can be implemented to mitigate noise from activities such as extractive industries. These measures include but are not limited to:

- Selecting vehicles with minimum noise output
- Using barriers and mounds within the site
- Giving preference to haul routes with low grades
- Using conveyor systems with low noise output
- Enclosing conveyors
- Maintaining plant and equipment
- Using 'smart' reversing alarms
- Insulation
- Noise barriers.

The INP also provides for negotiated agreements where project noise levels are not able to be met after the implementation of mitigation measures considered Best Available Technology Economically Achievable (BATEA).

Wherever practicable materials shall be stockpiled at locations that shield noise from internal traffic routes and truck loading areas from the nearest residences.

The processing plant shall be operated at the most shielded location available (to the extent practicable).

All internal roads for road haulage and off-road trucks shall be constructed and maintained to avoid excessive noise associated with uneven surfaces and potholes.

Figure 9: Additional Strategies/Mitigation Strategies

Source: QEMP

The Quarry Environmental Management Plan also outlines monitoring criteria to be undertaken by the quarry manager. These include:

The Quarry Manager will:

- Ensure regular surveillance of the site to qualitatively assess noise generation from plant and machinery.
- Ensure all plant and machinery and vehicles are serviced in accordance with, or more frequently than, manufacturers' specifications.
- Initiate a noise survey when requested by the administering authority, or as otherwise deemed necessary, to investigate a noise complaint.

If a noise survey is required to be undertaken, methods for measurements and reporting of noise monitoring will comply with the current edition of the *NSW Industrial Noise Policy*.

The measurement and reporting of noise levels will be undertaken by a person or body possessing both the qualifications and the experience appropriate to perform the required measurements.

Monitoring must include:

- $L_{Amax, adj, T}$
- Background noise (Background) as $L_{A 90, adj, T}$ or $L_{abg, T}$
- $Max L_{pA, T}$
- The level and frequency of occurrence of any impulsive or tonal noise effects due to extraneous factors such as traffic noise
- Atmospheric conditions including wind speed and direction
- Effects due to extraneous factors such as traffic noise
- Location, date and time of recording.

The following condition relating to noise limit monitoring has been extracted from the EPL:

M9.1 For the purposes of monitoring for compliance with the noise limit conditions of this licence (condition L4) noise emitted from the premises must be measured or computed at 30 metres from the nearest residential dwelling/s over a period of 15 minutes using the "FAST" response on the sound level meter. A modifying factor correction must be applied for tonal, impulsive, or intermittent noise in accordance with the document *NSW Industrial Noise Policy* (NSW EPA, January 2000).

Figure 11: Monitoring Criteria

Source: QEMP

6.3 Road Upgrade and Maintenance

Road upgrades and ongoing maintenance are required to achieve a standard to ensure traffic safety and efficiency. Necessary road upgrades were identified in the Traffic Impact Assessment. Additionally, in consultation with the Roads and Maritime Services the following conditions of consent are recommended to address road Safety and Maintenance including:

- Section 7.11 (formerly Section 94) contribution amount

6.4 Ecological and Biodiversity Impacts

Expansion of the quarry will not require any additional clearing. All detailed Flora and Fauna Assessment is provided with the EIS.

Ground truthing confirmed that native vegetation occurs outside the quarry operations area. The site contains six native vegetation types within or in close proximity to the site. Other vegetation existing on site included a patch of exotic grassland with scattered vegetation emergent on the margins of the existing quarry face which is heavily degraded and not considered to be representative of a native vegetation type or ECC. Nor are adjacent patches of heavily disturbed young regrowth shrub land dominated by Coast Cypress occurring on the steep rocky slopes. The remaining vegetation adjacent to the existing pit includes a small patch of heavily degraded, weed infested regrowth on old stockpiles to the north, and a patch of degraded, lantana infested regrowth and an old exotic pine plantation to the south.

A number of mitigation measures designed to reduce ecological impacts are outlined in the Ecological Assessment of the EIS.

