

COUNCIL ASSESSMENT REPORT

Panel Reference	2018NTH004
DA Number	5/2018
LGA	Gwydir Shire Council
Proposed Development	500,000 tonne/yr Hard Rock & White Rock Quarry
Street Address	1135 Croppa Creek Road North Star
Applicant/Owner	Alan Pearlman/Alan Trevor Pearlman
Date of DA lodgement	21st February 2018
Number of Submissions	1
Recommendation	Approval with conditions
Regional Development Criteria (Schedule 7 of the SEPP (State and Regional Development) 2011	Clause 7 Particular Designated Development. Development for the purpose of an extractive industry, which meets the requirements of designated development under clause 19 of Schedule 3 of the Environmental Planning and Assessment Regulation 2000
List of all relevant s4.15(1)(a) matters	<p>i.e. any:</p> <ul style="list-style-type: none"> • relevant environmental planning instruments <ul style="list-style-type: none"> - Gwydir Local Environment Plan 2013 - Environmental Planning and Assessment Act 1997 - Biodiversity Conservation Act 2016 - National Parks and Wildlife Act 1974 - The Heritage Act 1977 - Threatened Species Conservation Act 1994 (Repealed) - Rural Fires Act 1997 - Protection of the Environment Operations Act 1997 - Water Management Act 2000 - Local Land Services Act 2017 - State Environmental Planning Policy 33 – Hazardous and Offensive Development - State Environmental Planning Policy 44 – Koala Habitat Protection - State Environmental Planning Policy 55 – Remediation of Land - State Environmental Planning Policy Infrastructure 2007 - State Environmental Planning Policy Mining, Petroleum Production and Extractive Industries 2007 - State Environmental Planning Policy Rural Lands 2008 - State Environmental Planning Policy State and Regional Development 2011 • proposed instrument that is or has been the subject of public consultation under the Act and that has been notified to the consent authority <ul style="list-style-type: none"> - State Environmental Planning Policy 44 – Koala Habitat Protection (Review) - State Environmental Planning Policy Infrastructure 2007 (Review) - State Environmental Planning Policy Primary Production and Rural Development (Draft) • relevant development control plan <ul style="list-style-type: none"> - s94 Contributions Plan - Traffic Generating Development • relevant planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4 <ul style="list-style-type: none"> - Nil • coastal zone management plan <ul style="list-style-type: none"> - N/A • relevant regulations e.g. Regs 92, 93, 94, 94A, 288

	<ul style="list-style-type: none"> - Environmental Planning and Assessment Regulation 2000 - State Environmental Planning Policy
List all documents submitted with this report for the Panel's consideration	<ul style="list-style-type: none"> • Annexure 1 – Statutory Requirement – s4.15 • Annexure 2 – Draft Schedule of Conditions • Annexure 3 – Environmental Impact Statement • Annexure 4 – Environmental Impact Statement – Part 1 Appendix 1 – 7 • Annexure 4 – Environmental Impact Statement – Part 2 Appendix 8-12 • Annexure 5 – Submission and Proponents Response • Annexure 6 – Referral Agencies General Terms of Approval and Recommendations
Report prepared by	Patsy Cox Planning Officer
Report date	31 August 2018

Summary of s4.15 matters

Have all recommendations in relation to relevant s4.15 matters been summarised in the Executive Summary of the assessment report? **Yes**

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? **Yes**

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

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? **Not Applicable**

Special Infrastructure Contributions

Does the DA require Special Infrastructure Contributions conditions (S7.24)? **Not Applicable**

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

Conditions

Have draft conditions been provided to the applicant for comment? **Yes**

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

1. Executive Summary

1.1 Reason for consideration by Joint Regional Planning Plan

The development application has been referred to the Joint Planning Panel pursuant to s2.19(1)(c) of the Environmental Planning and Assessment Act 1997 and clause 7, Schedule 7 of the State Environmental Planning Policy (State and Regional Development) 2011 as the development is classified as an Extractive Industry and is designated development under Clause 19 of Schedule 3 of the Environmental Planning and Assessment Regulation 2000.

1.2 Brief Description of the Proposed Development

The applicant seeks consent for the operation of a 500,000 tonnes/year quarry operation. The operation will consist of two quarry sites and a processing plant to produce up to 500,000 tonnes of material per year for a period of approximately 3 years. The intention of the operation is to supply material for the Inland Rail Project.

1.3 Development History

The proposed development site is located on the property "Tikitere" consisting 1698.5 hectares of agricultural land located in the north western corner of the Gwydir Shire Council and forms part of the areas highest crop yielding area known as the "Golden Triangle". The property has historically been used for mixed cultivation and grazing operations since colonial settlement. Apart from the existing land use no other types of development apart from erection of residential and farm buildings affect the property.

1.4 Compliance with Planning Controls

The property is zoned RU1 Primary Production under the Gwydir Local Environmental Plan 2013.

An extractive industry is permissible within this zone with development consent.

1.5 Integrated Development

The proposed development is integrated development pursuant to Section 4.46(1) of the Environmental Planning and Assessment Act 1997, as the development requires an Environmental Protection Licence issued by the NSW Environment Protection Authority (EPA), as required by Schedule 1(19) of the Protection of the Environment Operations Act 1997. The General Terms of Approval by the EPA are contained in Annexure 6.

1.6 Designated Development

The proposed development is also identified as designated development pursuant to Section 4.10 of the Environmental Planning and Assessment Act 1997, and Clause 19, Schedule 3 of the Environmental Planning and Assessment Regulation 2000.

1.7 Consultation

The development application was exhibited and notified in accordance with the relevant provision of Schedule 1 of the Environmental Planning and Assessment Act 1979 and the Environmental Planning and Assessment Regulations 2000 for designated development. One opposing submission was received by Council. A copy of the submission is contained within Annexure 5 and is discussed in greater detail in Annexure 1.

1.8 Recommendation

It is recommended that the Development Application (DA 5/2018) be approved subject to the imposition of the draft conditions attached (Annexure 2).

