

JOINT REGIONAL PLANNING PANEL

(Northern Region)

JRPP No	2014NTH009
DA Number	DA T6-14-122
Local Government Area	Kempsey Shire
Proposed Development	Extractive Industry – Sand Quarry
Street Address	Lot 323 DP855616 and Lot 1324 DP785874 Belmore River Right Bank Road, McGuire's Crossing
Applicant/Owner	Grandia Investments Pty Ltd Crescent Head Sands Pty Ltd
Number of Submissions	Ten (10)
Regional Development Criteria (Schedule 4A of the Act)	Extractive Industry – Designated Development
List of All Relevant s79C(1)(a) Matters	• State Environmental Planning Policy (State and Regional Development) 2011 • State Environmental Planning Policy (Mining, Petroleum and Extractive Industries) 2007 • State Environmental Planning Policy 33 – Hazardous and Offensive Development • State Environmental Planning Policy 44 - Koala Habitat Protection • Kempsey Local Environmental Plan 2013.
List all documents submitted with this report for the panel's consideration	• Environmental Impact Statement (Townplanning Consultants and Drafting Services Pty Ltd, 2014) • Public Submissions received during exhibition period (x10) (not <u>for public exhibition</u>). • NSW DPI-Water General Terms of Approval (May 2014) • NSW RMS Submissions (x2) • NSW Office of Environment and Heritage Submissions (x4) • NSW EPA Submission • Council Information Request Response (Town Planning Consultants and Drafting Services, May 2015)

	• Ecological Report (Naturecall Environmental, 2016)
Recommendation	That the Joint Regional Planning Panel grant deferred commencement development consent to DA-T6-14-122 for an extractive industry on Lot 323 DP855616 and Lot 1324 DP785874 at 153 Tea Tree Lane, Belmore River, subject to the conditions of consent contained Appendix A.
Report by	Rachael Jeffrey, Town Planner, Kempsey Shire Council Les Pawlak, Acting Manager Development Assessment, Kempsey Shire Council

Executive Summary

Reason for Consideration by Joint Regional Planning Panel

The application has been referred to the Joint Regional Planning Panel pursuant to Clause 8 Schedule 4A of the *Environmental Planning and Assessment Act 1979* (EP&A Act) as the proposed extractive industry (sand quarry) is considered to be designated development for the following reasons:

- more than 2ha of land will be disturbed by clearing and excavating;
- the site is located within 40 metres of a natural waterbody, wetland or an environmentally sensitive area;
- it is in an area of acid sulphate soil; and
- it is within 500 metres of the site of another extractive industry that has operated during the last 5 years.

In accordance with Clause 78A(8)(a) of the EP&A Act 1979 an Environmental Impact Statement (EIS) has been prepared and submitted with the application.

Pursuant to Clause 21(1)(b) of *State Environmental Planning Policy (State and Regional Development) 2011* the Joint Regional Planning Panel (JRPP) is the consent authority for designated development.

Brief Description of Proposal

The development application seeks approval for the establishment of an extractive industry (sand quarry) which would extract a total of 340,000m³ of white sand material at a rate of 20,000m³ per annum (up to 29,000 tonnes per annum) resulting in a quarry life of 17 years. It is proposed the sand be extracted in 10 stages (or 'cells') over the quarry life with the disturbed area limited to one (1) hectare at any time comprising of a 0.5ha cell being quarried and a 0.5ha cell being rehabilitated.

The proposal would result in the progressive removal of approximately 6.4ha of native vegetation over the quarry life.

The only on-site processing that is proposed is primary screening which is a dry screening method used to remove debris and vegetative material (such as sticks and roots) from the resource. The dry screening will be undertaken within the 0.5ha 'cell' being quarried.

There is currently no 'legal and physical' access that benefits the site. Therefore Council recommends a deferred commencement development consent subject to 'legal and physical' access between the site and Belmore River Right Bank Road being established and evidence of this provided to Council.

The proposal will generate an average of six (6) laden truck trips per day, with a maximum (worst case scenario) of twelve (12) laden truck trips per day (or a maximum of 24 truck movements per day, one un-laden to the quarry and one laden from the quarry).

Trucks will only utilise the section of Belmore River Right Bank Road north of the quarry access road and then use South West Rocks Road to the wider road network within the Kempsey region and beyond.

Compliance with Planning Controls

The site is zoned RU1 Primary Production and E2 Environmental Conservation pursuant to the Kempsey Local Environmental Plan 2013. The proposal is defined as an “extractive industry” which is permissible with consent within the *RU1 Primary Production* zone.

The proposal is consistent with the relevant objectives of the RU1 zone which aim to allow a range of agricultural activities to be undertaken and avoid impacts to the character of the rural environment and avoid land use conflicts with neighbouring lands.

An ‘extractive industry’ is prohibited on the E2 zoned land and therefore the proposed quarry will be located and operated wholly within the RU1 zoned land.

Consultation

The application was placed on public exhibition and notified to nearby landholders between 13 August and 12 September 2015 in accordance with Clause 79 of the EP&A Act. Ten (10) public submissions objecting to the proposal were received by Council

Recommendation

That the Joint Regional Planning Panel grant deferred commencement development consent to DA-T6-14-122 for an extractive industry (sand quarry) on Lot 323 DP855616 and Lot 1324 DP785874 at 153 Tea Tree Lane, Belmore River, subject to the conditions of consent contained *Appendix A*.

Contents

1	Background	1
1.1	Previous Approvals.....	1
2	Site Locality and Description.....	2
3	Project Description.....	5
3.1	Quarry Footprint and Output.....	5
3.2	Quarry Staging Plan.....	5
3.3	Material Processing and Stockpiling	6
3.4	Transportation of Material	6
3.4.1	Site Access.....	6
3.4.2	Truck Movements and Haul Route	7
3.5	Hours of Operation	8
3.6	Quarry Rehabilitation.....	8
3.6.1	Revegetation Using Topsoil.....	8
3.6.2	Re-use of Hollow Bearing Trees	9
3.6.3	Targeted Replanting.....	9
3.6.4	Weed Control.....	9
3.6.5	Final Landform	9
4	Development Assessment Framework	10
4.1	Environment Protection and Biodiversity Conservation Act 1999 (Cth)	10
4.2	Environmental Planning and Assessment Act 1979.....	10
4.2.1	Designated Development	10
4.2.2	Integrated Development.....	10
4.3	Protection of the Environment Operations Act 1997	11
5	Consultation	12
5.1	Public Exhibition.....	12
5.2	State Agency Consultation and Referrals.....	14
5.2.1	Department of Primary Industries – Water	14
5.2.2	Office of Environment and Heritage	14
5.2.3	Environment Protection Authority	18
5.2.4	Roads and Maritime Services.....	18
6	Section 79C Considerations	20
6.1	(a)(i) the provisions of any environmental planning instrument.....	20

6.1.1	State Environmental Planning Policy (State and Regional Development) 2011.....	20
6.1.2	State Environmental Planning Policy (Mining, Petroleum and Extractive Industries) 2007	20
6.1.3	State Environmental Planning Policy 33 – Hazardous and Offensive Development	23
6.1.4	State Environmental Planning Policy 44 - Koala Habitat Protection.....	23
6.1.5	Kempsey Local Environmental Plan 2013 (KLEP 2013)	24
6.2	(a)(ii) the provisions of any draft environmental planning instrument.....	25
6.3	(a)(iii) any development control plans.....	25
6.4	(a)(iia) any planning agreement that has been entered into or any draft planning agreement that the developer has offered to enter into.....	25
6.5	(a)(iv) any matters prescribed by the regulations	25
6.6	(b) the likely impacts of the development.....	25
6.6.1	<i>Soil and Water Impacts</i>	25
6.6.2	<i>Traffic and Transport Impacts</i>	27
6.6.3	<i>Developer Contributions – Road Maintenance Levy</i>	28
6.6.4	<i>Air Quality Impacts</i>	29
6.6.5	<i>Noise Impacts</i>	29
6.6.6	<i>Flora and Fauna Impacts</i>	30
6.6.7	<i>Aboriginal Heritage Impacts</i>	31
6.6.8	<i>Visual Impacts</i>	32
6.6.9	<i>Socio-economic Impacts</i>	32
6.6.10	<i>Waste Management</i>	32
6.6.11	<i>Quarry Rehabilitation</i>	32
6.7	(c) the suitability of the site for development	33
6.8	(d) any submissions made in accordance with this Act or the Regulations.....	33
6.9	(e) the public interest.....	33
7	Conclusion.....	33

1 Background

The location of the proposed sand quarry is on Lot 323 DP855616 and Lot 1324 DP785874, 153 Tea Tree Lane at Belmore River (referred to collectively as ‘the site’ within this report). The location of the site is shown on *Figure 1.1*.



(Source: Google Maps, 2015)

Figure 1.1 - Proposed Quarry Location

1.1 Previous Approvals

There are no previous approvals relevant to the proposed quarry site.

2 Site Locality and Description

The site comprises two lots being Lot 323 DP855616 and Lot 1324 DP785874. Lot 323 DP855616 is 12.43ha in area and is generally rectangular in shape. Lot 1324 DP785874 is 11.86ha in area and is 'L' shaped. The site has a total area of 24.29ha and is approximately 5.6km south west of Hat Head and 16.8km east of the Kempsey CBD as illustrated on *Figure 1.1*.

The site is currently vacant and has been used for rural residential purposes in the past with limited agricultural activity being undertaken due to poor quality sandy soils and nearby seasonal water logging (Town Planning Consultants and Drafting Services Pty. Ltd, 2014).

Two unauthorised dwellings exist on the site (one on each lot). The site is vegetated with some clearing undertaken associated with bushfire protection around the unauthorised dwellings as well as along fence lines and access tracks. The unauthorised dwelling on Lot 323 DP855616 is outside the quarry footprint and will be retained for use as a lunch room and toilet facilities for future quarry staff. Consent Conditions will require that the structure no longer be used as a dwelling.

There are three wetlands on the site protected by *State Environmental Planning Policy 14 – Coastal Wetlands* (SEPP 14). The locations of the wetlands are shown on *Figure 2.1*. The topography of the site is undulating between less than 5m and 20m AHD with a ridge along the centre of the site and lower areas along the east and west boundaries.