6.5 Site Rehabilitation

The proposed rehabilitation aims to return the area of the quarry, excluding the excavation and hard stand areas, to its pre-quarrying conditions after quarrying activities have ceased. The proposed approach to the rehabilitation of the area includes:

- a) Permanent vegetation cover to be established across the benches with a combination of sowing fast growing grasses and native shrubs for initial cover and planting tube stock of native trees and shrubs which are endemic to the site and region for long term cover
- b) Quarry benches are to be progressively rehabilitated by covering surfaces with overburden and topsoil then revegetating
- c) The procedures for rehabilitating the benches is as follows:
 - (i) Landform shaping
 - (ii) Soil preparation
 - (iii) Planting techniques mulching
- d) Quarry floor is to be progressively carried out during each stage of the quarry operation by covering with overburden and topsoil and then revegetated
- e) Overburden stockpiles will be temporarily revegetated until required for permanent rehabilitation works and filter fences placed downslope of the stockpiles as part of the erosion and sediment control works.

A draft condition of consent has been prepared to require a detailed rehabilitation Plan that addresses the entire area and consideration of rehabilitating the excavation and hard stand areas, and any other additional matters are determined by Richmond Valley Council.

6.6 Cultural Heritage

A Cultural Heritage Assessment considering both historic and Aboriginal cultural heritage is included in the EIS. A desktop study and field inspection revealed that no indigenous cultural heritage sites or relics were identified within the existing and proposed area of operation. Additionally, no areas have been identified that are considered to potentially contain subsurface deposits of significant Aboriginal heritage. As there is no original or intact land surface in the subject area, there is very low to negligible potential for Aboriginal objects to be present.

To identify notify and register Aboriginal people who may hold cultural knowledge relevant to determining the cultural significance of Aboriginal objects and/or places the consultation and correspondence was undertaken with the following:

- NSW OEH
- Jali Local Aboriginal Land Council
- Bogal Local Aboriginal Land Council
- Birrigan Gargle Local Aboriginal Land Council
- Bandjalang Aboriginal Corporation Prescribed Body Corporate
- Office of the Registrar, Aboriginal Land Rights Act 1983
- National Native Title Tribunal
- Native Title Services Corporation Limited
- Richmond Valley Council

The OEH provided comments on a letter dated 28 May 2018 supporting the conclusion and recommendation of the Cultural Heritage assessment that no additional archaeological investigations are required. The OEH has no further issues relating to potential harm to Aboriginal objects with the Quarry footprint associated with this proposal. Despite that no sites or relics were identified nor any potential subsurface deposits the assessment makes recommendations which the proponent must adhere to as per the draft conditions of consent. The report recommends that during excavation monitoring for the purposes of identifying cultural material that may be uncovered is identified as a strategy within the QEMP. In the event of any cultural heritage sites or objects being uncovered work is to cease immediately and the OEH contacted.

6.7 Dust

The Air Quality Impact Assessment included in the EIS identified that the air quality in the area surrounding Broadwater Quarry is relatively clean. The operation of the quarry is not expected to diminish the ambient air quality due to the management practices proposed to be implemented and the vegetation buffer between the quarry and surrounding sensitive receptions. Individual processes that have the ability to generate particulate matters (dust) include:

- Excavation
- Material processing and handling eg screening and loading
- Vehicle induced dust emissions on haul road
- Wind erosion of exposed unstable soil surfaces and localised stockpiles

General measures that will be implemented as part of the existing dust control management plan include:

- Rehabilitated areas will be revegetated as early as possible after completion
- Newly stripped topsoil stockpiles will be immediately watered and revegetated with a grass cover or similar
- Haul truck routes will be watered as required, particularly during peak periods of vehicle movements and extended dry spells

7. Issues Raised in Submissions

The Quarry Environmental Management Plan (QEMP) addresses many of the concerns raised in the submissions and identifies mitigation measures and strategies to be incorporated into the daily operations of the quarry site.

7.1 Air Quality Impacts from dust and vehicle/plant emissions

Comment: Increased extractive activity and heavy vehicle traffic have the potential to increase dust and emissions generated from the site and thus the impacts on the adjoining residences. Mitigation measures includes sealing of the quarry access and use of water trucks to reduce dust and minimise the size of material stockpiles and vegetate inactive stockpiles to reduce erosion impacts. This will result in improved air quality and alleviate dust nuisance issues. Vehicle emissions standards are prescribed by the Australian Government Department of Infrastructure and Regional Development, and individual Smoky Vehicles can be reported to the Environmental Protection Authority for further action.

Council has determined that the sealing of Broadwater Quarry Road will not be required and the maintenance of the gravel road from the sealed intersection with Broadwater Evans Head Road will be at the expense of the quarry operator. Maintenance is to include grading and filling of pot holes and watering of the road from the intersection to the quarry pit.