2 Background, Location and Site Description

2.1 Background

Gwydir Shire Council received a development application (DA 5/2018) on the 21 February 2018, for a proposed 500,000 tonne/year extractive industry (quarry) operation on the property “Tikitere” located approximately 10 kilometres south of North Star, 12 kilometres north of Croppa Creek and 60 kilometres North North-west of Wyallda. The materials extracted from the quarry are to provide the Inland Rail Project with processed hard and white rock for the repair/reconstruction of the Camurra Boggabilla Railway line between Moree and the Macintyre River and will include the Narrabri to North Star and North Star to the NSW/QLD Border Australian Rail Track Corporation (ARTC) projects. Figure 1 below depicts the location of Tikitere in relation to local communities.

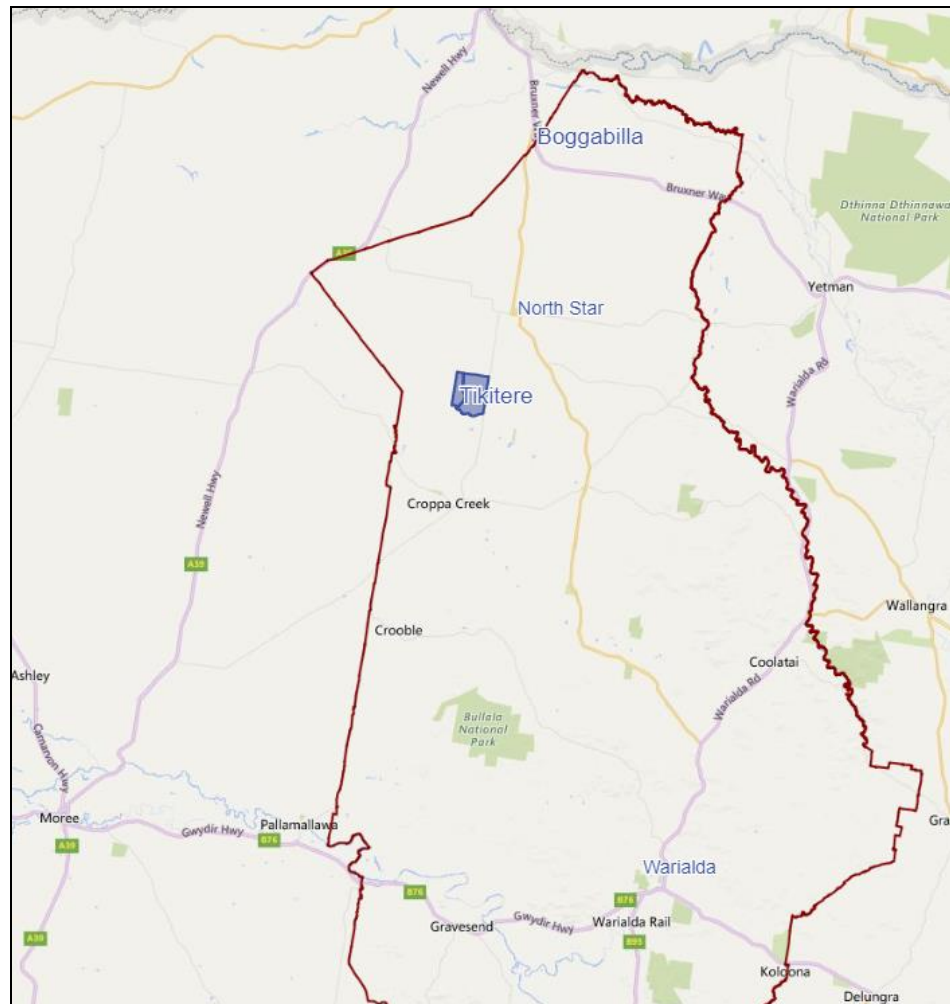


Figure 1 – Location Map

Initial assessment of the quantities of materials required by the ARTC projects indicate that a minimum of 1,000,000 cubic metres of rail ballast and up to 500,000 tonnes of manufactured dense grade base course will be needed for the reconstruction of the rail line. There are few quarries in the region able to supply the type and quantity of materials required.

The proposed development will predominantly haul material from the quarry to a loading platform on the rail line within the property “Tikitere”, with some use of local

roads which provide access to the existing rail corridor. The proposed development also will utilise the property's existing ground water irrigation licence.

2.2

Site Location

As stated above the proposed quarry is situated on the property "Tikitere", 1135 Croppa Creek Road North Star, which is located approximately 10 kilometres south of North Star and 12 Kilometres north of Croppa Creek. The property "Tikitere" is owned by Alan Trevor Pearlman (the applicant), encompasses an area of 1698.5 hectares and consists of Lot 5 and 17 in DP 755984. The proposed development will be situated on Lot 5 DP 755984 (1266Ha). The property of "Tikitere" is bordered by Tackinbri Creek in the south, the Croppa Creek Road to the east, Bushes Access Rd to the north and the property "Strathaine" on the western side.

The property holding is currently occupied by a homestead, various agricultural buildings, internal farm roads and irrigation infrastructure. The property is predominantly cleared of vegetation to allow for cropping, however areas of remnant vegetation remain along low ridge lines, fence lines, riparian areas and volcanic protrusions. The proposed development is to disturb two sites within Lot 5, the primary quarry site will encompass an area of 5.1 hectares and will consume in its entirety a volcanic plug situated approximately 200m from the existing rail corridor in the central area of the allotment. The secondary quarry will be located at the site of an existing on-farm quarry which lies along the northern edge of a remnant vegetation patch in the central area of the allotment. Figures 2 & 3 below identifies the proposed sites in relation to the local area and the rest of the property including the quarry sites proximity to roads and the rail corridor.



