

JRPP No	2012STH015
DA Number	RA12/1001
Local Government Area	Shoalhaven City Council
Proposed Development	Extension of area over the Shoalhaven River where sand is won via dredging (to be then processed at the existing land based facilities)
Street Address	Shoalhaven River and Lot 1 DP 787495 (No.123) and Lot 2 DP 787495 (No.125) Terara Road, Terara
Applicant	Allen Price and Associates (as agents for Shoalhaven Sands Pty Ltd)
Number of Submissions	10
Recommendation	Approval with Conditions
Report by	Andrew Lissenden, Senior Development Planner

ASSESSMENT REPORT AND RECOMENDATION

EXECUTIVE SUMMARY

Reason for Consideration by Joint Regional Planning Panel

The development application (DA) has been referred to the Joint Regional Planning Panel (JRPP) as it is of a class or description set out in Schedule 4A of the Environmental Planning and Assessment Act 1979 (EPA Act). Specifically, the proposed development satisfies the criteria of Clause 8 (Particular designated development) (a) of Schedule 4A of the EPA Act as it is for an extractive industry that meets the requirements for designated development under Clause 19 of Schedule 3 to the Environmental Planning Regulation 2000 (EPA Regulation).

Proposal

The development application, as amended, seeks approval for the following (summary only):

1. Regularisation of dredging in the Shoalhaven River on the southern side of Burraga (Pig) Island outside the existing permissive occupancy; and
2. Extension of area over the Shoalhaven River where sand is won via dredging, associated sand processing and production of up to 100,000 tonnes of course river sand. The works to be undertaken in two stages. Additional details on each of the stages are provided in the 'Assessment Report' below.

Permissibility

The site of the land based facilities is zoned 1(g) (Rural "G" (Flood Liable) Zone) and the section of the Shoalhaven River is uncoloured under the Shoalhaven Local Environmental Plan 1985 (SLEP 1985). The proposal is a permissible use in both zones with development consent under SLEP 1985.

Consultation

The application was placed on public exhibition in accordance with the requirements for designated development as outlined in the EPA Act and EPA Regulation on two separate occasions. A total of ten (10) submissions were received during notification periods. All submissions received objected to the proposal.

Main Issues

Land ownership, acid sulphate soils, potential contamination, flora and fauna, land based structures and NSW Department of Primary Industries (Fishing and Aquaculture) comments.

RECOMMENDATION

It is recommended that Stage 1 of RA12/1001 (JRPP Ref 2012STH015) be approved subject to the conditions contained in **Attachment 'A'**.

ASSESSMENT REPORT

1. Background

The following provides details on pre-lodgement discussions, post lodgement actions and general site history:

- a) Pre Lodgement: In accordance with the Department of Planning Director General's requirements, the applicant had a discussion with Council staff to obtain comments on issues to be considered in the Environmental Impact Statement (EIS) document on 22 February 2012. Issues raised at this meeting included land based structures without development consent, bank stability, flooding, acid sulphate soils, potential contamination and threatened species.
- b) Post Lodgement: The current application was lodged on 20 June 2012. Council officers during the assessment of the application have requested additional information from the applicant on six occasions (i.e. letters dated 3 July 2012, 18 July 2012, 23 August 2012 and emails dated 7 November 2012, 16 November 2012, 21 November 2012, 22 November 2012, 8 January 2013 and 14 May 2013). Issues raised included:
- Payment of outstanding fees;
 - Owner's consent;
 - Provision of detailed plans;
 - Consent for land based structures;
 - Information to address NSW Department of Primary Industries – Fishing and Aquaculture (Fisheries) concerns;
 - More detailed designs for traffic works required in Terara Road;
 - Concerns with flood/river impact assessment;
 - Concerns with flora and fauna assessment;
 - Concerns with noise assessment;
 - Operating hours for the dredge; and
 - Updated plans having regard for the issued deposited plan for Pig Island.

All of the above issues, apart from the request for updated plans (last dot point above), were raised with the applicant as part of Council's initial requests for additional information. Additional information was provided by the applicant on 24 August 2012, 23 October 2012, 19 November 2012, 21 November 2012 (x2), 27 November 2012, 28 November 2012 and 16 May 2013. During the assessment process, the applicant amended the application to stage the development so as to address environmental concerns and land ownership issues.

At this time, the applicant has not provided all the additional information that has been requested by Council.

- c) Site History: A review of Council's computer records/files has indicated that the current operation has had previous development and/or building applications lodged on it. An overview of the applications that have relevance to this current application is provided below:

- Letter from Council agreeing to the use of 123 Terara Road for the 'storage and sale of sand'. Issued on 22 November 1967 - implied interim development approval;
- DA91/2897: Development application for the existing sediment trench on Pig Island and its extension. Approved 10 August 1993. This development application has been subject to a number of amendments relating to removal, from the island, of sediment material that is temporarily stored adjacent to the trench;
- Amendment to DA91/2897: Change to Condition 1 to include construction of a dam for overflow water from trench. Approved 11 February 1994; and
- DA10/1345: Development application sought approval for use of the sediment by product from sand extraction for filling a natural depression on Pig Island. Application was withdrawn on 1 August 2011.

In addition to the above, a number of approvals and/or licences have been issued by State government authorities. Details of the ones that are relevant to this application/ still in force are provided below:

- Permissive Occupancy (PO1968/29) under the Crown Lands Act 1989 on 1 October 1968 for a portion of the Shoalhaven River. In recent years, the extraction of sand has been occurring outside the approved permissive occupancy area to a significant extent;
- A Controlled Activity Approval (10 ERM2012/0075) under the Water Management Act 2000 for the sediment trench with associated dam on Pig Island and temporary stockpiling/ management of dredge spoil on Pig Island; and
- Environmental Protection Licence (EPL 3209) under the Protection of the Environment Operations Act 1997 for a water-based extractive industry and associated activities at 125 Terara Road, Terara.

2. Subject Site and Surrounds

The development site is located approximately 1.4 kilometres east of the Nowra/Shoalhaven River Bridge. It comprises the Shoalhaven River and No.123-125 Terara Road, Terara (Lot 1 DP 787495 and Lot 2 DP 787495). Each is discussed below:

- The Shoalhaven River: The area of the Shoalhaven River, where it is proposed to dredge the material, is an area of intertidal sand flat that is exposed at low tide. It is located at the western end of Pig Island on its southern, western and northern sides; and
- No. 123 and 125 Terara Road, Terara: The land based component where the sand extracted from the Shoalhaven River is processed into coarse river sand for sale/distribution comprises two parcels of land known as 123 and 125 Terara Road, Terara. It is located on the southern banks of the Shoalhaven River to the west of Terara Village.

The existing land uses located on the southern banks of the Shoalhaven River include a mix of agricultural, commercial and residential uses. The existing land uses on the northern banks of the Shoalhaven River include a mix of industrial and agricultural land uses.

Pig Island is currently used for agricultural purposes and contains a dwelling house and a number of ancillary buildings related to the agricultural use of the land. Some of the land adjacent to the southern boundary of Pig Island is used by Shoalhaven Sand for a sediment trench that is associated with the existing sand dredging operation in the Shoalhaven River.

Refer to **Attachment 'B'** for additional details on the site's location.

3. Proposal

The development application as amended proposes:

1. The regularisation of dredging in the Shoalhaven River on the southern side of Burraga (Pig) Island outside the existing permissive occupancy; and
2. Extension of the area over the Shoalhaven River where sand can be won via dredging. The works to be undertaken in two stages:
 - Stage 1 comprises the area of intertidal sand flats that is located at the western end of Pig Island and has an area of approximately 2.4 hectares. This stage includes a dredge area with a 20 metre(m) buffer to existing sea grasses that are to the west (comprising a 5 metre buffer/offset from the sea grasses and 15m angle of repose at 1 in 2.5 maximum slope between the buffer zone and the base of the area to be dredged) and a 15m buffer to Pig Island (comprising the angle of repose between the banks of Pig Island and the base of the dredge area at 1 in 2.5 maximum slope). Dredging to occur down to a depth of 6m. Works proposed as part of Stage 1 also include the construction on 123 Terara Road of a noise wall 3.5m high;
 - Stage 2 comprises the intertidal sand flats that are located to the north west of Pig Island and has an area of approximately 6.7 hectares. This stage includes a dredge area with a 20m buffer to existing sea grasses (comprising a 5m buffer/offset from the sea grasses and 15m angle of repose (i.e. 1 in 2.5 maximum slope) between the buffer zone and the base of the area to be dredged) and a 15m buffer to Pig Island (comprising the angle of repose between the banks of Pig Island and the base of the dredge area - 1 in 2.5 maximum slope). Dredging to occur down to a depth of 6m. The applicant, as part of the amended application, acknowledges that Stage 2 will require further assessment to resolve environmental issues.

Refer to **Attachment 'C'** for a copy of the amended development application plans.

4. Community Consultation

The development application has been exhibited in accordance with the public participation requirements for designated development as outlined in the EPA Act and EPA Regulation. This notification has occurred on three (3) occasions as overviewed below:

a) Original Development Application Notification:

- Individual property owners within an 800 metre radius of the site were notified of the proposal. The notification period was from 4 July 2012 to 6 August 2012 (33 days);

- A notice was placed on the land to which the application relates (frontage of 123 Terara Road, Terara);
- The proposal was advertised in the local press on two occasions (South Coast Register on 4 July 2012 and Nowra News 19 July 2012); and
- The application and supporting documentation were on display at Council's City Administrative Centre in Nowra, Council's website as well as the NSW Department of Planning and Infrastructure Office in Wollongong.

Seven (7) submissions were received by Council. Two of these submissions were received after the notification period had finished. All submissions raise concerns with the proposal. The main concerns raised in the submissions were impacts on fish breeding, bank erosion (both on Pig Island and the southern bank of the Shoalhaven River), previous non-compliance, altering the course of the river, operating hours for dredge, acid sulphate soils, visual impacts, maximum extraction levels and impact on ferry servicing Pig Island.

b) Amended Development Application (Notification 1):

- Letters advising of the amended proposal were sent to the people who made submissions when the application was originally notified. The notification period was from 22 November 2012 to 28 November 2012.

The formal public exhibition and notification process was not undertaken as per the requirements of Section 79, Clause 6 (Circumstances in which public exhibition may be dispensed with) of the EPA Act. The consent authority at this time being of the opinion that the amended application differed only in minor respects from the original application and complied with other applicable requirements of this clause. One (1) submission was received by Council. This submission raised concerns with the proposal. The main concerns raised were environmental damage from stockpiling on Pig Island, absence of owner's consent, failure to properly notify the modified application, Council's failure to take compliance action and inadequacy of information.

c) Amended Development Application (Notification 2):

- Individual property owners within an 800 metre radius of the site were notified of the proposal. The notification period was from 10 April 2013 to 10 May 2013 (30 days);
- A notice was placed on the land to which the application relates (frontage of 123 Terara Road, Terara);
- The proposal was advertised in the local press on two occasions (South Coast Register on 10 April 2013 and 24 April 2013); and
- The application and supporting documentation were on display at Council's City Administrative Centre in Nowra, Council's website as well as the NSW Department of Planning and Infrastructure Office in Wollongong.

The above notification process was undertaken once it had been advised that the re-definition of Pig Island had been recently finalised by the Office of Lands and registered with NSW Land and Property Information. Two (2) submissions were received by Council. Both submissions raise concerns with the proposal. The main concerns raised in these submissions were visual impacts, noise, damage to river bed, impact on fish, impact on land values and owner's consent.

Further discussion of the issues raised in the submissions that have been received is provided in the following sections of this report.

5. Statutory Considerations

The following are relevant planning controls that have been considered in the assessment of this application.

- i. Environmental Planning and Assessment Act 1979;
- ii. Environmental Planning and Assessment Regulation 2000;
- iii. State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007;
- iv. State Environmental Planning Policy (State and Regional Development) 2011;
- v. State Environmental Planning Policy 55 – Remediation of Land;
- vi. State Environmental Planning Policy 71 – Coastal Protection;
- vii. Deemed SEPP (Illawarra Regional Environmental Plan);
- viii. Shoalhaven Local Environmental Plan 1985 (as amended);
- ix. Draft Shoalhaven Local Environmental Plan 2013;
- x. Development Control Plan No. 93 – Controls for Waste Minimisation and Management;
- xi. Development Control Plan 106 – Development on Flood Prone Land (DCP 106); and
- xii. Shoalhaven Contribution Plan 2010.

Additional information on the proposal's compliance with the above documents is detailed in the following section of this report.

6. Statement of Compliance /Assessment

The following provides an assessment of the submitted application against the matters for consideration under 79C of the EPA Act.

Any planning instrument, draft instrument, DCP's and regulations that apply to the land

- i) Environmental Planning and Assessment Act 1979 (EPA Act): The provision of the EPA Act need to be considered in the assessment of the proposed development. The clauses/matters contained in EPA Act that have relevance to this application are overviewed below:
 - a) *Part 1, Section 5A (Significant effect on threatened species, populations or ecological communities or habitats)*: The area where the works are proposed (i.e. Stage 2) contain two Endangered Ecological Community (EEC) identified under the NSW Threatened Species Conservation Act 1995 (TSC Act). These are Coastal Saltmarsh and Swamp Oak Floodplain Forest. In addition, it contains and is adjoined by shorebird habitat (i.e. both Stage 1 and 2). The applicant has submitted a flora and fauna assessment/7 part test pursuant to Section 5A of the EPA Act prepared by Peter Dalmazzo (dated 18 January 2012) and two supplementary documents (dated 7 November 2012 and 21 November). The reports dated 7 November 2012 and 21 November 2012 only look at Stage 1 with the applicant advising that Stage 2 of the proposed development will require further flora and fauna assessments to be undertaken. As such, Councils assessment on flora and fauna issues only relates to

Stage 1 of the proposed development as there has been inadequate information provided to allow an assessment for Stage 2. In the absence of further information to determine that there will not be a significant impact on the above communities, the consent authority does not have the legal ability to approve Stage 2 which may result in a significant impact and, as a consequence, may require a Species Impact Statement (SIS).

The updated assessment provided has regard for species listed under the TSC Act and Fisheries Management Act 1994 that have been recorded within a 10 kilometre radius of the site. In relation to bird species, Council is of the opinion that Stage 1 should have minimal impact on the lifecycle of any species that has been recorded near the site. It is however, recommended that, as part of Stage 1, monitoring of bird species should be undertaken. This ensuring that adequate information is available for the assessment of impact for future stages. In relation to the EEC's, while the applicant's original flora and fauna assessment referred to areas of Swamp Oak Floodplain Forest on the Pig Island that may be impacted upon by Stage 1, Council has confirmed through site visits that no Swamp Oak Floodplain Forest occurs within areas with the potential to be impacted by Stage 1 works. In addition, it is acknowledged that Stage 1 will not directly impact the areas mapped as Coastal Saltmarsh. The assessment provided recommends a number of mitigation measures that include prohibiting access and disturbance within the EEC's and bird habitats outside the areas affected by Stage 1, restricting animals, provision of information to workers, etc. The above to be incorporated into an Environmental Management Plan (EMP) for the proposed works that will be required as a condition on any development consent issued.

- b) *Part 4, Division 2, Section 79 (Public Participation – designated development)*: The development application has been advertised in accordance with the requirements of subclause 1, 3, 4 and 5. In accordance with subclause 6, the re-exhibition of the amended application was dispensed with when amended plans were first received as Council was of the opinion that the amended application differed only in minor respects from the original application that was submitted. However, given concerns that were subsequently raised by an objector and to ensure transparency in the process, the amended application was formally re-exhibited in accordance with the applicable designated development requirements when Council was advised that the boundary redefinition for Pig Island had been recently finalised to include the existing approved sediment trench within the ownership of the island owner.
- c) *Part 4, Division 5, Section 91 (What is integrated development) and Section 91A (Development that is integrated development)*: The amended development, in order for it to be carried out, requires development consent and one approval listed in this section (i.e. approval under the Protection of Environmental Operations Act 1997). As such, the amended development is classified as "integrated development". General Terms of Approval have been sought and obtained from the NSW Environmental Protection Authority (EPA). The conditions, as detailed in the General Terms of Approval, are to be included in any development consent issued.
- d) *Schedule 4A (Development for which regional panels may be authorised to exercise consent authority functions of councils)*: The proposed development is identified under this schedule as a type of development (i.e. extractive industry) which meets the

requirements of designated development and therefore, must be referred to the Joint Regional Planning Panel for determination. As such, the application will be determined by the Southern Joint Regional Planning Panel.