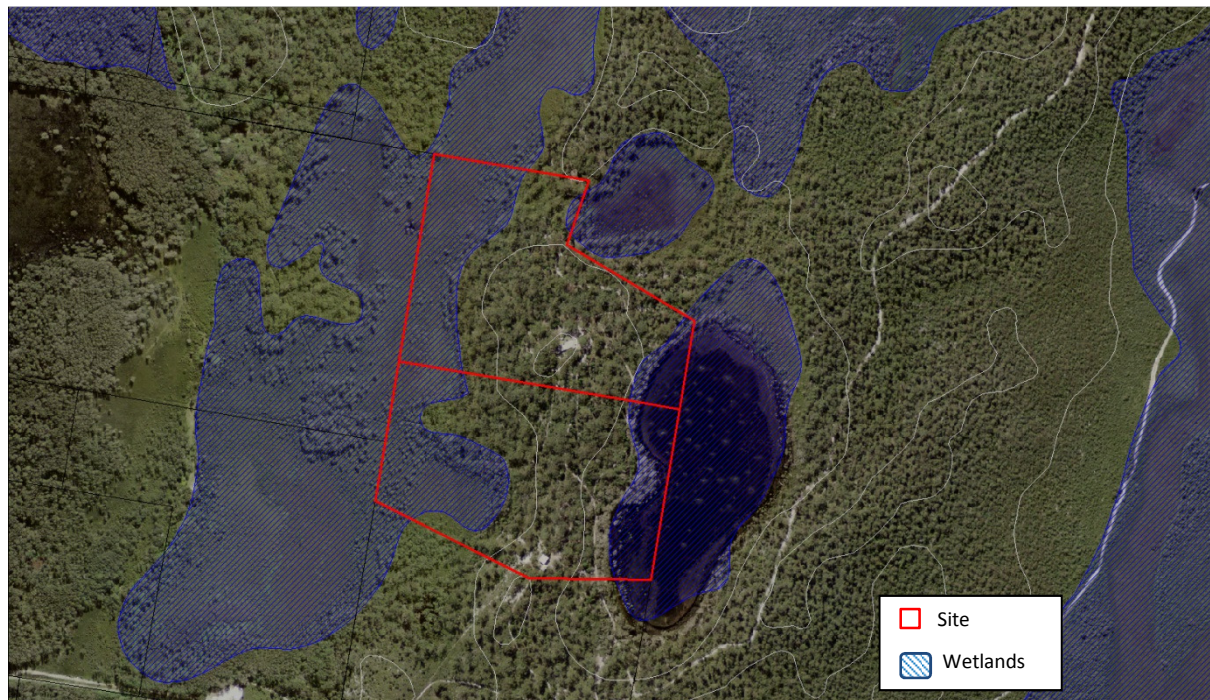


Figure 2.1 – Proposed Quarry Site Aerial Photograph

Hat Head National Park adjoins the site immediately to the north and east. The Pacific Ocean is approximately 2km to the east. There are two approved sand quarries located to the south and south west of the site. This quarry has a similar annual extraction rate to those already approved nearby.

The quarry on land to the south (Lot 323 DP855616) is under similar ownership to the site and is approaching the end of its life. Operations at this quarry will cease upon commencement of extraction at the new quarry, and as a result these two quarries will not be operated at the same time.

Land to the west is used for low intensity agricultural activities. Belmore River is located approximately 2.3km further west (refer to *Figure 2.2*).



Figure 2.2 – Proposed Quarry Location and Existing Approved Quarries in the Locality

The applicant proposes to provide access to the quarry site off Belmore River Right Bank Road and via the 'existing access road' as shown on *Figure 3.3*. Access to the site is discussed further in *Section 3.4.1*.

The site is zoned both *RU1 Primary Production* and *E2 Environmental Conservation* under the *Kempsey Local Environmental Plan 2013* (KLEP 2013) (refer to *Figure 2.3*). Quarrying is proposed within the RU1 zoned land only.

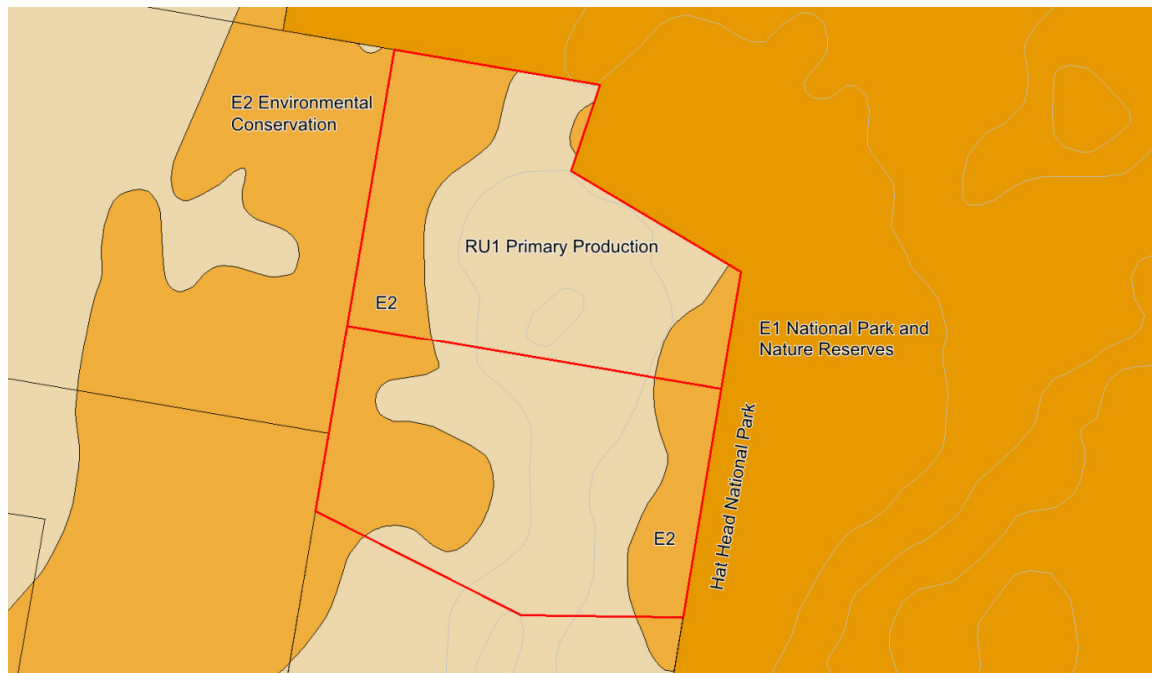


Figure 2.3 – Land Use Zones

3 Project Description

3.1 Quarry Footprint and Output

The applicant proposes to extract a total of 340,000m³ of white sand material at a rate of 20,000m³ per annum (up to 29,000 tonnes per annum) resulting in a maximum quarry life of 17 years. The application states that material will be won from the ridge and associated slopes along the centre of the site in a staged manner as illustrated on *Figure 3.1*. The total quarry footprint would be approximately 6.4ha. It is proposed that a buffer area of at least 50m remain between the boundary of the SEPP 14 wetlands and the quarry extraction limit. A complete set of plans is provided as *Appendix B*.

3.2 Quarry Staging Plan

The applicant states that quarrying at the site would be undertaken in a total of 10 stages (or 'cells') (as represented in *Figure 3.1*) with the area of each stage being approximately 0.5ha. It is proposed that the total area being 'worked' at any one time will be approximately 1ha consisting of the 0.5ha 'cell' being quarried and 0.5ha from the previously quarried 'cell' undergoing rehabilitation. The applicant states that quarrying would begin in the north west and gradually work towards the south east of the quarry footprint.

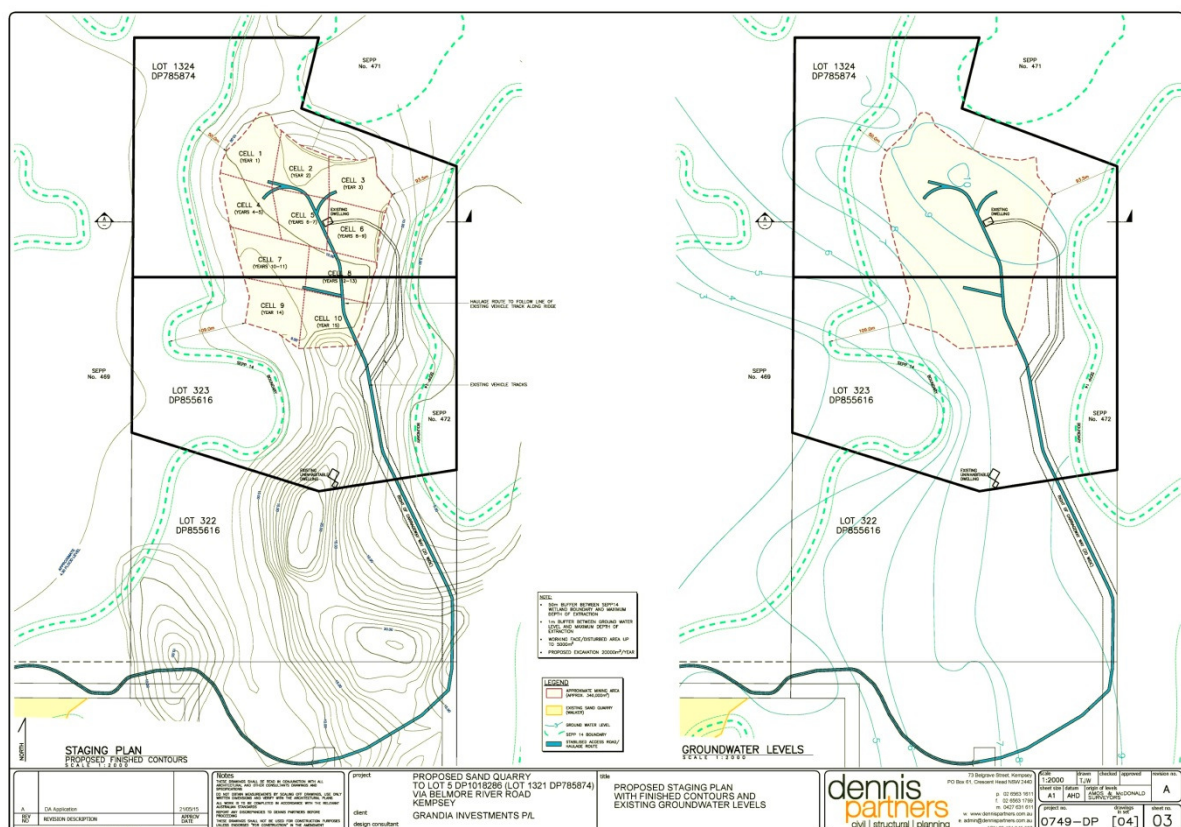


Figure 3.1 – Proposed Sand Quarry Staging Plan

3.3 Material Processing and Stockpiling

It is proposed that the only on-site processing that will be undertaken is primary screening which is a dry screening method used to remove debris and vegetative material (such as sticks and roots) from the resource (Town Planning Consultants and Drafting Services Pty. Ltd, 2014). The dry screening will be undertaken within the 0.5ha 'cell' being quarried.