Figure 2 – Locality Plan

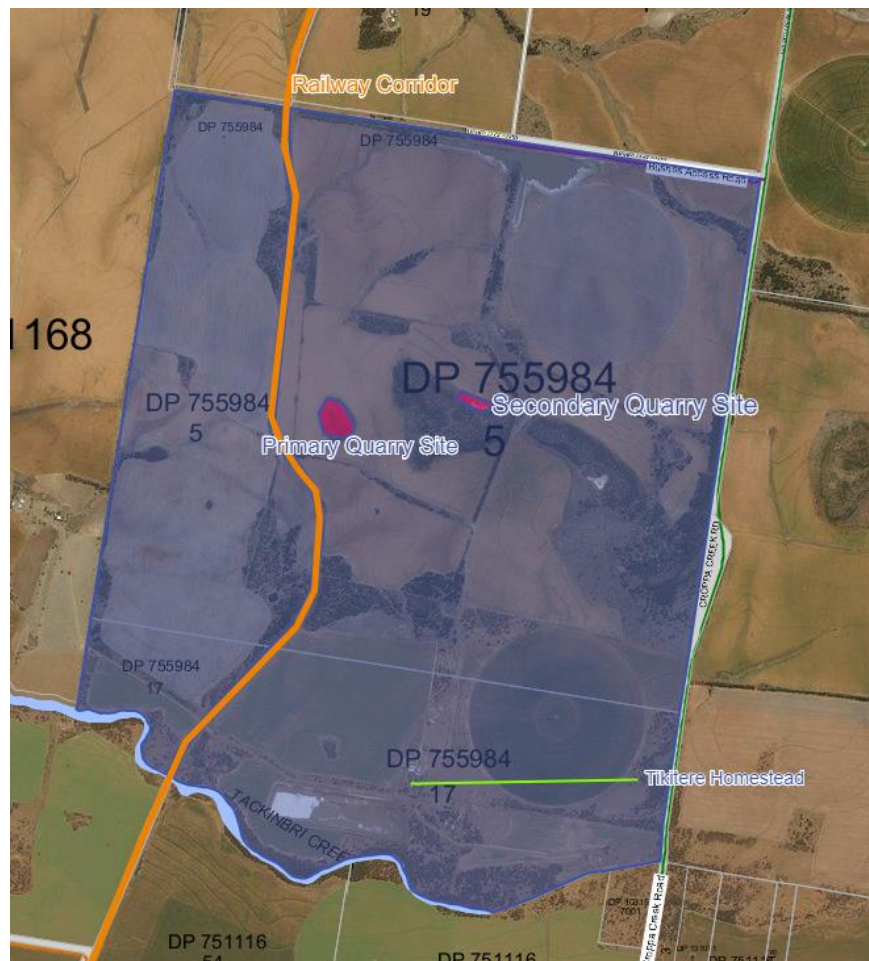


Figure 3 – Property Map

2.3 Site Description and Uses

Generally the “Tikitere” property consists of undulating hills traversed by ephemeral streams and gullies. However, the Primary quarry site (Hard Rock Quarry) is a volcanic plug which rises above the surrounding undulating slopes by approximately 20 metres and covered approximately 5.2 Hectares. The volcanic plug is sparsely vegetated with some mature iron bark trees and low shrubs growth. The slope of which is considered to increase steeply to greater than 15°. The proposed Primary Quarry it is surrounded by cultivated fields and existing farm tracks. The below Figure 4 shows the existing landform for the primary quarry site.



Figure 4 – Primary Quarry Elevation

The proposed secondary quarry site (White Rock Quarry) is consistent with the generally undulation of the remainder of the property with slopes of between 1-6%. The site is the location of an existing on-farm quarry opened up by the current property owner and is sandwiched between remnant native vegetation and cultivated

fields. The existing on-farm quarry was not given prior development approval. Figure 5 below shows the current condition of the site and the location of remnant native vegetation.



Figure 5 – Secondary Quarry

Both proposed quarry sites are quite some distance from natural waterways. Tackinbri Creek is located approximately 2.5 kilometres to the south from the quarry operations closest point and Mungle Creek is approximately 1.6 kilometre to the north. Tackinbri and Mungle Creeks are considered ephemeral waterways.

The proposed Primary Quarry site is approximately 200m from the existing rail corridor and the surrounding cultivated field provides suitable access to rail corridor and areas for loading. The Secondary Quarry is approximately another kilometre further away to the east. Again with suitable access roads to transport material to the rail load area.

Those areas not associated with the proposed development sites and access roads will continue to be cultivated and grazed as a part of existing agricultural enterprise.

2.4 Surrounding Land Uses

The property “Tikitere” is bound by the following properties:

Property Name	Location	Approx Distance to Homesteads	
		Primary Quarry	Secondary Quarry
Strathaine	South West	1.7km	2.5km
Bonny Ridge	North North-West	2.35km	2.2km
Windridge North	North	4.12km	3.7km
Minilya	North East	No Homestead	No Homestead
Yannarie	South East	5.0km	4.36km
Tulin Tulla	South South-East	6.7km	6.4km
Valley Heights	South	3.8km	4.0km
Crestview	South	3.6km	3.8km
Brooklyn	South South- West	3.5km	4.2km

All of these properties engage primarily in dry land and irrigated cropping and cattle grazing with the exception of the property “Tulin Tulla” which also operates a 5,000 head Feedlot operation. In addition “Myola Feedlot” which accommodates 20,000 head is also located 6.6km to the south of the proposed quarry site. Figure 6 below shows the location of the neighbouring properties and their homesteads.