7.2 Noise and vibration from extractive activities and transport operations

Comment: A Noise Impact Assessment for the proposed extension of the existing quarry was undertaken for the application. The assessment evaluated the potential noise impacts of the proposed activities upon existing residential properties in the locale with reference to the following policy documents and standards:

- NSW Industrial Noise Policy (2000)
- NSW Road Noise Policy (2011)
- NSW Interim Construction Noise Guidelines (2009)
- Secretary's Environmental Assessment Requirements (SEAR 1109 dated 13th December 2016)
- Australian Standards AS1055 – Acoustics Description and measurement of environmental noise

Increased extractive activity and heavy vehicle traffic have the potential to generate noise impacts along the internal access and haulage route. The NSW Industrial Noise Policy provides target levels and an assessment framework for noise generating activities occurring on the site.

7.3 Road Safety and Traffic Impacts

Comment: In the additional information submitted in October 2018, Transport Traffic plus, addressed the concerns relating road safety and traffic impacts and identified strategies that are easy to implement as part of the daily operations and able to be conditioned. These included a Driver Code of Conduct, signage and different coloured paving.

A Traffic and Pavement Assessment report was submitted with the application. Conditions of consent are recommended to address Road Safety including:

- Truck movements are to be within the approved operating hours Monday – Friday 7am – 6pm and Saturday 8am – 12pm with no work on Sundays or Public Holidays.
- Total daily truck movements (incoming and outgoing) limited to 102 movements Monday to Friday. As Saturday is only a half day it is recommended that this number be reduced to 38 movements (incoming and outgoing).
- Preparation of a Truck Management Plan and Driver Code of Conduct.
- A Section 7.11 (formerly Section 94) contribution amount

7.3.1 Road safety in regard to the cycle path and footpath

Comment: Appropriate signage is to be installed as the crossing of the Broadwater cycle path to enhance the awareness of the cyclists and truck drivers in relation to the crossing point. It is also recommended to use special pavement/pavement colouring for the cycle path prior to the Quarry Road to pre-warn riders.

Drivers are to be required to strictly follow the drivers code of conduct issued by the operator to ensure the safety of road user. It is recommended that if any component of the driver's code of conduct include "if any truck driver is every recorded to be speeding whilst hauling, the driver would not be permitted access to the site again." Such controls have been found to be very effective in managing driver behaviour on other projects.

7.4 Hazardous Chemicals stored on site

Comment: The volume of hazardous chemicals to be stored on site has been reduced and no approval has been given for the storage of those hazardous chemicals and the limits identified in the development application. All chemicals are below the limit required for licencing however, all chemicals will still need to be bunded, signed and Material Data Sheets kept on site.

7.5 Visual Impacts

Comment: The visual amenity of the area is not anticipated to be altered as the site has been in use as a quarry since the 1990's. The hill top from the original quarry face will hide the view of the quarry from those residential properties within Broadwater village whilst the view from those properties to the east will not be altered as the increased extraction area is to occur using a top down method rather than increasing the size of the existing footprint.

7.6 Concerns that increased extraction rate is not enforceable

Comment: Measures for enforceability include reconciliation and confirmation of sales data by annual aerial survey and cross checking with payment of heavy haulage contributions to Richmond Valley Council. The operator also operates another quarry within the local area and management procedures to ensure extraction does not exceed annual and total limits have been accepted by Council.

7.7 Non-Compliance with existing conditions

Comment: Council does not have a dedicated planning compliance officer however, when the original conditions were issued in 1997 planning regulations were not as stringent as those today. The new conditions reflect this and to ensure compliance does occur a site inspection will be undertaken by Council should a complaint be received. With the increase in the number of quarries within the Council area over the past years, a regular on-site quarry audit has commenced to check all compliance matters and commence enforcement.

7.8 Monetary Contributions too low

Comment: S7.11 (formerly Section94) Contributions are adopted by Council resolution with the identified contribution rate applicable to all quarries. Council has the ability to vary this rate in accordance with CPI.

8. Conclusion and Recommendations

The Broadwater Quarry (Gittoes) is identified as a locally significant resource and the need for increased extraction is primarily required to meet anticipated demand associated with the Pacific Highway upgrade project between Woolgoolga and Ballina. The Environmental Impact Statement and additional information submitted has addressed the relevant legislation, planning instruments and considered the likely impacts of the development.

Issues raised during the public exhibition periods have been addressed and form part of the recommended conditions of consent where applicable.