- ii) *Environmental Planning and Assessment Regulation 2000 (EPA Regulation)*: The provisions of the EPA Regulation need to be considered in the assessment of the proposed development. The clauses/matters contained in EPA Regulation that have relevance to this application are overviewed below:
- a) *Part 6, Division 3, Clause 66 (Seeking general terms of approval)*: The original development application was forwarded to NSW Department of Primary Industries – Fishing and Aquaculture (Fisheries), NSW Office of Water (OW) and EPA for comment/General Terms of Approval. The amended application was forwarded to Fisheries for comment/General Terms of Approval.
 - b) *Part 6, Division 3, Clause 69 (Forwarding of submissions to approval bodies)*: Copies of submissions received by Council during the formal notification periods were forwarded to approval bodies that were relevant at the conclusion of each exhibition period (i.e. EPA, OW and Fisheries) as per the requirements of this clause.
 - c) *Part 6, Division 3, Clause 70 (Notification of general terms of approval)*: The timeframe for the submission of comments from the approval bodies has been complied with. Comments including the General Terms of Approval relating to the amended application being received from the EPA on 21 March 2013.
 - d) *Part 6, Division 5, Clause 77 (Notice of application for designated development to public authorities – other than concurrence authorities and approval bodies)*: Notice of the application was provided to NSW Roads and Maritime Services – Roads (RMS Roads), NSW Roads and Maritime Services – Maritime (RMS Maritime) and NSW Office of Environment and Heritage (OEH) for comment.
 - e) *Part 6, Division 5, Clause 78 (What information must a written notice of development contain?)*: The written notices for the development application contained all information as required by subclause 1. In addition, the application was notified for a 30 day period as required by subclause 2 both times the application was formally exhibited.
 - f) *Part 6, Division 5, Clause 79 (How is notice under section 79(1)(c) of the Act exhibited on land for designated development?)*: A notice advising of the development application for designated development was exhibited on the land to which the development application relates (i.e. frontage of 123 Terara Road, Terara) in accordance with the requirements of this clause both times the application was formally exhibited. No notice was able to be placed on the relevant land within the Shoalhaven River given its location.
 - g) *Part 6, Division 5, Clause 80 (How is notice under section 79(1)(d) published for designated development?)*: A notice advising of the development application as designated development was published in accordance with the requirements of this clause both times the application was formally exhibited.
 - h) *Part 6, Division 5, Clause 81 (Forwarding of submissions to Director-General)*: At the

completion of each formal notification period, copies of the submissions received have been forwarded to the Director-General.

- i) *Schedule 3 (Designated Development), Part 1, Section 19 (Extractive Industries)*: The requirements of this clause are applicable as the proposed development will disturb a surface area of more than 2 hectares of land, is located in a natural water body, is located within an area as identified as containing acid sulphate soils and is within 200 metres of a coastline. As such, the proposed development is classified as designated development.
- iii) *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 (SEPP 2007)*: The provisions of SEPP 2007 apply to the proposed development. The clauses/matters contained in SEPP 2007 that have relevance to this application are overviewed below:
 - a) *Part 2, Clause 7 (Development permissible with consent)*: The proposed development satisfies the criteria of 'extractive industry'. As it is proposed in a waterway that is not in an environmental conservation zone, it may be carried out with development consent.
 - b) *Part 3, Clause 12 (Compatibility of proposed mine, petroleum production or extractive industries with other land uses)*: Consideration has been given to existing/approved uses in the vicinity, impacts of the development on the uses, incompatibility with existing/approved uses, public benefits of the development and mitigation measures proposed. An existing sand dredging operation has been in place on the site for a number of years (i.e. approximately 45 years). In this regard, the proposed works should not have a significant impact upon uses of land in the vicinity of the development subject to the implementation of mitigation measures as identified in the reports submitted in support of the application and the additional measures as detailed in this report and identified in the proposed conditions of development consent.
 - c) *Part 3, Clause 14 (Natural resource management and environmental management)*: Consideration has been given to the development's impact on natural resources and the development's environmental management. These issues are discussed in greater detail in other sections of this report. In summary, conditions will be included in any development consent issued relating to how the development is undertaken so as to ensure it occurs in an environmentally responsible manner (i.e. preparation of an environmental management plan, implementation of mitigation measures as identified in the reports submitted in support of the application). In terms of greenhouse gas emissions, consideration has been given to the assessment provided with the submitted application. No concerns are raised as the processes involved in the resource recovery are not energy intensive.
 - d) *Part 3, Clause 15 (Resource recovery)*: Consideration has been given to the development's efficiency in terms of resource recovery and no concerns are raised. In addition, sufficient information has been submitted with the application to demonstrate that waste generated by the development will be minimised. Conditions will be included in any development consent issued in relation to waste disposal to ensure if waste materials are reused they are done so in accordance with an approval issued

by Shoalhaven City Council (i.e. the reuse of the fine sand material from dredging process) or, if they are not, they are transported to an approved waste disposal facility and/or location.

- e) *Part 3, Clause 16 (Transport)*: Consideration has been given to the transportation of materials that will be produced by the development. No opportunities exist to exclude transport by public road as this is the only useable access option available, limit or preclude truck movements on roads in residential areas or near schools as there is only one access route available from the development site to the highway. In addition, it is not considered necessary to require the preparation and implementation of a code of conduct relating to the transport of materials on public roads. Issues of relevance, such as hours of operation for truck movements so as to minimise impacts, upgrading of the development site's access so as to provide a Basic Left Turn (BAL) and Basic Right Turn (BAR) treatment in accordance with the Austroads 2009 Guide to Road Design as well as additional upgrading/sealing of the access within the site to limit the tracking of loose materials onto the adjoining public road, are to be dealt with through conditions on any issued development consent. As the development will involve the continued transport of materials on a public road comments were sought from RMS Roads. Advice provided indicates that they had no objection to the development application.
- f) *Part 3, Clause 17 (Rehabilitation)*: Consideration has been given to the rehabilitation of the land that is impacted on by the proposed development (i.e. the dredging activities). The applicant has provided a 'Rehabilitation and Stabilisation Plan' that is contained within the River Impact Assessment prepared by Martens Consulting Engineers. This recommends, in part, leaving exhausted areas for a minimum of 10 years, water quality monitoring, bank stability monitoring and remediation of impacted areas. No concerns are raised subject to the imposition of conditions on any development consent issued in relation to the implementation of works as detailed in the proposed 'Rehabilitation and Stabilisation Plan'. It is, however, noted that some of the bank stability works proposed may occur on land owned by other parties. While no concern is raised with works required on public land subject to consultation with Council and/or other public authorities, no land owner's consent from the current owner of Pig Island has been provided as part of this application. As such, Council does not currently have the legal ability to require these works to be undertaken as conditions on any issued development consent. This position has unfolded since the island's redefinition recently by the Lands Office.

iv) *State Environmental Planning Policy (State and Regional Development) 2011 (SEPP 2011)*: The provisions of SEPP 2011 apply to the proposed development. The clauses/matters contained in SEPP 2011 that have relevance to this application are overviewed below:

- a) *Part 4 (Regional Development)*: The development is of a class or description included in Schedule 4A of the EPA Act and is therefore, regional development for which the Joint Regional Planning Panel will be determining authority. Clause 8 of Schedule 4A of the EPA Act states that it is regional development, if it is an extractive industry, which meets the requirements for designated development under Clause 19 of Schedule 3 of the EPA Regulation. The proposed development meets the requirements of an extractive industry under Schedule 3 of the EPA Regulation.

v) State Environmental Planning Policy 55 – Remediation of Land (SEPP 55): The provisions of SEPP 55 apply to this development. The clauses/matters as contained in SEPP 55 that have relevance to this application are overviewed below:

a) *Clause 7 (Contamination and remediation to be considered in determining development application)*: Consideration has been given to whether the land on which the dredging is proposed is contaminated. In this regard, an initial evaluation of the subject site and available information has indicated that:

- Council records do not identify the site as potentially contaminated land;
- Council is not aware of any previous investigations about contamination on the land;
- A potentially contaminating activity has not previously/prior to the current operation been conducted on the land;
- The subject land (e.g. the Shoalhaven River) is not currently used for an activity listed in the Managing Land Contamination Planning Guidelines; and
- There is no land use restriction relating to possible contamination affecting the land.

However, Council has previously made the applicant aware of concerns in relation to heavy metals that may be present in the Shoalhaven River due to past gold mining activities in the upper Shoalhaven River. In this regard, the applicant has submitted details on contamination testing of the waste material generated by the current dredging activities that has previously been stockpiled adjacent to the southern bank of Pig Island. The material tested having been through the screening/wash process and is a residue fine material that is a by-product from the sand dredging process. Samples that have been taken have been tested for heavy metals. The testing undertaken did not record any evidence of potential contamination for metals tested with the results below available criteria for residential land use and provisional phytotoxicity based investigation levels. Concern is, however, raised as no assessment has been provided at the point of collection. At this time, it is not clear to Council if the land, where the dredging is proposed, contains any contamination. Additional testing should therefore be undertaken within the proposed dredging area prior to the commencement of the works and then, given the nature of the development, every four months within the immediate area where the dredging at that time is occurring for the life of the development. This testing to be undertaken by a suitably qualified and experienced environmental consultant in accordance with the NSW Environmental Protection Authority (EPA) Guidelines for Consultants Reporting on Contaminated Sites and the NSW EPA Sampling Design Guidelines. Any recommendations in the four monthly testing to be incorporated into site management practices and subsequently implemented. The results to be reported to Council as part of a yearly Environmental Management Plan (EMP).

In terms of the by-product that is stockpiled on Pig Island and then removed to other sites for use, potential contamination must be managed through on-going monitoring. In this regard, testing should be undertaken prior to its removal from Pig Island. This testing is to validate its suitability for re-use from a contamination perspective and should form part of an Environmental Management Plan (EMP) for the proposed development. The above requirements are to be imposed as conditions on any development consent issued (i.e. for the separate use of the material).

In summary, the proposed development does not conflict with the aims and applicable provisions of SEPP 55.

vi) State Environmental Planning Policy 71 – Coastal Protection: The provisions of SEPP 71 apply to the site. The clauses/matters contained in the SEPP71 that have relevance to this application are overviewed below:

a) *Part 2 (Matters for consideration) Clause 8 (Matters for consideration)*: An assessment of the amended proposal against the requirements of this clause has indicated that it is consistent with the requirements of this clause as:

- It is not inconsistent with the aims of the policy (i.e. (a) to (l) in Clause 2);
- It does not impact or impinge on public access to or along the coastal foreshore. No existing access points are being blocked/ closed and no new access points are proposed;
- It is considered to be suitable development having regard for existing land uses, its location and its relationship with the surrounding area however, any consent issued should ensure that the buffer distance to Pig Island is increased to 25 m instead of that proposed (i.e. 15m) so as to include a greater margin of error than what is discussed in the supplementary Martens Consulting Engineer's Report. The current setback of 15 m does not include a margin of error. This issue is discussed in greater detail later in the report. The above is to be conditioned on any development consent issued;
- It will not lead to excessive overshadowing of foreshore areas or view loss from a public place;
- It will not diminish the scenic qualities of the area when viewed from public spaces as the dredging is not visible and the dredge structure, given its size, is not the dominant visual feature when viewed from the south, north and west;
- It will not have an adverse impact upon flora and fauna as the amended proposal does not seek the removal of any vegetation. It has incorporated measures to conserve animals, plants (amended proposal has reduced area of dredging and has recognised the need for the additional studies required to address potential flora and fauna issues associated with Stage 2), fish and marine vegetation as well as providing buffers to seagrass;
- It will not impact upon wildlife corridors as the site is not being identified as one;
- It will not lead to a conflict between land based and water based coastal activities. The area of dredging is to be clearly defined and marked with lit navigation aids and markers that clearly identify any approved dredge area. The above is to be conditioned on any development consent issued;
- It will not impact upon items of heritage, archaeological or historical significance - there being sufficient separation between the area of proposed dredging and the closest heritage item located at Terara;
- It will not have a significant impact upon the water quality of coastal water bodies. The dredging activity, while having the potential to impact on short term water quality, has not caused a problem in the current area of dredging in terms of increased turbidity, visual plumes or impacts being observed; and
- The proposal will not impact upon known aboriginal heritage. The proposal has incorporated measures to protect aboriginal heritage or items of heritage or

archaeological significance if found. These requirements/recommendations to be included as conditions on any development consent.

- b) *Part 4 (Development Control), Clause 13 (Flexible zoning provisions), Clauses 14 (Public access), Clause 15 (Effluent disposal) and Clause 16 (Stormwater):* The above clauses have been considered. The proposed development will not conflict with the requirements of these clauses as there are no flexible zoning provision that apply to the development site, there is no available public access to or along the foreshore in the area of the proposed dredging, no effluent disposal is proposed as part of the current development and no untreated stormwater is being discharged.

In summary, the proposed development, subject to the imposition of conditions as detailed above, does not conflict with the relevant provisions of SEPP 71.

- vii) *Deemed State Environmental Planning Policy - Illawarra Region Environmental Plan (IREP):* The subject land is affected by the provisions of the IREP. An assessment against the requirements of the IREP has indicated that the subject land is not identified as land containing rainforest vegetation, a wildlife corridor, land affected by a service corridor, land identified as a regional or sub-regional commercial centre, land containing coal resources or land potentially suitable for urban use. It is, however, identified as land of prime crop and pasture potential (123-125 Terara Road and Pig Island), land containing extractive materials (the Shoalhaven River adjacent to Pig Island is identified as an area containing an operating quarry/proven deposits of construction sand) and land with landscape and environmental attributes.

The clauses/matters contained in the IREP that have relevance to this application are overviewed below:

- a) *Clause 3 (Aims, objectives, etc):* The amended proposal does not conflict with the general aims and objectives as detailed in this clause. Additional discussion in relation to Part 2 and Part 13 of the IREP which is referenced in this clause is provided below;
- b) *Part 2 (Provisions relating to rural lands):* This amended proposal is consistent with the objectives relating to rural lands as detailed in Clause 11. The other requirements in this part are not applicable to the current application.
- c) *Part 13 (Provisions relating to coastal lands, wetlands and other waster bodies):* The amended proposal is consistent with the objectives as detailed in Clause 105. Consideration has been given to Clause 107 with it being determined that no land is required in this location to facilitate public access to the foreshore. The other requirements in this part are not applicable to the current application.
- d) *The Illawarra Region Landscape and Environmental Study:* The IREP contains no specific provisions that apply to land with “landscape and environmental attributes”. The Illawarra Region Landscape and Environmental Study that supports the IREP provides specific recommendations for broad areas of the south coast, including the subject site which is located within Unit 6 – Shoalhaven Delta. The site being affected by the Ilc/a Priority Protection recommendations. This policy recommendation stipulating that zoning is to protect the riverside environment and the scenic amenity of the area with agriculture continuing and no further clearing or intensive

development. The proposed development being consistent with the policy recommendation.