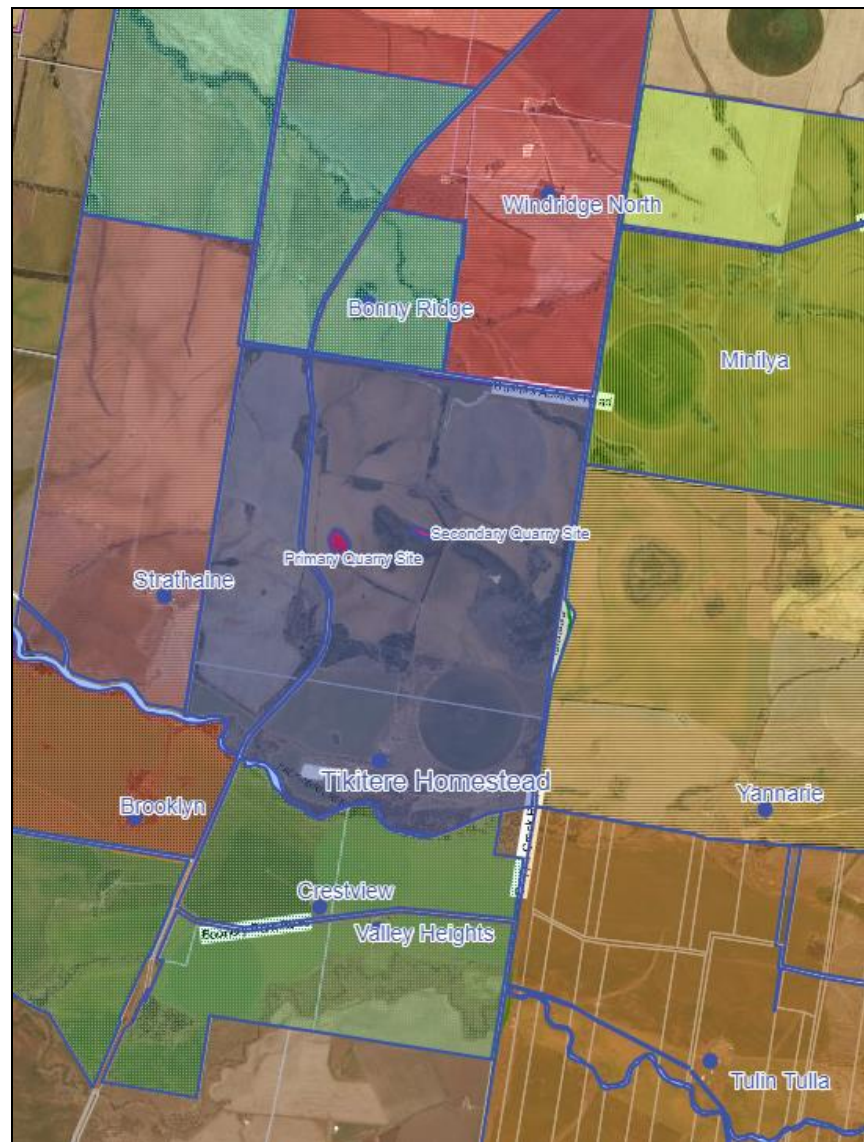


Figure 6 – Surrounding Property Homesteads
Note: Homesteads are depicted with a blue dot (●)

The proposed development is located approximately half way between the hamlets of Croppa Creek and North Star both of which are located along the rail corridor. Croppa Creek is located 12km to the south and as an approximate population of 75 residents. North Star is located 10km to the north and as an approximate population of 50 people. Both hamlet have limited services put do have a recreation clubs, a general store and a small number of agricultural support businesses.

1.5 Public Consultation and Referrals

The application was notified on two separate occasions, for a period of 28 days each, in accordance with the relevant provisions for designated development pursuant to Schedule 1 of the Environmental Planning and Assessment Act 1997, Division 5 of the Environmental Planning and Assessment Regulation 2000 and Council's Notification Policy – A.01.01 as detailed in the following table. The double up in notification was due to the proponent's alteration of the EIS to include blasting as a part of the quarry operations and to include off-property haulage route information.

The application was also advertised as designated development on two separate occasions, for a period of 28 days each, in accordance with the provision of the Environmental Planning and Assessment Regulation 2000.

Council's consultation with stakeholders has been extensive and in keeping with the scale and implications of the proposed development. The view expressed by each government agency and individual have been carefully considered.

The public consultation included:

- Advertising, notification and public exhibition of the initial Development Application by Council from Thursday 8th March 2018 to Monday 9th April 2018;
- Advertising, notification and public exhibition of the amended Development Application by Council from Wednesday 4th July 2018 to Wednesday 1st August 2018;
- Advertising of the exhibition period for the Development Application, on both occasions, in the Warialda Standard, the Bingara Advocate, The Local and the North West Magazine.
- Notification of nearby and potentially affected landholders and residents, on both occasions; and placement of signs at the site during the exhibition period;
- Exhibition of the initial Development Application and the Amended Development Application documents were physically located at the Warialda Office of the Gwydir Shire Council, 54 Hope Street, Warialda NSW 2402; Office of the Gwydir Shire Council, 33 Maitland Street, Bingara and NSW Office of Planning and Environment, Level 1 155-157 Marius Street, Tamworth NSW 2340. In addition both the initial Development Application and the amended Development Application were digitally available during both the exhibition periods from the Gwydir Shire Council Website www.gwydirshire.com

Gwydir Shire Council Community Consultation Policy – A.01.01: Notification Type • Level E - Locality	Development where impacts affect the broader locality, in addition to adjoining properties, as determined by Council; Extractive Industries
Notification	
Landowners/Occupiers	Adjacent land owners with a radius of 500m for the proposed site were notified
Newspaper advertisements	Yes
Exhibition Dates	28-30 days
Exhibition Venues	Gwydir Shire Council Office Bingara Gwydir Shire Council Office Warialda NSW Office of Planning & Environment Tamworth
Internal consultation	Council's Technical Services Department
External Referrals	Department of Primary Industries Environmental Protection Authority Office of Environment & Heritage Roads and Maritime Services
Public Submissions	1 submission received
Referral Submissions	5 submissions were received. A copy of submissions is found at Annexure 6. Issues are considered in section 4 of this report and further in Annexure 1

3

The Development Proposal

On the 21 February 2018, the applicant, Alan Pearlman owner of the property "Tikitere", lodged a Development Application with Council under the provisions of the Environmental Planning and Assessment Act 1979 for the extract a 500,000 tonnes/year from two quarry sites on the property "Tikitere".

The main components of the applicant's proposal include the following:

- Construction and Operation of a Primary Hard Rock Quarry including;
 - Site Office/Amenities/Maintenance/Storage Areas

- Crushing Area (with mobile crusher/screening plant)
- Stockpiles (topsoil/subsoil, raw and processed material, overburden)
- Drains
- Sediment Pond
- Stormwater Diversion and Retention Banks
- Roads
- Fencing
- Operation of a Secondary White Rock Quarry including;
 - Stockpiles (topsoil/subsoil)
 - Stormwater Diversion and Retention Banks
 - Roads
 - Fencing
- Stockpiles along rail line within the Rail Corridor

The Primary Quarry is located at the site of a volcanic plug covering an area of 5.1 hectares. The material to be extracted from this site is predominantly hard basalt rock to be used as ballast material. It is anticipated that little to no waste material will be generated from the processing of this material. Consequently, due to the materials toughness and density it may be necessary for the material to be blasted. Discussions with the applicant indicated that blasting may be necessary every 100,000 tonnes or so in order to facilitate excavation. Figure 7 below is taken from the EIS and shows the Project Site Layout for the Primary Quarry.