It is considered the proposed development complies with legislative requirements avoids adverse impacts where possible and mitigates against such impacts where feasible.

It is recommended that Development application DA2018.0188 (JRPP Reference No 2018NTH011) be approved subject to conditions contained in the Draft Conditions of Consent.

Attachments

- Draft Proposed Conditions of Consent
- General Terms of Approval Environmental Protection Authority
- General Terms of Approval Office Environment & Heritage dated 28 May 2018
- Plans
- Copy of Submissions
- Original Development Consent (DA123/95)

Development Consent - DA123/95

RICHMOND RIVER SHIRE COUNCIL

TELEPHONE (02) 66622066 - FAX (02) 66621342

All communication to be
addressed to

THE GENERAL MANAGER
P.O. BOX 378
CASINO NSW 2470

SHIRE OFFICE
68 WALKER STREET
CASINO NSW 2470

Council Ref: RO:SM(123/95)

ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979
(Form 3)

NOTICE TO APPLICANT OF DETERMINATION OF A DEVELOPMENT APPLICATION

TO: McGeary Bros Pty Ltd
9460 Pacific Highway
WOODBURN NSW 2472

G. Hines

being the applicant in respect of in respect of development application No.

Development Application. 123/95
No.

Applicant Name: McGeary Bros Pty Ltd

Applicant Address: 9460 Pacific Highway, Woodburn

Land to be developed: Lot 124, D.P., 755624, Quarry Road, Broadwater

Proposed Development: Extractive Industry

Determination: 18th May, 1999.
made on (date)

Determination: Consent granted subject to conditions described below.

Consent to Operate from: 18th May, 1999.
(date)

Consent to Lapse on: 18th May, 2004.
(date)

MONITORING AND OTHER APPROVALS

11. If the area of the resource, including the roads and stock piles will be greater than two (2) hectares then the premises may be scheduled under the Noise Control Act, 1975 and an approval from the Environment Protection Authority may be required.
12. All necessary Pollution Control Licenses are to be obtained from the Environment Protection Authority for the operation of the quarry and discharge of polluted wastewater from the site.
13. All discharges from the sedimentation pond shall meet the requirements of the Clean Waters Act and relevant criteria of the Environment Protection Authority. Design details together with discharge water quality shall be submitted for Council's assessment are to be in accordance with any available EPA or Department of Housing Guidelines for storm - water control. Final design details to engineering standard must be provided to Council for its approval 2 months from the date of endorsement of this consent.
14. Any discharges from the site should contain less than 50mg/L of non-filterable residue (NFR), no visible oil or grease, less than 10mg/L oil and grease and pH in the range 6.5 to 8.5. Compliance with the NFR standard may require the use of a coagulant injection system.
15. The National parks and Wildlife Service be consulted within 2 months regarding measures that can be implemented to retain/safeguard the habitat of the Squirrel Glider.

AMENITY AND NOISE CONTROL

16. The trees on the perimeter of the property be retained to provide a visual screen to the quarry workings.
17. The use shall not interfere with the amenity of the locality by reason of the emission of noise, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, waste water, waste products or grit, oil or otherwise.
18. The development shall meet noise emission criteria, vibration levels and standards relating to airborne pollutants and discharge of solid wastes to natural water courses as specified by the Environment Protection Authority.
19. The activities required by the operation of the quarry should not create, generate or emit offensive noise so as to be heard at the nearest affected residence.

Offensive noise means noise that by reason of its level, nature, character or quality or the time at which it is made or any other circumstances is likely:

- a) to be harmful to,
- b) to be offensive to, or
- c) to interfere unreasonably with the comfort or repose of a person.

20. The hours of operation for the proposed quarry shall be limited to between 7.00am and 6.00pm Mondays to Fridays and 8.00am to 12 noon Saturdays, with no work on Sundays or Public Holidays. Operations outside of these hours to be conducted only with the prior written approval of the Divisional Manager of Environmental Development Services.

ROADS AND TRANSPORT

21. All loading and unloading to take place within the curtilage of the quarry site.
22. Vehicles using off-street loading/unloading and parking area must enter and leave in a forward direction. All driveways and turning areas shall be kept clear of all obstructions that would prevent compliance with this condition.