In summary, the proposal does not conflict with the relevant provisions of the IREP.

viii) Shoalhaven Local Environmental Plan 1985 - as amended (SLEP 1985): The provisions of SLEP 1985 apply to this site. The clauses/matters contained in SLEP 1985 that have relevance to this application are overviewed below:

- a) *Clause 2 (Aims and objectives)*: The submitted proposal, based on the information provided, generally satisfies the aims as outlined in Sub Clause 1(a) to 1(c) and objectives as outlined in Sub Clause 2(a) to (w);
- b) *Clause 9 (Zone objectives and development control table)*: The subject land is zoned 1(g) (Rural "G" (Flood Liable) Zone)(land based activities) and uncoloured (extraction area) under SLEP 1985. Each zone is discussed below:
 - 1(g) (Rural "G" (Flood Liable) Zone): The 1(g) zoned portion of the site is 123-125 Terara Road and a portion of Pig Island. The proposed development in terms of use is best categorised as an 'extractive industry' which is defined in the Environmental Planning and Assessment Model Provisions 1980. The development satisfies the objectives of the zone as the impacts from flooding will not be increased, no dwelling is proposed to be erected, no prime crop and pasture land will be impacted on and with appropriate conditions, the impacts of acid sulfate soils will be reduced. In addition, 'extractive industries' are listed as a permissible use with development consent within land zoned 1(g).
 - Uncoloured Land: For the uncoloured portion of the site which comprises the works in the Shoalhaven River Clause 9 contains no requirements. The requirements of Clause 36 of SLEP 1985 apply to any development on this land. This is discussed further below.
- c) *Clause 20G (Development in the vicinity of a heritage item)*: The land based component of the development site (123-125 Terara Road) is located adjacent to three heritage items identified under LEP Amendment 212. These are at 119 Terara Road (timber slab worker's cottage), 124 Terara Road (Victorian rural residence) and 126 Terara Road (Victorian rural residence). All heritage items are of local significance. A Heritage Impact Statement has not been submitted with the current application. In terms of proximity, the closest heritage item is at 119 Terara Road which is located adjacent to the land based component of the proposed development (i.e. to the west of 123 Terara Road). The building at 119 Terara Road is located at the front of the site and is separated from the land based operations by a house on the adjoining parcel of land to the east (approximate separation of 100m). Council's assessment concludes that given the separation and the existing established vegetation that exists between the boundaries of the two properties, no impact should be had on the heritage significance of the items or significant views associated with the heritage items.
- d) *Clause 23 (Protection of streams)*: Consideration has been given to the objectives of this clause. Issues relating to water quality, flora/fauna and scenic/recreational values are discussed in greater detail in other sections of this report. With reference to measures proposed to avoid, mitigate or remedy adverse impacts, a requirement that mitigation measures as proposed by the applicant be implemented will be conditioned

on any development consent issued. In addition, other mitigation measures will be conditioned which include the preparation of an EMP and associated reporting against this plan on a yearly basis, preparation of an acid sulphate soil management plan and an increase in the buffer distance to Pig Island.

- e) *Clause 26 (Soil, water and effluent management)*: The land based component of the proposed development is located in an area which has water services/infrastructure and no reticulated sewer. With reference to stormwater and the disposal of effluent, the development as amended will not adversely impact upon public health, surface water, groundwater or community amenity as the proposal is not requiring the disposal of effluent or undertaking new works that will impact upon stormwater. With reference to surface water, some concerns are raised with the quality of runoff due to the presence of acid sulphate soils. This is specifically in relation to the location of the sedimentation pond and its proposed overflow in close proximity to the banks of the Shoalhaven River. The acid sulfate soil management plan that has been submitted does not address the land based operations at 123-125 Terara Road. While it is noted that the EPA, who are regulatory authority for the development, has not raised concerns in relation to this aspect, it is believed that details on how this will be addressed should be provided prior to commencement of works. This is to be conditioned on any development consent issued;
- f) *Clause 27 (Development on acid sulfate soils)*: The subject sites (both the land based component and the works in the Shoalhaven River) are identified as being affected by acid sulfate soils. The area of the proposed dredging, based on the 'Acid Sulfate Soil Risk Map', is classified as having a high probability of containing acid sulfate soil material given their origin from the bottom of the Shoalhaven River. The mapping indicates that 'bottom sediments' (as they are defined on the map) if disturbed have the potential for severe environmental risk. The applicant has submitted an acid sulfate soil management plan, however this plan only relates to the removal and treatment of the by-product that was being stockpiled on Pig Island. This assessment indicates that acid sulfate soils were present within this stockpile. No assessment has been provided in relation to the land based operations at 123-125 Terara Road where material from the river is first washed. Without any detailed information being provided, it has been assumed that iron pyrites are likely to be exposed during the wash down operations and, if not contained, there is a possibility it can flow into the Shoalhaven River. The exposure of iron pyrites creating an acid sulphate solution that affects soil and water quality.

In this regard an Acid Sulfate Soil Management Plan (ASSMP) should be prepared so as to include the land based operations at 123-125 Terara Road. This plan to be prepared by a suitably qualified and experienced environmental consultant in accordance the Acid Sulfate Soils Manual with the recommendations from the plan to be implemented for the life of the development. The above requirements are to be conditioned on any development consent issued. The preparation of this plan will satisfy Council that measures can and will be taken to avoid /mitigate the potential contamination of the adjoining Shoalhaven River;

- g) *Clause 29 (Development on flood liable land)*: The subject sites are identified as flood liable land. The sites are contained within the Lower Shoalhaven River Floodplain Risk Management Plan and are classified as being within a floodway and having a high hazard category. In accordance with the requirements of this clause, the applicant has

submitted a River Impact Assessment with the development application which considers flooding. In relation to Stage 1 works, it has been concluded that it is unlikely to have an effect on velocity, sedimentation and debris carrying effects of flooding and that there will be no likely impact from flooding on bank stability with reference to the southern bank and the levee. Council raises no concerns with this assessment. This is discussed in greater detail below under the heading 'Development Control Plan No.106'.

- h) *Clause 36 (Development of land shown uncoloured on the map)*: All development in uncoloured land requires development consent from Council. The current application seeking the required development consent;
- i) *Clause 37A (Notification of certain development)*: The submitted application was notified in accordance with the designated development requirements as outlined in the EPA Act and EPA Reg This is discussed in greater detail above under the heading 'Community Consultation'.

In summary, the proposed development, subject to the imposition of conditions as detailed above, complies with the relevant provisions in SLEP 1985.

- ix) *Draft Shoalhaven Local Environmental Plan 2013 (DSLEP 2013)*: The provisions of DSLEP 2009 need to be considered in the assessment of the proposed development. The clauses/matters contained in DSLEP 2009 that have relevance to this application are overviewed below:

- a) *Clause 2.3 (Zone objectives and land use table)*: The proposed development is best categorised under DSLEP 2009 as an 'extractive industry'. The land where the works are proposed is zoned part RU1 Primary Production (123-125 Terara Road and Pig Island) and part W2 Recreational Waterways (works in the Shoalhaven River). Each zone is discussed below:

- **Zone RU1 Primary Production**: The proposed development satisfies the objectives of the zone as it will minimise the fragmentation and alienation of resource land, conserves and maintains the economic potential of the land for extractive industries and conserves and maintains productive prime crop and pasture land. The RU1 zoning allows an 'extractive industries' with development consent.
- **Zone W2 Recreational Waterways**: Within the W2 zone an extractive industry is not listed as a permissible land use. However, the provisions of SEPP 2007 make this use permissible within a waterway that is not in any environmental conservation zone. As the subject waterway is not in any environmental conservation zone, the requirements of SEPP 2007 override DSLEP 2009 and the proposal is permissible with development consent;

- b) *Clause 5.5 (Development within the coastal zone)*: Council has considered the requirements in parts 1 and 2. In addition, Council is satisfied that Stage 1 of the amended proposal will not impede or diminish public access to or along the foreshore, impact water quality in terms of effluent, will not discharge untreated stormwater and will not be affected by coastal hazards or have a significant impact on coastal hazards.
- c) *Clause 5.7 (Development below mean high water mark)*: An environmental assessment relating to the works proposed on the land within the Shoalhaven River

has been undertaken. This assessment is discussed in detail in other sections of this report. In accordance with the requirements of this clause development consent is being sought for the proposed works;

- d) *Clause 5.10 (Heritage conservation)*: The development site is in the vicinity of three heritage items (i.e. 119 Terara Road, 124 Terara Road and 126 Terara Road). Consideration has been given to the relevant matters listed in parts 4, 5 and 8 which are discussed in detail in other sections of this report. In summary, the proposed works will not have an adverse impact on a heritage item or place of aboriginal heritage significance;
- e) *Clause 7.5 (Biodiversity)*: The development site is within 40 metres of the bank of a natural waterbody and is therefore, affected by this clause. Consideration has been given to the matters listed in parts 3 and 4 and Council is of the opinion that Stage 1 of the proposed development will not have a detrimental impact on flora and fauna species subject to the imposition of a condition on any development consent issued relating to mitigation measures that need to be implemented. Insufficient information has however been provided to support Stage 2 of the proposed development with the applicant in their supplementary submission acknowledging that additional studies are required to address the environmental issues associated with Stage 2. At this time, Council is of the opinion that Stage 2 should not be approved as part of the current application and should be subject to a separate development application with all required supporting documentation (i.e. Assessment of Significance for Coastal Saltmarsh and EEC and Swamp Oak Floodplain Forest EEC, clear identification of mitigation measures and offsets, etc).
- f) *Clause 7.6 (Water)*: Consideration has been given to the relevant matters within this clause. In this regard, Council is satisfied that Stage 1 of the proposed development will not have any potential adverse impacts on the Shoalhaven River in terms of the natural flow regime, water quality, groundwater and natural flow paths in the vicinity of the proposed works. Council is also satisfied that the proposal will have minimal impact upon the stability of the southern bank of the Shoalhaven River as there is good separation from the proposed works as part of Stage 1 to the southern bank of the river and existing flood levee. However, it is not satisfied, based on the amended information provided, that by removing the intertidal mud flats in their entirety at the western end of Pig Island that there will not be an increase in the erosion of the banks of the island. While it is acknowledged that the amended proposal incorporates a 20m setback for dredging to seagrasses (comprising a 15m setback for dredging/angle of repose plus a 5m margin of error which is based on samples of sediment analysed within the area to be dredged - refer to **Attachment 'D'**), the setback proposed to Pig Island is 15m which comprises the angle of repose between the banks of Pig Island and the base of the dredge area with no margin of error incorporated. The supplementary Martens Consulting Engineers Report (November 2012) identifies that the existing bank conditions on Pig Island are generally poor with the main types of bank erosion occurring being bank failure/mass slump and bank undercutting. The dredging of the intertidal mud flat at the western end of pig Island exposing the existing banks which are currently protected by the intertidal mud flats. While it has been recommended that stabilisation works on Pig Island be undertaken where required, it is acknowledged that no land owner's consent from the current owner of Pig Island has been provided as part of this application. As such, Council does not currently have the

legal ability to require these works to be undertaken, as conditions on any issued development consent. Given that these suggested rehabilitation works cannot be undertaken it is recommended that the buffer distance to Pig Island be increased to 25 metres minimum so as to include the margin of error as discussed in the supplementary Martens Consulting Engineers Report (November 2012) and an additional 5m margin of error. This is to be conditioned on any development consent, if issued.

- g) *Clause 7.7 (Scenic Protection)*: The development site is identified as a 'sensitive area' on the Scenic Protection Area Map. Consideration has been given to the relevant matters listed in part 3 of this clause which are discussed in detail in other sections of this report. In summary, the proposed works will not have a visual impact when viewed from a public place. No existing vegetation is proposed to be removed as part of Stage 1. The applicant is proposing to undertake some additional landscaping works at the western end of Pig Island comprising additional plantings, removal of weeds, fencing out of stock, however no land owner's consent from the current owner of Pig Island has been provided as part of this application. As such, Council does not currently have the legal ability to require these works to be undertaken as conditions on any issued development consent;
- h) *Clause 7.8 (Flood Planning Land)*: The land is identified as a 'flood prone land' on the Council's Flood Mapping. Consideration has been given to the matters listed in part 3 of this clause which are discussed in detail in other sections of this report. In summary, insufficient information has been submitted to satisfy the requirements of part 4(d) relating to erosion or reduction in the stability of the river bank. However, this can be addressed through an increase in the size of the buffer to Pig Island from 15m as proposed to 25m so as to include and increase the margin of error. The 5m margin of error being discussed in the supplementary Martens Consulting Engineers Report (November 2012). This is to be conditioned on any development consent if issued; and
- i) *Clause 7.10 (Acid Sulfate Soils)*: The land where the dredging works are proposed is identified as containing acid sulphate soils (i.e. class 1 and class 2 land). Any works potentially exposing this material therefore require development consent. Part 3 of this clause outlines that development consent cannot be granted unless an acid sulphate soils management plan has been prepared. No acid sulphate soils management plan in relation to the land based works at 123-125 Terara Road has been provided to Council. As this requirement is contained within a Draft LEP, the requirements are not at this time mandatory. As such, any development consent issued will be conditioned so as to require an ASSMP for the land based operations at 123-125 Terara Road to be submitted prior to the commencement of works with the recommendations from the plan to be implemented for the life of the development.

In summary, the proposed development, subject to the imposition of conditions, generally complies with the provisions of DSLEP 2013. It has, however, not provided sufficient information to demonstrate compliance with the provisions of Clause 7.10 (Acid Sulfate Soils) of DSLEP 2013.

- x) *Development Control Plan 93 - Controls for Waste Minimisation and Management (DCP 93)*: The provisions of DCP 93 apply to this development. A waste minimisation and management plan (WMMP) for the proposed development has been submitted with the

development application. The plan dividing the wastes generated into those created by the winning of sediment and its associated processing and those generated by the equipment used in the dredging process. Each is further discussed below:

- a) Waste generated by the winning of sediment and its associated processing: This waste includes large debris (timber, shells, bottles cans, shoes, etc) and fines (fine particles less than 300 microns). The larger debris, apart from the shells, is caught in the course sieve and will be set aside for removal to Council's landfill. The shell remains are separated from the process and used with coarse material not suitable for the construction process to make mixes for land fill and garden material. The fines which are stockpiled on Pig Island are disposed of offsite. In this regard, an Acid Sulfate Soil Management Plan has been submitted that details how the material once transported off site should be treated. No details have, however, been submitted with the application to detail how the stockpiled material when removed from the sediment trench will be treated to minimise the impacts from iron pyrite/sulfides which is likely to be exposed. In this regard an Acid Sulfate Soil Management Plan for the land based operations and its associated processing at 123-125 Terara Road is required to be submitted. This is to be conditioned on any development consent issued.
- b) Waste generated by the equipment used in the dredging process: This waste includes diesel, used oils, motor parts, packaging/containers and office waste. It has been advised that this material is sorted and either recycled or disposed of at the Council landfill. Any development consent issued is to be conditioned so as to require compliance with this component of the submitted plan.

Having regard for the above, it is considered that the proposed development does not conflict with the aims and relevant provisions of DCP 93.

- xii) Development Control Plan No. 106 – Development on Flood Prone Land (DCP 106): The provisions of DCP 106 apply to this development. The site (both the Shoalhaven River and 123-125 Terara Road) are identified as a High Hazard Floodway in the Lower Shoalhaven Flood Plain Risk Management Plan. The applicant, while not specifically addressing the requirements of DCP 106, has submitted a 'River Impact Assessment' that was prepared by Martens Consulting Engineers (dated February 2012) which, in part, provides a hydraulic assessment. In addition, a supplementary report was provided by Martens Consulting Engineers in November 2012. Extractive industries are identified in DCP 106 within land use category 'E' (Earthworks). Schedule 7 of DCP 106 identifies that extractive industries are not a suitable form of development within a high hazard flood way. Discussions with Council's Flood Unit indicates that the intent of extractive industries under DCP 106 was to capture land based industries and not sand dredging as is proposed which need to be positioned within the river. As such, the proposed development does not technically fit into the land use categories provided and an assessment has been undertaken based on merit in accordance with the NSW Floodplain Development Manual Provisions. This assessment has concluded that Stage 1 works are not likely to have an impact on flooding and the existing flood levee given the separation from the proposed works in the Shoalhaven River to its southern bank. In addition, it has been concluded that the works are not likely to have any adverse flood impact on buildings located in Terara. It is, however, recommended that in accordance with DCP 106 requirements, a flood emergency plan should be prepared. This should identify how the operator will inform themselves of potential flood warnings and the range of actions to be implemented by the applicant prior to a flood occurring including but not limited to:

storing of potential chemicals and fuels above flood levels; flood evacuation procedures; securing or relocation of machinery and the like to make sure they won't become floating debris. This is to be conditioned on any development consent issued.

In summary, the proposed development, subject to the imposition of conditions as detailed above, complies with the applicable requirements of DCP 106.