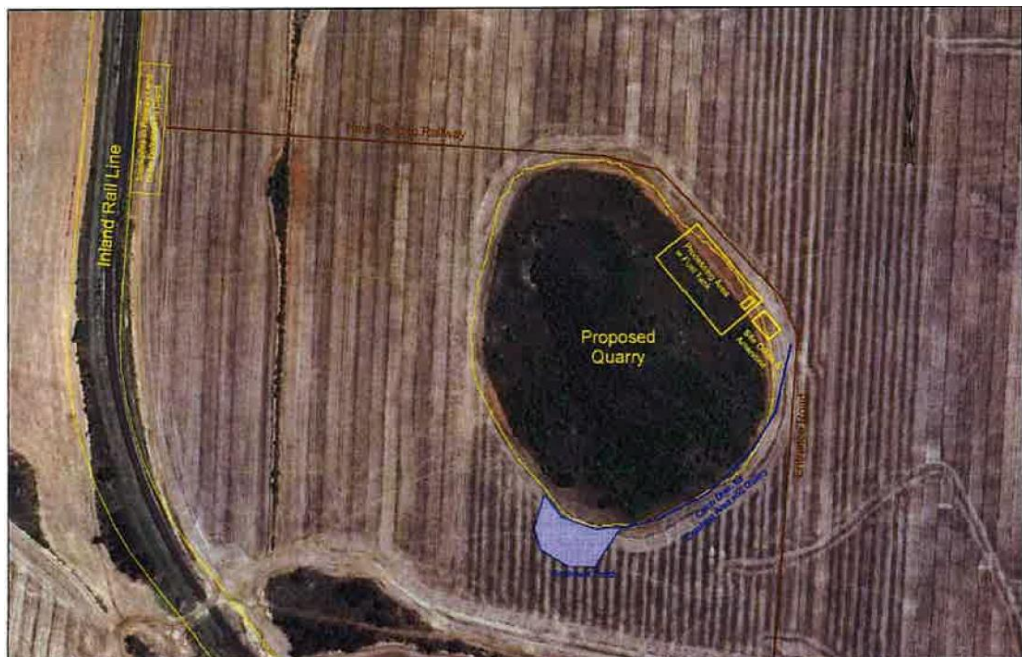


Figure 7 – Project Site Layout – Primary Quarry

The Secondary Quarry is located at the site of an existing on-farm quarry and will be extended to consist a footprint of 1.25 hectares. The material to be extracted from this site is described as siltstone and is identified as a potential ingredient for the production of the Dense Graded Base-course (DGB) also required by the Inland Rail Project in the repair and reconstruction of the rail line. The material won from this area would be excavated without the need for blasting and transport to the Primary Quarry for processing and storage.

Of the 9.5 hectares expected to form the total quarry operations footprint, an approximate total of 6.35 hectares will be involved in the winning of material and the remaining 3.15 hectares will be utilised by the crushing plant, site office and amenities, stockpiles, sediment pond, drains and access roads. The area not involved in excavation, in particular the sediment pond and roads, will be located on previously cleared and cultivated land.

The operation of the quarry will include the following processes:

- Removal of overburden (stripping involving bulldozers, scrapers or excavators) and the storage of overburden and topsoil for rehabilitation;
- Extraction of material and transport to the crushing plant (involving drilling, blasting, ripping and the use of explosives, front end loaders, hydraulics and excavators);
- Operation of the Crushing Plant and screening material;
- Reclaim of stockpiled material for loading into trucks;
- Transportation of finished material within the property to rail stockpile area or via road to areas that access the rail corridor; and
- Train loading operations.

The operation of the quarry will include the following mobile plant:

- Mobile Crushing Plants;
- Rear dump Trucks;
- Front end loader (FEL);
- Excavator; and
- Light Service Vehicles

It is currently expected that up to 50,000 tonnes per week will be excavated, processed and transported during the proposed operating hours of 6:00am to 6:00pm Monday to Saturdays. With no operations (apart from light vehicle traffic) on Sunday or Public Holidays. It may be reasonably expected that quieter quarry operations such as plant and equipment maintenance would be scheduled for the more sensitive times during these proposed hours such as between 6:00am and 8:00am and 5:00pm to 6:00pm. A more detailed explanation of the proposed hours can be found in s 2.27 of the EIS.

The proposed development initially determined that the haulage of material would exclusively be carried out within the property "Tikitere" between the Primary Quarry and the adjacent rail line. Estimating up to 12 heavy vehicle movements per hour at peak production. However, a more recent proposal also includes the use of private, public and state roads to transport material to various locations along the rail line between Croppa Creek and the NSW/QLD border. The expansion of the proposed quarries transportation methods to include roads outside of the property "Tikitere" has not been supported with information regarding the number of movements anticipated, the roads to be used and for how long, the type of vehicle to be used or how much material is expected to be hauled.

Apart from the possible use of road infrastructure the proposed quarry operation will also utilise an existing ground water bore licence with an allocation of 486 megalitres. The bore water, along with water collected in the sediment pond, will be used for the suppression of dust, cleaning of vehicles and equipment, fire-fighting and during the crushing/screening process. It is not expected that further licences will be required.

Generally, it is expected that the proposed quarry will require 5-6 full time equivalent staff and additional part-time staff over its life span. The predicted life span of the proposed operation is expected to be either when the total amount of usable material is consumed or in approximately 3 years when the Inland Rail Project is completed.

4 Statutory Planning Considerations

4.1 Gwydir Shire Local Environment Plan 2013 (GLEP)

The proposed development site is located within the RU1 Primary Production zone under the GLEP. The proposed development is defined as an extractive industry and is

categorised as intensive livestock agriculture under the GLEP. As such is permissible development in the RU1 Primary Production zone with consent.

