

Planit Ref: 2062
DOP Ref: DA-282-11-2004-i

11th June 2013

**The Director General
NSW Department of Planning and Infrastructure
GPO Box 39
Sydney NSW 2001**

**S.75W Application – DA-282-11-2004-i
Environmental Assessment
Construction and operation of a commercial Australian Bay Lobster aquaculture facility
and associated seawater supply works
Prepared on behalf of Australian Bay Lobster Producers P/L
Lots 706, 708, 709 and 710 DP 1000580; Lot 1 DP 267742; Lot 1 DP 578962; Lot 1 DP 227034; Lot 128 DP 1039348; Lot 32
DP 847319; Crown Reserve 1001008; and Council Public Reserves of Marine Parade, Beach Street, Elrond Drive,
Chinderah Road and Crescent Street, Tweed local government area.
Pacific Highway, Chinderah NSW**

This letter is in regards to and forms the supporting Statement of Environmental Effects for a proposed S.75W modification to development consent DA-282-11-2004-i. The development was previously approved under the Environmental Planning and Assessment Act 1979 as 'State Significant Development' by the Minister. As such, a S.75W application is required for the proposed modification to the consent.

1.0 Introduction

Planit Consulting has been engaged by Australian Bay Lobster Producers P/L (ABLP) to prepare an application for the modification of Integrated Development Approval DA-282-11-2004-i which relates to the construction and operation of a commercial Australian Bay Lobster aquaculture facility and associated seawater supply works. The subject site involves the following land parcels;

Lots 706, 708, 709 and 710 DP 1000580; Lot 1 DP 267742; Lot 1 DP 578962; Lot 1 DP 227034; Lot 128 DP 1039348; Lot 32 DP 847319; Crown Reserve 1001008; and Council Public Reserves of Marine Parade, Beach Street, Elrond Drive, Chinderah Road and Crescent Street, Tweed local government area.

A copy of DA-282-11-2004-i is provided at **Appendix A** of this report.

A subsequent application to modify has since been granted (Project Approval 08_0083 dated 16/12/2008) (See **Appendix B**).

This modification application seeks to vary the approved consent in relation to the designated staging process.

2.0 Project Background, Overview and Current Status

The development is approved over three (3) stage, each accommodating a footprint of approximately 15 hectares. After a lengthy approval process the technical management of the development approval was contested in court. After several months of legal contention, the NSW State Government declared in court that the Minister at the time of signing the development consent in fact did not have the power to do so (no consent no case). A new development consent (DA-282-11-2004-i) was issued and again contested through the Land and Environment Court, followed by the Supreme Court. The application was then taken back into the Land and Environment Court. After the considerable cost of both time and money involved in this process, ABLP had lost institutional funding commitments and a request was made to the NSW Department of Planning to allow for the commencement of the development on a smaller scale. This was agreed to and hence the staging plan outlined within DA-282-11-2004-i was formed. This application seeks to again modify this staging plan so as to facilitate the initial operation of the development.

The development, which is owned and operated by ABLP incorporates the development of an aquaculture facility for the production of the Bay Lobster (*Thenus spp.*) known locally as Moreton Bay Bugs. The facility is based on recirculation aquaculture technology inside horticultural type structures with animals housed in raceways. Upon completion of all three (3) stages, the operation has been estimated to produce 3228 tonnes of product a year and occupying 45 hectares of land. The project has been designed to produce two products; a live, hard shell animal of a nominal 218g and a soft shell animal (frozen or fresh chilled) of a nominal 45g.

The development ultimately incorporates the pumping of clean seawater from Dreamtime Beach, Kingscliff to the site. This seawater will be carried out using a relatively simple system of pipes laid within public reserves and private property. Treated seawater generated will be conveyed back to Council's Sewage Treatment Plant at West Kingscliff, where it will join existing discharge from the plant. All treated seawater generated will be of a quality consistent with the licensing requirements for Council's Sewage Treatment Plant located to the east of the site.

It is noted that as part of this proposal, seawater intake will not commence until Stage 2, with seawater transported to the site for initial production purposes by other means (Truck/Bulk Transport). The wastewater discharge will be trucked to the Kingscliff STP up until Stage 1b when the discharge pipeline is constructed. SEQWATER, owners of the Tugun Desalination Plant who will be the supplier, are in the process of modifying their development consent so as to allow for the public supply of seawater to ABLP. The existing development consent cites that the plant is specifically a public utility to feed the water grid. Delivery of the seawater (fresh and treated) would be via a licensed ISO stainless steel lined transport tank. Written correspondence confirming the seawater supply arrangement will be submitted to the Department of Planning once the development consent has been modified.

Project Approval 08_0083 gave consent for the pipeline route to be amended. No changes were made to the overall development on-site.

The current arrangement consists of one constructed glasshouse building with a total footprint of approximately 1.7h. This represents 50% of the Stage 1a development. Due to further financial pressure, mainly as a result of the Global Financial Crisis, ABLP are now looking to commence with a production base that will utilise only one third of the existing building (See **Appendix C**). This element will be wholly supported by shareholder funds which are limited and initial operation will serve to allow for some recompense of outlaid funds.

3.0 Subject Site and Surrounds

The site is zoned as 1(a) Rural pursuant to the Tweed Local Environmental Plan 2000 (see below excerpts). The site is wholly surrounded by other 1(a) Rural zoned lands as well as the Melaleuca Station Crematorium and Pacific Highway to the west. The primary site access is from the Pacific Highway – Tweed Valley Way interchange at Chinderah NSW.

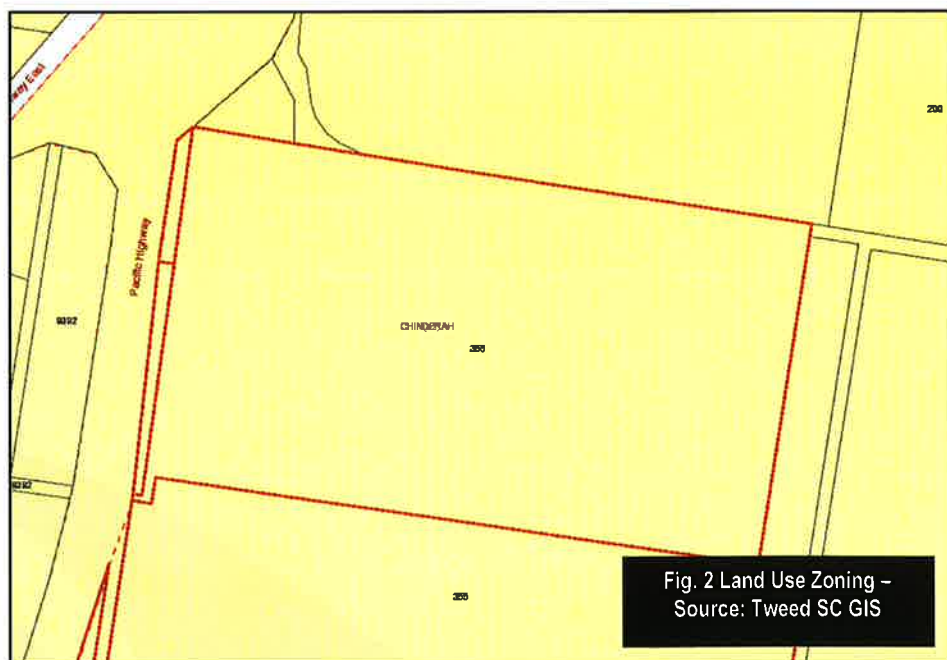




Fig. 3 Surrounding Development

As illustrated above, surrounding development is not considered to experience any increased impact as a result of this modification. All nearby dwellings and buildings used for permanent residency are located a significant distance away from the development site.

4.0 Proposed Modifications

4.1 The Existing Consent

In 2005 the Minister for Infrastructure and Planning, granted Development Approval DA-282-11-2004-i which relates to the construction and operation of a commercial Australian Bay Lobster aquaculture facility and associated seawater supply works.

A subsequent application to modify has since been granted (Project Approval 08_0083 dated 16/12/2008) (See **Appendix B**).

This Modification Application seeks to vary the approved consent in so much as it relates to the supply and discharge of seawater (specifically Schedule 2 and the descriptions of the staging process).

The existing staging outlined within the development consent reads as follows;

Stage 1 works

The construction and operation of Farm 1 located in the north-west section, occupying an area of approximately 15 hectares and including hatchery and growout facilities, carparking plus processing building, workshop facilities, administration building, seawater and freshwater

storage tanks, as well as seawater and wastewater pipelines and pump house at Dreamtime Beach, access road upgrade, and as described under DA-282-11-2004-i, and all additional information submitted in support of the application

Stage 2 works

Construction and operation of Farm 2 located immediately east of Stage 1, occupying an area of approximately 15 hectares and including hatchery and growout facilities, carparking, and water storage, as described under DA-282-11-2004-i, and all additional information submitted in support of the application

Stage 3 works

Construction and operation of Farm 3 located immediately south of Farm 1 and occupying an area of approximately 15 hectares and including hatchery and growout facilities, carparking and water storage as described under DA-282-11-2004-i, and all additional information submitted in support of the application

4.2 Modifications

The proposal seeks to modify the terms of Schedule 2 of the Development Approval, specifically relating to the descriptions of the staging process. In this regard, the schedule outlines each of the development stages as was prepared within the original application. Since this time, the proponent has been forced to reconsider what works will be completed as part of each stage of the development; hence why this application is made. Rewording is also required when referring to the location of each stage.

A breakdown of the modified staging process is as follows;

Stage 1 works

The site filling and earthworks associated with Farm 1 located in the **central** section, occupying an area of approximately 15 hectares. Carparking and access road upgrade and all additional information submitted in support of the application (**Completed**)

Stage 1a works

The continued site filling, construction and initial operation of Farm 1 located in the **central** section, occupying an area of approximately 15 hectares and including hatchery and growout facilities, carparking plus processing building, workshop facilities, administration building, seawater and freshwater storage tanks, seawater trucked onto site from Tugun Desalination Plant, wastewater trucked off site to Kingscliff STP discharge point and all additional information submitted in support of the application (**Current Stage**)

Stage 1b works

Seawater trucked onto site from Tugun Desalination Plant, construction of wastewater pipeline from Farm 1 to Kingscliff STP, connection of Farm 1 to Kingscliff STP to allow for discharge of wastewater.

Stage 2 works

Construction of seawater pipelines and pump house at Dreamtime Beach, construction and operation of Farm 2 **located immediately west of Stage 1**, occupying an area of approximately 15 hectares and including hatchery and growout facilities, carparking, and water storage, as described under DA-282-11-2004-i, and all additional information submitted in support of the application

Stage 3 works

Construction and operation of Farm 3 **located immediately south of Farm 2** and occupying an area of approximately 15 hectares and including hatchery and growout facilities, carparking and water storage as described under DA-282-11-2004-i, and all additional information submitted in support of the application

The proponent seeks to have Farm No. 1 of the aquaculture facility operational in the immediate term, delaying the construction of the wastewater pipeline section to the Kingscliff STP. This will then be undertaken as part of Stage 1b. High levels of rainfall in recent times have resulted in a rise of the water table surrounding the development site. As such, any construction works to establish the discharge pipeline would require dewatering. It is considered a low impact and more cost effective outcome to have the staging plan realigned to allow for the project to proceed without the discharge pipeline being constructed. This will allow for

the developer to begin aquaculture activities on-site and reduce the financial strain associated with the realization of the overall development. The approval of this modification will allow for the proponent to be able to begin offsetting the substantial construction costs once Farm No. 1 becomes operational. The discharge pipeline will then be established as part of the Stage 1b works.

ABLP are ready to undertake the construction of the discharge pipelines from the subject site to the Kingscliff STP, however the inclement weather in recent times has resulted in a significant rise in the water table in the surrounding area. The trucked discharge of water will be a temporary arrangement for the treated seawater (as per our EPA license). This will be carried out until such time as it is dry enough to allow for the construction of the pipelines. This proposal will also act as a stopgap until approval is given to utilise the septic system on-site. This is to be emptied by a commercial operator as required (in this regard once Stage 1a construction is completed there will be less load involved, as there will be fewer people employed on site). The pipeline delay is seen as a short term issue only. It is expected to take three to four weeks to install the pipelines once the water table has dropped sufficiently. All stored seawater (clean incoming and treated outgoing) will be kept in poly tanks as demonstrated within **Appendix C**. The clean incoming water is produced by the Tugun Desalination Plant and does not have an unpleasant odour. As detailed within **Figure 3**, the site is located a significant distance from any sensitive receptors. The on-site storage of treated wastewater is not considered to create an unpleasant odour strong enough to impact upon the surrounding area.