- xii) *Shoalhaven Contribution Plan 2010*: The provisions of Council's Section 94 Contribution Plan apply to this site. Having regard for the works proposed and the Section 94 projects that are applicable which relate to fire, emergency services and administration, Council staff are of the opinion that no contributions are to be levied as the applicable contributions have no nexus to the new works which relate to extending the dredge area within the Shoalhaven River. It is, however, acknowledged that the development will have some impact on the existing road infrastructure in Terara Road and, in this regard, the developer will be required to upgrade the intersection of their site with Terara Road so as to provide a Basic Right Turn and Basic Left Turn design. These works to be completed within nine months from the date a development consent is issued. This is to be conditioned on any development consent issued.

Likely impact of that development on the natural and built environment and social and economic impacts in the locality.

- i) *Threatened Species*: The works, as proposed as part of Stage 1, have been assessed as having no impact upon two EEC's identified in the vicinity of the site, bird species and their lifecycles, amphibians, reptiles and mammals. A number of mitigation measures have been proposed by the applicant to minimise any potential impacts that could occur to threatened species and these are discussed in greater detail in other sections of this report. With reference to Stage 2, the applicant acknowledges that additional flora and fauna assessment is required to resolve environmental issues associated with this stage. Given that no detailed flora and fauna assessment has been provided for Stage 2, Council has been unable to undertake an adequate assessment and is therefore unable to determine whether the works proposed as part of Stage 2 are likely to have a significant effect on threatened species, populations or ecological communities, or their habitats. It is therefore unclear, at this time, whether an SIS will be required due to the impacts, in part, Stage 2 may have on the two EEC's that are located in this stage. As such, Council is unable to recommend approval of Stage 2 of the amended proposal. Therefore, in accordance with Part 4, Division 2, Section 80 (Determination) of the EPA Act, any development consent granted will be partial (i.e. for Stage 1 only subject to conditions).
- ii) *Noise, odour and dust*: A Noise Impact Assessment prepared by Day Design Pty Ltd (dated 11 May 2012) and a supplementary report (dated 7 November 2012) were submitted as part of the application. The submitted reports looked at noise both from the land based activities at 123-125 Terara Road and the sand dredging in the Shoalhaven River. In terms of the land based activities at No.123-125 Terara Road, the report identified that noise will exceed noise criteria at the nearest residential receiver being 121 Terara Road by up to 8dB. It is recommended that a sound barrier screen to a height of 3.5m be erected within 123 Terara Road to achieve the required noise reduction at 121 Terara Road. Two options being provided in terms of its location. As the premises are licensed under the Protection of the Environment Operations Act 1997 by the EPA, the

application was referred to the EPA for comment. Initial comments provided sought clarification in relation to noise issues. This included the impact on the adjacent property to the west (No.111 Terara Road) which contains approved bed and breakfast accommodation and the proposed option of using material stockpiles as the sound barrier screen. For the purpose of the submitted noise assessment, the bed and breakfast use, for which the EPA had concerns, was classified as a 'commercial' receiver. As such, the EPA advised that it was unable to provide its General Terms of Approval. The supplementary report provided was referred to the EPA and, as a consequence, General Terms of Approval have now been provided. The supplementary report still recommends the erection of a sound barrier screen to a height of 3.5m within 123 Terara Road. In terms of its location, two options were provided. Council's assessment recommends that Option A, which places the sound barrier wholly within No.123 Terara Road approximately 40m from the boundary of No.121 Terara Road, which is identified as a heritage item. The Option A location ensures that a sound barrier will have minimal impacts upon adjoining properties in terms of overshadowing or the removal of existing established vegetation. Any development consent issued is to be conditioned that an appropriately erected sound/screen barrier (i.e. timber, masonry or galvanised sheet metal) in the general location of that identified as Option A in the Day Design Pty Ltd reports be erected and constructed in accordance with the noise control recommendations contained in the above reports within nine months from the date of the development consent. This barrier is to be maintained for the life of the development. With reference to noise from the sand dredging activities in the Shoalhaven River, no concerns were raised with the calculations provided demonstrating that it is able to comply with acceptable noise level criteria.

In terms of odour and dust, a Qualitative Ambient Air Quality Assessment by Clearsafe Environmental Solutions (dated 14 February 2012) was submitted as part of the application. The report identifying that while there a number of sensitive receivers located in proximity to the site, it was concluded that the proposed development is unlikely to have a significant adverse impact on nearby sensitive receptors in terms of dust emissions or air quality. In addition, the EPA as the regulatory authority for the development has raised no concerns with the information provided in the report in relation to odour and dust issues. Any issued development consent will however, be conditioned so as to require the conclusions and recommendations in the report to be implemented and maintained for the life of the development.

- iii) *Context and Setting:* A sand dredging operation has existed on the subject site since 1968. The current proposal is seeking to extend the life of the existing operation. No changes to the operation of the land based component are proposed as part of the current application. However, a change to the area within the Shoalhaven River where dredging is to occur is proposed with this area being moved further to the west. The floating dredge that will be visible on the Shoalhaven River is made of steel and has dimensions of approximately 24m x 6m and is approximately 4m high. The main working components associated with the dredging activity (i.e. cutting head, suction hose, etc) are located below the water level and therefore, are not visible and will have no impact upon the development's context and/or setting. The dredge itself, while it is visible from public vantage point adjacent to the Shoalhaven River, is not considered to be a bulky structure and is painted in light colours which assist in minimising its visual dominance on the water when viewed from adjoining areas. In terms of the land based operations, they are not highly visible from public viewing points to the north or south. The site is however visible

when viewed from the waterway on the southern side of Pig Island and from the adjacent properties to the east and west, however existing vegetation adjacent to the northern, eastern and western property boundaries helps to screen this and reduce its visual impact. Additional plantings adjacent to the eastern and northern property boundaries would further assist in reducing impacts. Having regard for the above, it is considered that the development has a bulk and scale that ensures that it is not the prominent feature when viewed from adjoining public lands and is satisfactory in terms of context and setting. Any development consent issued will impose conditions in line with the comments above (i.e. provision additional plantings adjacent to the eastern and northern property boundaries).

- iv) Water Quality: Water quality has been assessed by the applicant through the submission of a River Impact Assessment and associated Supplementary Report prepared by Martens Consulting Engineers. While it acknowledged that dredging activities have the potential to impact on short term water quality it is understood through discussions that have been had with Fisheries that turbidity during past dredging operations has not been an issue with no visible plumes or impacts being observed. This is supported by the assessment of turbidity in the Martens Consulting Engineers reports. A peer review/ comments on the submitted reports by an independent consultant engaged by Fisheries has advised in part that it would be rare for increased turbidity to decrease the rate of photosynthesis and have a significant impact on the overall functioning of the ecosystem. However, it may impact upon burial due to settling and clogging of gills and organs of aquatic fauna. Therefore, the peer review indicates that it is important to establish a suitable setback to reduce the risk of direct and indirect harm to sea grass beds, etc. This aspect is discussed in more detail in Section 7 (Other Issues) of the report. Another issue identified is reduced dissolved oxygen with Fisheries advising that dissolved oxygen during past dredging activities has not appeared to be a significant issue. The peer review indicating that reducing the maximum dredge depth may not lessen potential impacts on dissolved oxygen concentrations by itself. It advising that a *“suitable dredge depth and design would be one that ties in with the surrounding river bathymetry and minimises regions of isolated deeper water, which are not productive for the recovery of fish habitat and in the longer term are most likely to behave as sink holes and problem areas with respect to water quality and the accumulation of fine sediments”*. It being concluded that water quality impacts are unlikely to be significant (based on the limited information had), however ongoing target monitoring should be required to capture the spatial and temporal variability of water quality. It should however be noted that Fisheries have advised of their concern of a proposed dredging depth of 6m with their recommendation being a dredge depth of 4m. Fisheries advising that they would not be prepared to recommend concurrence to the issue of a Crown Lands Licence for Stage 1 until, in part, the dredge depth was reduced to a maximum of 4m. Any development consent issued to impose conditions in line with the comments above.
- v) Traffic and access: A Traffic and Transport Analysis prepared by Allen Price and Associated (dated April 2012) was submitted as part of the application. No concerns are raised with the conclusions in relation to traffic generation as a consequence of the proposal and in relation to the type of intersection treatment required for the proposed development (i.e. Basic Right Turn Treatment and Basic Left Turn Treatment). Council however disagrees with the applicant’s assessment that the current intersection is satisfactory and complies with minimum design criteria as detailed in Austroads 2009 – Guide to Road Design. A concept design plan has subsequently been provided which

indicates that works within the road reserve area will be required with the requirements being able to be accommodated within the existing road reserve area. Access within the site will also need to be upgraded to ensure loose material is not tracked onto the east bound lane on Terara Road. The above requirements to be conditioned on any development consent issued.

- vi) *Economic/Social Impacts:* In terms of economic impacts, the proposed development will have a positive economic impact as it will enable the continuation of local employment opportunities which equate to 8 full time staff. In addition, the extension of the dredge area into Stage 1 will enable the supply of coarse river sand to continue which will have benefits for local businesses and industries who currently purchase the product for which there are not many local suppliers. Furthermore, there will continue to be economic benefits for those businesses who provide goods and or services to the current operators. In terms of social impacts, the proposed development subject to the implementation of mitigation measures as detailed in this report (i.e. preparation of an acid sulfate soil management plans for the land based activities at 123-125 Terara Road, additional contamination testing, provision of a greater setback to Pig Island, construction of the proposed sound barrier screen) should not result in any adverse social impacts.

The suitability of the site for the development

The proposed development is consistent with the current zoning of the land as well as being consistent with the existing use of the land based sites and a portion of the adjoining land within the Shoalhaven River. It is therefore considered that the Stage 1 component of the proposed development, subject to the incorporation of the measures as detailed in this report, will preserve the rural character of the area, will not adversely impact the physical environment and provides a social and economic benefit which outweighs any potential negative impacts. In this respect, it is considered that the site is suitable for the proposed development.

Any submissions made in accordance with the Act or the regulations

The application was notified by way of a public notification as outlined in Section 4 (Community Consultation). Submissions have been received from both the general public and public authorities. Each is discussed below:

- i) *The Public:* Ten submissions were received by Council. All submissions received raised concerns with the proposal. A summary of the issues raised in the submission is provided below:
- *Bank Erosion – Southern Bank of the Shoalhaven River:* Concern has been raised about the impact the proposed works may have on the southern bank of the Shoalhaven River and the associated levee which has received both local and state government funding to undertake works including bank restoration and levee construction. Council is satisfied, based on the information that has now been submitted, that the issue of bank stability with reference to the southern bank of the Shoalhaven River and impacts on the flood levee has been adequately addressed with any potential impacts on bank stability being very limited. Further discussion of this issue is provided in the report above.

- *Bank Erosion – Southern Bank of Pig Island:* Concern has been raised about the impact the proposed works may have on the southern bank of Pig Island and whether the proposed activities are compatible with preserving the integrity of the river bank. Based on the information that has now been submitted, Council has raised concerns with the buffer that has been proposed. In this regard, it is recommended that a greater buffer (i.e. increase from 15m to 25m) should be provided. Further discussion of this issue is provided in the report above.
- *Failure to Comply:* Concern has been raised that the current operator has been dredging outside the current permitted area with Council and State Government authorities failing in their responsibility to monitor the operation and ensure compliance. While these concerns are acknowledged, this issue is separate to the current development application under consideration. Action has now been taken by the NSW Office of Water and, as a result, regular inspections by Council staff have confirmed that the operator has been confining the dredging of material to within the currently approved permissive occupancy area and removing spoil/by product material in accordance with consent requirements.
- *Altering the Course of the River:* Concern has been raised that the dredging of the river around Pig Island may alter the course of the Shoalhaven River to the south side of Pig Island and therefore, impact upon bank stability and bank restoration works that have occurred along the southern bank of the Shoalhaven River as well as result in the loss of valuable farm land. As discussed above, Council is of the opinion that the bank stability issue relating to the southern bank of the Shoalhaven River has been sufficiently addressed. The River Impact Assessment provided with the application indicating, in part, that current extraction work has not been a significant cause of river bank erosion with other causes such as vegetation removal and wave erosion caused by wind and water craft being potential causes which is a view supported by Council's Strategic Planning Group. In addition, the assessment has concluded that river velocities are not anticipated to be significantly changed as a result of extraction works and no concerns are raised with this conclusion.
- *Operating Hours:* Concern has been raised with the operating hours of the dredge. The proposed operating hours for this development application (for both the dredge and the land based activities) is 7am to 6pm Monday to Friday, 8am to 1pm Saturdays and no operations on Sunday or Public Holidays. Further discussion of this issue is provided in Section 7 (Other Issues) of this report.
- *Acid Sulfate Soils:* Concern has been raised as to whether the requirements of an acid sulfate soil management plan will be addressed during processing and storage of material at the premises on Terara Road and on Pig Island. The requirement for the developer/operator to comply with an acid sulfate soil management plan approved by Council will be conditioned on any development consent issued and will require ongoing monitoring by the applicant and EPA as the regulatory authority for the development. Concerns have, however, been raised by Council in relation to how acid sulfate soil will be managed for the land based operations at 123-125 Terara Road. Further discussion of this issue is provided in the report above.
- *Land Ownership/Owners Consent:* Concern has been raised that some of the proposed works are located on land to which the application has not received consent from the land owner (i.e. an area of Pig Island known as part Lot 97 DP

755952 – owned by Burraga Island Pty Ltd). The original application was submitted with the consent of the NSW Department of Lands as the owner of the relevant portion of the Shoalhaven River affected and KR/JM Gibson as the owners of 123-125 Terara Road, Terara. During the assessment process it became apparent that some of the works proposed would encroach on land that at that time was owned by the owners of Pig Island (part Lot 97 DP 755952). The applicant was subsequently requested to obtain owners consent from Burraga Island Pty Ltd or amend their application to exclude that portion of land owned by Burraga Island Pty Ltd. The legal property boundary of Pig Island has subsequently been re-defined and registered with NSW Land and Property Information. As such, based on the amended plans which have now been submitted which locate the new property boundary for Pig Island, that all works proposed as part of Stage 1 are located outside the land owned by Burraga Island Pty Ltd and as a consequence all required land owners consents have been obtained.

- *Impact on Ferry Servicing Pig Island:* Concern has been raised about the impact on the ferry that enables vehicles and people to move between the southern bank of the Shoalhaven River and Pig Island. This ferry is privately owned and was replaced in 2010. The new ferry having a larger carrying capacity and is now able to transport heavy machinery to the island for the dairy and trucks to allow removal of sand that has built up from the dredging operation (as required by DA91/2897). No concerns are had with the current ferry and any arrangements for use would be the subject of a private agreement between the land holder and the operator of Shoalhaven Sands.
- *Visual Impacts:* Concern has been raised with the visual impact of the dredge on the Shoalhaven River. Council is of the opinion that the dredge structure will not diminish the scenic quality of the area when viewed from public and/or private spaces. The dredge structure not being the dominant visual feature when viewed from the south, north or west.
- *Impact on Land Values:* There is no evidence to support the claim that adjoining property values will be adversely affected if the development as currently proposed is approved. It is therefore considered that, on the basis of information that Council currently has available, that this claim is unfounded.

ii) Public Authorities: These submissions are discussed in greater detail in Section 8 (Referrals) of this report.

The public interest

Refer to point (d) above.

7. Other Issues:

- a) Land Based Structures: The component of the site located at 123 and 125 Terara Road currently contain a number of structures that, based on Council's research, have not been subject to development consent and/or any other form of approval from Council. These structures include sheds (including site offices), a workshop building, cyclone tower, sediment pond, fuel storage area and jetty/pontoon structure. Council has therefore formed the opinion that a number of land based structures are unauthorised under the EPA Act as the only related consent Council has issued for the land based component at 123 and 125 Terara Road is for the stockpiling of material associated with the extraction

of sand from the existing permissive occupancy. The applicant has subsequently been requested by Council to consider amending their application to seek consent for the use of the land based structures. At this time, the applicant has advised Council that they are of the opinion that no further consent for these structures is required as they are not unauthorised given the structures are used for or incidental to the permissible land use and, as such, do not wish to amend the application to seek retrospective consent for the use of the land based structures as part of this application. This opinion being based on:

- The current development application not seeking consent for the use of any lands other than the Shoalhaven River bed for the new extraction area;
- The consent issued in November 1967 for the use of the land being expressed in very informal terms (i.e. for storage and sale of land) and, as such, it is reasonable to infer that the land to which the consent was granted not only approved the storage of sand for sale, on site sale of dredged sand but also activities that are incidental to the storage and sale of stockpiled sand such as the delivery of sand on site by dredging, sorting of the sand in saleable categories, etc; and
- Earlier consents granted such as the approval for the cottage on 125 Terara Road which noted that the present use of the land was for a business which included machinery and storage of sand and associated Council reports that note the use of the land for washing, grading, etc of sand extracted from the river.