Figure 3.2 illustrates the proposed indicative locations of stockpiles of topsoil/overburden and quarried sand within Cell 1. The applicant has indicated that the stockpiles will be located in a similar location within each active 'cell' as quarrying progresses.

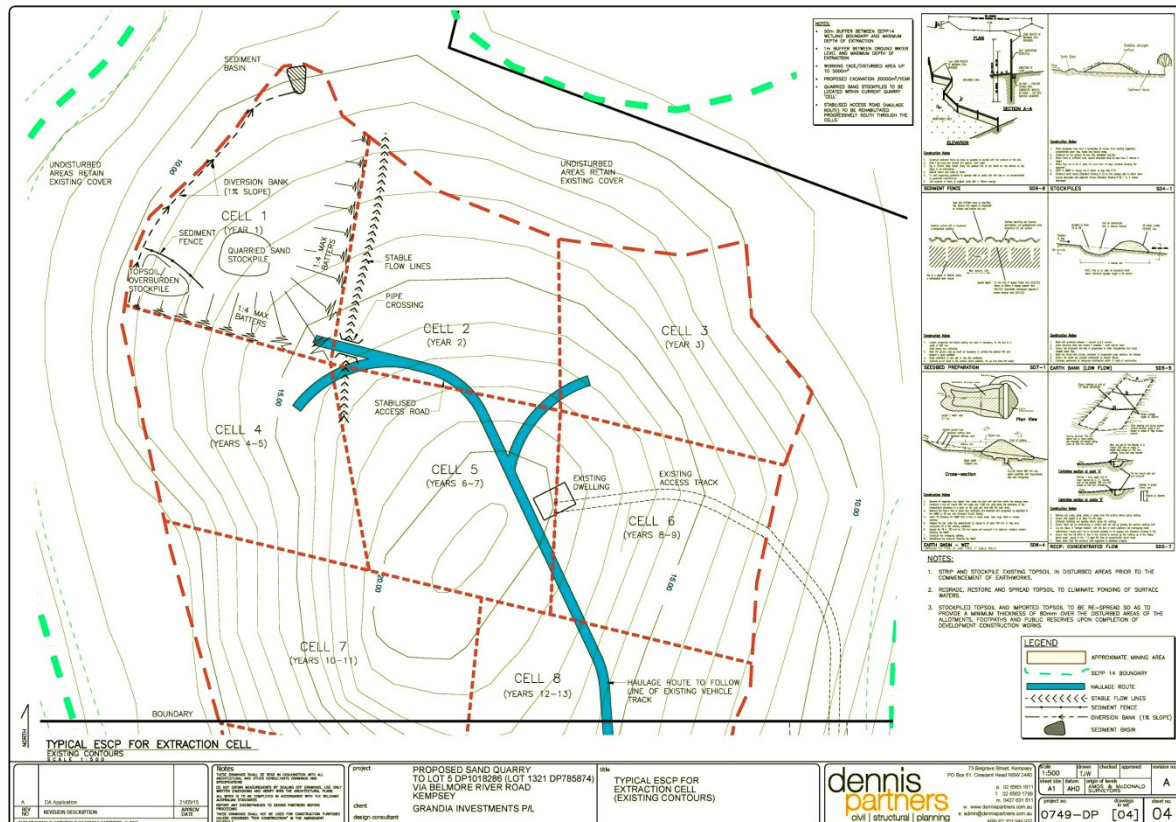


Figure 3.2 - Indicative Locations of Stockpiles and Erosion and Sedimentation Controls

3.4 Transportation of Material

3.4.1 Site Access

The site is currently accessed via an access track off Belmore River Right Bank Road. The location of the access track is illustrated on Figure 3.3.

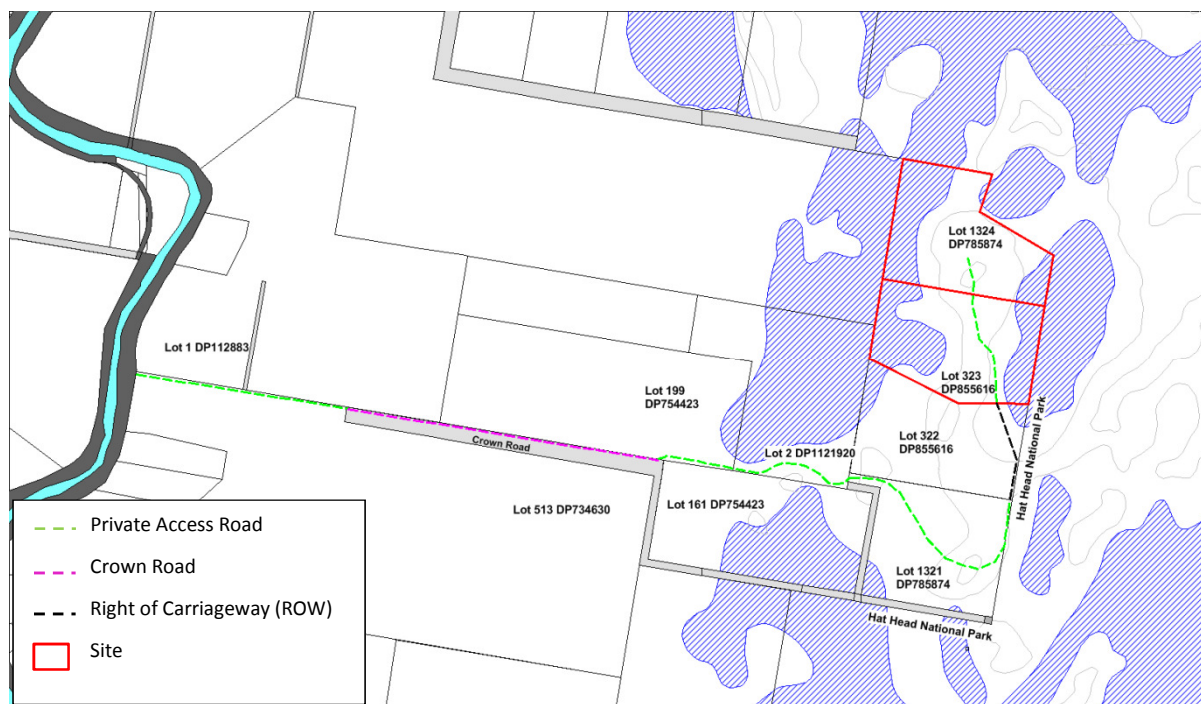


Figure 3.3 – Access to the Proposed Quarry Site

As illustrated in *Figure 3.3*, the access track traverses the land identified in *Table 3.1* between the intersection with Belmore River Right Bank Road and the site.

Table 3.1 – Access Track Property Details

Property Description (from west to east)	Length (approximate)
Lot 513 DP735630*	590m
Crown Road	880m
Lot 199 DP754423*	210m
Lot 2 DP1121920*	320m
Crown Road	90m
Lot 1321 DP785874*^	448m
Lot 322 DP855616#	268m

* Under same ownership as the site.

^ Existing sand quarry in operation

Right of Carriageway (ROW) exists across this site

There is currently no 'legal and physical' access that benefits the site. Therefore Council recommends a deferred commencement condition subject to 'legal and physical' access to the site being established and evidence of this provided to Council (refer to draft Consent Conditions in *Appendix A*). The private land over which the proposed access to the site traverses is owned by one of the quarry site owners, and therefore the provision of 'legal and physical' access to the site via a Right of Carriageway (RoW) is unlikely to be an issue.

3.4.2 Truck Movements and Haul Route

The proposal will generate an average of six (6) laden truck trips per day, with a maximum (worst case scenario) of twelve (12) laden truck trips per day (or a maximum of 24 truck movements per day, one un-laden to the quarry and one laden from the quarry).

The haul route proposed is to utilise the existing quarry access road and ROW outlined in *Section 3.4.1* between the site and Belmore River Right Bank Road. This access is to be formalised prior to commencement (refer to draft consent conditions in *Appendix A*).

Trucks will only utilise the section of Belmore River Right Bank Road north of the quarry access road and then use South West Rocks Road to the wider road network within the Kempsey region and beyond. The haul route is illustrated on *Figure 3.4*.



Figure 3.4 – Haul Route

3.5 Hours of Operation

The proposed hours of operation are Monday to Friday 7am to 6pm and Saturday 7am until 12 noon. No quarrying is proposed on Sundays or Public Holidays.

3.6 Quarry Rehabilitation

Consent conditions would require the applicant will prepare Quarry Rehabilitation Plan as part of the Environmental Management Plan (EMP) if the proposal is approved.

3.6.1 Revegetation Using Topsoil

It is proposed that the topsoil from each stage be stockpiled and respread over the quarried area to utilise the endemic seed stock within the topsoil to naturally revegetate the site. Each former 0.5ha of quarry working area is to be rehabilitated with the topsoil stripped from the next cell to be quarried. This aims to maximise the in situ seed bank and soil ecosystem integrity and expedite recovery (Naturecall Environmental, 2016).

The most recent ecological assessment prepared by Naturecall Environmental (2016) in regards to the proposed development provides the following recommendations to enhance the success of rehabilitation at the site:

- Topsoil stripping is to avoid mixing the lower stratum with the clearly organic enriched uppermost horizon;
- Overburden should not be stockpiled for excessive periods if practical, but should be re-spread within a short interval after stripping over the rehabilitated areas to maximise maintenance of the soil biota; and
- All leaf litter and coarse woody debris is to be stockpiled and then re-spread over the rehabilitation area.

3.6.2 Re-use of Hollow Bearing Trees

The applicant proposes to respread all felled hollow bearing trees across the area undergoing rehabilitation immediately after the topsoil has been respread but before any direct planting has been undertaken. The aim of this is to provide habitat for fauna following quarrying activities.

3.6.3 Targeted Replanting

The Ecological Report (Naturecall Environmental, 2016) recommends that, unless monitoring shows sufficient regeneration from the seed bank within the first six (6) months of rehabilitation, targeted replanting of the following species be undertaken as part of rehabilitation activities:

- *Banksia serrata*;
- Scribbly Gums;
- Pink Bloodwood; and
- Needlebark.