As noted above, the seawater used as part of the aquaculture process will be trucked onto the site during Stages 1a and 1b. This seawater will be sourced from the Tugun Desalination Plant located 25km north of the site (See **Appendix C**). SEQWATER, owners of the Tugun Desalination Plant who will be the supplier, are in the process of modifying their development consent so as to allow for the public supply of seawater to ABLP. The existing development consent cites that the plant is specifically a public utility to feed the water grid. Delivery of the seawater (fresh and treated) would be via a licensed ISO stainless steel lined transport tank. Written correspondence confirming the seawater supply arrangement will be submitted to the Department of Planning once the development consent has been modified. Each load will be 20,000L in capacity with a trip estimate of 2 times per day. The wastewater generated from Farm No. 1's initial operation will be pumped back into the trucks taken to the Kingscliff STP for discharge into the approved outfall location. It is envisaged that this will be at a rate less than 2 times per day due to evaporation of a portion of the seawater within the glasshouse as part of the aquaculture process.

The following is an outline of the water supply and discharge arrangements throughout the various stages of development;

Water Type	Stage 1a	Stage 1b	Stage 2	Stage 3
Seawater Supply	Tugun Desalination Plant. Two (2) trips per day bringing loads of 20,000L of seawater.	Tugun Desalination Plant. Two (2) trips per day bringing loads of 20,000L of seawater.	Construction of seawater pipeline to draw water from approved site at Dreamtime Beach, Kingscliff. Drawing seawater from the approved site.	Drawing seawater from approved site at Dreamtime Beach, Kingscliff.
Wastewater Discharge	Discharge of wastewater to Kingscliff STP outfall as approved. Amount of water discharged is less than brought onto site due to evaporation within the glasshouse.	Construction of wastewater pipeline from Farm No.1 to Kingscliff STP. Discharge as approved.	Use of wastewater pipeline from Farm No.1 to Kingscliff STP. Discharge as approved.	Use of wastewater pipeline from Farm No.1 to Kingscliff STP. Discharge as approved.

4.3 Projected Time Frames

The following table demonstrates each of the proposed stages and a timeframe for completion.

ABLP Aquaculture Facility	Stage 1	Stage 1a	Stage 1b	Stage 2	Stage 3
Stage Description	<p>Stage 1 works</p> <p>The site filling and earthworks associated with Farm 1 located in the central section, occupying an area of approximately 15 hectares. Carparking and access road upgrade and all additional information submitted in support of the application</p>	<p>Stage 1a works</p> <p>The continued site filling, construction and initial operation of Farm 1 located in the central section, occupying an area of approximately 15 hectares and including hatchery and growout facilities, carparking plus processing building, workshop facilities, administration building, seawater and freshwater storage tanks, seawater trucked onto site from Tugun Desalination Plant, wastewater trucked off site to Kingscliff STP discharge point and all additional information submitted in support of the application (Current Stage)</p>	<p>Stage 1b works</p> <p>Seawater trucked onto site from Tugun Desalination Plant, construction of wastewater pipeline from Farm 1 to Kingscliff STP, connection of Farm 1 to Kingscliff STP to allow for discharge of wastewater.</p>	<p>Stage 2 works</p> <p>Construction of seawater pipelines and pump house at Dreamtime Beach, construction and operation of Farm 2 located immediately west of Stage 1, occupying an area of approximately 15 hectares and including hatchery and growout facilities, carparking, and water storage, as described under DA-282-11-2004-i, and all additional information submitted in support of the application</p>	<p>Stage 3 works</p> <p>Construction and operation of Farm 3 located immediately south of Farm 2 and occupying an area of approximately 15 hectares and including hatchery and growout facilities, carparking and water storage as described under DA-282-11-2004-i, and all additional information submitted in support of the application</p>
Timing	Completed	Current Stage Initial operation to commence within 1/3 of the existing building. Whole building to be operational and in full production by June 2015.	The discharge pipeline will be constructed from Farm 1 to the Kingscliff STP as soon as the surrounding water table has lowered to allow for it.	Stage 2 will commence based on demand placed on Farm 1. Projected for the beginning of 2017.	Stage 3 will commence based on demand placed on Farm 2. Projected for the beginning of 2019.

5.0 Statutory Assessment

5.1 Environmental Planning and Assessment Act 1979

Part 3A (repealed)

As the development was approved under Part 3A of the Act, the modification of the approval is required to comply with the relevant modification process under Part 3A.

Section 75W of the Act, states, inter alia:-

"Modification of Minister's approval 75W

(1) In this section:

Minister's approval means an approval to carry out a project under this Part, and includes an approval of a concept plan.

Modification of approval means changing the terms of a Minister's approval, including:

- (a) revoking or varying a condition of the approval or imposing an additional condition of the approval, and
 - (b) changing the terms of any determination made by the Minister under Division 3 in connection with the approval.
- (2) The proponent may request the Minister to modify the Minister's approval for a project. The Minister's approval for a modification is not required if the project as modified will be consistent with the existing approval under this Part.
- (3) The request for the Minister's approval is to be lodged with the Director-General. The Director-General may notify the proponent of environmental assessment requirements with respect to the proposed modification that the proponent must comply with before the matter will be considered by the Minister.
- (4) The Minister may modify the approval (with or without conditions) or disapprove of the modification.
- (5) The proponent of a project to which Section 75K applies who is dissatisfied with the determination of a request under this section with respect to the project (or with the failure of the Minister to determine the request with 40 days after it is made) may, within the time prescribed by the regulations, appeal to the Court. The Court may determine any such appeal.
- (6) Subsection (5) does not apply to a request to modify:
- (a) an approval granted by or as directed by the Court on appeal, or
 - (b) a determination made by the Minister under Division 3 in connection with the approval of a concept plan.
- (7) This section does not limit the circumstances in which the Minister may modify a determination made by the Minister under Division 3 in connection with the approval of a concept plan."

This application has been made in accord with the above provisions. The proposed amendment of DA-282-11-2004-i will see to the rearrangement of the staging process in order to facilitate operation without the construction of the pipeline section from Farm No.1 to the Kingscliff STP. It will also align the staging process with the envisaged timing and structure to allow for the most efficient development process to occur. The development will be carried out as previously approved, with only the staging process being amended to reflect the proponent's desired project planning strategy.

5.2 Environmental Planning and Assessment Regulations 2000

The proposal remains consistent with the requirements of the Environmental Planning and Assessment Regulations 2000 as they apply to the development. The development will be carried out as previously approved, with only the staging process being amended to reflect the proponent's desired project planning strategy.

5.3 Tweed Local Environmental Plan 2000

The proposal remains consistent with the requirements of the TLEP 2000 as they apply to the previous approval. The development will be carried out as previously approved, with only the staging process being amended to reflect the proponent's desired project planning strategy. No further assessment is required under this instrument.

6.0 Conclusion

The proposed modification will have no impact in respect of the functionality or efficiency of the proposed development and nor will it lead to any associated environmental or public risk. Rather, the proposal seeks to simply rationalize the timeframes in which elements relating to the proposed development can be carried out.

No adverse social or environmental impacts are considered likely in the context of the proposed modification. The proposed modification will assist in ensuring that Farm No.1 will become operational as soon as possible, leading to further employment and other indirect and direct economic benefits.

Having regard to the foregoing submission, the proposed modification is considered to warrant the Departments support. **The Department of Planning and Infrastructure's support for the proposed modification to DA-282-11-2004-i is respectfully requested.**

If the Department has any questions regarding the proposal please do not hesitate to contact the undersigned.

Yours sincerely

**Brock Lamont
Town Planner
Planit Consulting
11th June 2013**

Appendix A – DA-282-11-2004-i

**DETERMINATION OF A DEVELOPMENT APPLICATION
FOR STATE SIGNIFICANT AND INTEGRATED DEVELOPMENT
PURSUANT TO SECTION 80 OF THE
ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979**

I, the Minister for Infrastructure and Planning, pursuant to section 80 of the *Environmental Planning and Assessment Act 1979* ("the Act") determine the development application ("the Application") referred to in Schedule 1 by granting consent subject to the conditions set out in Schedule 2.

The reason for the imposition of conditions is to:

- a) minimise any adverse environmental impacts associated with the development;
- b) ensure effective on-going environmental management of the development; and
- c) provide for regular monitoring and reporting on the development.

Craig Knowles MP
Minister for Infrastructure and Planning

Sydney,

2005

File No. 9036247

SCHEDULE 1

Application made by:	Australian Bay Lobster Producers Pty Ltd ("the Applicant").
To:	The Minister for Infrastructure and Planning ("the Minister").
In respect of:	Land described as: Lots 706, 708, 709 and 710 DP 1000580; Lot 1 DP 267742; Lot 1 DP 578962; Lot 1 DP 227034; Lot 128 DP 1039348; Lot 32 DP 847319; Crown Reserve 1001008; and Council Public Reserves of Marine Parade, Beach Street, Elrond Drive, Chinderah Road and Crescent Street, Tweed local government area.
For the following:	<p>The construction and operation of a commercial Australian Bay Lobster aquaculture facility and associated seawater supply works and includes:</p> <ul style="list-style-type: none">• construction of a combined hatchery, growout and processing facility using above-ground, tank-based (raceways) recirculation technology;• construction of an underground pumping station and sub-sand seawater intake pipeline from Dreamtime Beach, Kingscliff to the main site at Cudgen;

- construction of a wastewater pipeline from the site to the Kingscliff Sewage Treatment Plant;
- construction of associated landscaping, carparking and ancillary facilities; and
- upgrading of the site access road.

Development Application:

Integrated DA No. DA-282-11-2004-i, lodged with the Department of Infrastructure, Planning and Natural Resources on 15 November 2004, accompanied by *Statement of Environmental Effects, Proposed Aquaculture Development and Water Supply Works, Volumes 1 and 2*, prepared by Australian Fresh Research & Development Corporation Pty Ltd in association with Planit Consulting Pty Ltd, and dated 20 October 2004;

State Significant Development

Under Section 76A of the *Environmental Planning and Assessment Act 1979*, the development is classified as State Significant development by virtue of it being a development to which a declaration made by the Minister for Infrastructure and Planning relating to aquaculture development on 3 August 1999, applies.

Note:

- 1) To ascertain the date upon which this consent becomes effective, refer to section 83 of the Act.
- 2) To ascertain the date upon which this consent is liable to lapse, refer to section 95 of the Act.
- 3) If the Applicant is dissatisfied with this determination, section 97 of the Act grants him or her a right of appeal to the Land and Environment Court, which is exercisable within 12 months of receiving notice of this determination.

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SCHEDULE 2

In this consent, except in so far as the context or subject-matter otherwise indicates or requires, the following terms have the meanings indicated:

Act	<i>Environmental Planning and Assessment Act, 1979</i>
AEMR	Annual Environmental Management Report
Applicant	Australian Bay Lobster Producers Pty Ltd
BCA	Building Code of Australia
construction	any activity requiring a Construction Certificate, significant excavation work, site preparation works, road works, demolition, or any construction related activity as described in DA-282-11-2004-i
Council	Tweed Shire Council
EPA	NSW Environment Protection Authority (now part of the Department of Environment and Conservation)
Department	NSW Department of Infrastructure, Planning and Natural Resources
development	the development to which this consent applies, the scope of which is described in the documents listed under condition 1.1 of this consent
Director-General	Director-General of the NSW Department of Infrastructure, Planning and Natural Resources, or delegate
dust	any solid material that may become suspended in air
EPL	Environment Protection Licence issued under the <i>Protection of the Environment Operations Act, 1997</i>
fish	has the same meaning as “fish” as defined under the <i>Fisheries Management Act 1994</i>
hatchery	facility for the maintenance and maturation of broodstock, spawning (natural and artificial) and larval rearing to fingerlings or post-larval stage
Minister	NSW Minister for Infrastructure and Planning, or delegate
operation	any activity that results in the cultivation, or intended cultivation, packaging, storage and distribution of commercial quantities of <i>Thenus</i> spp.
Principal Certifying Authority	the Minister or an accredited certifier, appointed under section 109E of the Act, to issue a Part 4A Certificate as provided under section 109C of the Act
Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
RTA	NSW Roads and Traffic Authority
POEO Act	<i>Protection of the Environment Operations Act, 1997</i>
site	the land to which this consent applies
Stage 1 works	the construction and operation of Farm 1 located in the north-west section, occupying an area of approximately 15 hectares and including hatchery and growout facilities, carparking plus processing building, workshop facilities, administration building, seawater and freshwater storage tanks, as well as seawater and wastewater pipelines and pump house at Dreamtime Beach, access road upgrade, and as described under DA-282-11-2004-i, and all additional information submitted in support of the application
Stage 2 works	construction and operation of Farm 2 located immediately east of Stage 1, occupying an area of approximately 15 hectares and including hatchery and

Stage 3 works	growout facilities, carparking, and water storage, as described under DA-282-11-2004-i, and all additional information submitted in support of the application
<i>Thenus</i> spp.	construction and operation of Farm 3 located immediately south of Farm 1 and occupying an area of approximately 15 hectares and including hatchery and growout facilities, carparking and water storage as described under DA-282-11-2004-i, and all additional information submitted in support of the application
utility	Specifically, <i>Thenus orientalis</i> and <i>T. indicus</i> , the species permitted to be commercially cultivated at the site and includes the animal at any stage of its life history (whether alive or dead) and includes any part of the animal
	any infrastructure or service associated with water supply, sewerage, electricity supply, telecommunications or gas supply

1. GENERAL

Scope of Development

- 1.1 ¹The Applicant shall carry out the development generally in accordance with:
- a) Development Application No. DA-282-11-2004-i, lodged with the Department of Infrastructure, Planning and Natural Resources on 15 November 2004;
 - b) *Statement of Environmental Effects, Proposed Aquaculture Development and Water Supply Works, Volumes 1 and 2*, prepared by Australian Fresh Research & Development Corporation Pty Ltd in association with Planit Consulting Pty Ltd, and dated 20 October 2004;
 - c) additional information supplied to the Department from the Applicant dated 14 January 2005 in response to information requested by the Department;
 - d) additional information supplied to the Department from the Applicant dated 31 January 2005 in response to issues raised by the Department and the Department of Primary Industries;
 - e) additional information supplied to the Department from the Applicant on 8 March 2005, 10 March 2005 and 11 March 2005 regarding works at Dreamtime Beach and details of the borrow pit; and
 - f) the conditions of this consent.
- 1.2 In the event of an inconsistency between:
- a) the conditions of this consent and any document listed from condition 1.1 a) to 1.1 e) inclusive, the conditions of this consent shall prevail to the extent of the inconsistency; and
 - b) any document listed from condition 1.1 a) to 1.1 e) inclusive, and any other document listed from condition 1.1 a) to 1.1 e) inclusive, the most recent document shall prevail to the extent of the inconsistency.
- 1.3 The development is restricted to the commercial cultivation of *Thenus orientalis* and *T. indicus* at the site.