The proposed development is also compliant with all other relevant sections of the GLEP. For more detailed information regarding the above see Annexure 1

4.2 Section 94 Development Contribution Plan No 1 – Traffic Generating Development (DCP)

The proposed quarry is development to which the DCP applies. As such the proposed quarry operation shall be required to enter into an agreement with the Gwydir Shire Council for any movement of trucks on Council roads in accordance with the DCP. For more detailed information regarding the above see Annexure 1

4.3 New England North West Regional Plan

The objectives of the NENWRP were considered during the assessment of the proposed development. It is considered that the proposed development is in line with the goals of the NENWRP, specifically, as the intended purpose of the quarry is to supply material to the Inland Rail Project, the delivery of “strong infrastructure and transport networks for a connected future” is particular relevant.

4.4 State Legislation

4.4.1 Environmental Planning and Assessment Act 1979 & Environmental Planning and Assessment Regulation 2000

Aside from Council’s Local Environmental Plan, the proposed extractive industry development is classified as *designated development* under the provisions of s4.10 of the *Environmental Planning and Assessment Act 1979* and clause 19 of Schedule 3 of the *Environmental Planning and Assessment Regulation 2000*. As the proposal will exceed the required level of 30,000 cubic metre and will also disturb more than 2 hectares of surface area.

Further, the proposed development is also listed under s4.46 of the *Environmental Planning and Assessment Act 1979* as an activity which is required to be licensed under the clause 19 of Schedule 1 of the *Protection of the Environment Operations Act 1997*.

Thus it is determined that the proposed quarry is both designated and integrated development.

4.4.2 Other State Legislation relevant to the proposed Development

The proposed development is considered to be compliant with the following Acts. Further details are available in Annexure 1.

- Biodiversity Conservation Act 2016
- National Parks and Wildlife Act 1994
- The Heritage Act 1977
- Threatened Species Conservation Act 1995 (Repealed)
- Rural Fires Act 1997
- Protection of the Environment Operations Act 1997
- Water Management Act 2000
- Native Vegetation Act 2003 (Repealed)
- Local Land Service Act 2017

Please note that the proposed development was lodged prior to the end of the transitional period (which ended on the 25 February 2018) for the implementation of

the Biodiversity Conservation Act 2016 and has been assessed under the now repealed Threatened Species Conservation Act 1995.

4.5 State Environmental Planning Policies & Draft State Environmental Planning Policies

The proposed development is considered to be compliant with the following relevant State Environment Planning Policies (SEPP). For further detail see Annexure 1.

- SEPP 33 – Hazardous and Offensive Development
- SEPP 44 – Koala Habitat Protection
- SEPP 55 – Remediation of Land
- SEPP Infrastructure 2007
- SEPP Mining, Petroleum Production and Extractive Industries 2007
- SEPP Rural Lands 2008
- SEPP State and Regional Development 2011

The proposed development is considered to be compliant with the following relevant Draft or Reviewed State Environmental Planning Policies. For further detail see Annexure 1.

- SEPP 44 – Koala Habitat Protection (Review)
- SEPP Infrastructure 2007 (Review)
- SEPP Primary Production and Rural Development (Draft)

4.6 Commonwealth Legislation

The proposed development is considered to be compliant with the following relevant Commonwealth Legislation. For further detail see Annexure 1

- Environment Protection and Biodiversity Conservation Act 1999

4.7 Site Suitability and Potential Impacts

4.7.1 Site Suitability

The proposed “Tikitere” quarry operation is located approximately 12 kilometres north of Croppa Creek and 10 kilometres south of North Star, in an area known as the “Golden Triangle”. The surrounding land uses consists of the agricultural enterprises of dryland and irrigated cropping and cattle grazing, with the inclusion of two cattle feedlots within a 5 kilometre radius. There are no other developments of this type in the immediate surrounding area.

The property “Tikitere” is dissected by the Camurra Boggabilla Railway line and has outcrops and low ridges containing basalt rock and siltstone. It is for this reason along with the proposed sites isolation from neighbouring homesteads and its close proximity to the rail line which have made the property an ideal location for the supply, processing and transportation of materials for the Inland Rail Project.

The proposed quarry operation will consist of two sites which are located in excess of 1km from the nearest residence on a neighbouring property and is approximately 200m from the rail line which bisects the property. In addition, the proposed operation, also has access to the Croppa Creek Road, a sealed public road, which runs along the eastern boundary of the property and is approximately 2.2 kilometres from the Primary Quarry site.

The proposed development has access to a water supply through an existing ground water bore licence with an allocation of 486 megalitres per year. This will mainly be

used, along with water from the sediment pond, for dust suppression along internal haulage roads and during the crushing and screen activities.

4.7.2

Potential Impacts

i. Flora and Fauna Impacts

A list of Endangered Ecological Communities (ECC's) and threatened species are listed in Annexure 1. However, of particular significance is the proposed development removal of all vegetation from the sites, which will directly impact 2.8 hectares of degraded Semi-evergreen Vine ECC (SEVT).

The portion of SEVT to be removed represents 3.7% (74.9 hectares) of the total SEVT community mapped within the "Tikitere" property and 0.1% (3070 hectares) of the total community mapped in the Border Rivers – Gwydir River Region. Semi-evergreen Vine Thicket in the Brigalow Belt South and Nandewar Bioregions is listed as an ECC under both the Environmental Protection and Biodiversity Conservation Act 1999 and the now repealed Threatened species Conservation Act 1995 (TSC).

Although the removal of the ECC has been assessed under the TSC the proponent has prepared a Biodiversity Impact Assessment Report which provides an insight into the condition of the SEVT to be impacted and key mitigation measures in order to avoid and minimise further biodiversity impacts. The measures include the preparation of a Vegetation Management Plan which has been included as Appendix 12 of the EIS (see attached Annexure 4); the revegetation of cleared areas with local species consistent with SEVT; and fire mitigation measure to protect the remaining SEVT on "Tikitere".

The assessment of the proposed development under the TSC has determined that removal of the SEVT is considered not to have an adverse effect on the extent of the SEVT ECC to such an extent as to place the ECC at risk of extinction nor should it substantially or adversely modify the SEVT ECC to such an extent that it is likely to place the ECC at risk of extinction. The area of SEVT to be removed at the Primary Quarry site is presently very isolated from the remaining SEVT ECC and its removal is not deemed add to any further isolation of the SEVT ECC.