ENGINEERING SERVICES CONDITIONS

23. The following work be provided at no cost to Council, within 12 months of the date of this consent, to the satisfaction of the Divisional Manager - Engineering Services and the operator shall also be responsible for the full cost of any maintenance of the work, considered necessary by Council's Divisional Manager - Engineering Services, for a period of twelve months from the date of approval of the completed work.
 - a) Upgrading of the existing intersection at Quarry Road with the Evans Head/Broadwater Road to comply with the Northern Rivers Local Government Development and Design manual. The left turn intersection treatment will be as shown in Figure 5.16 desirable treatment from Austroads Part

MONITORING AND OTHER APPROVALS

11. If the area of the resource, including the roads and stock piles will be greater than two (2) hectares then the premises may be scheduled under the Noise Control Act, 1975 and an approval from the Environment Protection Authority may be required.
12. All necessary Pollution Control Licenses are to be obtained from the Environment Protection Authority for the operation of the quarry and discharge of polluted wastewater from the site.
13. All discharges from the sedimentation pond shall meet the requirements of the Clean Waters Act and relevant criteria of the Environment Protection Authority. Design details together with discharge water quality shall be submitted for Council's assessment are to be in accordance with any available EPA or Department of Housing Guidelines for storm - water control. Final design details to engineering standard must be provided to Council for its approval 2 months from the date of endorsement of this consent.
14. Any discharges from the site should contain less than 50mg/L of non-filterable residue (NFR), no visible oil or grease, less than 10mg/L oil and grease and pH in the range 6.5 to 8.5. Compliance with the NFR standard may require the use of a coagulant injection system.
15. The National parks and Wildlife Service be consulted within 2 months regarding measures that can be implemented to retain/safeguard the habitat of the Squirrel Glider.

AMENITY AND NOISE CONTROL

16. The trees on the perimeter of the property be retained to provide a visual screen to the quarry workings.
17. The use shall not interfere with the amenity of the locality by reason of the emission of noise, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, waste water, waste products or grit, oil or otherwise.
18. The development shall meet noise emission criteria, vibration levels and standards relating to airborne pollutants and discharge of solid wastes to natural water courses as specified by the Environment Protection Authority.
19. The activities required by the operation of the quarry should not create, generate or emit offensive noise so as to be heard at the nearest affected residence.

Offensive noise means noise that by reason of its level, nature, character or quality or the time at which it is made or any other circumstances is likely:

- a) to be harmful to,
 - b) to be offensive to, or
 - c) to interfere unreasonably with the comfort or repose of a person.
20. The hours of operation for the proposed quarry shall be limited to between 7.00am and 6.00pm Mondays to Fridays and 8.00am to 12 noon Saturdays, with no work on Sundays or Public Holidays. Operations outside of these hours to be conducted only with the prior written approval of the Divisional Manager of Environmental Development Services.

ROADS AND TRANSPORT

21. All loading and unloading to take place within the curtilage of the quarry site.
22. Vehicles using off-street loading/unloading and parking area must enter and leave in a forward direction. All driveways and turning areas shall be kept clear of all obstructions that would prevent compliance with this condition.

ENGINEERING SERVICES CONDITIONS

23. The following work be provided at no cost to Council, within 12 months of the date of this consent, to the satisfaction of the Divisional Manager - Engineering Services and the operator shall also be responsible for the full cost of any maintenance of the work, considered necessary by Council's Divisional Manager - Engineering Services, for a period of twelve months from the date of approval of the completed work.
 - a) Upgrading of the existing intersection at Quarry Road with the Evans Head/Broadwater Road to comply with the Northern Rivers Local Government Development and Design manual. The left turn intersection treatment will be as shown in Figure 5.16 desirable treatment from Austroads Part

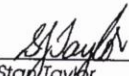
RIGHT OF APPEAL

If you are dissatisfied with this decision Section 97 of the Environmental Planning & Assessment Act, 1979 gives you the right to appeal to the Land and Environment Court within 12 months after the date on which you receive this notice

*section 97 of the Environmental Planning & Assessment Act, 1979 does not apply to the determination of a development application for State significant development or local designated development that has been the subject of a Commission of Inquiry.

Signed on behalf of the General Manager,
RICHMOND RIVER SHIRE COUNCIL
for (P.T. Muldoon)

Signature
Name
Date


Stan Taylor
31st May, 1999.

- Note 1** where the consent is subject to a condition that the consent is not to operate until the applicant satisfies a particular condition the date should not be endorsed until that condition has been satisfied.
- Note 2** clause 69A of the Regulation contains additional particulars to be included in a notice of determination where a condition under section 94 of the Environmental Planning & Assessment Act, 1979 has been imposed.