Note: *Thenus* spp. are commonly known as Moreton Bay Bugs, Slipper Lobsters and Bay Lobsters (the latter being the internationally recognised name for these species).

Source of Fish

- 1.4 ²The Applicant must not obtain any live fish from any person, whether in NSW, interstate or overseas, unless that person is authorised as a supplier of fish under state and/ or Commonwealth legislation.

Provision of Documents

- 1.5 Where practicable, the Applicant must provide all documents and reports required to be submitted to the Director-General under this consent in an appropriate electronic format. Provision of documents and reports to other parties, as required under this consent, must be in a format acceptable to those parties and must aim to minimise resource consumption.
- 1.6 Nothing in this consent prevents the Applicant from combining reporting requirements under this consent with identical or similar reporting requirements for submission to another relevant party. Reporting requirements must only be combined with the prior agreement of the Director-General of Infrastructure, Planning and Natural Resources and the Director-General (or equivalent) of the other relevant party.

¹ Incorporates and EPA General Term of Approval (A1.1)

² Incorporates a Department of Primary Industries General Term of Approval (14)

Note: the purpose of conditions 1.5 and 1.6 is to provide for minimisation of resource utilisation (particularly paper) associated with administration of this consent. At the time of granting this consent, an “appropriate electronic format” for submission to the Director-General and the Department is portable document format (pdf).

Statutory Requirements

- 1.7 ³The Applicant must ensure that all licences, permits and approvals required for the development are obtained and kept up-to-date as required throughout the life of the development. No condition of this consent removes the obligation for the Applicant to obtain, renew or comply with such licences, permits or approvals.
- 1.8 ⁴The Applicant must not undertake any works that intersect with any groundwater at the site until it has been granted any necessary approvals from the Department under Part V of the *Water Act 1912*.
- 1.9 ⁵Prior to the commencement of any work being undertaken on Crown Reserve 1001008 or on the Crown Road adjoining Lot 2 DP 777905, all necessary licences and approvals are required to be obtained from the Department of Lands.

Dispute Resolution

- 1.10 In the event that a dispute arises between the Applicant and Council or the Applicant and a public authority other than the Department, in relation to a specification or requirement applicable under this consent, the matter must be referred by either party to the Director-General, or if not resolved, to the Minister, whose determination of the dispute must be final and binding on all parties. For the purpose of this condition, "public authority" has the same meaning as provided under section 4 of the Act.

Note: Section 121 of the *Environmental Planning and Assessment Act 1979* provides mechanisms for resolution of disputes between the Department, the Director-General, councils and public authorities.

2. COMPLIANCE

- 2.1 The Applicant must put in place a management system, and take reasonable steps to ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.
- 2.2 The Applicant must be responsible for the works the subject of this consent and the environmental impacts that may result from those works, and must put in place an environmental management system governing the conduct of all persons on the site, including contractors, subcontractors and visitors.
- 2.3 At least two weeks prior to each of the events listed from a) to b) below, or within such period otherwise agreed by the Director-General, the Applicant must certify in writing to the satisfaction of the Director-General, that it has complied with all applicable conditions of this consent prior to that event.

Where an event is to be undertaken in stages, the Applicant may, subject to the agreement of the Director-General, stage the submission of certification consistent with the staging of activities relating to that event. The events referred to in this condition are as follows:

³ Incorporates a Department of Primary Industries General Term of Approval (4)

⁴ Incorporates a General Term of Approval for a licence under the *Water Act 1912*

⁵ Incorporates a Department of Lands General Term of Approval

- a) commencement of any construction works on the land the subject of this consent; and
- b) commencement of operation of the development.

- 2.4 Notwithstanding condition 2.3 of this consent, the Director-General may require an update report on compliance with all, or any part, of the conditions of this consent. Any such update must meet the requirements of the Director-General and be submitted within such period as the Director-General may require.
- 2.5 The Applicant must meet the requirements of the Director-General in respect of the implementation of any measure necessary to ensure compliance with the conditions of this consent, and general consistency with the documents listed under condition 1.1 of this consent. The Director-General may direct that such a measure be implemented in response to the information contained within any report, plan, correspondence or other document submitted in accordance with the conditions of this consent, within such time as the Director-General may require.

3. CESSATION OF WORKS

- 3.1 The Applicant must notify the Director-General of the intention to permanently cease operation of the development.
- 3.2 Upon the permanent cessation of operation of the development, the Applicant must remove the seawater intake pipeline and associated infrastructure (seaward of Marine Parade) from the seabed and beach system, in consultation with and to the satisfaction of the Director-General, Department of Lands and Council's Reserve Trust Manager. The full monetary cost associated with this removal must be borne by the Applicant.

4. ENVIRONMENTAL PERFORMANCE

Water Quality

- 4.1 ⁶Except as may be expressly provided by a licence issued under the *Protection of the Environment Operations Act 1997* (POEO Act) in relation to the development, section 120 of the POEO Act (pollution of waters) must be complied with in, and in connection with, the carrying out of the development.

Effluent Discharge Point

- 4.2 ⁷Prior to the commencement of construction, the Applicant must establish wastewater discharge quality and quantity monitoring points that are located at the point at which effluent is discharged from the site.

Effluent Discharge Limits

- 4.3 ⁸The Applicant must design, construct, operate and maintain the development to ensure that discharges of wastewater from the site only occur from the discharge point(s) identified under condition 4.2, and that for each discharge point(s), the concentration/ range of each pollutant/ parameter listed under Table 1 does not exceed the discharge limit for that pollutant/ parameter at the discharge point.

To avoid any doubt, this condition does not authorise the discharge or emission of any other pollutants.

⁶ Incorporates an EPA General Term of Approval (L1.1)

⁷ Incorporates an EPA General Term of Approval (L3)

⁸ Incorporates EPA General Terms of Approval (L3.1, L3.2 and L3.3)

Table 1. Maximum Allowable Discharge Concentration Limits (Waters)

Pollutant/ Parameter	Units of Measure	90% Allowable Concentration Limit	100% Allowable Concentration Limit
Biochemical Oxygen Demand (BOD)	mg/L	10	20
Total Suspended Solids (TSS) ^a	mg/L	15	30
Total Phosphorus (TP)	mg/L	0.3	1
Total Nitrogen (TN)	mg/L	5	20
Ammonia	mg/L	< 1	5
Oils and Grease	mg/L	2	6
Faecal Coliforms	cfu/100mL	200	600
pH ^b	-	6.5 – 8.5	6.5 – 8.5

a. TSS (Total Suspended Solids) was previously called NFR (Non-Filterable Residue) but refers to the same measurement.

b. For pH quality limits, the specified percentage of samples must be within the specified ranges noted in the Table.

- 4.4 ⁹For the discharge point(s) identified under condition 4.2, the volume of effluent discharged must not exceed a total of 600 kilolitres (kL) per day for each stage of the development.

Note: At full-scale operation (all three stages operating), the Applicant is permitted to discharge a combined total from all three farms of 1800 kL per day.

Erosion and Sediment Control

- 4.5 The Applicant must install erosion and sedimentation controls at the site (including along the length of the pipeline route) to prevent soil loss from the site as a result of activities undertaken as part of the development.
- 4.6 All erosion and sedimentation controls required as part of this consent must be put in place prior to the commencement of construction and must be maintained at or above design capacity for the duration of the construction works, and until such time as all ground disturbed by the construction works, has been stabilised and rehabilitated so that it no longer acts as a source of sediment.
- 4.7 Prior to the commencement of construction, the Applicant must provide documentary evidence to, and to the satisfaction of, the PCA confirming that all erosion and sedimentation controls are in place.
- 4.8 All construction vehicles exiting the site, having had access to unpaved areas, must depart via a “shake down” area that is installed to the satisfaction of Council.

Note: Council has indicated that a “shake down” area 10 metres long, 3 metres wide, constructed of 50mm diameter crushed rock or similar and located immediately before the intersection with the road reserve, would be acceptable.

Surface Water

- 4.9 The construction and operation of the development must not concentrate or lead to an increase in the volume or rate of flow of stormwater discharged from the site over and above the pre-development flow conditions.
- 4.10 The Applicant must design, construct, operate and maintain all stormwater infrastructure to direct all stormwater runoff to the site’s borrow pit prior to discharge from the site. Such stormwater infrastructure must be capable of collecting, containing and treating all stormwater for at least a one in three month ARI storm peak flow and must be constructed prior to the commencement of any building work.

⁹ Incorporates an EPA General Term of Approval (L4.1)

- 4.11 Notwithstanding condition 4.10, the Applicant may capture and store roof water for use at the development site.
- 4.12 Where stormwater discharge from the site is proposed in any location other than existing drainage lines, the Applicant must create or have created any easements over the downstream connection point(s) such that the stormwater can legally be drained off-site.

Flood Impacts

- 4.13 The Applicant must design, construct, operate and manage the development to ensure that the flood protection measures for the main aquaculture development site (including the perimeter walls) are capable of excluding up to and including a 1 in 100 year ARI flood event. In this regard, an impervious perimeter bund around the main aquaculture development site is to be constructed to a height of 4.0m AHD.

Note: For the purposes of this condition, “main aquaculture development site” refers to the area of approximately 45 hectares on which Farms 1 to 3 will be located on part Lot 1 DP267742 and part Lot 706 DP1000580.

- 4.14 The Applicant must design, construct, operate and manage the site to ensure that the flood management system at the site is consistent with the objectives and guidelines of the New South Wales Government publication *Floodplain Management Manual: the management of flood liable land (2001)*.
- 4.15 The area inside the perimeter bund is to be protected by appropriate floodgates or flaps on stormwater conduits that penetrate the bund wall.
- 4.16 The perimeter bund wall is to be landscaped to minimise or prevent erosion. Such landscaping must be in accordance with the approved landscape management plan, as required under condition 8.5 b).

Groundwater

- 4.17 ¹⁰Within two months after the works described under condition 1.8 are completed, the Applicant must submit a plan to the Grafton office of the Department identifying the location of the bores.
- 4.18 ¹¹All drilling and bore construction must be undertaken by a person(s) with a relevant New South Wales class licence.
- 4.19 ¹²Water must not be extracted from Dreamtime Beach for any purpose other than dewatering for construction purposes and must not exceed a total volume of 20 megalitres, or as otherwise approved by the Department.

Note: The Department has the authority to vary the volumetric allocation or the rate at which the allocation is taken in order to prevent the overuse of an aquifer.

- 4.20 ¹³The use of groundwater is conditional on the basis that no tailwater drainage is discharged into or onto any: adjoining public or Crown road; adjacent property not owned by the Applicant; Crown land; watercourse; groundwater aquifer; area of native vegetation; or wetland, unless a **Groundwater Discharge Management Plan** for works at Dreamtime Beach has been prepared, and submitted for the approval of the Director-General, that

¹⁰ Incorporates a General Term of Approval for a licence under the *Water Act 1912*

¹¹ Incorporates a General Term of Approval for a licence under the *Water Act 1912*

¹² Incorporates a General Term of Approval for a licence under the *Water Act 1912*

¹³ Incorporates a General Term of Approval for a licence under the *Water Act 1912*

permits the discharge of water on to this land. Construction work at Dreamtime Beach must not commence until written approval has been received from the Director-General.