The Ecological Report (Naturecall Environmental, 2016) states that replanting the above species will enhance revegetation of the site with nectar producing plants and facilitate understorey to canopy development. This will increase the ecological value of the regenerating area in the shortest interval.

3.6.4 Weed Control

The applicant states within the EIS that the Quarry Rehabilitation Plan would include a Weed Management Sub-plan. The Ecological Report (Naturecall Environmental, 2016) recommends that this sub-plan ensure:

- Key transformer weeds such as Bitou bush, other noxious weeds and Weeds of National Significance are effectively eliminated from the site over the quarry life and following the quarry maintenance period; and
- Agricultural/ environmental weeds are effectively controlled, especially at the loading/parking areas and regenerating areas. Proactive control and intervention to prevent their establishment and spread is to be undertaken.

3.6.5 Final Landform

The applicant states that the final landform would be generally flat with a sloped perimeter provided by the area of sand dune not excavated.

4 Development Assessment Framework

4.1 Environment Protection and Biodiversity Conservation Act 1999 (Cth)

An Ecological Assessment prepared by FloraFauna Consulting (2013) has been submitted in relation to the potential ecological impacts of the proposed sand quarry (Annexure D of the EIS). A further, more detailed, Ecological Assessment has been prepared by Naturecall Environmental (2016) and this concluded that the proposed development would not result in significant impacts to nationally listed flora or fauna and therefore a Species Impact Statement (SIS) and referral to the federal Department of the Environment (DotE) is not required.

Further discussion of the potential impacts of the proposal on flora and fauna are provided in *Section 6.6.6*.

4.2 Environmental Planning and Assessment Act 1979

The applicant is seeking development consent for the proposed quarry pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

4.2.1 Designated Development

Schedule 3 of the *Environmental Planning and Assessment Regulation 2000* (EPA Regs) identifies development that is ‘designated development’. The proposed extractive industry (sand quarry) is considered to be designated development for the following reasons:

- more than 2ha of land will be disturbed by clearing and excavating;
- the site is located within 40 metres of a natural waterbody, wetland or an environmentally sensitive area;
- it is in an area of acid sulphate soil; and
- it is within 500 metres of the site of another extractive industry that has operated during the last 5 years.

In accordance with Clause 78A(8)(a) of the EP&A Act 1979 and Environmental Impact Statement (EIS) has been prepared and submitted with the application.

4.2.2 Integrated Development

Clause 91 of the EPA Act identifies development that is considered to be ‘integrated development’ requiring development consent and an approval under one (or more) approvals under specified legislation.

The proposal includes the installation of groundwater monitoring piezometers and the NSW Office of Water has advised, if the piezometers will extract less than 1ML per year, a licence under Part 5 of the *Water Act 1912* is required. Therefore the proposed development is considered to be ‘integrated development’.

4.3 Protection of the Environment Operations Act 1997

Schedule 3 of the POEO Act lists 'scheduled activities' which require an environment protection licence (EPL). In regards to 'land-based extractive activities', any proposal that involves the extraction, processing or storage of more than 30,000 tonnes per year of extractive materials requires an EPL.

The proposed development is for the extraction of up to 20,000m³ (equivalent of 29,000 tonnes) of sand per annum and therefore an EPL is not required.

5 Consultation

5.1 Public Exhibition

The application was placed on public exhibition and notified to nearby landholders between 13 August and 12 September 2015 in accordance with Clause 79 of the EP&A Act. Ten (10) public submissions objecting to the proposal were received by Council. A summary of the issues raised in the submission is provided in Table 5.1 below.

Table 5.1 - Public Submissions Summary

Issue	Comment
Concerns for driver safety as Belmore River Right Bank Road is used by tourists.	Belmore River Right Bank Road meets the Austroads Standard for a rural road and, as a result, is considered appropriate for use by both heavy vehicles and tourist traffic. If approved, Council will charge developer contributions from the quarry operator for the maintenance of affected local roads, including Belmore River Right Bank Road (refer to Section 6.6.3 and draft consent conditions in Appendix A).
Belmore River Right Bank Road is a narrow and winding road with some blind corners.	As above.
There is existing subsidence along Belmore River Right Bank Road that has not been rectified by Council. An increase in heavy vehicles will exacerbate this issue.	Any issues related to the road surface should be reported in writing to Council's Infrastructure Services Department. Council staff will then inspect the issue and undertake appropriate maintenance work. If approved, Council will charge developer contributions from the quarry operator for the maintenance of affected local roads, including Belmore River Right Bank Road.
Council has no plans to upgrade Belmore River Right Bank Road.	No upgrade is proposed. Maintenance work is undertaken by Council regularly.
Noise impacts as a result of trucks.	The noise impact assessment prepared in regards to the proposed development indicates that road traffic noise from haul trucks will be below relevant criteria at residences along the haul route.
Structural damage to houses resulting from trucks using Belmore River Right Bank Road.	Belmore River Right Bank Road meets the Austroads Standard for a rural road and, as a result, is considered appropriate for use by heavy vehicles.
Lack of policing of heavy vehicles on Belmore River Right Bank Road.	This is a Police matter. Council has no control over the movements of Police. Council Compliance Officers will intermittently monitor heavy vehicle movements to and from the quarry to ensure compliance with consent conditions.
Safety concerns for school children waiting for buses on the side of the road as there is limited width for two heavy vehicles to pass each other.	Draft consent conditions require that haul trucks not use Belmore River Right Bank Road during the times when the school bus is using the road.
No marker lines on Belmore River Right Bank Road.	This is acceptable for a rural road.
Object to trucks heading south on Belmore River Right Bank Road after exiting the quarry access road.	Draft consent conditions require that haul trucks do not head south on Belmore River Right Bank Road

	from the quarry access road.
Trucks speed along the straighter sections of the road.	Speeding is a Police matter. Council is not able to restrict speed limits lower than what is legally allowed on the road or issue speeding fines. The draft consent conditions require the applicant to update their Driver's Code of Conduct
There is a steep fall away in some sections of the road that make it hard to pull off when a truck is approaching. Also, these are often hidden by long grass.	Any issues related to the road surface should be reported in writing to Councils Infrastructure Services department. Council staff will then inspect the issue and undertake appropriate maintenance work. If approved, Council will charge developer contributions from the quarry operator for the maintenance of affected local roads, including Belmore River Right Bank Road.
Concerns over road conflicts between quarry trucks and the school buses and milk tanker that use Belmore River Right Bank Road.	The quarry operator has elected not to permit haul trucks to travel along Belmore River Right Bank Road during the time that the school bus uses this road. This is reflected in the draft consent conditions.
Limits should be placed on the times truck movements from the proposed quarry are able to use Belmore River Right Bank Road to Monday to Friday between school bus hours.	As above.
Extra heavy vehicle traffic will further deteriorate the road surface.	Any issues related to the road surface should be reported in writing to Councils Infrastructure Services department. Council staff will then inspect the issue and undertake appropriate maintenance work. If approved, Council will charge developer contributions from the quarry operator for the maintenance of affected local roads, including Belmore River Right Bank Road.
There is no access to the lots where the development is proposed.	Council is satisfied that it is possible for legal and practical access to be achieved to service the site. Council recommends that if the proposal is approved, it be with a deferred commencement until satisfactory legal and practical access arrangements can be determined (refer to draft consent conditions).
A levy should be charged to repair the road.	If approved, Council will charge developer contributions from the quarry operator for the maintenance of affected local roads, including Belmore River Right Bank Road.
Value of property has decreased due to the quarry.	There have been a number of sand quarries operating in the immediate area since 1993. The proposal is for a land use that is permitted with development consent on the land. The EIS and supporting reports indicate that the proposal will not significantly impact any residences and therefore unlikely to impact property value.

5.2 State Agency Consultation and Referrals

5.2.1 Department of Primary Industries – Water

The application is integrated development as it requires a licence to install groundwater monitoring piezometers under Part 5 of the *Water Act 1912*. The application was referred to DPI-Water in accordance with section 91 of the *Environmental Planning and Assessment Act 1979*.

DPI – Water provided a response dated 20 May 2014 accompanied by General Terms of Approval (GTA's) (refer to *Appendix C*) which have been incorporated into the draft conditions of consent (refer to *Appendix A*).

5.2.2 Office of Environment and Heritage

The application was referred to OEH for comment as an adjoining owner (Section 79(1)(a) of the *Environmental Planning and Assessment Act 1979*), and as a public authority who may have an interest in the determination of the application (Clause 77 of the *Environmental Planning and Assessment Regulation 2000*).

The OEH has provided comments in respect of flora and fauna and Aboriginal heritage in a number of letters. This was a result of the applicant providing additional information on a number of occasions relating to matters of interest to OEH. These comments are summarised and Council comments provided in *Tables 5.2 to 5.5*, and produced in full at *Appendix D*.

A copy of the most recent Ecological Report prepared by Naturecall Environmental (2016) was forwarded to OEH for comment however, at the time of writing Council had not received a response.

Table 5.2 - OEH Response (dated 3 August 2015)

OEH provided the following comments after review of an updated flora and fauna assessment undertaken by FloraFauna Consulting (2015).

OEH Comment	Council Comment
OEH recommended further ecological assessment be undertaken to allow the potential impacts to flora and fauna resulting from the proposed development be determined. These related to the following: a) Brush-tailed Phascogale; b) Hollow bearing trees; c) Retention of hollow bearing trees and staggering clearing of quarry cells; d) Use the Biobanking Assessment Methodology Calculator to determine an appropriate offset; e) Use an appropriate mechanism to secure that offset in perpetuity; and f) Consider utilising the bio-banking scheme as part of the proposed quarry operation.	Noted. Recommendations were forwarded to applicant by Council.

Table 5.3 - OEH Response (dated 17 June 2015)

OEH provided the following comments following review of the applicants Response to Submissions report.