It is recommended by the NSW Office of Environment and Heritage that any impacts to native vegetation that cannot be avoided using avoidance and mitigation measures should be offset. It is therefore recommended that the applicant develop a Biodiversity Offset Management Plan to identify an offset area consistent with the removed SEVT which is to be properly managed, funded and improved overtime.

In addition to the removal of SEVT the proposed development will also remove 9 mature trees deemed to be habitat trees. The removal of these trees has the potential to affect hollow dependent fauna and decrease this habitat resource for the area. The Vegetation Management Plan prepared by SMK Consultant as a part of the appendices for the EIS (Appendix 12 – see attached Annexure 4) list suitable mitigation measures to be taken to minimise and rehabilitate the loss of the habitat trees to be removed.

The identified vulnerable fauna species that are likely to inhabit the areas to be cleared are typically highly mobile, however the removal of habitat may

potentially interrupt breeding cycles, although this is considered to be very unlikely.

Thus given the extent of the vegetation to be removed it is considered that the proposed development is unlikely to have a significant impact on SEVT or any other threatened species identified under the TSC or EPBC. With the addition of a designated offset area and the mitigation measures stated in the Vegetation Management Plan the treatment of biodiversity is considered to be adequate.

ii. Noise and Dust

The proposed development is considered to comply with all separation distance criteria for noise and dust emissions. A comprehensive Noise Impact Assessment by Advitech Environmental and Land Use Conflict Risk Assessment by SMK Consultants have adequately addressed any potential impacts by careful siting of quarry equipment, minimise noise and dust emissions through effective equipment maintenance and dust suppression, and implementation of a Mine Safety Management System. Greater detail regarding these issues is address in Annexure 1, throughout the EIS (Annexure 3) and the EIS Appendices (Annexure 4).

It is consider that the impacts of noise and dust will be adequately mitigated through the implementation of the proposed development management and mitigation practices. A summary of all mitigation measure, including dust suppression and noise minimization, for the development and operation of the proposed development is included at pages 104-109 of the EIS (see Annexure 3).

iii. Erosion and Sediment Contamination

The impacts of erosion on landform during and after the operation of an extractive industry is a key general consideration of all quarry activities, the extent of which differs from site to site. The property "Tikitere" is located within undulating slopes of between 1-6% however, the site of the proposed Primary quarry will be over an existing volcanic plug which has slopes in excess of 15°.

The proposed development will prepare a comprehensive Erosion and Sediment Control Plan and Environmental Management Plan to protect the surrounding agricultural land from erosion caused by the remove of vegetation and the operation of the quarry on the site. The plans will also need to address the potential loss of topsoil and subsoil whilst being stockpiled and during rehabilitation of areas after activities cease. The secondary quarry site is more in line with the surrounding slopes however, attention will still need to be paid to potential erosion from wind and stormwater

It is considered that the potential for erosion impacts to affect surrounding properties and their agricultural operations is minimal, and with the implementation of the proposed mitigation measures for the site it is considered inconsequential. Likewise, the proposed development will not significantly impact existing cultivation of the surrounding fields within "Tikitere" as long as mitigation measures and management protocols are upheld during the operation and rehabilitation of the sites. Similarly, it is considered that potential impacts of erosion and sediment contamination of natural waterways in the area to be low to non-existent. Should the erosion mitigation measures stated in the EIS and/or Environmental Management

Plan prove to be inadequate the applicant must employ any and all further necessary and practical measures to mitigate any erosion on or outside the proposed development site caused by the quarry's operations and/or activities.

iv. Aboriginal Heritage

The proposed development site is located within the area managed by the Moree Local Aboriginal Land Council MLALC and within the land claim region of the Gomeroi Nation. Although direct consultation with the MLALC was not undertaken by the applicant, a due diligence archaeological survey, as required by legislation, was undertaken. The due diligence process includes a search of the Aboriginal Heritage Information Management System (AHIMS) register, an assessment of the landscape to identify any signs of disturbance by aboriginal ancestors and a desktop and visual inspection of the site for artefacts and sites. If no artefacts or archaeology is located than a summary of the survey is prepared. The due diligence guidelines have been followed and the applicants consultants, SMK consultants, have prepared and provided a summary of the survey results as a part of the EIS and Appendices (see Annexure 3 and 4).

As a part of the consultation process Council received a submission (See Annexure 5) particularly questioning the adequacy of the applicants due diligence survey, citing the discovery of scar trees and stone artefacts on the "Tikitere" property as well as the possibility of an pre-colonial axe quarry on the Primary Quarry site. Further correspondence with the applicant's consultants, SMK, confirmed and clarified the submitter's claims. A single scar tree was discovered on the property "Tikitere" approximately 2 kilometres to the south of the proposed project area. Further surveys of that site or in the surrounding area or the proposed development site failed to find any further scar trees or signs of ceremonial sites. An artefact was discover in an eroded area of the rail line corridor which was determined have been relocated to the site, during the initial construction of the rail line, and has been unearthed by water erosion. An extensive survey of the rail corridor by the Inland Rail Project failed to identify any other artefacts. Any potential ceremonial site located along the Tackinbri Creek (located approximately 2.5 kilometres to south) the will not be disturbed during the operation of the proposed quarry. The onsite inspection of the site fail to discover any evidence of pre-colonial axe quarries which may have be located on the Primary Quarry site.

It is unlikely that the proposed development will result in the disturbance of any known Aboriginal sites or objects. In the event of a site or artefact being discovered during the construction or operation of the proposed development all ground-disturbing activities will cease, the area protected and notification of OEH and the Local Land Council will be undertaken. The impact of the proposed development on Aboriginal Heritage is deemed to have satisfactorily complied with the legislation and guidelines.

v. Off-site Haulage

Originally the intention of the proposed development was to haul extracted and processed material from the quarry sites to the rail line without the use of roads external to the "Tikitere" property or the existing rail corridor. However, during the course of the original applications notification, public exhibition and initial referral it become apparent to the quarry contractors involved in the operation of the proposed development that it may be necessary to deliver materials by truck along private, public and state roads

in order to gain access to areas of the rail line located between Croppa Creek and the NSW/QLD border in addition to delivering materials via rail cart along the rail line.