Council, in the assessment of this application, is required to consider those matters which are of relevance to the proposed development. Hypothetically, the structures that Council believes do not have consent are not relevant considerations of the proposed development and as such Council, given the applicant's refusal to amend the current application, is of the opinion that it cannot refuse the development application because of the erection of structures without development consent and can determine the current application based on the current conditions of the subject land. Council can investigate the erection of structures on the land that has occurred without consent separately to this application and consider whether to take separate action against the owner which could include issuing a penalty infringement notice, serving Section 121B orders and/or taking Class 4 proceedings in the Land and Environment Court.

- b) Regularisation of Dredging: Part of the currently submitted application includes an area to the west of the existing permissive occupancy that has already been dredged without any development consent being obtained from Council for the works. As the dredging in this area has been undertaken without consent, Council does not have the legal ability to issue a retrospective approval for those works that have occurred (i.e. outside the area of the existing permissive occupancy) as part of the current development assessment process. As such, any approval issued will not be recommending approval for these past works.
- c) Increased Buffer: The amended application proposes a buffer to the start of the dredging from Pig Island of 15m and 20m to the sea grasses that exist to the west. A subsequent report that was commissioned by Fisheries provides a peer review/comments on the submitted information. The report in summary, concurs with the Fisheries concerns that a 20m buffer to existing sea grasses does not provide sufficient security against slumping and reworking of sand shoals particularly during larger (more erosive) fluvial flow conditions. It stating in part that a 20m buffer to sea grasses in the long term will result in a readjustment of the batter which will result in undermining sea grass beds. The

consultant engaged to do the peer review also advising that from reviewing the underwater profile presented by Martens Consulting (2012), it was considered that the proposal results in an ultimate setback which is very small. The consultant recommends caution when establishing the buffer distances from the top of the expected stable slope. It also being recommended that *“a buffer of less than 50m (from top of the batter to the outer edge of sea grass beds and island foreshore) to a smaller distance of say, 30m, should require that more detailed ongoing monitoring is undertaken during the dredging operations (at all stages of tide)”*. As a result of the above assessment an increase in the setback to both the sea grasses and Pig Island to 25m has been recommended. In addition, detailed ongoing monitoring will be required. The above to be conditioned on any development consent issued.

- d) Aboriginal Cultural Heritage: As the development will impact upon the intertidal sand bank areas of Pig Island, the development needs to consider the impact on Aboriginal cultural heritage. The applicant, as part of this application, has submitted due diligence advice for aboriginal archaeological heritage. This advice concludes that while the proposal will have an extensive impact upon the area, the archaeological potential is assessed as low with a slight possibility that occasional discarded or lost cultural material is preserved by alluvial deposits. The Office of Environment and Heritage (OEH) has reviewed the information that was provided and has raised no concerns with it and advise that it supports the applicant's proposal to prepare a Cultural Heritage Induction Plan and recommended a condition in relation to human remains/Aboriginal skeletal material if discovered during the sand dredging process. Any development consent issued is to be conditioned in relation to the above and to comply with the recommends contained in the advice from Biosis Research dated 23/1/12.
- e) Aboriginal Land: Council records indicate that the subject land is not affected by an Aboriginal Land Claim. In addition, contact has been made with the Office of the Registrar, Aboriginal Land Right Act 1983 who have advised that a search of the Register of Aboriginal Land Claims database has indicated that the development site does not appear on the register as being affected by an Aboriginal Land Claim pursuant to Sections 36 and 37 of the Aboriginal Land Rights Act 1983.
- f) Operating Hours: The applicant has advised Council, in the additional information that has been provided, that the proposed operating hours for this development application (for both the dredge and the land based activities) is 7am to 6pm Monday to Friday, 8am to 1pm Saturdays and no operations on Sunday or Public Holidays. The above times are in accordance with the current NSW Environmental Protection Authority Licence that has been issued for the operation of Shoalhaven Sands. No concerns are raised with the proposed operating hours subject to implementation and compliance with noise mitigation measures as detail in the Noise Impact Assessment that was prepared by Day Design Pty Ltd (dated 11 May 2012) and a supplementary report (dated 7 November 2012). While a concern has been raised in a submission received in relation to the operating hours for the dredge, the Noise Impact Assessment provided has indicated that the noise from the dredge is in compliance with the NSW Industrial Noise Policy and should not result in the creation of offensive noise as defined by the Protection of the Environment Operations Act 1997.
- g) Land Owner's Consent: The original application submitted to Council proposed works which encroached upon part Lot 97 DP 7559532 which, at that time, formed part of the

deposited plan for Pig Island which is owned by Burruga Island Pty Ltd. No land owner's consent for the proposed works on this parcel was submitted with the development application. The legal boundaries of Lot 97 DP 7559532 being legally uncertain and included part of the Shoalhaven River where some of the dredging works were proposed. The information available to Council, at that time, indicated that the surveyed location/coordinates for Pig Island had shifted since the original Crown Plan mapping (conducted 1851) due to natural accretion, erosion and other climactic factors. The boundaries of Pig Island have now been amended as a result of a boundary redefinition application lodged with Crown Lands. The amended property boundary has now been registered with Land and Property Information Office (DP 1184790) and the applicant has submitted updated plans that show the location of the amended proposal in relation to the new deposited plan. No dredging works as currently proposed (both Stage 1 and Stage 2) occurring on DP 1184790.

- h) Bushfire: The subject site is not identified as being bushfire prone land on Council's mapping. As such, no further assessment in relation to bushfire protection has been undertaken.
- i) Easements/Restrictions on the use of the land: A review of the Deposited Plans (DP) has indicated that the subject land is not affected by any easements or restrictions on the use of the land. A right of carriageway 6.095m wide is however in existence along the eastern boundary of Lot 1 DP 187495 (No.123 Terara Road) which provides access to Lot 2 DP 187495 (No.125 Terara Road). No works, as part of the amended application, impact this right of carriageway.
- j) Climate Change: No cumulative impacts are expected in regard to the proposed development that could further contribute to climate change. Furthermore, there are no risks relevant to the site that could potentially be exacerbated by climate change.

8. Referrals

Internal:

- Environmental Health Officer: Concerns raised about information provided in relation to acid sulphate soils (the non-consideration of land based operations), contamination (inadequate soil assessment) and banks stability/erosion impacts on Pig Island (identification of appropriate stabilisation and rehabilitation measures). It is recommended that, should approval be granted, these issues be addressed through deferred commencement conditions. It was also recommended that the applicant be required to prepare an annual Environmental Management Plan (EMP) to ensure that there is a planned approach to the environmental protection measures and that they are appropriately managed and monitored.
- Threatened Species Officer: Concerns raised with the original proposal in relation to submitted flora and fauna assessment in relation to survey work/assessment for bird species and EEC's, adequacy of measures to avoid or mitigate impacts on EEC's and shorebird habitat. It is concluded that a Species Impact Statement should be submitted or the proposal be redesigned to avoid significant impact upon the EEC's and bird species. With the submission of amended plans and additional supporting information it was recommended that Stage 1 of the proposal could be approved with conditions which include the preparation of an EMP prior to the commencement of Stage 1 to ensure there

is adequate protection of the shorebird habitat outside the Stage 1 area, implementation of recommended mitigation measures, monitoring and a timeline with schedule of works.

- Development Engineer: No objection to the proposed works subject to the imposition of conditions relating to works within the road reserve and associated construction standards.
- Shoalhaven Water: No objection to the proposal and no conditions recommended.
- Strategic Planning Group: Concerns raised with the original proposal in terms of river bank stability, water quality, mitigation measures and the adequacy of the information provided. With the submission of amended plans, no concerns have been raised with Stage 1 in terms of river bank stability for the southern bank of the Shoalhaven River and impacts upon the existing flood levee. It has, however, been recommended that a flood emergency plan be developed for the land based activities. This to be included as a condition on any issued development consent. In terms of traffic/access issues, Council agrees with the applicant in terms of intersection treatment required (i.e. BAL and BAR treatment) and the extension of the current seal into the site so as to prevent the tracking of loose material onto Terara Road. The design that has been submitted with the amended application complies with the minimum design criteria for a BAR and BAL type intersection and demonstrates that the additional works required can be accommodated within the existing road reserve. Requirements in relation to the intersection design and its construction to be conditioned on any development consent issued.

External:

- Department of Planning: No comments have been received.
- Department of Primary Industries – Catchments and Lands (DPI - Crown): Advice provided in relation to the need for a new permissive occupancy (PO) licence being required for the new dredge area including the existing extraction area (i.e. existing licence to be relinquished). It also advised that consent from Council, DPI Fisheries and RMS Roads would be required before a new licence would be granted. Comments also provided that permanent markers are to be installed prior to commencing of new works and are to be maintained throughout the term of any extraction. In addition, comments were provided in relation to the structures (i.e. jetty/pontoon), outside the boundary of 125 Terara Road which are associated with the land based operations which may require authorisation from the Department in the form of a new licence. Requirements as outlined in their advice is to be included as conditions on any development consent issued.
- NSW Department of Primary Industries – Fishing and Aquaculture (Fisheries): Fisheries initially advised that the original proposal was integrated development under the EPA Act, and did not support the proposed expansion. As such, it would not be prepared to issue a Harm Marine Vegetation Permit. The concerns raised related to impacts upon fish habitat, operator's non compliance with previous approvals and concerns with the detail in the information provided. With the submission of amended plans and additional supporting information, Fisheries advised that as the proposal now avoids any direct impact upon seagrasses and saltmarsh it can be undertaken without a Harm Marine Vegetation Permit. As such, it is no longer categorised as integrated development under the EPA Act. Fisheries, however, have indicated that they would not be prepared to recommend concurrence to the issuing of a Crown Lands Licence for Stage 1 unless a number of

conditions were complied with. These included ceasing dredging in the previously dredged area, preparation and implementation of a shoreline re-vegetation plan, a 30m buffer to seagrass and other marine vegetation, dredging to a maximum depth of 4m (compared to the 6m sought under the amended application), annual surveys and audits.

- NSW Environment Protection Authority (EPA): EPA advised that the proposal is integrated development under the EPA Act. Advice provided in relation to the original proposal outlined that additional information was required (i.e. clarification in relation to noise issues) before it could consider issuing General Terms of Approval. With the submission of amended plans and additional supporting information, it was advised that an amended licence could be issued by the EPA and the General Terms of Approval were provided. Requirements as outlined in its advice is to be included as conditions on any development consent issued.
- NSW Office of Environment and Heritage (OEH): Advice provided that the proposal as originally submitted would remove the local occurrence of the Coastal Saltmarsh EEC and that the indirect impacts of the development had not been adequately addressed. It further stated that the mitigation measures would not adequately offset the impacts on the Coastal Saltmarsh community. In addition, comments were also provided in relation to flooding impacts. OEH raised concerns with the detail in the information provided and impacts of the proposed works on bank stability and the flood levees that have been constructed at Riverview Road, Terara. OEH raised no concerns with the submitted Cultural Heritage Induction Plan.
- NSW Office of Water (OW): No objection to Stage 1 works relating to the dredge area expansion with it being advised that the amended proposal in terms of the dredging component is not integrated development under the EPA Act as no Controlled Activity Approval (CAA) is required. It is noted that the existing CAA does not capture the land based operations occurring at 123-125 Terara Road that are within 40m of the mean high water mark (MHW) such as the sediment pond, stockpiling of material, access ramp above the MHW, etc. As such, an amended CAA is required. Comments were also made that the recommended buffers as detailed in the updated reports provided by the applicant are supported along with the recommendation for a shoreline re-vegetation plan for Pig Island. Requirements as outlined in their advice to be included as conditions on any development consent issued.
- NSW Roads and Maritime Services – Roads (RMS Roads): Advice provided that the RMS does not object to the development application in principle. No conditions recommended.
- NSW Roads and Maritime Services – Maritime (RMS Maritime): No objection to the proposal subject to the dredge area boundaries being marked with lit RMS approved navigation aids prior to works commencing. The number required to be determined by RMS Maritime. These requirements to be conditioned on any development consent issued.

9. Options

The Joint Regional Planning Panel may:

- a) Resolve to approve the application subject to conditions (i.e. adopt the recommendations of this report including the draft conditions of consent provided or modify the provided conditions); or
- b) Resolve to refuse the application; or
- c) Write to the applicant requesting them to amend/modify the proposal and subject to the matters being satisfactorily resolved, a further report be submitted to the Joint Regional Planning Panel (Southern Region) for its consideration.

10. Conclusion

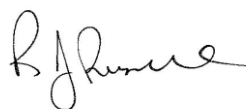
This application has been assessed having regard to the Matters for Consideration under Section 79C of the Environmental Planning and Assessment Act 1979. Following a detailed assessment, it is considered that Development Application No RA12/1001 (2012STH015) should be supported subject to suitable conditions being imposed on any issued development consent.

11. Recommendation

RECOMMENDED that, in respect of RA12/1001 (2010STH015) for the extension of area over the Shoalhaven River where sand is won via dredging (to be then processed at the existing land based facilities), the application be approved as a deferred commencement development consent subject to conditions as contained in **Attachment 'A'**.



Signed: Andrew Lissenden
Senior Town Planner
Shoalhaven City Council
Date: 11/06/13



Robert Russell
Development Manager,
Shoalhaven City Council
Date: 11/06/13

**NOTICE TO APPLICANT OF DETERMINATION OF
APPLICATION
PARTIAL DEVELOPMENT CONSENT
S.80(4) of the Environmental Planning and Assessment Act 1979**

**Environmental Planning and Assessment Act, 1979
RA12/1001**

TO:

Allen Price and Associates (as agents for Shoalhaven Sands Pty Ltd)
No.75 Plunkett Street
NOWRA NSW 2541

being the applicant(s) for RA12/1001 relating to:

Shoalhaven River and Lot 1 DP 787495 (No.123) and Lot 2 DP 787495 (No.125) Terara Road, Terara

APPROVED USE AND OR DEVELOPMENT:

Extension of area over the Shoalhaven River where sand is won via dredging (to be then processed at the existing land based facilities).

DETERMINATION DATE:

Pursuant to the Section 81 of the Act, notice is hereby given that the above application has been determined by granting partial development consent, subject to the conditions listed below.

CONSENT TO OPERATE FROM:

CONSENT TO LAPSE ON:

DETAILS OF CONDITIONS

The conditions of consent and reasons for such conditions are set out as follows:

Note: This is a partial development consent and only grants consent to Stage 1 as amended of the proposed development.