OEH Comment	Council Comment
Brush-tailed Phascogale – additional assessment is required to determine potential impact of proposal, and inform quarrying design and timing.	Noted.
Biodiversity Offsets – offsets should be provided in accordance with OEH's <i>Principles for the use of biodiversity offsets in NSW</i> . The BioBanking Assessment Methodology should be used as a suitable metric to determine the type and quantum of offsets required.	Noted.
Biodiversity Offsets – The EIS does not establish the mechanism for how the offset will be secured in perpetuity.	Noted. An appropriate draft consent condition has been provided (refer to draft consent conditions).
Impacts on OEH Estate – Direct negotiation should be undertaken between the applicant, Council and the National Parks and Wildlife Service (Macleay Area) to ensure NPWS estate is appropriately protected. - Vegetated buffers 50m-100m wide should be provided between the development and SEPP 14 wetlands, and between the development and adjoining NPWS estate. - The abovementioned buffers should be appropriately managed. - Other sand quarries in the vicinity of this site have directly impacted on the NP. If approved, stringent conditions and monitoring should be imposed on this development to prevent such impacts. - A weed and pest management plan should be prepared in regards to the proposal with reporting to Council to demonstrate successful implementation. - Buffer areas should be fenced and all quarry staff inducted in regards to the protection of the buffer areas and Aboriginal cultural heritage responsibilities. - The property boundary be identified by a registered surveyor along common boundaries with the National Park, excluding wetland areas, to ensure appropriate buffers are provided between quarry works and the National Park. This should be undertaken with minimal impact to vegetation and the NPWS Macleay Area office to be contacted prior to the survey being undertaken. - No vehicle access from the site to the National Park and prohibiting the use of Tea Tree Lane.	Noted. Appropriate conditions have been included in the draft conditions of consent.
Consent Conditions – OEH suggested 13 conditions of consent following the resolution of the abovementioned issues.	The 13 suggested conditions of consent have been included in the draft conditions in <i>Appendix A</i> .

Table 5.4 - OEH Response (dated 29 April 2015)

OEH provided the following comments following receipt of further information from the applicant relating to Aboriginal heritage assessment at the site.

OEH Comment	Council Comment
OEH notes an Aboriginal cultural heritage assessment was undertaken which recommended further archaeological investigations be undertaken at the site which was not supported by the Aboriginal stakeholders. OEH acknowledges the Aboriginal knowledge-holders determination that the shell material identified on the access track is not of a cultural nature.	Noted.
OEH supports the ongoing working relationship with the community detailed in the Draft Plan of Management and the proposed management strategy of ongoing monitoring by representatives of the registered Aboriginal parties for the project to identify any Aboriginal objects to be uncovered as part of the proposed works.	Noted. Refer to draft consent conditions.
OEH notes that the strategies outlined in the draft plan only provide only cover procedures to ensure the identification of any Aboriginal objects, as opposed to their management. The NPW Act clearly establishes Aboriginal objects and places are protected and may not be damaged, defaced or disturbed without appropriate authorisation. If the quarry is approved conditions that clarify the procedure to follow should Aboriginal objects be identified through proposed works, such as the potential for an Aboriginal Heritage Impact Permit (AHIP) to be obtained in accordance with the guideline <i>Applying for an Aboriginal Heritage Impact Permit: Guideline for Applicants</i> (OEH, 2011).	Noted. Appropriate draft consent conditions have been provided.
Any Aboriginal heritage objects identified within the project boundary prior to or during any subsequent works must be registered on OEH's Aboriginal Heritage Information Management System (AHIMS). Penalties apply for failing to do this.	Noted.

Table 5.5 - OEH Response (dated 15 December 2014)

OEH provided the following comments after review of the original EIS and supporting reports.

OEH Comment	Council Comment
Further consideration should be given to the cumulative effects of biodiversity impacts associated with this and similar operations in the vicinity of the subject site.	Further assessment has been undertaken. Refer to Section 6.6.6.
A more realistic assessment of rehabilitation capacity should be prepared along with a suitably detailed rehabilitation plan that includes monitoring of revegetation more frequently than the annual timeframe that is currently proposed in the EIS, and which considers the need for pest control to ensure	Further assessment has been undertaken. Refer to Section 6.6.6.

that the proposal does not contribute to the Key Threatening Process Predation by the European Red Fox.	
It is necessary for the EIS to address the need for pest species and weed control programs, ensuring that efforts to control pests will be effectively co-ordinated with programs operating on adjoining lands, particularly within Hat Head National Park.	Draft consent conditions require the quarry operator to undertake pest and weed control measures. Council has suggested the applicant consult with OEH regarding co-ordination of the required pest and weed control works with programs operating within Hat Head National Park.
Clarification should be provided regarding whether additional clearing is proposed to erect fencing around buffer zones, the type of fencing to be erected and the potential barrier to fauna movement arising from fencing.	This has been clarified in the subsequent information provided to Council. No clearing beyond the quarry limits is proposed. The draft consent conditions will ensure no further vegetation removal is undertaken.
Further consideration of likely impacts to Hat Head National Park is provided in the EIS and direct engagement between NPWS, the proponent and the consent authority is undertaken, as requested by NPWS, to ensure appropriate protections for NPWS estate are included in the EIS prior to its finalisation. These should include the adequacy of proposed impact mitigation such as buffer distances between park boundaries and the proposed operational area, weed and pest control programs, restrictions on park access, and bushfire management needs.	The draft conditions of consent require that a buffer area of at least 50m be maintained between the quarry extraction area and Hat Head National Park. Further, the draft conditions require the applicant to prepare a Vegetation Management Plan for the Biodiversity Offset Area (which would include these buffer areas) to address issues such as weed and pest control. Council considers that the above conditions will prevent significant impacts to the neighbouring National Park.
Additional and appropriate biodiversity assessment should be undertaken in accordance with the OEH threatened species survey and assessment guidelines to inform the EIS. Biodiversity assessment must include impacts through all stages of the proposal. It would be appropriate for the EIS to commit to implementation of a suitable biodiversity monitoring and adaptive management program for the life of the proposal.	Further assessment has been undertaken. Refer to Section 6.6.6.
All unavoidable direct and indirect impacts on biodiversity should be offset in accordance with the OEH offset principles.	Further assessment has been undertaken. Refer to Section 6.6.6.
The BioBanking Assessment Methodology should be used as a suitable metric to determine the quantum of offsets required to compensate for the impacts of the proposal.	Further assessment in regards to biodiversity offsets has been provided by the applicant (refer to Section 6.6.6). The draft consent conditions require the applicant to prepare a Biodiversity Offset Strategy (BOS) prior to commencement of works at the site.
The recommendations of the Aboriginal cultural heritage assessment report, all of which are supported by OEH, should be reflected in the EIS.	Subsequent information provided by the client has satisfied the concerns of Council and the OEH in regards to Aboriginal heritage impacts. The draft consent conditions require that if any item of Aboriginal heritage significance is disturbed that all work stop immediately in the vicinity of the item and OEH and Local stakeholders be notified.

5.2.3 Environment Protection Authority

The proposed development was referred to the EPA as a public authority who may have an interest in the determination of the application (Clause 77 of the *Environmental Planning and Assessment Regulation 2000*). A full copy of the EPA's response is provided with *Appendix D*.

The EPA noted that the proposed extraction limit was below the trigger for requiring an Environment Protection Licence (EPL). The EPA also suggested that if the proposal was approved, the consent conditions specifically restrict extraction to 20,000 cubic metres (29,000 tonnes) per annum.

Appropriate draft conditions have been provided to limit annual extraction to the abovementioned amounts (refer to draft consent conditions in *Appendix A*).

5.2.4 Roads and Maritime Services

The proposed development was referred to the RMS for comment pursuant to clause 16 of *State Environmental Planning Policy (Mining, Petroleum and Extractive Industries) 2007*.

The RMS comments are summarised in *Table 5.6* and produced in full at *Appendix D*.

Table 5.6 - RMS Response

RMS Comments	Council Comment
The Traffic Impact Assessment (TIA) (September 2013) provided a number of recommendations that Council may wish to implement to address the traffic related impacts of the proposed development.	The TIA only provided a single recommendation, being that W5-22(A) and W8-5(A) "200m" signage be installed on Belmore River Right Bank Road at the approaches to the quarry access road. An appropriate condition based on this recommendation has been provided.
An inspection undertaken by Roads and Maritime in August 2014 identified that the Basic Right turn (BAR) and basic left-turn (BAL) treatments recommended by the TIA at the Belmore River Road and Access Road intersection are not currently in place. The narrow bridge on Belmore River Road and adjacent water courses may make it difficult to implement such treatments. Council may wish to consider requiring appropriate signage and ongoing vegetation management to improve visibility and site lines at the intersection. The intersection should be sealed to an appropriate distance along the access road to minimise the tracking of material onto the public road.	Noted. Council Development Engineers are of the opinion that a BAL/BAR intersection be provided at the intersection of Belmore River Right Bank Road and the quarry access road as one of the owners of the site subject to this DA also owns Lot 513 DP734630. As a result the intersection could be relocated further south to allow the design and construction of the recommended BAL/BAR intersection (having regard to constraints such as flooding, ASS and SEPP 14 Wetlands) and a new Right of Carriageway created over existing Lot 513 DP734630. As the existing quarries in the locality have been operating for some time, using the existing intersection, and no traffic safety incidents have occurred (that Council is aware of), it is considered unreasonable to require the relocation of the access road intersection, particularly as the proposal is for extraction of a similar volume to the approved quarry to the south, which will cease operation prior to the commencement of this new quarry..

To improve safety for vehicles turning into Belmore Road the line marking at the South West Rocks Road and Belmore River Road intersection could be updated to a channelized right-turn (CHR-S) treatment as per current warrants provided in Figure 4.9 of the <i>Austroads Guide to Road Design Part 4A</i>.	Council traffic data, whilst dated, indicates the majority of the increase in traffic at the Belmore River Right Bank Road and South West Rocks Road intersection is a result of traffic using South West Rocks Road, not Belmore River Right Bank Road. As well as collecting contributions for road maintenance, Council's Development Engineer recommends comprehensive traffic data is collected by the applicant's traffic engineers over a full 12 month period for the first 12 months of the quarry operation, and thence every five (5) years for the life of the quarry. This data shall be made available for Council planning purposes. This requirement has been included as a draft condition of consent.
It is suggested that Council condition the Draft Operational Management Plan outlined in Section 4 of the EIS to be amended to address the following matters under a heading for Traffic and Transport Management; a. A Code of Conduct for heavy vehicle operators, staff and contractors b. An induction procedure for the Code of Conduct c. A map of the approved haulage route/s highlighting considerations for; i. Residential areas ii. School zones iii. Known safety issues, including; narrow bridges, concealed driveways, etc d. A complaints handling and resolution procedure	Noted. Draft consent conditions have been provided reflecting this recommendation.
Any works required on a classified road should be designed and constructed in accordance with the current Austroads Guidelines, Australian Standards and RMS Supplements.	Noted.

6 Section 79C Considerations

6.1 (a)(i) the provisions of any environmental planning instrument

6.1.1 State Environmental Planning Policy (State and Regional Development) 2011

Clause 21 of SEPP State and Regional Development states:

(1) A regional panel for a part of the State may exercise the following consent authority functions of the council or councils for that part of the State for development to which this Part applies:

.....