- 4.21 ¹⁴Prior to the issue of a water licence under Part V of the *Water Act 1912*, the Applicant must submit for the approval of the Director-General, a **Hydrogeological Assessment Report**, prepared by a qualified groundwater consultant, that addresses the following matters:
- a) details of the extent of the cone of depression due to the dewatering of the excavation to the desired depth, with all parameters provided for review. If the determined area is seen to extend beyond the development site boundaries, the Applicant may be required to install restrictive “curtains” or similar, to reduce groundwater drawdown in the local vicinity;
 - b) details of the depth of the required dewatering level as well as the depth of the base of the excavation, relative to the surface level;
 - c) details and justification of the proposed dewatering pumping rate; and
 - d) identification of the predicted total volume (in megalitres) of groundwater to be extracted.
- 4.22 The Applicant must design, construct, operate and maintain all seawater storage ponds on site with the internal surfaces of the ponds equivalent to, or better than, a clay liner of permeability $1 \times 10^{-9} \text{ ms}^{-1}$ or less and a thickness of no less than 900mm, or as otherwise agreed to by the Department.

Infrastructure for Seawater Supply

- 4.23 The Applicant must, throughout the life of the development, implement a system that is capable of detecting any leaks from the seawater storage infrastructure or along the seawater supply route. Should such a system identify a leak, the Applicant must undertake all necessary measures to repair the infrastructure and stop the leak.
- 4.24 Detailed engineering plans of the pipelines and associated pumping facilities located on Council controlled land must be submitted to Council prior to commencement of construction of those facilities.
- 4.25 Prior to the commencement of construction within Crown Reserve 1001008, the Applicant is to prepare and implement a Site Management Strategy for Crown Reserve 1001008 to identify management actions to be undertaken in the event of damage to infrastructure associated with the development as a result of coastal erosion and other coastal processes. The Management Strategy should include, but not necessarily be limited to:
- a) description of the procedures/ timing for the installation, ongoing inspections and maintenance of the seawater infrastructure;
 - b) description of emergency procedures to be undertaken in the event any infrastructure is damaged, including a list of people to be notified;
 - c) description of procedures/ timing for the urgent rehabilitation/ reinstatement of the infrastructure and removal of associated debris from the surrounding seabed and beach;
 - d) details of a program to notify the public during times of maintenance and repair; and
 - e) details of any temporary infrastructure, such as truck-mounted pumps, to be used to ensure a continuous supply of seawater to the main aquaculture facility with a demonstration that any such infrastructure would comply with the EPA's *Industrial Noise Policy*, as may be relevant.

The Management Strategy is to be submitted for the approval of the Department's Coastal Unit, in consultation with the Department of Lands and Council's Reserve Trust Manager. Works must not commence until written approval has been received.

¹⁴ Incorporates a General Term of Approval for a licence under the *Water Act 1912*

Traffic and Transport

- 4.26 The Applicant shall undertake all works affecting any public road, its associated road reserve and any public infrastructure in that road reserve, to meet any reasonable requirements that may be specified by Council.
- 4.27 Notification of intention to undertake work within the public road reserve is to be received by Council's Engineering Services Division at least forty eight (48) hours prior to the commencement of such work. Where work within the public road reserve is to occur on more than one occasion, notification must be provided to Council at least forty eight (48) hours prior to the commencement of each event.

Carparking

- 4.28 The carpark design must comply with *AS2890.1 1993 Off-Street Car Parking* and Council's *DCP2 Site Access and Parking Code* in terms of manoeuvrability, disabled access and visitor/ delivery car spaces.
- 4.29 The Applicant must take reasonable steps to ensure that the development does not interfere with other operations occurring in the vicinity of the site, notably, the cane pads located near the Melaleuca Station crossover and the site access point, otherwise an alternative hardstand area, or other suitable arrangement, must be provided, to the satisfaction of the Director-General.

Site Access, Internal Roads

- 4.30 All vehicles associated with the construction, operation and maintenance of the development may access and utilise the overpass bridge at the Tweed Valley Way interchange with the Pacific Highway as the vehicular access point to the development, subject to compliance with the conditions of this consent.
- 4.31 ¹⁵Prior the commencement of construction of Stage 1, the Applicant must demonstrate to the satisfaction of the Director-General, in consultation with the RTA, that the road pavement on Lot 51 DP 1056966 (Melaleuca Road) has been widened, sealed and delineated to the private property boundary, to provide a two lane/ two way road that is capable of accommodating all heavy vehicle turning paths.

Note: It is recognised that a similar condition has been placed on Tweed Shire Council as part of its access to the new Sewage Treatment Plant for Kingscliff. As such, it is a matter of timing as to who must pay for and undertake the works. Consideration must also be given to the existing cane pad operations and safety issues.

- 4.32 ¹⁶The Applicant must manage the connection point of the site to Lot 51 DP 1056966 (Melaleuca Road) in a manner that prevents any through public road connection for the public or any other person and/ or vehicle not associated with the development. Details of the management measures are to be detailed in the Traffic Code of Conduct for the development required under condition 8.5 b).
- 4.33 Notwithstanding condition 4.32, the Applicant may permit Council to access Lot 2 DP 611021 via Melaleuca Road and the site, only during construction of the new Sewage Treatment Plant that is to be located on Lot 2 DP 611021, in accordance with the provisions of the RTA's licence (Special Conditions) with Council.

¹⁵ Incorporates a RTA General Term of Approval under section 138 of the *Roads Act 1993*

¹⁶ Incorporates a RTA General Term of Approval under section 138 of the *Roads Act 1993*

- 4.34 ¹⁷All vehicles associated with the construction and operation of the development must not access the site at any time from the north via a left turn from Tweed Valley Way into Melaleuca Road unless either:
- a) a Traffic Management Plan is in place (that has been approved by the RTA) that details measures to be undertaken to protect decelerating vehicles turning left into Lot 51 DP 1056966 (Melaleuca Road) from collisions with southbound through traffic; or
 - b) the junction of the Tweed Valley Way off-ramp and formed pavement on Lot 51 DP 1056966 (Melaleuca Road) has been upgraded to a southbound left-turn deceleration lane into Melaleuca Road that is to an AUSTROADS Type 'B' left turn treatment, designed to 80km/h standard, to the satisfaction of the RTA.

Note: The RTA has indicated that it will undertake regular audits of the Traffic Management Plan referred to under condition 4.34 a), at the Applicant's expense, to ensure it remains relevant.

- 4.35 ¹⁸Where the Traffic Management Plan referred to under condition 4.34 a) has first been implemented but subsequently, the works referred to under condition 4.34 b) are to be undertaken, the Traffic Management Plan must remain in place until such time as all road works required under condition 4.34 b) are completed to the satisfaction of the RTA. Following completion of the road works, the Traffic Management Plan referred to under condition 4.34 a) shall no longer be required.

- 4.36 ¹⁹All vehicles greater than 9 metres in length that are associated with the construction and operation of the development must not exit the site and subsequently undertake a U-turn manoeuvre on the Tweed Valley Way crossover at Melaleuca Station to head north unless either:
- a) a Traffic Management Plan is in place (that has been approved by the RTA) that details measures to be undertaken to manage U-turning vehicles; or
 - b) the existing at grade crossover on the Tweed Valley Way at Melaleuca Station has been upgraded to accommodate heavy vehicle usage, including the construction of a U-turn bay and an acceleration lane that is to AUSTROADS standards, to the satisfaction of the RTA.

Note: The RTA has indicated that it will undertake regular audits of the Traffic Management Plan referred to under condition 4.36 a), at the Applicant's expense, to ensure it remains relevant.

- 4.37 ²⁰Where the Traffic Management Plan referred to under condition 4.36 a) has first been implemented, but subsequently the works referred to under condition 4.36 b) are to be undertaken, the Traffic Management Plan must remain in place until such time as all road works required under condition 4.36 b) are completed to the satisfaction of the RTA. Following completion of the road works, the Traffic Management Plan referred to under condition 4.36 a) shall no longer be required.

- 4.38 ²¹All road works required under this consent are to be at no cost to the RTA.

Note: The RTA has indicated that the approval of road works will require the execution of a Major Works Authorisation Deed with the RTA. This is to cover current legislative, environmental and construction requirements.

¹⁷ Incorporates a RTA General Term of Approval under section 138 of the *Roads Act 1993*

¹⁸ Incorporates a RTA General Term of Approval under section 138 of the *Roads Act 1993*

¹⁹ Incorporates a RTA General Term of Approval under section 138 of the *Roads Act 1993*

²⁰ Incorporates a RTA General Term of Approval under section 138 of the *Roads Act 1993*

²¹ Incorporates a RTA General Term of Approval under section 138 of the *Roads Act 1993*

Soil Quality

- 4.39 Any fill material brought to site must be Virgin Excavated Natural Material (VENM).
- 4.40 All cut or fill on the site must be battered at an angle not greater than 45° within the development site, stabilised to the satisfaction of the PCA and provided with a dish drain or similar at the base, or otherwise retained to the satisfaction of the PCA. All retaining works must be completed to the satisfaction of the PCA prior to the commencement of any building work, or as otherwise agreed with the PCA.

Note: All cut or fill must comply with Council's Development Control Plan 47.
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- 4.41 Prior to the commencement of any building work on site, a certificate signed by a registered professional engineer is to be submitted to the PCA to certify that adequate consolidation of foundation material has been achieved to support all structures on site.

Acid Sulfate Soils

- 4.42 Prior to the commencement of any works that will disturb the soils/ sediments at the site (including along the pipeline route), the Applicant must undertake acid sulfate soil (ASS) testing at those areas of the site. ASS testing must be consistent with the NSW State Government's *Acid Sulfate Soils Manual* (ASSMAC 1998), or as otherwise approved by the Department. All results of testing for acid sulfate soils must be submitted to the Director-General.
- 4.43 ²²The Applicant must prepare and implement an **Acid Sulfate Soils (ASS) Management Plan**. This Plan must detail measures to be implemented in relation to the management and handling of any acid sulfate soils identified as a result of the tests required as part of the above condition. The Plan must be prepared in accordance with the NSW State Government's *Acid Sulfate Soils Manual* (ASSMAC 1998). The Plan must be submitted for the approval of the Director-General prior to the commencement of those works, or as otherwise agreed with the Director-General.

Air Quality Impacts

Odour

- 4.44 The Applicant must not cause or permit the emission of offensive odours beyond the boundary of the site. For the purposes of this condition, "offensive odour" has the same meaning as defined under section 129 of the *Protection of the Environment Operations Act 1997*.
- 4.45 ²³The Applicant must ensure that there is adequate refrigerated storage available on site at all times for the storage of feedstock and, prior to its disposal, any putrescible waste generated as a result of the operation of the development in order to prevent the emission of offensive odours from the site.
- 4.46 All rearing, feed preparation and processing activities must be carried out within enclosed structures.
- 4.47 The Applicant must implement a program detailing measures to be undertaken for the management and minimisation of odour generation at the site. The program should include procedures for the monitoring of odour emissions and measures to be undertaken if any non-compliance is detected.

²² Incorporates a General Term of Approval for a licence under the *Water Act 1912*

²³ Incorporates an EPA General Term of Approval (O1.2)

Dust

- 4.48 ²⁴The Applicant must design, construct, operate and maintain the development in a manner that minimises or prevents the emission of airborne pollutants (such as dust) from the site, including wind-blown and traffic-generated dust.
- 4.49 All trafficable areas and vehicles manoeuvring on the site must be maintained in a condition that will minimise the generation or emission of wind blown or traffic generated dust from the site at all times.
- 4.50 During construction, the Applicant must ensure that a water cart is available or water sprays installed at the site at all times for the suppression of dust, as may be necessary.

Noise Impacts

- 4.51 ²⁵Construction activities associated with the development, including the arrival and departure of vehicles delivering or removing materials from the site, must only be carried out between the hours of:
- a) 0700 and 1800, Monday to Friday;
 - b) 0800 and 1300 on Saturdays; and
 - c) at no time on a Sunday or Public Holiday.
- 4.52 ²⁶All construction works undertaken on site (including pipeline and pumping station construction, excavation of the borrow pit and placement of fill) must be undertaken in accordance with the EPA's *Environmental Noise Control Manual* and must not give rise to an 'offensive noise' as defined under the *Protection of the Environment Operations Act 1997* and accompanying Regulations.
- 4.53 Operation activities associated with the development, including the arrival and departure of vehicles delivering or removing products from the site, may be undertaken twenty four (24) hours a day, seven (7) days a week provided the noise contribution limits comply with the EPA's *Industrial Noise Policy*.
- 4.54 ²⁷The Applicant must submit detailed designs of the seawater pumping station located at Dreamtime Beach with any Environment Protection Licence application. The design must provide confirmation of the predicted noise levels from the pumping station and how it will comply with the EPA's *Industrial Noise Policy*.
- 4.55 ²⁸The operation of the development (including operation of the pipeline and pumping station) must be undertaken in accordance with the EPA's *Industrial Noise Policy* and must not give rise to an 'offensive noise' as defined under the *Protection of the Environment Operations Act 1997* and accompanying Regulations.
- 4.56 During construction and operation, the Applicant must minimise noise emissions from plant and equipment operated on the site in relation to the development by installing and maintaining, wherever practicable, efficient silencers, low-noise mufflers (residential standard) and replacement of reversing alarms on vehicles with alternative silent measures, such as flashing lights.