PART A**CONDITIONS OF A GENERAL NATURE, INCLUDING A DESCRIPTION OF THE PROPOSED DEVELOPMENT****General**

1. This partial consent relates to an **extension of area over the Shoalhaven River where sand is won via dredging (to be then processed at the existing land based facilities)** as illustrated on the plans, specifications and supporting documentation with the following references:

- Allen, Price & Associates Ref: 21519-12, Sketch plan showing staging of proposed extension of sand dredging over bed of the Shoalhaven River near Pig Island, Sheet 1 (Site Plan), Revision 4, Dated: 15.05.13;
- Allen, Price & Associates Ref: 21519-01, Sheet 1 of 4 (Plan showing detail over proposed expansion of sand extraction area within the Shoalhaven River at Terara), Revision 4, Dated: 15.05.13;
- Allen, Price & Associates Ref: 21519-02, Sheet 2 of 4 (Plan showing detail and levels over part of Shoalhaven River, part of Pig Island and Lots 1 & 2 DP 1184790 and proposed expansion of sand extraction area at Terara), Revision 4, Dated: 15.05.13;
- Allen, Price & Associates Ref: 21519-03, Sheet 3 of 4 (Plan showing detail and levels over part of Pig Island, Lots 1 & 2 DP 1184790 and P.O. 1968/29 at Terara), Revision 2, Dated: 15.05.13;
- Allen, Price & Associates Ref: 21519-14, Sheet 1 of 1 (Plan showing MGA grids and coordinates, detail and levels over part of Shoalhaven River, part of Pig Island and Lots 1 & 2 DP 1184790 and proposed expansion of sand extraction area at Terara), Revision 1, Dated: 15.05.13;
- Allen, Price & Associates Ref: 21519-15, Sheet 1 of 1 (Plan showing BAR/BAL intersection design into Lots 1 & 2 DP 787495 off Terara Road, Terara), Revision 1, Dated: 26.11.2012;
- Environmental Impact Statement for Proposed Extension of Sand Dredging over bed of Shoalhaven River near Pig Island, Prepared by Allen, Price & Associates, Ref: 21519, Volume 1, 2 and 3, Dated: May 2012;
- Supplementary Report to accompany Environmental Impact Statement for Proposed Extension of Sand Dredging over bed of Shoalhaven River near Pig Island, Prepared by Allen, Price & Associates, Ref: 21519, Dated: November 2012;
- Supplementary Environmental Details – Proposed Expansion of Sand Extraction Area; Pig Island, Lower Shoalhaven River, NSW, Prepared by: Martens Consulting Engineers, Ref:P1103077JR04V02, Dated: November 2012;

stamped with reference to this consent, as modified by the following conditions. The development shall be carried out in accordance with this consent.

Notes:

- *Any alteration to the plans and/or documentation shall be submitted for the approval of Council. Such alterations may require the lodgement of an application to amend the consent under s96 of the Act, or a fresh development application. No works, **other than those approved under this consent**, shall be carried out without the prior approval of Council.*

- *Where there is an inconsistency between the documents lodged with this application and the following conditions, the conditions shall prevail to the extent of that inconsistency.*
2. Consent is given to Stage 1 of the development subject to compliance with the following conditions. No consent has been given for works associated with Stage 2 or the regularisation of dredging in the area to the west of existing Permissive Occupancy 1968/29.
 3. The dredging within the approved area must not commence until all relevant conditions of development consent have been met or unless other satisfactory arrangements have been made with council (i.e. a security).

PART B

GENERAL TERMS OF APPROVAL – NSW ENVIRONMENT PROTECTION AUTHORITY (EPA)

Administrative conditions

Information supplied to the EPA

4. Except as expressly provided by these general terms of approval, works and activities must be carried out in accordance with the proposal contained in:
 - a) The development application RA12/1001 submitted to Shoalhaven City Council on 20 June 2012;
 - a) The Environmental Impact Statement - Proposed Extension of Sand Dredging over bed of Shoalhaven River near Pig Island for Shoalhaven Sand Pty Ltd dated May 2012, and subsequent supporting documents relating to the development;
 - b) The Supplementary Report to accompany Environmental Impact Statement for Proposed Extension of Sand Dredging over bed of Shoalhaven River near Pig Island, prepared on behalf of Shoalhaven Sand Ply Ltd dated November 2012; and
 - c) All additional documents supplied to the EPA in relation to the development, including public submissions.

Limit conditions

Noise limits

5. Noise from the premises must not exceed the noise limits presented in the table below. Note: the limits represent the sound pressure level (noise) contribution, at the nominated receiver locations in the table.

<i>Location</i>	<i>Daytime - LAeq, 15 minute</i>
The residence at 111 Terara Road, Terara	40 dB(A)
The residence at 119 Terara Road, Terara	40 dB(A)
The residence at 121 Terara Road, Terara	40 dB(A)

Shoalhaven Caravan Village, 17 Terara Road, Terara	45 dB(A)
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Definition

L_{Aeq} means the equivalent continuous noise level - the level of noise equivalent to the energy-average of noise levels occurring over a measurement period.

6. Noise from the premises is to be measured at the nearest affected receiver at the most affected point on or within the residential boundary or at the most affected point within 30 metres of the dwelling (rural situations) where the dwelling is more than 30 metres from the boundary to determine compliance with the L_{Aeq}(15 minute) noise limit in Condition 5.

Where it can be demonstrated that direct measurement of noise from the premises is impractical, the EPA may accept alternative means of determining compliance. See Chapter 11 of the NSW Industrial Noise Policy.

The modification factors presented in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise levels where applicable.

7. The noise emission limits identified in Condition 5 apply under meteorological conditions of:
 - a) Wind speed up to 3m/s at 10 metres above ground level; or
 - b) Temperature inversion conditions of up to 3⁰C/100m and wind speed up to 2m/s at 10 metres above the ground.

Operating conditions

Dust

8. Activities occurring at the premises must be carried out in a manner that will minimise emissions of dust from the premises.
9. Trucks entering and leaving the premises that are carrying loads must be covered at all times, except during loading and unloading.

Pollution Studies and Reduction Programs

Installation of noise attenuation barriers

10. The licensee must install, at a suitable location, a noise attenuation barrier(s) such that the sound pressure level (noise) contribution at the nominated receiver locations in Condition L3.1 are not exceeded.
11. Proof of completion of the works required by condition 10 must be submitted to the Regional Manager, South East Region at PO Box 622, QUEANBEYAN NSW 2620 no later than 3 months from the date of the development consent for the proposed extension to the sand dredging area.

PART C

CONDITIONS THAT MUST BE COMPLIED WITH BEFORE WORK CAN COMMENCE

Principal Certifying Authority/Construction Certificate

12. The following must be undertaken before any building works (i.e. construction of noise attenuation barrier) can commence:
- a) A Principal Certifying Authority (PCA) must be appointed; and
 - b) A Construction Certificate must be obtained from either Council or an accredited certifier.

Notice of Commencement

13. Notice must be given to Council **at least two (2) days** prior to the commencement of building work.
- *If appointment as PCA, **Shoalhaven City Council WILL NOT INSPECT any building work unless evidence of indemnity insurance has been provided.** A copy of the Certificate of Insurance will suffice.*

Sign – Supervisor contact details

14. Prior to the commencement of any building works, the person/company responsible for the construction of all works must erect a sign at the front of the property/site in a visible position with that person/company's name, license number, site address and contact number, and the name of the Principal Certifying Authority, accreditation number and telephone number, where the Principal Certifying Authority is not the Council.

Note: This condition is prescribed under the Environmental Planning and Assessment Regulation 2000.

Builders' Toilet

15. Before commencing building operations, a builder's water closet accommodation must be provided to Council's satisfaction.

A chemical toilet may be used on the site or alternatively the site may be provided with temporary closet accommodation connected to Council's sewer where sewer is available and operational.

Under no circumstances will pit toilets or similar be accepted by Council.

Fencing

16. The building site is to be fenced (in accordance with Workcover requirements) prior to the commencement of construction with a fence suitable to keep members of the public and unauthorised people out.

Existing services/damage to public assets (all stages)

17. Prior to the commencement of any work(s) associated with this development, the developer or their agent must:

- a) Check that the proposed works are not affected by any Council, Integral Energy, telecommunications, gas service or other services. Any required alterations to services as a consequence of undertaking works under this consent will be at the developer's expense. In addition, any repair or damage to services will be at the developer's expense; and
- b) Undertake a site inspection and document any evidence of damage to the public assets prior to commencement of work. A copy of the inspection documentation is to be provided to Council prior to the commencement of works. Failure to adequately identify existing damage will result in all damage detected by Council after completion of the work being repaired at the developer's expense.

Soil and Water Management

18. Prior to the commencement of construction works, the relevant sedimentation and erosion controls required by this consent must be implemented, inspected and approved by the PCA and maintained until the work is completed and the site stabilised.

Acid Sulphate Soils

19. Prior to the commencement of dredging works, an Acid Sulfate Soil Management Plan for the land based operations at 123 and 125 Terara Road, Terara must be prepared by a suitably experienced and qualified consultant. The plan is to be prepared in accordance with the guidance provided in the Acid Sulfate Soil Manual and detail measures to be implemented in relation to the management and handling of any potential or actual acid sulfate soils that the land based activities may produce (i.e. the exposure of acid sulfate during the wash down/sand processing operations) and must include details on ongoing monitoring and management of acid sulfate soils. A copy of the plan must be submitted to the NSW EPA and Shoalhaven City Council.
20. Prior to the commencement of construction works that will disturb the soil (i.e. footings required for noise attenuation barrier), acid sulfate soil testing must be undertaken by the applicant. Acid sulfate soil testing must be consistent with the DEC's *Environmental Guideline Assessing and Managing Acid Sulfate Soil* and the *Acid Sulfate Soil Manual*. Should testing indicate that any potential or actual acid sulfate soils may be disturbed during the construction of the project, the applicant must prepare an Acid Sulfate Soil Management Plan. This to be prepared in accordance with the guidance provided in the Acid Sulfate Soil Manual and detail measures to be implemented in relation to the management and handling of any potential or actual acid sulphate soils. A copy of the Acid Sulfate Soil Management Plan must be provided to the PCA and Shoalhaven City Council.

NSW EPA Licence Variation

21. Prior to the commencement of dredging works, an application must be made to the NSW EPA to vary the Environmental Protection Licence which is held by the operator under the Protection of the Environment Operations Act 1997 and an amended licence obtained. A copy of the amended licence must be provided to Shoalhaven City Council.

Marking of Dredge Area Boundary

22. Prior to the commencement of dredging works, the boundaries of the dredge area for Stage 1 must be marked as follows:
 - a) Poles placed at 35m spacing's (maximum) that are driven at least 6m into the seabed which extend above the water level at high tide or buoys secured to piles driven at least 6m into the sea bed and finished off flush with the seabed. The above to occur at locations that must ensure a 25m setback to existing sea grasses and 25 m

setback to the Pig/Burruga Island mean high water mark as identified on Deposited Plan 1184790 are maintained. The position of each pole/buoy is to be accurately determined and recorded by survey or Differential GPS with a copy provided to Shoalhaven City Council;

- b) Marked with lit navigation aids. The type and number of navigation aids must be determined by the NSW Roads and Maritime Service's Boating Safety Officer.

Note: All costs associated with the purchase, installation and ongoing maintenance of the navigation aids must be borne by the operator undertaking the dredging activities.

Flooding

- 23. Prior to the commencement of dredging works, a flood emergency evacuation plan that has been prepared by a suitably qualified consulting engineer, in accordance with the requirements of Development Control Plan No.106 – Amendment No.1 must be submitted to Shoalhaven City Council. The plan must identify how the operator will inform themselves of potential flood warnings and the range of actions to be implemented by the applicant prior to a flood occurring including but not limited to:

- a) Storing of potential chemicals and fuels above flood levels;
- b) Flood evacuation procedures;
- c) Securing or relocation of machinery and the like to make sure they won't become floating debris.

Permissive Occupancy

- 24. Prior to the commencement of dredging works, the current Permissive Occupancy issued by the NSW Department of Primary Industries must be relinquished and a new Permissive Occupancy/licence issued to cover the extraction area approved by this development consent.

PART D

CONDITIONS THAT MUST BE COMPLIED WITH BEFORE A CONSTRUCTION CERTIFICATE CAN BE ISSUED

Structural Soundness

- 25. Prior to the issue of a Construction Certificate for the noise attenuation barrier/screen certification must be submitted to Council from a suitably qualified structural engineer who is a Chartered Member of the Institute of Engineers Australia that the building works can withstand forces of floodwaters including debris and buoyancy forces up to the PMF scenario.

Erosion and Sediment Control Plan

- 26. An Erosion and Sediment Control Plan (ESCP) and accompanying specifications for the construction phases of the works (i.e. access works, noise attenuation barrier works) prepared by a suitably qualified/experienced person and based on the Landcom manual *"Soils and Construction, Managing Urban Stormwater, Vol 1 4th Edition, March 2004"*, must be lodged for approval with the application for a Construction Certificate and the Engineering Design/Section 138 Approval. The ESCP controls shall be implemented, inspected and approved prior to the commencement of any site works and maintained for the life of the construction period and until revegetation measures have taken hold. The ESCP must include, but not be limited to the following works/details:

- a) Location and type of proposed erosion and sediment control measures;
- b) Location of and proposed means of stabilisation of site access so as to ensure no material is tracked onto the adjoining road network;
- c) Measures to be implemented around existing drainage pits within and adjacent to the development site;
- d) Proposed staging of construction and ESCP measures;
- e) Proposed site rehabilitation measures, including seeding of all bare un-grassed areas and turfing where erosion or scouring is likely to occur;
- f) Clearance of sediment traps on a regular basis and after major storms; and
- g) Standard construction drawings for proposed erosion and sediment control measures.

PART E

CONDITIONS THAT MUST BE COMPLIED WITH IN A SPECIFIED TIMEFRAME

Access

27. The intersection of the development with Terara Road must be upgraded generally in accordance with the plan with reference Allen, Price & Associates Ref: 21519-15, Sheet 1 of 1 (Plan showing BAR/BAL intersection design into Lots 1 & 2 DP 787495 off Terara Road, Terara), Revision 1, Dated: 26.11.2012. The works to be completed no later than 9 months from the date of this development consent.

The design must ensure compliance with the following:

- a) The provision of a Basic Right Turn Treatment (BAR) and Basic Left Turn Treatment (BAL) on Terara Road in accordance with AUSTROADS 2009 Guide to Road Design – Part 4A: Unsignalised and Signalised Intersections;
- b) The provision of suitable drainage treatment across the driveway accessing Terara Road to prevent water proceeding onto, or undermining, the travel lane of Terara Road;
- c) The installation of give way signage;
- d) The provision of safe intersection sight distances in accordance with AUSTROADS Part 5;
- e) The provision of a design that meets Austroads Design Vehicle and Turning Path Templates for vehicles that will use the intersection to enter/exit the site; and
- f) The provision of a seal carriageway internally from the property boundary with Terara Road for a minimum of 20 metres.

Verification of Works (in the Road Reserve)

28. No later than 9 months from the date of this development consent:

- a) Compliance certificate or certificates shall be obtained from Council for all works in the road reserve; and
- b) Work As Executed' (WAE) plans certified by a consulting engineer or registered surveyor shall be submitted to Council for review and records upon completion of the works required by Condition 22 (Access). The certification shall state the information shown on the plans is a true and accurate representation of the constructed works. The WAE information is to be marked in red is to be provided on a copy of the Council approved plans. Where works are not within the tolerances specified in Council's Development Construction Specifications, the certifying engineer / surveyor shall confirm, in writing, the works still comply with the intent of the original design, specifications and relevant Australian Standards.

Noise Attenuation Barrier

29. No later than 6 months from the date of this development consent:

- a) A noise attenuation barrier/screen must be constructed in the location as identified as Option A in Appendix C of the *Environmental Noise Impact Shoalhaven River Sand Extraction at Nowra NSW* prepared by Day Design Pty Ltd, Report Number 4969 dated 11 May 2012. In addition, it must be constructed in accordance with the construction requirements (except for the use of material stockpiles) as detailed in Section 7 (Noise Control Recommendations) of the same report; and
- b) Certification must be provided to Shoalhaven City Council from a suitably qualified acoustic consultant that the noise attenuation barrier/screen:
 - i) As detailed in part a) of this condition has been constructed in accordance with the requirements of the *Environmental Noise Impact Shoalhaven River Sand Extraction at Nowra NSW* prepared by Day Design Pty Ltd, Report Number 4969 dated 11 May 2012; and
 - ii) Achieves the noise levels at the locations/receives identified in the above report.

Lot Consolidation

30. The subject land known as Lot 1 DP 787495 (No.123 Terara Road, Terara) and Lot 2 DP 787495 (No.125 Terara Road, Terara) shall be consolidated into one allotment. Evidence of registration of the plan of consolidation with the Land and Property Information Office must be submitted to Council within six months of the determination of this development application.

PART F

CONDITIONS RELATING TO THE APPROVED WORK AND ONGOING SITE MANAGEMENT

Building Code of Australia

31. All building work must be carried out in accordance with the requirements of the Building Code of Australia.

Note: *This condition is prescribed under the Environmental Planning and Assessment Regulation 2000.*

Road Reserve, Footpath & Gutters

32. The kerb, gutter and footpath adjoining the site shall be kept clear of soil and debris.

Soil and Water Management

33. All practical measures must be taken to ensure erosion and subsequent sediment movement off-site does not occur (e.g. sediment fences, etc).