(b) the functions of a consent authority under Divisions 2of Part 4 of the Act
.....

‘Designated development’ is identified in Division 2 Part 77A(1) of the EP&A Act and therefore designated development may be determined by the JRPP. As the proposed quarry expansion is considered to be ‘designated development’ (refer to *Section 4.2.1*) the development application is to be determined by the JRPP.

Schedule 1 of SEPP State and Regional Development identifies development that is State significant. In regards to extractive industry it states:

(1) Development for the purpose of extractive industry that:

- a) extracts more than 500,000 tonnes of extractive materials per year, or*
- b) extracts from a total resource (the subject of the development application) of more than 5 million tonnes, or*
- c) extracts from an environmentally sensitive area of State significance.*

The proposed quarry is not considered to be State significant as the proposal is for:

- the extraction of up to 29,000 tpa;
- a total extraction of up to approximately 348,000 cubic metres of material (or approximately 504,600 tonnes); and
- the site is not an environmentally sensitive area of State significance.

6.1.2 State Environmental Planning Policy (Mining, Petroleum and Extractive Industries) 2007

Clause 7(3)(a) of *State Environmental Planning Policy (Mining, Petroleum and Extractive Industries) 2007* (SEPP Mining Petroleum and Extractive Industries) permits (with consent) extractive industry development on land where development for the purposes of agriculture or industry may be carried out (with or without development consent). The proposed quarry site is zoned both *RU1 Primary Production* and *E2 Environmental Conservation*. Quarrying is only proposed within portions of the site zoned RU1, and therefore the proposed quarry is permitted with consent.

Part 3 of SEPP Mining Petroleum and Extractive Industries provides matters for consideration for determining authorities before determining an application.

Clause 12 requires determining authorities to consider the compatibility of the proposed extractive industry with other land uses. Table 6.1 below provides a summary of the considerations.

Table 6.1 SEPP Mining, Petroleum and Extractive Industries - Clause 12 considerations

<i>(a)(i)</i>	<i>The existing uses and approved uses of land in the vicinity of the development.</i>
	The Hat Head National Park is located immediately to the east and north of the site. Land to the west and immediately south of the site is rural land used for low intensity agricultural purposes. Further to the south and south west are two approved sand quarries, with the quarry to the south under the same ownership as the site. The closest dwellings to the site (not associated with the site owners) are located approximately 2km to the west along Belmore River Right Bank Road. The proposed sand quarry is generally considered compatible with these land uses in proximity to the site. The existing sand quarry to the south has been operating since 2000 at the same extraction rate as the proposed new quarry with minimal conflicts with surrounding land uses. The primary concern of nearby residents in regards to the proposed development relate to traffic safety along Belmore River Right Bank Road. The traffic study has demonstrated that the road is suitable for heavy vehicle use. The relocation of the intersection of the access road and Belmore River Right Bank Road, as well as the implementation of the Driver's Code of Conduct, will further assist in minimising any potential traffic issues.
<i>(a)(ii)</i>	<i>Whether or not the development is likely to have a significant impact on the uses that, in the opinion of the consent authority having regard to land use trends, are likely to be the preferred uses of land in the vicinity of the development.</i>
	The KLEP 2013 provides the preferred uses of land in the vicinity of the development by way of land zoning and permissible land uses within the zones. Part of the subject site is zoned <i>RU1 Primary Production</i>, with the remainder zoned <i>E2 Environmental Conservation</i>. Adjacent land to the east is Hat Head National Park. As a result, the land use in this direction is unlikely to change. Buffer areas will be maintained between the operational area of the quarry and the boundary to the National Park of at least 50m, and no access to the National Park from the quarry site will be permitted, as a result it is considered that no significant impacts to the National Park will occur. There are no plans to change the zoning of other nearby rural land to uses which may result in conflicts with the quarry operation. As mentioned above, there are dwellings at a distance of approximately 2km to the west of the proposed quarry however it is unlikely that significant amenity impacts resulting from the proposed quarry would occur.
<i>(a)(iii)</i>	<i>Any ways in which the development may be incompatible with any of those existing, approved or likely preferred uses.</i>
	As outlined above, it is considered that the proposed sand quarry is generally compatible with existing and future surrounding land uses. The implementation of conditions on the consent, and management measures outlined within the EIS, Response to Submissions report and latest Ecological Report (Naturecall Environmental, 2016), will further assist in avoiding land use conflicts.
<i>(b)</i>	<i>Evaluate and compare the respective public benefits of the development and the land uses referred to in paragraph (a) (i) and (ii).</i>
	The applicant states that the white sand at the quarry site is highly sought after within the construction industry, and in particular, for use in the Pacific Highway upgrade projects

	currently being undertaken and those planned for the near future, within northern NSW. The proposed quarry would also ensure the ongoing employment of two (2) full time and one (1) part time staff currently employed at the existing quarry to the south (on Lot 1321 DP785874) resulting in associated flow on benefits within the local economy. As discussed above, there is unlikely to be significant impacts on the surrounding land uses as a result of the proposed quarry expansion and therefore it is considered that the public benefits of these land uses will not be reduced.
(c)	<i>Evaluate any measures proposed by the applicant to avoid or minimise any incompatibility, as referred to in paragraph (a)(iii).</i>
	It is considered that the proposed quarry is generally compatible with surrounding land uses which are primarily rural and National Park. Potential impacts to roads and traffic will be minimised through the implementation of the Drivers Code of Conduct as well as the relocation of the intersection of the quarry access road and Belmore River Right Bank Road further south. As a result, it is considered that the measures proposed to avoid or minimise any incompatibility with surrounding land uses are satisfactory.

Clause 13 requires consideration of the compatibility of the proposal with surrounding mining, petroleum production or extractive industry developments.

As mentioned previously there are existing sand quarries located on land to the south and south west of the site. The existing quarry on Lot 1321 DP785874 (DA T6-06-85) to the south will not operate simultaneously to the proposed quarry. The draft consent conditions require that the consent for DA T6-06-85 be surrendered prior to the commencement the proposed development. As a result the two quarries will not operate concurrently and compatibility issues avoided. It is Council's understanding that the quarry on Lot 161 DP754423 does not currently operate due to access issues, and as a result no conflicts will arise.

Clause 14 requires the consent authority to consider whether or not the consent should be issued subject to conditions aimed at ensuring that the development is undertaken in an environmentally responsible manner, including conditions to ensure the following:

(a) that impacts on significant water resources, including surface and groundwater resources, are avoided, or are minimised to the greatest extent practicable,

(b) that impacts on threatened species and biodiversity, are avoided, or are minimised to the greatest extent practicable,

(c) that greenhouse gas emissions are minimised to the greatest extent practicable.

The Conditions of Consent (refer to *Appendix A*) are aimed to ensure the development is undertaken in an environmentally responsible manner.

Clause 15 requires the consent authority to consider the efficiency of the proposed extractive industry resource recovery. The applicant states that all material extracted at the proposed sand quarry will either be used in quarry products or rehabilitation and therefore there is no waste of resource material. The extraction method is considered to be efficient.

Where a proposal requires the transportation of extracted materials, *clause 16(1)* requires the consent authority to consider if the consent should be issued subject to conditions aimed at:

- determining if products should be transported other than by public road;
- limiting impacts on the road network;
- limiting potential impacts to residential areas or school zones; or
- considering if a code of conduct relating to the transport of materials on public roads is appropriate.

The proposed development includes transportation of quarried product by road. Draft consent conditions have been included to assist in minimising impacts to traffic and the road network from the proposal.

Through implementation of the draft consent conditions and the Drivers Code of Conduct, haul vehicles will not use Belmore River Right Bank Road during the time the school bus uses the route. The quarry operator will be required to check with the local school bus service provider during January, prior to school commencing each year, to ensure the abovementioned time restrictions are accurate.

The draft consent conditions require the quarry operator to include a map in the Drivers Code of Conduct of the approved haulage route highlighting considerations for:

- Residential areas;
- School zones; and
- Known safety issues, including; narrow bridges, concealed driveways, etc.

The Drivers Code of Conduct is to be incorporated into the Environmental Management Plan (EMP) for the proposed quarry. The Drivers Code of Conduct will also include a complaints handling procedure.

Clause 17 requires the consent authority to consider whether or not the consent should be issued subject to conditions aimed at ensuring the rehabilitation of land that will be affected by the development. As indicated previously in this report, the quarry site will be regenerated using seed stock in the stripped topsoil, with additional planting as required over time (refer to Section 3.6), to eventually create an environment similar to the existing site, albeit without the mature and hollow bearing trees. This is reinforced through the Conditions of Consent contained in *Appendix A*.

6.1.3 State Environmental Planning Policy 33 – Hazardous and Offensive Development

Substances likely to be used at the quarry that are relevant to SEPP 33 are diesel. The applicant states within the EIS (page 82) that having regard for the size and planned method of operation the extractive industry is not a potential hazard or offensive industry.

6.1.4 State Environmental Planning Policy 44 - Koala Habitat Protection

State Environmental Planning Policy 44 - Koala Habitat Protection (SEPP 44) applies within the Kempsey LGA.

Kempsey Shire Council has prepared a *Comprehensive Koala Plan of Management for the Eastern Portion of the Kempsey LGA* (CKPoM) (KSC, 2011) which applies to the eastern portion of the Kempsey LGA, which includes the proposed quarry site. The site is mapped as being partially 'Secondary Class A Koala habitat' under the Kempsey CKPoM.

The Ecological Report prepared by Naturecall Environmental (2016) concluded that as no Koala food trees will be removed, the proposal is unlikely to lead to a significant impact on Koalas.

6.1.5 Kempsey Local Environmental Plan 2013 (KLEP 2013)

Zoning

The site is zoned both *RU1 Primary Production* and *E2 Environmental Conservation* under the *Kempsey Local Environmental Plan 2013* (KLEP 2013). As illustrated on *Figure 2.3* the areas of SEPP 14 wetland are zoned *E2 Environmental Conservation* while the remainder of the site is zoned *RU1 Primary Production*.

The objectives of the *RU1 Primary Production* zone 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 maintain the rural and scenic character of the zone.*
- *To encourage eco-tourist facilities and tourist and visitor accommodation that minimise any adverse effect on primary industry production and scenic amenity of the area.*
- *To enable agricultural support activities to be carried out on land within the zone in a manner that does not significantly reduce the agricultural and horticultural production potential of land in the locality.*
- *To encourage development that is compatible with the character of the zone.*

The objectives of the *E2 Environmental Conservation* zone are:

- *To protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values.*
- *To prevent development that could destroy, damage or otherwise have an adverse effect on those values.*
- *To protect wetland ecosystems from development that could adversely affect water quality, water supply and biodiversity.*
- *To keep floodways free of development liable to be damaged by flood waters.*
- *To keep floodways free of development which is likely to adversely affect the flow of flood waters.*

'Extractive Industries' are permitted in the *RU1 Primary Production* zone with development consent however are prohibited in the *E2 Environmental Conservation* zone.