Waste Generation and Management

- 4.57 ²⁹The Applicant must not cause, permit or allow any waste generated outside the site to be received at the site for storage, treatment, processing, reprocessing or disposal, or any

²⁴ Incorporates an EPA General Term of Approval (O2.1)

²⁵ Incorporates an EPA General Term of Approval (L6.1)

²⁶ Incorporates EPA General Terms of Approval (O5.2 and O5.3)

²⁷ Incorporates an EPA General Term of Approval (O5.1)

²⁸ Incorporates EPA General Terms of Approval (O5.4 and L6.1)

²⁹ Incorporates an EPA General Term of Approval (L5.1)

waste generated at the site to be disposed of at the site, except as expressly permitted by a licence issued under the *Protection of the Environment Operations Act 1997*.

- 4.58 All wastes generated on site during construction and operation of the development must be classified in accordance with the EPA's publication *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes* and disposed of to a facility that may lawfully accept the waste.
- 4.59 ³⁰Notwithstanding condition 4.58, the disposal of dead and/ or diseased fish is to be undertaken in accordance with the requirements of the Department of Primary Industries.

Trade Waste

- 4.60 Prior to the issue of a Construction Certificate for the discharge of effluent to Council's sewerage system, the Applicant must enter into a trade waste agreement with Council.

To obtain such an agreement, the Applicant must submit to Council an application for a Trade Waste Licence that is to be approved by Council and, where necessary, concurrence obtained from the Department. Supporting information to the application must include but is not limited to the provision of detailed hydraulic plans indicating the size, type and location of pre-treatment devices. All plumbing and drainage installations to this device must comply with Australian Standard AS3500.

Note: A trade waste application fee will be applicable as per Council's Fees and Charges.
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Health Impacts

- 4.61 ³¹The Applicant must notify the Department of Primary Industries within 24 hours of the discovery of any disease declared under Division 4 or Part 6 of the *Fisheries Management Act 1994*, any unusual sign or symptom of disease, or any significant event associated with the welfare of the fish on the site.

Note: Diseases declared under the <i>Fisheries Management Act 1994</i> (Declared Disease) are reproduced in Attachment A of this consent. The Department of Primary Industries has identified a significant event as one where there has been a significant loss (mortality) of fish stocks of greater than 5% in a week, whether explained or otherwise.
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- 4.62 ³²Where any Declared Disease or any other disease exists, or is reasonably suspected of existing on the site, the Applicant must carry out any direction so ordered by the Director-General of Department of Primary Industries for the treatment or destruction of fish including quarantine of the site. Any such order must remain in effect until revoked by the Director-General of Department of Primary Industries in writing.
- 4.63 ³³The Applicant must not sell, give away, or otherwise supply or release into waterways, any fish if it is known or suspected to be infected with a Declared Disease. The Applicant must take all precaution as specified in writing by the Director-General of Department of Primary Industries to prevent the escape of fish or disease from the site.

Visual Amenity Impacts

- 4.64 The Applicant must prepare an external design panel indicating the proposed external design finishes, materials, with specific consideration of using low reflectivity finishes, and configuration for all buildings on site, in consultation with Council.

³⁰ Incorporates a Department of Primary Industries General Term of Approval (13b)

³¹ Incorporates a Department of Primary Industries General Term of Approval (21)

³² Incorporates a Department of Primary Industries General Term of Approval (22)

³³ Incorporates a Department of Primary Industries General Term of Approval (23)

- 4.65 The Applicant must ensure that all external lighting associated with the development is mounted, screened, and directed in such a manner so as not to create a nuisance to the surrounding environment, properties and roadway. The lighting must be the minimum level of illumination necessary and must comply with *AS 4282(INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting*.
- 4.66 During normal operation, the seawater intake pipeline and associated pumping facility at Dreamtime Beach must be sited below the substrate surface and must not be visible at any point.

Note: It is recognised that minimising the visual impact of the pipeline and pumping facility is of key importance, however, it is noted that at some times, particularly during maintenance periods, parts of the pipeline or pumping station may be visible.

Hazards and Risk Impacts

Bunding and Spill Management

- 4.67 The Applicant must store and handle all dangerous goods (as defined by the Australian Dangerous Goods Code) and combustible liquids, strictly in accordance with:
- a) all relevant Australian Standards;
 - b) a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and
 - c) the EPA's Environment Protection Manual Technical Bulletin *Bunding and Spill Management*.

In the event of an inconsistency between the requirements listed from a) to c) above, the most stringent requirement shall prevail to the extent of the inconsistency.

Flora and Fauna

- 4.68 ³⁴The Applicant must prevent the escapement of fish into waterways from the site covered by a permit issued under the *Fisheries Management Act 1994*.
- 4.69 Landscaped areas of the site must be kept clear of parked vehicles, stored goods, garbage and waste materials.
- 4.70 ³⁵The Applicant must prepare an **Alternate Feed Strategy** with an aim to investigate and pursue options for the use of alternative sources of feed, such as compounded feeds, to reduce the proportion of fishmeal and fresh fish used in the development. The Applicant must provide a report to the Department of Primary Industries and the Director-General within twelve months from the date of commencement of operation detailing the nature and results of such investigations and a timeframe for the implementation of such alternative sources.

5. ENVIRONMENTAL MONITORING AND AUDITING

Water Quality Monitoring

- 5.1 ³⁶The Applicant must undertake all water quality monitoring required under this development consent in accordance with the NSW EPA's *Approved Methods for the Sampling and Analysis of Water Pollution in NSW*.

³⁴ Incorporates a Department of Primary Industries General Term of Approval (13a)

³⁵ Incorporates a Department of Primary Industries General Term of Approval (special condition)

³⁶ Incorporates an EPA General Term of Approval (M4.1)

Discharge Concentration Monitoring

- 5.2 ³⁷During operation, for each monitoring point determined in accordance with condition 4.2 of this consent, the Applicant must take representative samples of the effluent prior to its discharge off-site and determine the concentration/ parameter specified in Table 2 below, by sampling and obtaining results by analysis. All pollutant concentrations/ parameters for each monitoring point must be determined concurrently, at the frequency indicated in the table, and using the units of measure specified, throughout the life of the development.

Table 2. Discharge Concentration Monitoring Requirements

Discharge/ Monitoring Point(s)	Pollutant/ Parameter	Units of Measure	Frequency	Sampling Method ^a
discharge point(s) determined under condition 4.2	BOD	mg/L	Monthly	Grab sample
	TSS	mg/L	Monthly	Grab sample
	TP	mg/L	Monthly	Grab sample
	TN	mg/L	Monthly	Grab sample
	Ammonia	mg/L	Monthly	Grab sample
	Oils and Grease	mg/L	Monthly	Grab sample
	Faecal Coliforms	cfu/100mL	Monthly	Grab sample
	pH	-	Monthly	In-situ
	Salinity	ppt	Monthly	In-situ

a – NSW EPA Approved Methods for the Sampling and Analysis of Water Pollution in NSW

- 5.3 ³⁸The Applicant must continuously monitor and record the volume of effluent discharged from the site on a daily basis (kL/ day).

Groundwater Monitoring

- 5.4 ³⁹A **Groundwater Monitoring Program** must be prepared by a qualified groundwater consultant and implemented to monitor the effects of the development on groundwater during construction and operation. The Program must be prepared in consultation with the Department and must include, but not necessarily be limited to:
- locations of monitoring bores, that include locations that are in close proximity to the saltwater storage tanks at the site;
 - parameters/ pollutants to be monitored, including procedures and protocols for sampling and testing;
 - a program for periodic monitoring of groundwater quality, at a frequency of no less than once every 12 months;
 - details of at least one background survey to establish groundwater quality prior to the commencement of operation of the development; and
 - details of groundwater quality limits that would indicate contamination from the development and a contingency plan in the event that contamination occurs.

Noise Monitoring

- 5.5 ⁴⁰Within 90 days of commissioning of the pumping station at Dreamtime Beach, and during a period in which the pumping station is operating under design loads and normal operating conditions, the Applicant must undertake a program to confirm the noise emission performance of the pumping station. The program must meet the requirements of the EPA, should there be any and must include, but not necessarily be limited to:

³⁷ Incorporates an EPA General Terms of Approval (M2.1)

³⁸ Incorporates an EPA General Term of Approval (M3.1)

³⁹ Incorporates a General Term of Approval for a licence under the *Water Act 1912*

⁴⁰ Incorporates an EPA General Term of Approval (O5.1)

- a) noise monitoring, consistent with the guidelines provided in the *New South Wales Industrial Noise Policy* (EPA, 2000) (INP) to determine compliance with the INP;
- b) a comparison of the results of the noise monitoring required under a) above; and
- c) details of any entries in the Complaints Register (condition 7.3 of this consent) relating to noise impacts.

A report providing the results of the program must be submitted to the Director-General within 28 days of completion of the testing required under part a).

- 5.6 In the event that a program undertaken to satisfy condition 5.5 of the consent indicates that the operation of the pumping station, under normal operating conditions, will lead to greater noise impacts than permitted under this consent, the Applicant must provide details of remedial measures to be implemented to reduce noise impacts to compliant levels.

Details of the remedial measures and a timetable for implementation must be submitted to the Director-General for approval within such period as the Director-General may require.

Independent Environmental Auditing

- 5.7 Within two years of the commencement of construction of the development, and then as may be directed by the Director-General, the Applicant must commission an independent person or team to undertake an Environmental Audit of the development. The independent person or team must be approved by the Director-General prior to the commencement of the Audit. The Audit must:
- a) be carried out in accordance with *ISO 19011:2002 - Guidelines for Quality and/ or Environmental Management Systems Auditing*;
 - b) assess compliance with the requirements of this consent, and other licences and approvals that apply to the development;
 - c) assess the environmental performance of the development against the predictions made and conclusions drawn in the documents referred to under condition 1.1 of this consent; and
 - d) review the effectiveness of the environmental management of the development, including any environmental impact mitigation works.

An **Environmental Audit Report** must be submitted for comment to the Director-General, Council, the Department of Primary Industries and the EPA within two months of the completion of the Audit, detailing the findings and recommendations of the Audit and including a detailed response from the Applicant to any of the recommendations contained in the Report.

The Director-General may, having considered any submissions made by Council, the Department of Primary Industries and the EPA in response to the Report, require the Applicant to undertake works to address the findings or recommendations presented in the Report. Any such works must be completed within such time as the Director-General may require.

6. UTILITIES AND PUBLIC WORKS

- 6.1 The Applicant must identify (including, but not limited to the position and level of service) all public utility services on the site, roadway, nature strip, footpath, public reserve or any public areas that are associated with, and/or adjacent to the site, and/or are likely to be affected by any activity associated with the development.
- 6.2 The Applicant must consult with the relevant provider of the utilities identified in condition 6.1 and make arrangements to adjust and/or relocate their services as required. The cost of any such adjustment and/or relocation of services must be borne by the Applicant.

- 6.3 An application to connect to Council's sewer, together with any prescribed fees, including inspection fees, is to be submitted to and approved by Council prior to the commencement of any building works on site. The application is to be accompanied by hydraulic drawings on the sewer drainage systems including pipe sizes, details of materials and discharge temperatures.
- 6.4 Prior to the issuing of a final occupation certificate for the development, the Applicant must provide documentary evidence from the utility providers identified in condition 6.1, to the PCA and Tweed Shire Council, confirming that their requirements have been satisfied.
- 6.5 Any damage caused to public infrastructure as a result of the development must be repaired to the satisfaction of Council, or relevant utility provider and within such period as specified by the Council, or relevant utility provider.

7. COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT

- 7.1 Subject to confidentiality, the Applicant must make all documents required under this consent available for public inspection on request.

Complaints Procedure

- 7.2 Prior to the commencement of construction of the development, the Applicant must ensure that the following are available for community complaints:
- a) a 24-hour telephone number on which complaints about the development may be registered;
 - b) a postal address to which written complaints may be sent; and
 - c) an email address to which electronic complaints may be transmitted, should the Applicant have e-mail capabilities.

The telephone number, the postal address and the e-mail address must be advertised in a newspaper circulating in the locality on at least one occasion prior to the commencement of construction of each stage of the development. These details must also be displayed on a sign near the entrance to the site, in a position that is clearly visible to the public and on the Applicant's internet site, should one exist. The telephone number, the postal address and the email address must be maintained throughout the life of the development.

- 7.3 The Applicant must record details of all complaints received through the means listed under condition 7.2 of this consent in an up-to-date Complaints Register. The Register must record, but not necessarily be limited to:
- a) the date and time, where relevant, of the complaint;
 - b) the means by which the complaint was made (telephone, mail or email);
 - c) any personal details of the complainant that were provided, or if no details were provided, a note to that effect;
 - d) the nature of the complaint;
 - e) any action(s) taken by the Applicant in relation to the complaint, including any follow-up contact with the complainant; and
 - f) if no action was taken by the Applicant in relation to the complaint, the reason(s) why no action was taken.

The Complaints Register must be made available for inspection by the Director-General upon request.