Detailed information regarding the delivery of processed material via the road network has been difficult to obtain from the applicant or the Inland Rail Project, who will utilise the material. However, a map of potential road routes (see Annexure 1) has been supplied which seem to include shire roads, private access roads and state roads, some of which are sealed and some which are unsealed and some are not even under the jurisdiction of the Gwydir Shire Council. Without further details regarding the frequency of use, the amount to be hauled and on which roads and the types of vehicles to be used, it is difficult to make an accurate or any type of assessment with regards to impacts on road infrastructure or on amenity for possibly effected residents.

Council has agreed to the applicant entering into a planning agreement with Council regarding the haulage of material along Gwydir Shire Council road. However, this will only happen if and when road haulage of materials is necessary. Also at this time it may be necessary to prepare a Traffic Impact Assessment (TIA) and enter into an agreement with Roads and Maritime Services. Similarly it may be necessary for the applicant to enter into private agreements with property owners to allow access to private or internal property road.

5

Consultation

The proposed development was notified under Gwydir Shire Council's Community Consultation Policy for period of 28 days. Council received one submission (See Annexure 5) objecting to the proposed development. The main concerns raised are as follows:

- EIS does not address the "Tikitere Bora Ground" – discovery of Aboriginal carved trees and possible ceremonial site,
- EIS does not address discovery of Aboriginal stone artefacts along Tackinbri Creek and the likelihood of more artefact located across the landscape.
- Possibility that the basalt outcrop was used as a pre-colonial Aboriginal axe quarry
- Inadequate mitigation measure relating to cultural heritage
- No consultation with the Aboriginal Community
- EIS does not make areas to be impacted clear
- The loss of 2.8 hectares of Semi-evergreen Vine Thicket is of national significance
- Enforcement of the Vegetation Management Plan and conditions of consent to enforce offset agreement.
- More details regarding the possible ground water recharge rate post rehabilitation
- Insufficient funds set aside for rehabilitation works.

These concerns have been referred back to the applicant to address. A summary of their response (see Annexure 5) is as follows:

- Applicant confirms the past discovery of a single scarred tree approximately 2 kilometres to the south of the proposed development site. The tree had been cut down and was of a type not typical to the area. No other scar trees have been identified within the property.

- No indication of any ceremonial sites or aboriginal places with the project or wider area were discovered on the property. SMK Consultants have been involved in several archaeological investigation in the region since 1988 that included officers from the Toomelah-Boggabilla Land Council. An investigation of the floodplain and waterways in particularly centered on Boobera Lagoon.
- No Aboriginal sites or places are recorded on the Office of Environment & Heritage Aboriginal Heritage Information Management System within a 50 metre buffer of the proposed development site.
- The proposed development site is located within 300m of the existing Camurra-Boggabilla Rail Line which forms part of the Narrabri to North Star Inland Rail project. Recent archaeological survey conduct for this project resulted in the identification of new site within the rail corridor. An artefact was found in a large section of erosion on an access track bordering the rail line. The area has been subject to gully erosion which as revealed extensive deposits of siltcrete. One artefact was discovered at the site. Which is approximately 200 metre south west of the proposed development.
- No area along Tackinbri Creek or Croppa Creek Road will be impacted by the proposed development.
- Desktop and field inspection were undertaken in accordance with the Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW.
- Any unexpected Aboriginal artefacts will be managed in accordance with NSW OEH Unanticipated Finds Protocol.
- Relevant guidelines were followed and such guidelines indicate that it is not mandatory to engage in consultation with the Local Aboriginal representatives if under the due diligence process it is determined that no aboriginal objects are present.
- The total area impacted by the proposed development is 9.5 hectares which includes the Primary Quarry site 5.1 hectares, the Secondary Quarry site 1.25 hectares and the remaining 3.15 hectares for the crushing plant, stockpiles, site office, sediment pond and roads. Of the 5.1 hectares impacted by the Primary Quarry 2.8 hectares is identified as Mixed Vine Thicket low eucalypt woodland of the northern-western Brigalow Belt South Bioregion which is consistent with the Semi-evergreen vine Thicket (SEVT) Endangered Ecological Community located adjacent to the proposed development site.
- The SEVT to be impacted is not considered significant, given its small size, degraded conditions and isolation and therefore does not require assessment under the Environmental Protection and Biodiversity Conservation Act 1999.
- The landholder is responsible for the implementation of the Vegetation Management Plan
- The proposed development is not considered necessary given the limited extent of vegetation removed. The remaining SEVT (72.1 hectares) will not be impacted by the proposed development. Future development applications on the property would now need to be assessed under the current legislation including the Biodiversity Conservation Act 2016.
- Depending on the final landform of the Primary Quarry site the site may be utilised for crop production or may be a localised depression which will capture and hold surface water in situ and be potentially use for on-farm water storage.
- The amount set aside for rehabilitation works of \$20,000 has been calculated based on earthworks and revegetation management. The amount is considered adequate but is not a fixed amount.

Conclusion

It is considered that the development application submitted to Council by Alan Pearlman for the operation of a 500,000 tonne/year Basalt and Siltstone Quarry, including the crushing plant, sediment pond, drains, roads, fences, stockpiles and stormwater diversion banks, satisfactorily addresses:

- S4.15 matters for consideration of the Environmental Planning and Assessment Act 1979, and
- Potential impacts of the proposed quarry operations can either be mitigated or managed
- The proposal is generally in the public interest

Based on the assessment, it is considered that the merits of the proposal warrant development approval subject to the recommended draft conditions of consent (see Annexure 2).

The conditions take into consideration issues raised by internal and external Government Departments and land owners. Conditions of consent establish compliance controls and performance and environmental audits to mitigate the environmental impacts of the proposal to an acceptable level.

RECOMMENDATION

THAT the Joint Regional Planning Panel:

- Receive, consider the findings and recommendations of this report in relation to the proposal for the 500,000 tonne/yr quarry operation,
- Subject to the Conditions of Consent attached.

Further that the applicant is advised of Joint Regional Planning Panel decision and of their right to appeal to the Land and Environment Court within 12 months after the date of determination.

That the objectors are notified of the Joint Regional Planning Panel's decision.