In particular, a silt fence or equivalent must be provided downhill from the cut and fill area (or any other disturbed area). The fence must be regularly inspected and cleaned out and/or repaired as necessary and all collected silt must be disposed of to the satisfaction of the Principal Certifying Authority (PCA).

Unnecessary disturbance of the site (eg excessive vehicular access) must not occur.

All cuts and fills must be stabilised or revegetated as soon as possible after the completion of site earthworks.

All the above requirements must be to the satisfaction of the PCA.

Engineering Design and Approval - works in road reserve

34. Detailed engineering plans and specifications for works referred to in this development consent within the road reserve and on other public land shall be prepared by a practising engineer or surveyor.
35. a) Engineering design plans and specifications for civil works within the road reserve must be submitted to Council for approval. Approval from Council must be obtained prior to the commencement of these works. Refer to Part H (Other Council Approvals) of this development consent for additional details/requirements.
b) All work must be carried out in accordance with the approved plans.

Note: Fees apply to the checking of engineering plans and inspections. Contact shall be made with Councils Development Engineer for a fee estimate. All fees must be paid prior to plans being released for construction approval.

Construction Hours

36. To limit the impact of the development on adjoining owners, *all* construction work shall be restricted to the hours of 7.00am to 6.00pm Monday to Friday and 8.00am to 3.00pm Saturdays. No construction work shall take place on Sundays or Public Holidays.

Waste Minimisation and Management

37. All waste must be contained within the site during construction and then be recycled in accordance with the approved Waste Minimisation and Management Plan (WMMP) or removed to an authorised waste disposal facility. No waste shall be placed in any location or in any manner that would allow it to fall, descend, blow, wash, percolate or otherwise escape from the site.

Compliance with the WMMP shall be demonstrated by the retention of relevant receipts. These must be submitted to Council, upon request.

Note: "Waste" has the same meaning as the definition of "Waste" in the Protection of the Environment Operations Act 1997.

38. Waste materials generated from the dredging process must be disposed of at an approved waste facility location.

Human Remains

39. If any potential human remains/aboriginal skeletal material are discovered in, on or under the land, the operator must:
- a) Not further harm these remains;
 - b) Immediately cease all work at the particular location;
 - c) Secure the area so as to avoid further harm to the remains;
 - d) Notify the local police and the Office of Environment and Heritage Environment (OEH) Line on 131 555 as soon as practicable and provide any available details of the remains and their location; and
 - e) Not recommence any work at the particular location unless authorised in writing by OEH.

Setbacks

40. A setback/buffer of 25 metres (minimum) to the:

- a) Edge of the seagrass beds and saltmarsh areas adjacent to Stage 1; and
- b) Mean high water mark of Pig/Burruga Island (as identified on deposited plan 1184790) adjacent to Stage 1.

must be maintained at all times for the life of the development.

Dredge Depth

41. Dredging within the area outside the existing permissive occupancy known as PO1968/29 shall occur to a maximum depth of 4m or other such greater depth as approved by NSW Department of Primary Industries – Fishing and Aquaculture, up to a maximum depth of 6m. A copy of the approval for any depth greater than 4m from NSW Department of Primary Industries must be provided to Shoalhaven City Council.

Contamination

42. Testing of material at the point of collection for heavy metals must be undertaken every 4 months. This testing to be undertaken by a suitably qualified and experienced environmental consultant in accordance with the NSW Environmental Protection Authority (EPA) Guidelines for Consultants Reporting on Contaminated Sites and the NSW EPA Sampling Design Guidelines. Any recommendations in the 4 monthly testing to be incorporated into site management practices and subsequently implemented.

Mitigation Measures

43. All mitigation measures/recommendations as detailed in the following reports relating to operations and Stage 1 works must be implemented:

- a) *Aquatic Habitat, Flora and Fauna Assessment for Proposed Expansion of Sand Extraction Area Shoalhaven River Adjacent to Pig Island, Terara*, Prepared by: Peter Dalmazzo, Dated: 18 January 2012;
- b) *Supplementary Report – Assessment of Significance for NSW Threatened Species, Populations and Ecological Communities, and their Habitats for Stage 1 Proposed Expansion of Sand Extraction Area*, Prepared by: Peter Dalmazzo, Dated: 7 November 2012;
- c) *River Impact Assessment – Proposed Expansion of Sand Extraction Area: Pig Island Lower Shoalhaven River, NSW*, Prepared by: Martens Consulting Engineers, Reference: P1103077JR01V03, Dated: February 2012;
- d) *Supplementary Environmental Details - Proposed Expansion of Sand Extraction Area: Pig Island Lower Shoalhaven River, NSW*, Prepared by: Martens Consulting Engineers, Reference: P1103077JR04V02, Dated: November 2012;
- e) *Due Diligence for Aboriginal Archaeological Heritage for Shoalhaven Sands on Pig Island*, Prepared by: Biosis Research, Reference: 14267, Dated: 23/01/2012;
- f) *Environmental Noise Impact Shoalhaven River Sand Extraction at Nowra NSW* Prepared by: Day Design Pty Ltd, Reference: 4969, Dated 11 May 2012;
- g) *River Sand Extraction Noise Impact Assessment – Response to EPA*, Prepared by: Day Design Pty Ltd, Reference: 4696-L1, Dated 7 November 2012;
- h) *Qualitative Ambient Air Quality Assessment*, Prepared by: Clearsafe Environmental Solutions, Reference: 1144-01-A-AQ (Revision A), Dated: 14 February 2012; and

- i) *Proposed Relocation of Dredged Sand Spoil Acid Sulphate Soil Management Plan*, Prepared by: Network Geotechnics, Reference: W07/1356-Cr, Dated: November 2011.

Noise and Dust

44. The use of the approved development must not give rise to transmission of unacceptable vibration or noise to any place of different occupancy in accordance with the NSW Environment Protection Authority's Environmental Noise Control Manual and Industrial Noise Policy 2000 and The Protection of the Environment Operations Act 1997 (NSW).
45. Dust emissions from stockpiles within the site must be suppressed by permanently installed sprinklers and/or covering of stockpiled material. In addition, all recommendations as detailed in Section 10 (Conclusions and Recommendations) of the *Qualitative Ambient Air Quality Assessment*, prepared by Clearsafe Environmental Solutions, Reference 1144-01-A-AQ (Revision A), dated 14 February 2012.
46. The noise and dust attenuation measures as required by this development consent must be maintained for the life of the development.

In this regard, it is the proponent's responsibility to identify the need for and implement additional noise and dust attenuation measures (i.e. if the actual noise level exceeds the design noise level or if the noise frequency and duration make the noise intrusive at a lower level).

Limits

47. The operation of the approved development must not exceed the processing limits as specified in the submitted Environmental Impact Statement (i.e. 100,000 tonnes per year).

Cessation of Dredging

48. All extraction/dredging within the existing permissive occupancy area known as PO1968/29 must cease upon commencement of dredging in the new approved area.

Ongoing Monitoring

49. Ongoing monitoring of the area adjacent to Stage 1 works must be undertaken. This including:
- a) Bird surveys designed in consultation with the NSW Office of Environment and Heritage. The surveys must be undertaken by a suitably qualified environmental consultant and are to be designed to detect shorebird presence and habitat use including migratory species during October–March. Surveys are to include monitoring of threatened bird species known to occur in the locality, including the Eastern Osprey;
 - b) An assessment of threats to the shorebird habitats and Coastal Saltmarsh and recommendations for protective measures; and
 - c) Monitoring of river bank erosion (both the western and southern bank of Pig/Buraga Island and the southern bank of the Shoalhaven River).

Signage

50. A sign must be erected at the front of the property (visible from Terara Road) which clearly states that, in the event of a complaint, to contact the relevant company

employee providing a name, telephone number and email address. The sign is to be legible and maintained for the life of the development and have a maximum size of 0.8m².

51. No signage other than what has been approved as part of this development consent or that is considered to be exempt from requiring development consent under Development Control Plan No.82 – A Signage Strategy for the City of Shoalhaven, is approved as part of this development application.

Hours of Operation

52. All works associated with the approved development (both dredging and upon the land based site) must occur between the hours of 7am to 6pm Monday to Friday, 8am to 1pm Saturday with no work on Sundays and Public Holidays. Access to the site for deliveries is to be confined to between the above operating hours.

Additionally heavy vehicle movements along Terara Road and Moss Street are restricted to outside peak school times of 7:30am to 9:00am and 2:30pm to 4:00pm Monday to Friday.

Recording of Complaints

53. The owner/operator must keep a legible record/log book of all complaints made to the owner/operator or any employee or agent of the business in relation to the operation of the approved use.

The record must include details of the following:

- a) The date and time of the complaint;
- b) The method by which the complaint was made;
- c) Any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
- d) The nature of the complaint;
- e) The action taken by the operator in relation to the complaint, including any follow-up contact with the complainant; and
- f) If no action was taken by the licensee, the reasons why no action was taken.

The record of a complaint must be kept for at least 4 years after the complaint was made and must be made available to Council at any time upon request.

Environmental Management Plan

54. The consent holder/operator must submit an Environmental Management Plan (EMP) relating to the operation of the approved development for the previous 12 months period to Shoalhaven City Council. The EMP must be prepared by a suitably qualified person and must be submitted within 30 days of the twelve month anniversary of the issue of this development consent and subsequently every twelve months for the life of the development. The EMP shall address, but not be limited to, the following:

- a) Record/log of all complaints made for the period of the EMP providing details as required by Condition 53;
- b) Quantity of material produced/obtained by the plant represented as tonnes per day and tonnes per year;
- c) An assessment by a suitably qualified acoustic consultant that the noise levels at the locations/receivers identified in the *Environmental Noise Impact Shoalhaven River Sand Extraction at Nowra NSW* Prepared by: Day Design Pty Ltd, Reference: 4969,

Dated 11 May 2012 and any other receivers as identified by Council are in accordance with the requirements of the above report and comply with NSW EPA requirements and associated recommendations;

- d) An assessment by a suitably qualified air quality consultant that the air quality levels comply with the *Qualitative Ambient Air Quality Assessment*, prepared by Clearsafe Environmental Solutions, Reference 1144-01-A-AQ (Revision A), dated 14 February 2012 and the NSW EPA requirements and any associated recommendations;
- e) Annual monitoring of the extent of sea grass beds in the vicinity of the dredging operations (i.e. within 25m of the outside of the buffer) with this information to be shown on the surveys discussed in point f);
- f) Annual survey of the dredging area to indicate the extent, depth and location of dredging as well as cross sections to test assumptions relating to angle of repose and buffer slope readjustment;
- g) Annual independent auditing and reporting of compliance against consent conditions and associated license conditions (i.e. NSW EPA, NSW Office of Water, NSW Department of Primary Industries);
- h) Results of ongoing monitoring as required by Condition 49;
- i) Works that have been undertaken in the preceding 12 months to address the mitigation measures/recommendations as detailed in the approved reports detailed in Condition 43;
- j) The results and recommendations from the testing of material at the point of collection for heavy metals as required in Condition 42;
- k) Ongoing targeted monitoring during dredging operations relating to water quality impacts (including the establishment of background levels) so as to capture the spatial and temporal variability of water quality; and
- l) Details on additional measures to be implemented (including a timeframe for implementation) to address all identified issues and/or concerns.

Dangerous Goods

55. The operator must ensure that the storage, handling, and transport of dangerous goods is carried out in accordance with relevant Australian Standards, particularly AS 1940-2004: The storage and handling of flammable and combustible liquids and AS/NZS 1596:2002: The storage and handling of LP Gas, and the Dangerous Goods Code.

Site Management and Maintenance

56. The proprietor/operator must at all times be responsible for on-going site management and maintenance in accordance with the following:
- a) loading and unloading in relation to the use of the premises must occur within the subject site (i.e. in the designated loading areas);
 - b) goods or machinery must be stored, and all activities must occur, inside the building(s) and not in the carpark or drive way areas;
 - c) activity on the site must not impact upon the amenity of any adjoining property or tenancy by reason of the emission of noise, dust, fumes, odour, vibration, electrical interference or otherwise;
 - d) removal of all graffiti within a maximum of 14 days of being notified by Council; and
 - e) maintenance of all:
 - vehicular movement areas including driveways, carparking, manoeuvring areas and line marking to the standard specified in this consent;
 - stormwater drainage pipes and systems to ensure efficient discharge of stormwater in accordance with the approved stormwater drainage plan including the area of the drainage easement under the suspended concrete slab adjacent to the site's eastern boundary;
 - signs and lines; and

- buildings, fencing to the standards outlined in the development application and/or specified in this consent.

PART G

OTHER COUNCIL APPROVALS

Section 68 Local Government Act, Section 138 Roads Act

Approval REQUIRED for work within the Road Reserve – Section 138 Roads Act

1. Prior to undertaking any works within the road reserve, the contractor must obtain the approval of Council under Section 138 of the Roads Act, 1993. The following details must be submitted to Council for in order to obtain the s.138 approval:
 - Traffic Control Plan (TCP) to provide protection for those within and adjacent to the work site, including the travelling and pedestrian public. The TCP must comply with the RTA's manual – "*Traffic Control at Work Sites*". Warning and protective devices shall comply with the provisions of AS 1742.3 – 2002 Traffic Control Devices for Works on Roads. The plan must be prepared and certified by a person holding the appropriate RTA accreditation, a copy of which is to be submitted with the plan; and
 - Insurance details

Should the Traffic Management Plan require a reduction of the speed limit, a Direction to Restrict shall be obtained from the relevant road authority (Council or the RTA - Traffic Operations Unit).

PART H

REASONS FOR CONDITIONS

Conditions of consent have been imposed to:

1. Ensure the proposed development:
 - a) achieves the objects of the Environmental Planning and Assessment Act, 1979;
 - b) complies with the provisions of all relevant environmental planning instruments;
 - c) is consistent with the aims and objectives of Council's Development Control Plans, Codes and Policies.
2. Ensure that the relevant public authorities and the water supply authority have been consulted and their requirements met or arrangements made for the provision of services to the satisfaction of those authorities.
3. Meet the increased demand for public amenities and services attributable to the development in accordance with Section 94 of the Environmental Planning and Assessment Act, 1979.
4. Ensure the protection of the amenity and character of land adjoining and in the locality of the proposed development.
5. Minimise any potential adverse environmental, social or economic impacts of the proposed development.
6. Ensure that all traffic, carparking and access requirements arising from the development are addressed.

7. Ensure the development does not conflict with the public interest.

PART I

ADVICE ABOUT RIGHTS OF REVIEW AND APPEAL

Development Consent under Environmental Planning and Assessment Act, 1979

*Under section 82A of the Environmental Planning and Assessment Act, 1979 an applicant may request the council to review its determination except where it relates to a complying development certificate, designated development or integrated development. The request must be made **within twelve (12) months** of the date of the receipt of the determination, with a prescribed fee of 50% of the original DA fee.*

*Section 97 of the Environmental Planning and Assessment Act, 1979 confers on an applicant who is dissatisfied with the determination of a consent authority a right of appeal to the Land and Environment Court which can be exercised **within twelve (12) months** after receipt of this notice.*

Approvals under Local Government Act, 1993

Section 100 of the Local Government Act, 1993 provides that an applicant may request Council to review its determination of an application.

*Section 176 of the Local Government Act, 1993 provides that an applicant who is dissatisfied with the determination of the Council may appeal to the Land and Environment Court. The appeal must be made within **twelve (12) months** of the date of determination.*

PART J

ADVICE ABOUT WHEN THIS CONSENT LAPSES

This consent is valid for five years from the date hereon.

In accordance with Section 95 of the Act, development consent of the erection of a building does not lapse if building, engineering or construction work relating to the building or work is physically commenced on the land to which the consent applies before the lapse date.

PART K

GENERAL ADVICE TO APPLICANT

Commonwealth Environment Protection and Biodiversity Conservation Act 1999

The Commonwealth Environment Protection and Biodiversity Conservation Act 1999 provides that a person must not take an action which has, will have, or is likely to have a significant impact on

- a) A matter of national environmental significance (NES) matter; or
- b) Commonwealth land

without an approval from the Commonwealth Environment Minister.