8. ENVIRONMENTAL MANAGEMENT

Environmental Representative

- 8.1 Prior to the commencement of construction of the development, the Applicant must nominate a suitably qualified and experienced Environmental Representative(s) whose appointment is to receive prior approval of the Director-General. The Applicant must employ the Environmental Representative(s) throughout the life of the development. The Environmental Representative must be:
- a) the primary contact point in relation to the environmental performance of the development;
 - b) responsible for all Management Plans and Monitoring Programs required under this consent;
 - c) responsible for considering and advising on matters specified in the conditions of this consent, and all other licences and approvals related to the environmental performance and impacts of the development;
 - d) responsible for receiving and responding to complaints in accordance with condition 7.2 of this consent; and
 - e) given the authority and independence to require reasonable steps be taken to avoid or minimise unintended or adverse environmental impacts, and failing the effectiveness of such steps, to direct that relevant actions be ceased immediately should an adverse impact on the environment be likely to occur.

The Applicant must notify and seek the approval of the Director-General of any changes to that appointment that may occur from time to time.

Construction Environmental Management Plan (CEMP)

- 8.2 The Applicant must prepare and implement a **Construction Environmental Management Plan** to outline environmental management practices and procedures to be followed during the construction of each stage of the development. The Plan must include, but not necessarily be limited to:
- a) a description of all activities to be undertaken on the site during construction, including an indication of the duration of each of the activities and any coordination of such activities and an indication of stages of construction, where relevant. Particular consideration should be given to the timing of the construction of the underground pipelines;
 - b) statutory and other obligations that the Applicant is required to fulfil during construction of the development, including all approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies;
 - c) specific consideration of measures to address any requirements of the Department, Council, Department of Primary Industries and the EPA during construction;
 - d) details of how the environmental performance of the construction works will be monitored, and what actions will be taken to address identified adverse environmental impacts;
 - e) a description of the roles and responsibilities for all relevant employees involved in the construction of the development;
 - f) details of a program to inform the public of the timing of construction of the pipeline and pumping station including any requirements for temporary restrictions/ diversions to areas etc.;
 - g) complaints handling procedures during construction and site preparation;
 - h) the relevant environmental monitoring requirements outlined under conditions 5.1 to 5.6 of the consent, inclusive; and
 - i) the Management Plans listed under condition 8.3 of this consent. The following environmental performance issues must also be addressed in the Plan:
 - i) measures to monitor and manage dust emissions.

The CEMP must be submitted for the approval of the Director-General no later than one month prior to the commencement of any site preparation and construction works associated with the development, or within such period as otherwise agreed by the Director-General. Notwithstanding, where construction work is to be undertaken in stages, the Applicant may, subject to the agreement of the Director-General, stage the submission of the CEMP consistent with the staging of activities relating to that work.

Site preparation and construction works associated with any stage of the development must not commence until written approval has been received from the Director-General for that stage. Upon receipt of the Director-General's approval, the Applicant must supply a copy of the CEMP to the Council, Department of Primary Industries and the EPA as soon as practicable.

8.3 As part of the CEMP for the development, required under condition 8.2 of this consent, the Applicant must prepare and implement the following Management Plans:

- a) ⁴¹an **Erosion and Sedimentation Control Management Plan** to detail measures to minimise erosion and the discharge of sediment and other pollutants to land and/ or water during site preparation and construction works associated with the development (including construction of the underground pipelines). The Plan must include, but not necessarily be limited to:
 - i) demonstration of best practice methods to be applied for the on-site control of run-off, sediments and other pollutants including specification of performance criteria for erosion, sediment and pollution control devices, including diversionary works, discharge points etc;
 - ii) demonstration that erosion and sediment control measures will conform with, or exceed, the relevant requirements of the Department of Housing's publication *Managing Urban Stormwater: Soils and Construction* (1998) and Council's *Tweed Urban Stormwater Quality Management Plan*;
 - iii) description of procedures to ensure that the measures implemented to control sediment and erosion on site, are maintained at or above design capacity at all times; and
 - iv) details of an erosion monitoring program during construction of the development, including measures to address erosion, should it occur, and to rehabilitate/ stabilise disturbed areas of the site.
- b) a **Noise Management Plan** to detail measures to minimise noise emissions associated with the construction of the development, particularly, the pipeline and Dreamtime Beach works. The Plan must include, but not necessarily be limited to:
 - i) identification of all major sources of noise that may be emitted as a result of the construction of the development;
 - ii) specification of the noise criteria as it applies to a particular activity;
 - iii) identification and implementation of best practice management techniques for minimisation of noise emissions;
 - iv) procedures for the monitoring of noise emissions; and
 - v) description of the procedures to be undertaken if any non-compliance is detected;
- c) a **Traffic Management Plan** to outline measures for the management and coordination of road works required under this consent and to minimise potential conflicts between different user groups. The Plan must be prepared in consultation with the RTA and Council and must include, but not necessarily be limited to:
 - i) details of measures to minimise interactions between the development and other users of the roads such as through the use of fencing, lights, barriers, traffic diversions etc.;
 - ii) procedures for informing the public where any road access will be restricted as a result of the development;

⁴¹ Incorporates an EPA General Term of Approval (O3.1)

- iii) where any works are required on or adjacent to public roads, parks or drainage reserves, a Traffic Control Plan providing details of all warning signs, lights, barriers etc. to be provided and maintained in accordance with AS 1742-1991 (Manual for Uniform Traffic Control Devices) and the RTA's Guideline *Traffic Control at Work Sites, Version 3.0*;
 - iv) details of traffic routes to be used by heavy vehicles associated with the development;
 - v) minimum requirements for vehicle maintenance to address noise and exhaust emissions, particularly along roads in close proximity to residences;
 - vi) speed limits to be observed along routes to and from the site and within the site; and
 - vii) details of the expected behavioural requirements for vehicles drivers travelling to and from the site and within the site.
- d) a **Waste Management Plan** to outline measures to manage and minimise resource consumption during construction of the development. The Plan must include, but not necessarily be limited to:
- i) identification of the types and quantities of waste that would be generated;
 - ii) description of measures and actions to be taken to minimise waste generated by the construction of the development; and
 - iii) description of how waste would be handled and stored during construction, and reused, recycled, and if necessary, appropriately treated and disposed of in accordance with the EPA guidelines *Assessment, Classification and Management of Liquid and Non-Liquid Waste*.

Operation Environmental Management Plan (OEMP)

8.4 The Applicant must prepare and implement an **Operation Environmental Management Plan** to detail an environmental management framework, practices and procedures to be followed during the operation of the development. The Plan must include, but not necessarily be limited to:

- a) identification of all statutory and other obligations that the Applicant is required to fulfil in relation to the operation of the development, including all consents, licences, approvals and consultations;
- b) a management organisational-chart identifying the roles and responsibilities for all relevant employees involved in the operation of the development;
- c) overall environmental policies and principles to be applied to the operation of the development;
- d) standards and performance measures to be applied to the development, and a means by which environmental performance can be periodically reviewed and improved, where appropriate;
- e) management policies to ensure that environmental performance goals are met and to comply with the conditions of this consent;
- f) the Management Plans listed under condition 8.5 of this consent; and
- g) the environmental monitoring requirements outlined under conditions 5.1 to 5.6 of this consent, inclusive.

The Plan must be submitted for the approval of the Director-General no later than one month prior to the commencement of operation of the development, or within such period as otherwise agreed by the Director-General. Operation must not commence until written approval has been received from the Director-General. Upon receipt of the Director-General's approval, the Applicant must supply a copy of the OEMP to the EPA, Council, and Department of Primary Industries as soon as practicable.

8.5 As part of the OEMP for the development, required under condition 8.4 of this consent, the Applicant must prepare and implement the following Management Plans and Programs:

- a) ⁴²a **Water Management Plan** to outline measures to control and manage surface water (including flooding, erosion and sedimentation), stormwater and effluent water associated with the operation of the development. The Plan must address the requirements of the EPA and Council, should there be any. The Plan must include, but not necessarily be limited to:

surface water, flooding, erosion and sedimentation management

- i) measures to be implemented to minimise the potential for erosion from the site during the operation of the development and measures to maintain all erosion mitigating works at, or above design capacity;
- ii) demonstration that erosion and sedimentation control measures will conform with, or exceed, the relevant requirements and guidelines provided in the Department's publication *Urban Erosion and Sedimentation Handbook*, the EPA's publication *Pollution Control Manual for Urban Stormwater*, and the Department of Housing's publication *Soil and Water Management for Urban Development*;
- iii) measures to rehabilitate erosion-affected areas and areas the subject of excavation, including tree and shrub species and implementation;
- iv) details of the flood mitigation infrastructure at the site; and
- v) measures to be implemented to minimise the impact of flooding on and in the vicinity of the development site.

stormwater management

- i) detailed plan showing the design of the stormwater management system, with an emphasis on water sensitive design practices such as porous pavements, rainwater tanks etc.;
- ii) demonstration that the proposed stormwater system would not reduce the existing capacity for neighbouring property's to discharge runoff from their properties;
- iii) description of the procedures for the installation, inspection and maintenance of the stormwater control infrastructure;
- iv) demonstration that the stormwater control infrastructure will conform with, or exceed all relevant requirements and guidelines within Council's *Tweed Urban Stormwater Quality Management Plan*, particularly sections 5.5.3 to 5.5.5; and
- v) description of the procedures for planting and maintaining vegetation along stormwater channels and detention systems, to minimise the potential for erosion.

process and effluent water management

- i) details of the location, size, storage capacity etc. of all rainwater storage tanks, including methods for preventing contamination;
- ii) identification of all sources of nutrients and suspended solids brought into the tanks during operation of the development;
- iii) details of all process water and effluent water treatment systems for the development, including discharge points, effluent treatment ponds, procedures for maintenance of the systems and water quality monitoring regimes;
- iv) specification of the water quality criteria as it applies to a particular activity;
- v) procedures to be undertaken to monitor, manage and minimise the load of nutrients and suspended solids in the water column, particularly prior to discharge of the effluent water (for example, through feeding rates, aeration of tanks, use of denitrification units etc.);
- vi) measures to consider minimising the consumption of water through water capture, reuse and recycling;
- vii) details of how effluent discharged from the site will be managed such that when mixed with water at the Sewage Treatment Plant it is capable of achieving salinity

⁴² Incorporates EPA General Term of Approval (O4.1, O5.3 and O5.4)

- levels consistent with the ANZECC Guidelines for Fresh and Marine Water Quality (2000);
- viii) details of how the temperature of the effluent stream will be managed to minimise potential thermal pollution impacts on the Tweed River, and ensure a temperature outcome consistent with the ANZECC Guidelines for Fresh and Marine Water Quality (2000); and
 - ix) a contingency plan should monitoring of water quality indicate that the development has had or is having an adverse effect on water quality, including outside the development site.
- b) a **Transport Code of Conduct** to outline measures to manage traffic conflicts associated with the operation of the development. The Code shall include, but not necessarily be limited to:
- i) details of traffic routes to be used by vehicles associated with the development and how this would be managed;
 - ii) measures to restrict through access from Melaleuca Road to lots east of the development site for the public or any other person and/ or vehicle not associated with the development, in accordance with condition 4.32;
 - iii) minimum requirements for vehicle maintenance to address noise and exhaust emissions, particularly along roads in close proximity to residences;
 - iv) details of the expected behavioural requirements for vehicles drivers travelling to and from the site and within the site; and
 - v) speed limits to be observed along routes to and from the site and within the site.
- c) a **Landscape Management Plan** to outline measures to ensure appropriate development and maintenance of landscaping on the site. The Plan should be prepared by a landscape architect and meet the requirements of Council, should there be any. The Plan must include, but not necessarily be limited to:
- i) details of landscaping to be undertaken at the site;
 - ii) maximisation of use of flora species that are native to the locality in landscaping the site, with particular emphasis on plants with low maintenance requirements;
 - iii) a program for the removal of weeds at the site;
 - iv) a program to ensure that all landscaped areas on the site are maintained in a tidy, healthy state; and
 - v) details of all external lighting to be erected at the site.
- d) a **Disease Prevention Program** to detail measures to manage and minimise the risk of disease outbreaks on the farm. The Program must meet the requirements of the Department of Primary Industries, should there be any. The Program must include, but not necessarily be limited to:
- i) details of the frequency of water quality monitoring of the tanks, including testing of waters for pathogens;
 - ii) details on the routine for examining stock for signs of disease;
 - iii) measures to be undertaken for the isolation of diseased tanks;
 - iv) procedures for the disposal and/ or treatment of diseased stock and wastes; and
 - v) measures to be undertaken for the maintenance of the site in a clean and tidy state, at all times.
- e) a **Waste Management Plan** to outline measures to manage and minimise waste generated during operation of the development. The Plan must include, but not necessarily be limited to:
- i) identification of the types and quantities of waste that would be generated during operation;
 - ii) description of measures and actions to be taken to minimise waste generated during operation of the development; and
 - iii) description of how waste would be handled and stored during operation, and reused, recycled, and if necessary, appropriately treated and disposed of in accordance with the EPA guidelines *Assessment, Classification and Management of Liquid and Non-Liquid Waste*.