It is considered that the proposed quarry expansion is in accordance with the objectives of the RU1 zone as it will result in the extraction of a valuable resource with positive economic flow on effects within the Kempsey community. The quarry is already partially disturbed and it is considered that, with the implementation of consent conditions and mitigation measures within the EIS, impacts on the surrounding environment will be minimal and manageable. Further, at the completion of quarrying at the site it is proposed that it will be rehabilitated to result in a similar ecological character to what currently exists.

No quarrying is proposed within the E2 zoned land. Buffers of between 50m and 100m are to be maintained between the quarrying areas and adjacent wetlands and National Park. It is considered these buffer areas will minimise any potential impacts to these sensitive environments.

6.2 (a)(ii) the provisions of any draft environmental planning instrument

There are no draft environmental planning instruments relevant to the proposal.

6.3 (a)(iii) any development control plans

Kempsey Development Control Plan 2011 (Kempsey DCP) provides comprehensive controls for development within the LGA. Relevant sections of the DCP and where they are addressed within this report are provided in *Table 6.2*.

Table 6.2 – Kempsey Development Control Plan 2013

Relevant Kempsey DCP 2013 Chapter		Report Reference
B2	Parking, Access and Traffic Management	6.6.2
B4	Earthworks and Sediment and Erosion Control	6.6.1
B5	Stormwater Management	6.6.1
B10	Tree Preservation and Vegetation Management	6.6.6

6.4 (a)(iia) any planning agreement that has been entered into or any draft planning agreement that the developer has offered to enter into

There are no planning agreements or draft planning agreements relevant to this application.

6.5 (a)(iv) any matters prescribed by the regulations

No matters prescribed by the regulations are relevant to the proposed development.

6.6 (b) the likely impacts of the development

6.6.1 Soil and Water Impacts

Given the location of the proposed sand quarry in close proximity to a number of SEPP 14 Wetlands potential impacts to surface and groundwater as a result of the development is an important consideration.

Prior to any construction works being undertaken at the site the applicant has stated that baseline surface water and groundwater sampling will be undertaken in accordance with relevant guidelines.

Surface and groundwater quality data will be compared to *the Australian and New Zealand guidelines for fresh and marine water quality: Volume 1 - The guidelines* {Australian and New Zealand Environment and Conservation Council (ANZECC) Guidelines, 2000}.

Surface Water

The site is a sand dune and therefore has high infiltration rates and there is limited opportunity for overland stormwater flows, with the exception of the lower lying surrounding areas particularly around wetlands. The primary potential water quality pollutants from the proposed development are suspended sediment and hydrocarbons (fuels/ oils).

A Water Management Report was prepared by Dennis Partners (2011) in regards to the proposed sand quarry. This report provides recommendations for the management and monitoring of surface water across the site. The report provides a number of management measures which are generally reflected in the draft consent conditions.

Each active one (1) hectare cell will have a sediment basin and appropriate controls including:

- Maintenance of buffers and boundary setbacks and installation of silt fences where appropriate to prevent sediment transport and impact on adjoining land;
- Erosion and sediment control measures are to be implemented prior to, or in conjunction with, vegetation clearing.
- Topsoil is to be stripped immediately after clearing and either stored temporarily or re-spread immediately in rehabilitation works.
- Minimise disturbed areas to each cell (as described in Section 3.2) with progressive rehabilitation (as outlined in Section 3.6);
- Direct any stormwater runoff from disturbed areas to sedimentation ponds for infiltration or treatment, if and when necessary, prior to discharge off-site;
- Maintenance of the rim around the perimeter of the quarry until rehabilitation is complete; and
- Regular inspection and maintenance of sediment controls

The site is located within Zone 1 of the Rainfall Distribution Zones outlined in Landcom's *Managing Urban Stormwater Soils and Construction Volume 1, 4th Edition* (Landcom, 2004). Council considers it appropriate that the applicant not undertake soil stripping activities during February and March (higher rainfall months) in accordance with the guidelines to further reduce the likelihood of water pollution occurring in the surrounding environment.

Conditions also require that all stockpiles and associated surface water runoff controls at the quarry be designed and constructed in accordance with *Managing Urban Stormwater Soils and Construction Volume 1, 4th Edition* (Landcom, 2004).

The Water Management Report (Dennis Partners, 2011) recommends a Water Management Plan be implemented for the site.

Council considers that a Soil and Water Management Plan (SWMP) prepared in accordance with the Landcom publication *Soils and Construction, Volume 1, 4th Edition March 2004* (NSW Government, 2004) (commonly referred to as 'The Blue Book') should be prepared for the site prior to commencement of operations to further ensure surface water runoff across the site is managed appropriately. The SWMP would form part of the overall Environmental Management Plan (EMP) for the site (refer to the draft consent conditions in Appendix A).

Groundwater

The applicant does not expect to intercept groundwater as a result of the proposed sand quarrying activities. The applicant states that groundwater piezometers will be installed adjacent to each extraction area prior to each stage of extraction to establish the groundwater level at that specific location. Quarrying activities will be kept at least one (1) metre above the wet weather groundwater table.

The monitoring program proposed by the applicant will measure groundwater levels within each cell at three (3) monthly intervals and following prolonged wet weather.

Council considers the proposed groundwater management and monitoring methods be detailed within the SWMP for the proposed development.

6.6.2 Traffic and Transport Impacts

The applicant has stated that the proposed sand quarry will generate an average of six (6) laden truck trips per day (or 12 truck movements per day – 6 un-laden to the quarry and 6 laden from the quarry). This is similar to the existing sand quarry operation on Lot 1321 DP785874. The Applicant has stated that the quarry would generate a maximum of twelve (12) laden truck trips per day as a worst case scenario.

The haul route is proposed to be along the existing access road that services the site, north onto Belmore River Right Bank Road and then onto South West Rocks Road to the wider road network. No haul vehicles are to head south on Belmore River Right Bank Road past the intersection of the quarry access road and Belmore River Right Bank Road. The proposed haul route is illustrated on Figure 3.4.

The primary concern of the public with the proposed sand quarry is with the potential road safety issues of haul trucks using Belmore River Right Bank Road and conflicts with local road users, school buses and tourist traffic.

A Traffic Impact Assessment (TIA) was prepared by RoadNet in regards to the proposed development which the potential impacts of the proposal on road capacity efficiency and safety, as well as measures required to mitigate any adverse impacts. The TIA concluded that no significant impacts to the local traffic or road transport network would result as a result of the proposed development. The only recommendation of the report was that W5-22(A) and W8-5(A) “200m” signage be installed at the approaches to the quarry access.

RMS was consulted in regards to the proposed development (refer to Section 5.2.4). RMS noted that the Basic Right turn (BAR) and Basic Left turn (BAL) treatments discussed in the TIA do not exist at the intersection of the quarry access road and Belmore River Right Bank Road and suggested Council require appropriate signage and ongoing vegetation management to improve sight lines at the intersection as an alternative to requiring the applicant to provide the BAR/BAL intersection. The RMS also suggested Council require the applicant to seal an appropriate length of the access road to prevent tracking of material onto the public road. The RMS also suggested a Drivers Code of Conduct be developed by the quarry operators identifying sensitive areas (such as schools, residential areas, narrow bridges etc) and a complaints handling and resolution procedure be developed.

Council's Development Engineer generally agreed with the RMS comments however indicated that it would be preferable for the required BAL/BAR intersection be constructed at the intersection of the quarry access road and Belmore River Right Bank Road. Despite this, the Assessing Officer considers that this is an unreasonable request given that the proposed sand quarry will operate at a similar capacity to the existing sand quarry on nearby Lot 1321 DP785874. These two quarries will not be operated at the same time, and as far as Council is aware, there have been no safety issues at the existing intersection. As a result the Assessing Officer is satisfied that the existing access is adequate for the proposed development.

Given neither the RMS or Councils Development Engineer identified any safety issues associated with Belmore River Right Bank Road nor is its use by haul trucks, Council satisfied the road is suitable for use by haul trucks from this development.

In addition, Council's development Engineer recommended the applicant be required to collect comprehensive traffic data (including holiday periods in which the sand quarry is operating) by their Traffic Engineers in accordance with the relevant standards and guidelines over a full twelve (12) months, from the date of commencement of quarry operations, and thence every five (5) years for the life of the quarry. The results of this data should be made available to Council for future planning purposes.

Draft consent conditions have been provided which prohibit haul vehicles associated with this quarry from using Belmore River Right Bank Road during the times that the school bus operates along this road.

Appropriate consent conditions have been drafted to ensure other matters outlined above are implemented.

6.6.3 Developer Contributions – Road Maintenance Levy

Council has applied contributions along Belmore River Right Bank Road to South West Rocks Road, a classified road as this has been identified as the haulage route. Truck movements from the quarry will have an impact on the pavement on this road.

Kempsey Shire Council's *Local Roads and Traffic Infrastructure Developer Contributions Plan 2009* (effective from 12 January 2010) specifies the following requirement:

5.3.4 Haulage Provisions

Extractive and rural industries where land use is intensified and results in heavy vehicle movements on local roads will be subject to a contribution under this plan for the upgrade of the roads being used by the development. The contribution is calculated on gross tonnage hauled. Contributions payable are calculated on receipt of the development application and are unique to each application.

The NSW Independent Pricing and Regulatory Tribunal has issued the *Local Infrastructure Benchmark Costs – Costing Infrastructure in Local Infrastructure Plans Final Report April 2014* to guide Councils in the calculation of fair and reasonable contribution rates. The report provides guidelines for section 94 contributions in mining areas based on the additional cost for road maintenance attributed to mining activity.

The IPART methodology specifies the following steps:

1. Step 1: Determine the lifetime cost of maintenance for a typical road with an assumed natural life of 20 years.
2. Step 2: Assume reduced lifespans resulting from mining activity using notional lower and upper bounds and convert this to an additional cost per km, per year.
3. Step 3: Apportion costs derived at lower and upper bands on a mine by mine basis by determining the total kilometres of affected road (shared and non-shared) for the relevant mine and allocating the total cost on a pro rata mine output basis across the different mines.