This application has been assessed in accordance with the New South Wales Environmental Planning & Assessment Act, 1979. The determination of this assessment has not involved any assessment of the application of the Commonwealth legislation.

It is the proponent's responsibility to consult Environment Australia to determine the need or otherwise for Commonwealth approval and you should not construe this grant of consent as notification to you that the Commonwealth Act does not have application.

The Commonwealth Act may have application and you should obtain advice about this matter.

There are severe penalties for non-compliance with the Commonwealth legislation.

Disclaimer – s88B restrictions on the use of land

The applicant should note that there could be covenants in favour of persons other than Council restricting what may be built or done upon the subject land. The applicant is advised to check the position before commencing any work.

Under clause 37 of Shoalhaven Local Environmental Plan 1985 agreements, covenants or instruments that restrict the carrying out of the proposed development do not apply to the extent necessary to enable the carrying out of that development, other than where the interests of a public authority is involved.

Inspections

If Council is the appointed PCA for this project, a minimum twenty-four (24) hours notice must be given to Council to make an inspection of the work.

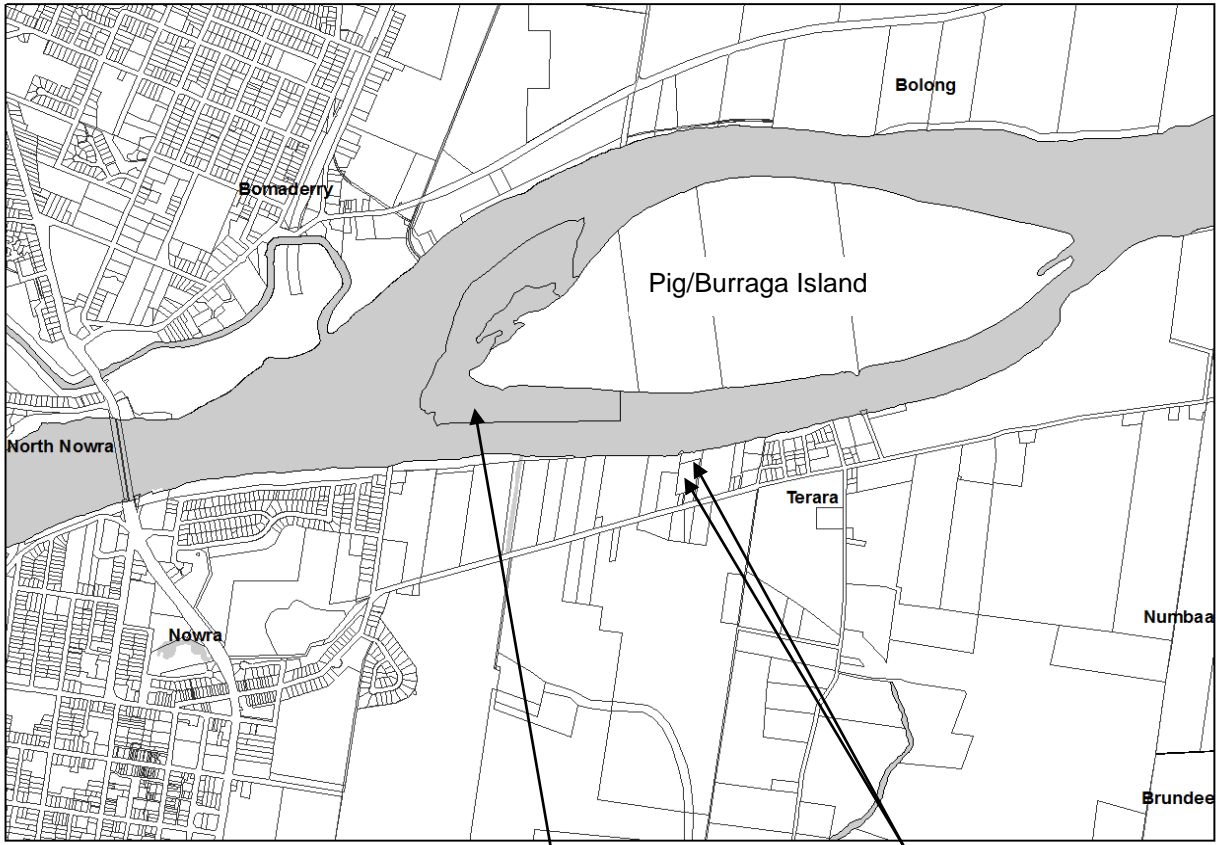
DBYD Enquiry - 'Dial Before You Dig'

In order to avoid risk to life and property it is advisable that an enquiry be made with "Dial Before You Dig" on 1100 or www.dialbeforeyoudig.com.au prior to any excavation works taking place to ascertain the location of underground services.

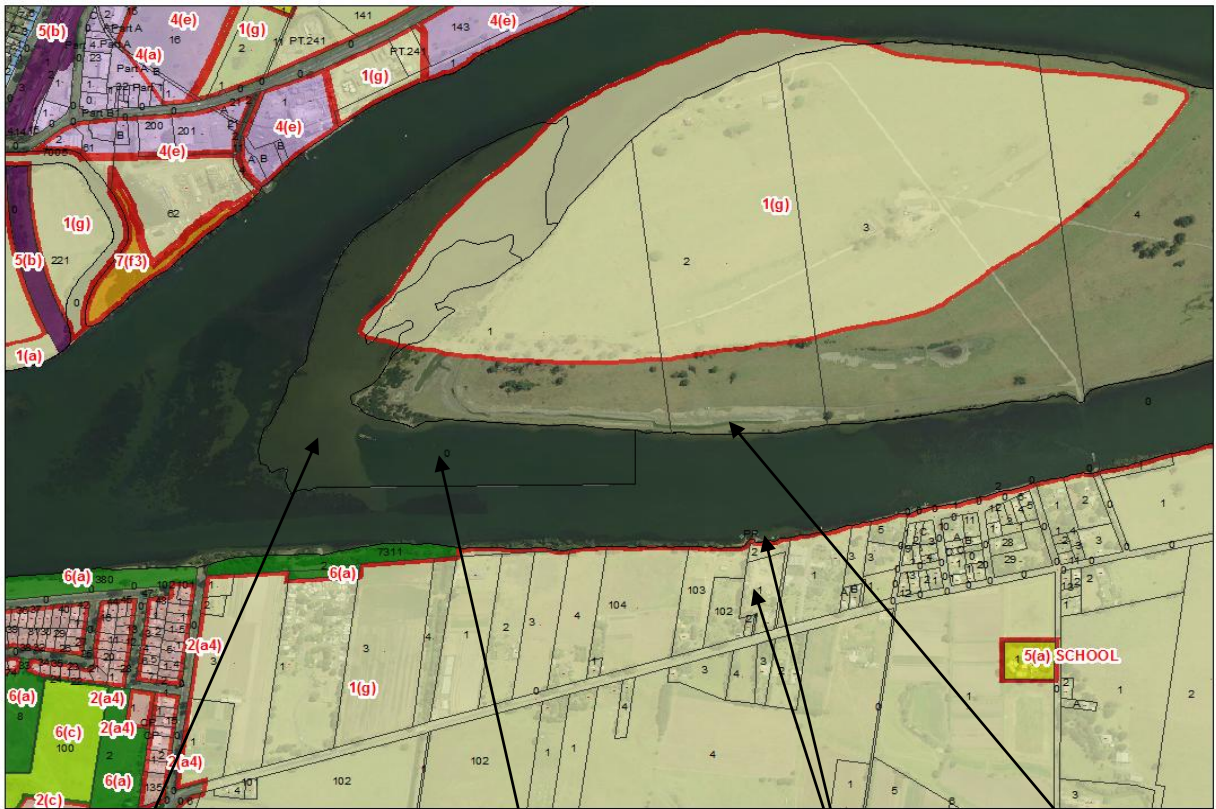
Privacy Notification

Personal information contained on this Development Consent and any associated documents will be published on Council's website as required by the Government Information (Public Access) (GIPA) Act 2009.

Location Plan



Location and Zoning Plan

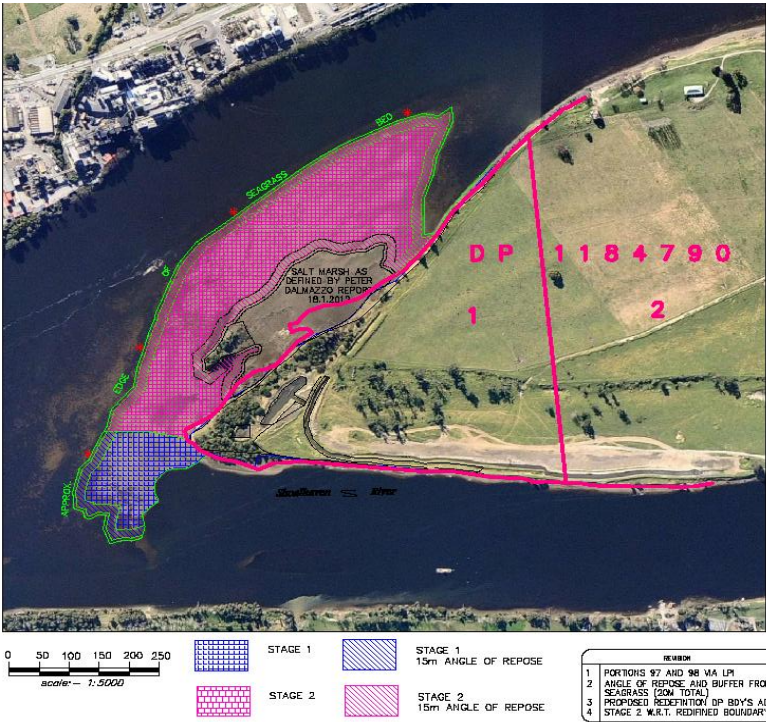


Area of dredging extension

Area of unapproved dredging
(outside existing PO)

No.123-125 Terara Road,

Existing sediment trench



NOTE:
This plan was prepared for Shoalhaven Sand as an indicative design to accompany a development application to Shoalhaven City Council.
The information shown on this plan is not suitable for any other purpose.
The areas on this plan are subject to field survey and also to the requirements of Council and any other authority which may have requirements under any relevant legislation.
In particular, no reliance should be placed on the information on this plan for any financial dealings involving the land.
Allen, Price and Associates therefore disclaims any liability for any loss or damage whatsoever or howsoever incurred, arising from any party using or relying upon this plan for any purpose other than as a document prepared for the sole purpose of accompanying an application to council for development and which may be subject to alteration for reasons beyond the control of Allen, Price and Associates.
This note is an integral part of this plan.

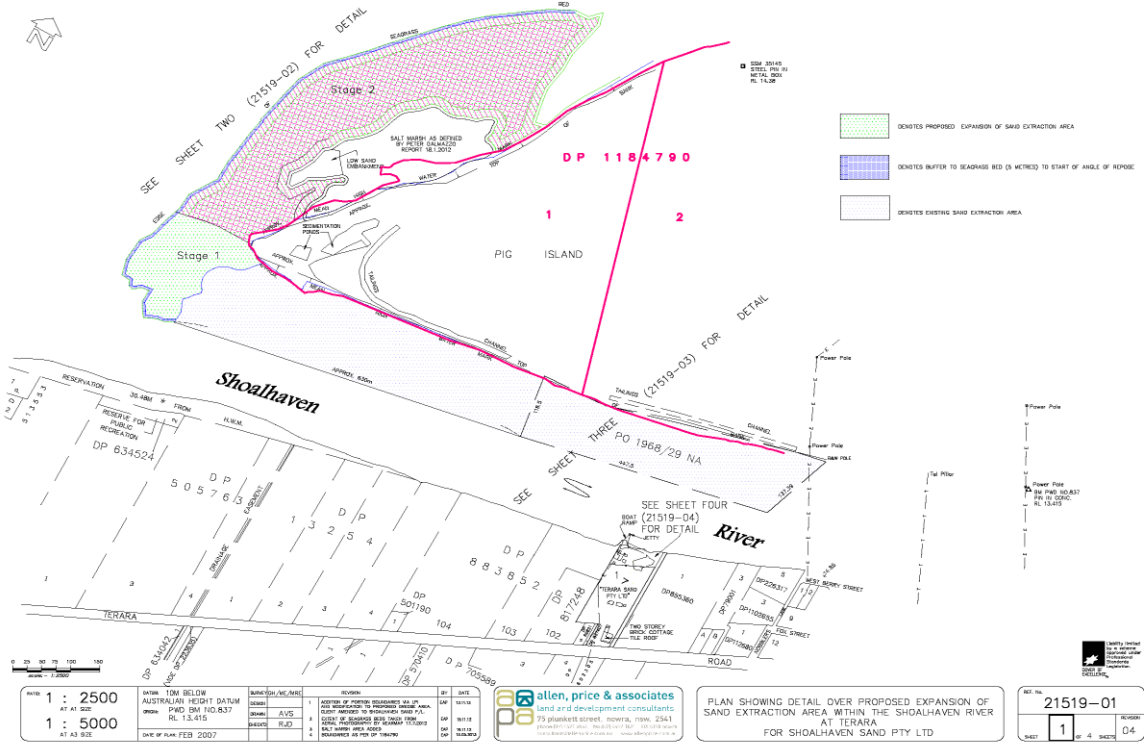
Sketch plan showing staging of proposed extension of sand dredging over bed of the Shoalhaven River near Pig Island for Shoalhaven Sand Pty Ltd (RA12/1001)

NOTES
RATIO 1:5000 DATE 22.10.2012 REF: 21519-12 REV: 04
(AT A3 SIZE)

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NO	REVISION	BY	DATE
1	PORTIONS 97 AND 98 VIA LPA	EAP	13.11.10
2	ANGLE OF REPOSE AND BUFFER FROM SEABASS (20M TOTAL)	EAP	18.11.12
3	PROPOSED REDEFINITION OF BOY'S ADDED	EAP	05.11.13
4	STAGE 2 W.L.T. REDIFIED BOUNDARY	EAP	15.11.13

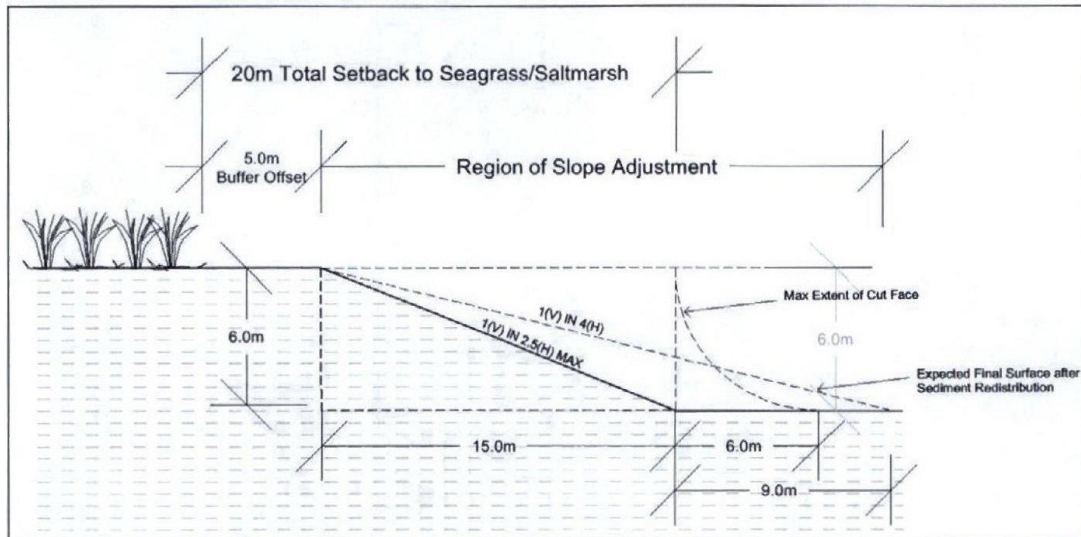
Plan showing staging of expanded dredge area



Plan showing existing permissive occupancy (PO1968/29), dredging that has occurred outside existing permissive occupancy and



Plan showing land based operations at 123 and 125 Terara Road, Terara



Applicant's diagrammatic representation of their proposed setback/buffer to seagrasses