- 8.6 Within three years of the commencement of operation, and at least every three years thereafter, the Applicant must undertake a formal review of the Operation Environmental Management Plan (OEMP) required under condition 8.4 of this consent. The review must ensure that the OEMP is up-to-date and all changes to procedures and practices since the previous review have been fully incorporated into the OEMP. The Applicant must notify the Director-General, Council, Department of Primary Industries and the EPA of the completion of each review, and must supply a copy of the updated OEMP to those parties on request.

9. ENVIRONMENTAL REPORTING

Incident Reporting

- 9.1 The Applicant must notify the Director-General and any relevant Government authority of any incident with actual or potential significant off-site impacts on people or the biophysical environment as soon as practicable after the occurrence of the incident ("initial notification"). The Applicant must provide written details ("written report") of the incident to the Director-General and any relevant Government authority within seven days of the date on which the incident occurred.
- 9.2 The Applicant must meet the requirements of the Director-General to address the cause or impact of any incident, as it relates to this consent, reported in accordance with condition 9.1 of this consent, within such period as the Director-General may require.

Note: Condition 9.2 of this consent does not limit or preclude the EPA from requiring any action to address the cause or impact of any incident, in the context of the EPA's statutory role in relation to the development.

- 9.3 The Applicant must, throughout the life of the development, prepare and submit for the approval of the Director-General, an **Annual Environmental Management Report (AEMR)**. The AEMR must review the performance of the development against the Operation Environmental Management Plan (refer to condition 8.4 of this consent), the conditions of this consent and other licences and approvals relating to the development. The AEMR must include, but not necessarily be limited to:
- a) details of compliance with the conditions of this consent;
 - b) a copy of the Complaints Register (refer to condition 7.3 of this consent) for the preceding twelve-month period (exclusive of personal details), and details of how these complaints were addressed and resolved;
 - c) a comparison of the environmental impacts and performance of the development against the environmental impacts and performance predicted in those documents listed under condition 1.1 of this consent;
 - d) results of all environmental monitoring required under this consent and other approvals, including interpretations and discussion by a suitably qualified person;
 - e) a list of all occasions in the preceding twelve-month period when environmental performance goals for the development have not been achieved, indicating the reason for failure to meet the goals and the action taken to prevent recurrence of that type of incident;
 - f) identification of trends in monitoring data over the life of the development to date;
 - g) a list of variations obtained to approvals applicable to the development and to the site during the preceding twelve-month period; and;
 - h) environmental management targets and strategies for the following twelve-month period, taking into account identified trends in monitoring results.

- 9.4 The Applicant must submit a copy of the AEMR to the Director-General, the EPA, Department of Primary Industries and Council every year, with:
- a) the first AEMR to be submitted within twelve months of commencement of operation of the development;
 - b) the second and subsequent AEMRs to be submitted concurrently with the EPA's Annual Return; and
 - c) must be made available to the public upon request.
- 9.5 The Director-General may require the Applicant to address certain matters in relation to the environmental performance of the development, in response to review of the Annual Environmental Report and any comments received from the EPA, Department of Primary Industries and/or Council. Any action required to be undertaken must be completed within such period as the Director-General may agree.

Note: The AEMR does not aim to satisfy any requirement of the EPA with regard to any Annual Return, required under any licence issued for the development under the *Protection of the Environment Operations Act 1997*. It is noted, however, that the Applicant may consult with the Directors-General of the Department of Infrastructure, Planning and Natural Resources and the Department of Environment and Conservation with the aim of combining the reporting requirements of the AEMR and the Annual Return. These reporting requirements must only be combined with the agreement of both Directors-General.

APPENDIX A – DECLARED DISEASES

The following diseases are declared to be Class A diseases:

- a) in relation to finfish:
 - epizootic haematopoietic necrosis;
 - infectious haematopoietic necrosis;
 - viral haemorrhagic septicaemia;
 - bacterial kidney disease;
 - epizootic ulcerative syndrome;
 - infectious pancreatic necrosis;
 - *Aeromonas salmonicida* infection;
 - viral nervous necrosis;
 - yersiniosis; and
 - whirling disease;
- b) in relation to molluscs;
 - bonamiosis;
 - haplosporidiosis;
 - marteiliosis;
 - mikrocystosis;
 - perkiniosis; and
 - irodeviroses;
- c) in relation to crustaceans
 - baculoviral midgut gland necrosis;
 - crayfish plague;
 - infectious hypodermal and haematopoietic necrosis;
 - bacuovirus infection;
 - yellowhead disease;
 - white tail disease; and
 - white spot syndrome virus;

The following diseases are declared to be Class B diseases:

- Northern Pacific sea-star; and
- toxic dinoflagellates

Appendix B – Project Approval 08_0083



NSW GOVERNMENT
Department of Planning

**Industry & Mining
Major Project Assessment**
Phone: (02) 9228 6550
Fax: (02) 9228 6499
Email: ann-maree.carruthers@planning.nsw.gov.au
Room 304
23-33 Bridge Street
GPO Box 39
SYDNEY NSW 2001

Mr M Dalton
Managing Director
Australian Bay Lobster Producers Limited
42 Campbell St
BOWEN HILLS QLD 4006

Our Ref: 9036247

Dear Mr Dalton

**Australian Bay Lobster Aquaculture Project
Pipeline Amendment (08_0038)
Notice of Approval**

I am writing to advise you that on 15 December 2008, the Minister for Planning, the Hon Kristina Keneally, approved the project application (08_0038) for the amended pipeline route for the Australian Bay Lobster Aquaculture Project under Part 3A of the *Environmental Planning and Assessment Act 1979*.

I have enclosed a copy of the Minister's project approval, and you may view a copy of the Department's Assessment Report on the Department's website, under "Major Project Assessments/Notices of Determination" (www.planning.nsw.gov.au).

If you have any enquiries on this matter please contact Ann-Maree Carruthers on 9228 6550.

Yours sincerely

Chris Ritchie
**Manager – Industry
Major Development Assessment**

22/12/08

Project Approval

Section 75J of the *Environmental Planning and Assessment Act 1979*

I, the Minister for Planning, approve the project referred to in Schedule 1, subject to the conditions in Schedules 2 and 3.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.



The Hon Kristina Keneally MP
Minister for Planning

Sydney,

15 Dec.

2008

SCHEDULE 1

Application Number:	08_0083
Proponent:	Australian Bay Lobster Producers Pty Ltd
Approval Authority:	Minister for Planning
Land:	A 2 kilometre pipeline route commencing at the western boundary of Lot 20 DP 1082482 and ending at Chinderah Road (see Appendix 1)
Project:	Australian Bay Lobster Facility – Pipeline Amendment Project

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DEFINITIONS

BCA	Building Code of Australia
Australian Bay Lobster Aquaculture Facility	The construction and operation of an aquaculture facility for the commercial production of Morton Bay bugs and associated seawater supply works and infrastructure (DA-282-11-2004-i), determined by the Minister
Council	Tweed Shire Council
DECC	Department of Environment and Climate Change
Department	Department of Planning
Director-General	Director-General of Department of Planning, or delegate
DPI	Department of Primary Industries
DWE	Department of Water and Energy
EA	Environmental Assessment titled <i>Environmental Assessment of Amended Pipeline Route</i> prepared by MBR Environmental and dated August 2008
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
Minister	Minister for Planning, or delegate
Project	The development as described in the EA
Proponent	Australian Bay Lobster Producers, or its successors
Reasonable and Feasible	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements. Feasible relates to engineering considerations and what is practical to build
RTA	Roads and Traffic Authority
Site	The land referred to in Schedule 1
Statement of Commitments	The Proponent's commitments in Appendix 2.

**SCHEDULE 2:
ADMINISTRATIVE CONDITIONS**

Obligation to Minimise Harm to the Environment

1. The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the project.

Terms of Approval

2. The Proponent shall carry out the project generally in accordance with the:
 - (a) EA;
 - (b) statement of commitments; and
 - (c) conditions of this approval.
3. If there is any inconsistency between the above, the conditions of this approval shall prevail to the extent of the inconsistency.
4. The Proponent shall comply with any reasonable and feasible requirement/s of the Director-General arising from the Department's assessment of:
 - (a) any reports, plans, programs, strategies or correspondence that are submitted in accordance with this approval; and
 - (b) the implementation of any actions or measures contained in these reports, plans, programs, strategies or correspondence submitted by the Proponent.

Protection of Public Infrastructure

5. The Proponent shall:
 - (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and
 - (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.

Operation of Plant and Equipment

6. The Proponent shall ensure that all plant and equipment used on site is:
 - (a) maintained in a proper and efficient condition; and
 - (b) operated in a proper and efficient manner.

Management Plans/Monitoring Programs

7. With the approval of the Director-General, the Proponent may submit any management plan or monitoring program required by this approval on a progressive basis.
-

**SCHEDULE 3:
SPECIFIC ENVIRONMENTAL CONDITIONS**

CONSTRUCTION HOURS

8. Unless otherwise agreed with the Director-General, the Proponent shall comply with the construction hours in Table 1.

Table 1: Construction and Operation Hours for the Project

Activity	Day	Time
Construction	Monday – Friday	7am to 6pm
	Saturday	8am to 1pm
	Sunday and Public Holidays	Nil
Operation	All days	Any time

Notes:

- Construction activities may be conducted outside the hours in Table 1 provided that the activities are not audible at any residence beyond the boundary of the site; and
- Emergency work to avoid the loss of life, property and/or prevent environmental harm may be undertaken outside the hours in Table 1.

CONSTRUCTION MANAGEMENT PLAN

9. The Proponent shall prepare and implement a Construction Management Plan for the project to be approved by the Director-General prior to the commencement of construction. This plan must:
- (a) be submitted to the Director-General for approval at least one month prior to the commencement of construction;
 - (b) be prepared in consultation with Council;
 - (c) include:
 - a complaints management procedure, including:
 - i. contact details of the person who would be responsible for the environmental management of the project;
 - ii. procedures to keep the relevant agencies informed;
 - iii. procedures to receive, handle, respond to, resolve and report complaints; and
 - iv. procedures to respond to any non-compliance or emergency.
 - a dilapidation report of the public infrastructure in the vicinity of the site (including roads, gutters, footpaths, pipelines, drains etc);
 - a detailed Erosion and Sediment Control Plan for the construction works that complies with the requirements in Landcom's *Managing Urban Stormwater: Soils and Construction* guidelines; and
 - an Acid Sulfate Soils Management Plan that is consistent with the NSW State Government's *Acid Sulfate Soils Manual* (ASSMAC 1998) and includes measures to be implemented in relation to the management and handling of any acid sulfate soils identified during construction works.

SOIL AND WATER

10. Except as may be expressly provided in an Environment Protection Licence for the project, the Proponent shall comply with Section 120 of the *Protection of the Environment Operations Act 1997*.
11. The Proponent shall not disturb the beds of watercourses without approval from the DWE and the DPI.

DUST MANAGEMENT

12. The Proponent shall carry out all reasonable and feasible measures to minimise dust generated by the project.
13. During construction, the Proponent shall ensure that:
- (a) all trucks entering or leaving the site with loads have their loads covered;
 - (b) trucks associated with the project do not track dirt onto the public road network; and
 - (c) public roads used by these trucks are kept clean.

WASTE MANAGEMENT

14. The Proponent shall ensure that any waste generated on the site during construction is classified in accordance with the DECC's *Waste Classification Guidelines* and disposed of to a facility that may lawfully accept the waste.

ABORIGINAL AND CULTURAL HERITAGE

15. In the event that Aboriginal objects are uncovered during the course of the project, then work in the immediate areas shall cease, the Director-General and appropriate authorities shall be notified and expert archaeological advice must be sought from an appropriately qualified professional. Works may only commence in this area with the written approval of the Director-General.

Note: The appropriate authority is DECC and appropriate Aboriginal groups are the Tweed Byron Local Aboriginal Land Council.