Using this methodology, Council has determined that a contribution rate of \$0.10/tonne/km for an extraction rate of 20,000 cubic metres and a haul route of 11.08km (from intersection of the quarry access road and Belmore River Right Bank Road) would apply. It is therefore recommended that a condition of consent be imposed requiring a contribution of \$1.75 per cubic metre.

6.6.4 Air Quality Impacts

The proposed quarry would be situated approximately 2km from the closest dwelling. The applicant has stated that appropriate measures will be undertaken to minimise dust emissions from the quarry as follows:

- Quarry Extraction Operations:
 - Disturbed areas are to be limited to a maximum of one (1) hectare at any one time;
 - The use of water sprays during operational periods
 - Stockpiles are to be immediately stabilised using mulching vegetation;
 - Previous extraction areas are to be concurrently rehabilitation as the next cell is developed;
 - Stockpiles of screened material are to be no greater than 2,000 cubic metres; and
 - Stockpiles are to be situated within a protected section of the cell not exposed to prevalent winds.
- Haul Route:
 - Proper maintenance of the gravel access road;
 - Regular watering of the access road during haulage periods and adverse weather conditions;
 - Access road speed limit of 30km per hour; and
 - Securely cover loads.

Consent conditions will ensure these measures are implemented and incorporated into the EMP for the quarry.

6.6.5 Noise Impacts

The applicant has undertaken noise modelling for proposed quarry operations.

No blasting is proposed.

Operational Noise

A Noise Impact Assessment was prepared by Environmental Resources Management Australia Pty Ltd (ERM) in 2010 in regards to the proposed sand quarry. This report concluded that 3m high noise barriers were required to the west of the quarry to meet relevant noise criteria at sensitive receivers along Belmore River Right Bank Road.

A revised report *{Technical (Acoustics) Report (May 2015) for Crescent Head Sands Pty Ltd}* was prepared by ERM in 2015 and revised noise modelling re-evaluated the position of quarry plant, noise sources and operational layout in relation to the quarry footprint using detailed elevation data. It was concluded in this revised report (ERM, 2015) that the 3m acoustic barrier was not required.

Road Traffic Noise

The *Noise Impact Assessment* (ERM, 2010) concluded that noise emissions resulting from haul trucks travelling to and from the proposed quarry site are not likely to exceed the relevant ECRTN criteria.

Consent conditions will require that compliance noise monitoring be undertaken during the first three (3) months of operation at the quarry to ensure relevant criteria are not exceeded.

6.6.6 Flora and Fauna Impacts

The proposed development involves the removal of 6.4ha of vegetation in stages over a 17 year period. A complex mosaic of vegetation types occur around the haulage route and quarry site reflecting the overlap of alluvial, swamp and Aeolian geomorphology (Naturecall Environmental, 2016).

Three separate Ecological Assessments have been undertaken in regards to the proposed sand quarry development as follows:

- *Ecological Assessment EA-2013-2204 In relation to: Proposed Sand Extraction at Lot 1324 DP785574 and Lot 323 DP855616 Via Belmore River Road McGuire's Crossing May 2013* by FloaFauna Consulting, 2013;
- *Addendum to Ecological Assessment Report EA-2013-2204 In relation to: Proposed Sand Extraction at Lot 1324 DP785574 and Lot 323 DP855616 Via Belmore River Road McGuire's Crossing May 2015* by FloaFauna Consulting, 2015; and
- *Proposed Extractive Industry Sand Quarry Lot 1324 DP785874 Lot 323 DP855616 Belmore River Right Bank Road Belmore River NSW Ecological Report prepared by Jason Berrigan* by Naturecall Environmental, 2016.

Council and the OEH were of the opinion that the earlier ecological assessments undertaken by FloaFauna Consulting in 2013 and 2015 did not provide sufficient information to allow the consent authority to determine if the proposed development would result in significant impacts to threatened species, endangered ecological communities, or their habitats. Due to the location of the quarry in a sensitive ecological area adjacent to SEPP 14 Wetlands and the Hat Head National Park, it was considered that the potential ecological impacts of the proposal were a primary consideration of the assessment. Council is satisfied that the 2016 report prepared by Naturecall Environmental provides sufficient information.

In summary, the report prepared by Naturecall Environmental (2016) concludes that, with the implementation of recommendations and mitigation measures, the proposal will not result in significant ecological impacts and therefore a Species Impact Statement (SIS), or referral to the Commonwealth DotE, is not required. The recommendations and mitigation measures outlined in the ecological report are reflected in the draft consent conditions.

See comments provided in *Tables 5.2 to 5.5* with respect to the comments received from OEH.

Biodiversity Offset Strategy

The ecological assessment by Naturecall Environmental (2016) gave consideration to a Biodiversity Offset Strategy (BOS) to assist in offsetting the ecological impacts of the proposal. The area identified as an offset in the BOS would be protected by a section 88B instrument (refer to the draft consent conditions in Appendix A). This area in the future may be dedicated to the National Parks and Wildlife Service via a boundary adjustment to Hat Head National Park.

Council considers that this would be a positive ecological outcome and has provided consent conditions requiring a BOS to be prepared, to the satisfaction of Council, prior to commencement.

6.6.7 Aboriginal Heritage Impacts

An Aboriginal Heritage Due Diligence Letter Report was prepared by Archaeological and Heritage Management Solutions (AHMS) in 2011. As part of the investigations undertaken for this report the following were identified:

- Two scatterings of shell, potentially middens of Aboriginal origin;
- One registered midden within 300m of the study area;
- A potential scarred tree; and
- Several archaeological 'landforms of interest'.

This report recommended that an Aboriginal Cultural Heritage Assessment be undertaken and an Aboriginal Heritage Impact Permit (AHIP) application be prepared under the *National Parks and Wildlife Act 1974* (NPW Act). This recommendation was made despite correspondence from both the Dunghutti Elders and Kempsey Local Aboriginal Land Council (who were both involved in a site visit and consulted as part of the abovementioned AHMS (2011) report) stating that no such further archaeological investigation work was required at the site. In the opinion of the Aboriginal stakeholders the two shell scatterings identified on the vehicle access track was not of Aboriginal origin, and both the potential scarred tree and registered midden were well outside the proposed sand quarry disturbance area. Both Aboriginal stakeholders requested that they be informed and attend the site when clearing works commence for each stage.

Consultation with OEH concurred with the opinions of the Aboriginal stakeholders. OEH also identified that the draft Plan of Management within the EIS (Townplanning Consultants and Drafting Services, 2014) only provided procedures in regards to the identification of any Aboriginal objects, as opposed to their management. OEH stated that the NPW Act clearly establishes Aboriginal objects and places are protected and may not be damaged, defaced or disturbed without appropriate authorisation. OEH requested that if the quarry is approved conditions that clarify the procedure to follow should Aboriginal objects be identified through proposed works, such as the

potential for an Aboriginal Heritage Impact Permit (AHIP) to be obtained in accordance with the guideline *Applying for an Aboriginal Heritage Impact Permit: Guideline for Applicants* (OEH, 2011).

Conditions have been included to ensure that Aboriginal stakeholders are present when clearing for each stage is being undertaken and that appropriate measures are undertaken if items are discovered that are suspected to be of Aboriginal cultural heritage significance.

6.6.8 Visual Impacts

Visual impacts resulting from the proposed sand quarry are considered to be minimal. A vegetative buffer area will be maintained around the perimeter of the quarry and, given the local topography, and distance to any sensitive receivers, such as dwellings, roads or open space areas, the change to the visual landscape will be minimal.

6.6.9 Socio-economic Impacts

The proposed quarry expansion will result in employment of staff which will result both directly and indirectly in positive economic benefits for the community in the Kempsey region.

Quarrying at the site will allow a valuable resource to be extracted from an already partially disturbed environment.

6.6.10 Waste Management

The applicant states there would be minimal production wastes generated at the proposed sand quarry as all extracted materials are incorporated in to products dispatched from the quarry site or will be used in rehabilitation works.

An industrial bin is to be provided at the quarry to ensure any wastes are disposed of appropriately.

The existing dwelling at the site will be utilised as a lunchroom and toilet facility for quarry staff.

6.6.11 Quarry Rehabilitation

Quarry rehabilitation is described in detail in Section 3.6 of this report.

Rehabilitation of the quarry site is intended to facilitate the restoration of a native vegetation community typical of the local endemic conditions. This will be achieved through the implementation of a Quarry Rehabilitation Plan (to become part of the EMP) monitored to achieve key performance indicators, with remediation actions if these are not met (Naturecall Environmental, 2016).

The applicant proposed to strip the topsoil from each cell which would either be stockpiled or immediately re-spread on a cell where quarrying has finished. The aim of this method is to utilise the existing seed bank within the topsoil to revegetate the site. This natural revegetation will be supplemented with plantings as required.

Sand which is extracted but not suitable for sale will be placed back in the site and shaped to provide a final landform that will be generally flat. The quarry area will have a surrounding sloped perimeter resulting from the section of the sand dune that is not excavated.

6.7 (c) the suitability of the site for development

It is considered that the site is suitable for the proposed development as with the implementation of conditions of consent, impacts to the surrounding environment will be minimal. The site is suitable for the development in that it contains the resource sought and nearby residences are at an adequate distance that any potential amenity impacts can be appropriately managed.

6.8 (d) any submissions made in accordance with this Act or the Regulations

See Section 5 of this report.

6.9 (e) the public interest

The proposed development complies with relevant legislation, environmental planning instruments and relevant development controls ensuring that the public interest is maintained. The implementation of Conditions of Consent (refer to *Appendix A*) will further ensure that impacts to the surrounding environment are minimal.

7 Conclusion

After consideration of the proposal against the relevant statutory considerations, it is concluded that on balance the proposed development is appropriate. The development is permissible with consent and not envisaged to have any significant adverse impacts.

The proposal will involve the removal of approximately 6.4ha of native vegetation however with the implementation of recommendations and mitigation measures through conditions of consent, no significant ecological impacts will result.

DPI-Water has issued General Terms of Approval for the development, and the RMS are satisfied from a traffic and road safety aspect.

In conclusion, it is recommended that the Joint Regional Planning Panel grant deferred commencement development consent to DA-T6-14-122 for an extractive industry on Lot 1324 DP785874 and Lot 323 DP855616 at 153 Tea Tree Lane Belmore River subject to the Conditions of Consent contained *Appendix A*.

Appendix A

Draft Conditions of Consent

Appendix B

Development Plans

Appendix C

Department of Primary Industries – Water

General Terms of Approval

Appendix D

Authority Correspondence