OPERATIONAL MANAGEMENT

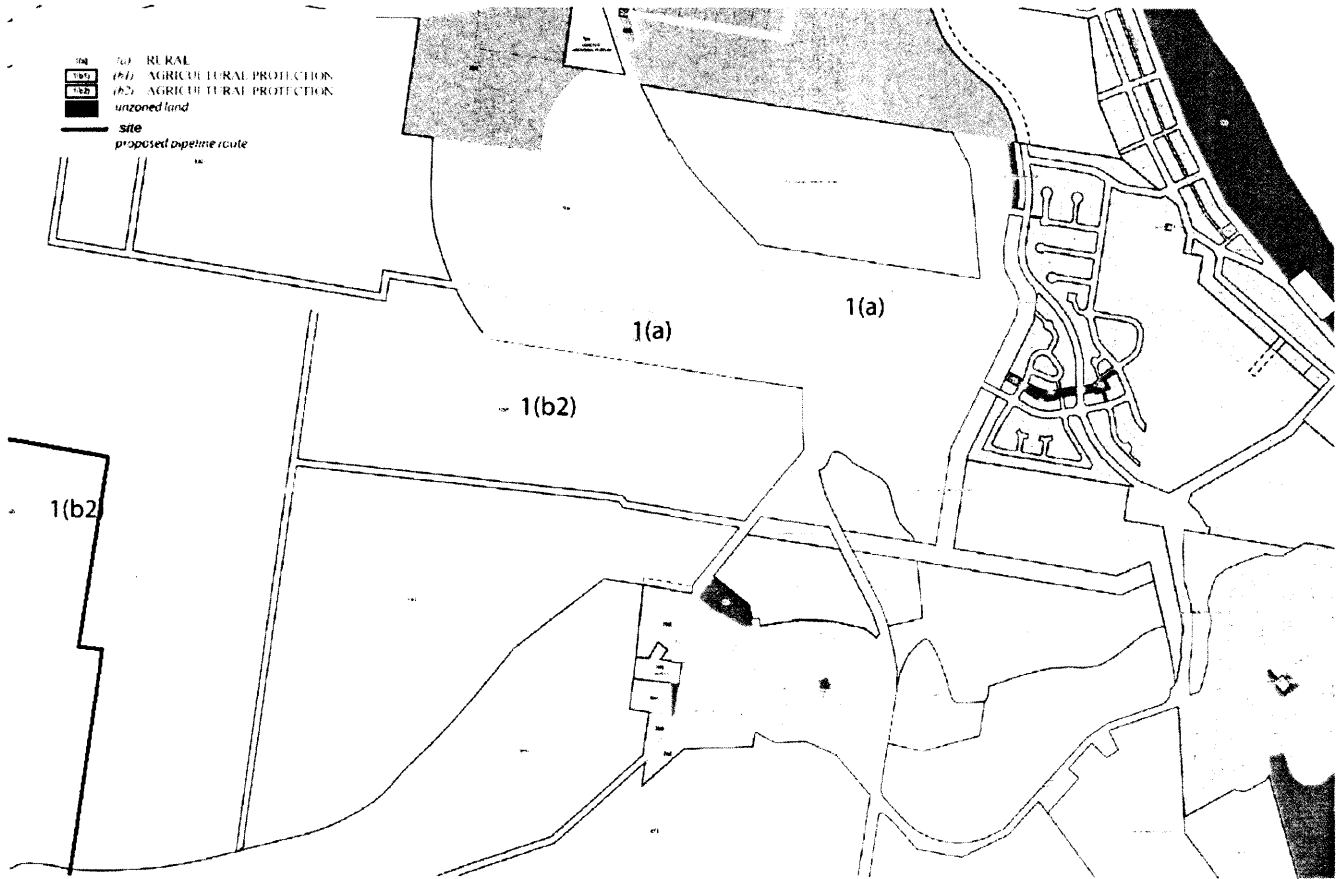
16. For the life of the project, the Proponent shall maintain the pipeline, ensuring that any leaks or maintenance issues are detected and repaired.

Note: The Proponent may integrate any pipeline maintenance works or program associated the Australian Bay Lobster aquaculture facility consent (DA-282-11-2004-1), for the purposes of satisfying this condition.

INCIDENT REPORTING

17. Within 7 days of detecting an exceedance of the limits/performance criteria in this approval or an incident causing (or threatening to cause) material harm to the environment, the Proponent shall report the exceedance/incident to the Department, and any other relevant agency. This report must:
 - (a) describe the date, time, and nature of the exceedance/incident;
 - (b) identify the cause (or likely cause) of the exceedance/incident;
 - (c) describe what action has been taken to date; and
 - (d) describe the proposed measures to address the exceedance/incident.
-

APPENDIX 1: PIPELINE ROUTE



**APPENDIX 2:
STATEMENT OF COMMITMENTS**

5 Statement of commitments

ABLP has developed a Construction Environmental Management Plan for Stage 1A of the development, an outline of which is included in Appendix D. This is intended as a living document to be updated prior to new stages and aspects of the overall development being undertaken or approved. This document will be updated to include the relevant aspects identified within this assessment, incorporating the following broad management concepts:

Erosion and Sediment Control

Control of erosion on the site and sediment loss from the site will be undertaken according to the requirements of Tweed Shire Council and in regards to Landcom's Managing Urban Stormwater: Soils and Construction (Landcom, 2004). The overall approach will be to:

- minimise the period of time erodible material is exposed;
- fit sediment fencing downslope of construction areas where sensitive environments or water bodies / drainage channels are in close proximity to works;
- ensure stockpiles are fitted with diversion channels / bunds upslope and sediment fencing downslope, and that they are covered or otherwise stabilised if in place for long periods of time.

Acid Sulfate Soils Management

The general approach will be to undertake, in discussions with Council, a testing regime along the proposed pipeline route and incorporating lime treatment into excavation works to avoid the necessity of treatment areas and soil movement off-site.

Noise Management

Noise management will entail limiting working hours and times, and ensuring vehicles, plant and machinery associated with the development are fitted with the required noise minimising equipment according to the NSW EPA's Environmental Noise Control Manual.

Vegetation Management

Prior to excavation and construction commencing, all approvals from relevant agencies will be obtained for the removal of vegetation if required. A vegetation management plan will include measures to identify vegetation that needs assessment for removal permits prior to clearing, including any removal or disturbance as part of waterway crossings.

Utilities Management

A management plan describing general actions to be undertaken for ground-truthing and locating of services (undertaken to the satisfaction of Council) will be developed to be implemented prior to excavation commencing. No go zones will be marked to avoid damage to existing utilities.

Waste Management

A waste management plan will include provisions for the collection and disposal of general waste from construction activities. This is expected to be minimal since the works will be progressing along the pipeline route rather than located in a single location. However, the management plan will detail provisions for reducing, reusing and recycling waste including appropriate waste classification as per the DECC's Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes.

General Environmental Management, Awareness and Review

The CEMP contains procedures for effective communication, reporting, review and oversight of development works including a risk assessment of impacts and aspects, legislative and permit requirements, contractor management and procedures for community consultation. Appendix D shows the table of contents for the CEMP which will be updated to include the relevant aspects of the pipeline construction process. The CEMP document is currently under review by the Department of Planning for approval for Stage 1A.

Operation of Pipeline

Operation of the pipeline route will involve minimal works other than pipeline, fitting and any pump station inspections and maintenance works where required (expected to be very minimal). Generally the pipe material is chosen to avoid replacement over 20-50 years and fittings such as valves, connections and junctions are easily accessed for these routine inspections.

6 Conclusion

For reasons outlined within this report, the need to carry out the proposed works is justified and is of a significant benefit, both to ABLP and to surrounding land owners. In addition, the proposed development can be demonstrably carried out without the creation of adverse impacts. The proposed aquaculture facility and associated pump stations and pipeline works will be complete with best practice environmental and operational safeguards and will be constructed and operated in accord with all relevant standards.

The modification of the pipeline route does not increase the impact on the social, biological or economic environment compared to the existing approved route and will result overall in a minimal environmental impact.

7 References

ASSMAC (1998). *NSW Acid Sulfate Soils Manual*. NSW Acid Sulfate Soils Management Advisory Committee, August 1998.

GHD (2002) *Environmental Impact Statement* for the Kingscliff Wastewater Treatment Plant.

Landcom (2004). *Managing Urban Stormwater, Soils and Construction* 4th Edition, March 2004.

Planit Consulting & Australian Fresh (2004) *Statement of Environmental Effects: Proposed Aquaculture Development & Water Supply Works. Prepared For Australian Bay Lobster Producers Pty Ltd* By Australian Fresh Research & Development Corporation Pty Ltd In Association With Planit Consulting Pty Ltd, 20 October 2004.

Appendix C – Plan Set

99' 23" 30"
FRONT BOUNDARY

TOP OF BUND
TOE OF BUND

BITUMEN

ENTRY WAY

ROAD

EXISTING GLASSHOUSE
'FARM 1' STAGE 1A

FUTURE GLASSHOUSE
'FARM 2' STAGE 2

PLANT
BUILDING

ANOLYTE
STORAGE TANK
HERE (1000
LITRE)

WASTEWATER
TREATMENT

PATHWAY

LABORATORY

WATER TREATMENT
LARVAL REARING

domestication/other
softshell unit
softshell water treat

PROCESSING

PATHWAY

PATHWAY

WATER TREATMENT
LARVAL REARING

WATER TREATMENT
NURSERY

GROW/OUT

PATHWAY

CONCRETE
APRON

SEAWATER
STORAGE

pipeline
termination pit

16M X 5M
MODULE
COVERED
AREA

OFFICE

WORKSHOP
DRY STORE

ABLUTION

STAFF

RAINWATER STORAGE

FUTURE GLASSHOUSE
'FARM 3' STAGE 3

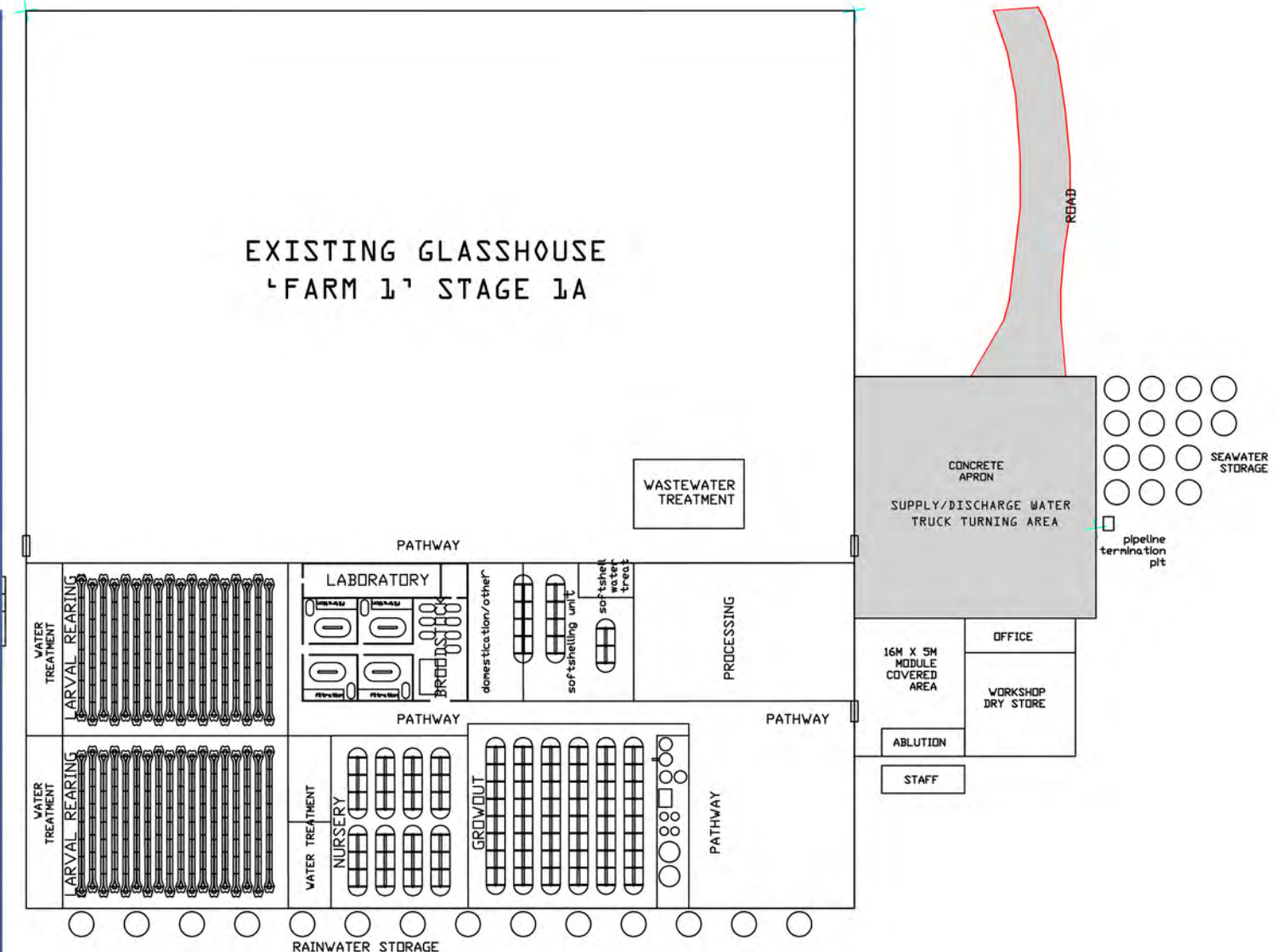
SITE PLAN
AUSTRALIAN BAY LOBSTER
PRODUCERS P/L
DA-282-11-2004-i
PACIFIC HIGHWAY, CHINDERAH NSW



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ROYAL BLUE LINE - SEAWATER SUPPLY ROUTE

SKY BLUE LINE - WASTEWATER DISCHARGE SUPPLY ROUTE

WATER SUPPLY AND DISCHARGE ROUTES
STAGES 1A and 1B
AUSTRALIAN BAY LOBSTER PRODUCERS P/L
DA-282-11-2004-1
PACIFIC HIGHWAY, CHINDERAH NSW

SCALE - NTS

DATE - JUNE 2013

DRAWN BY - BL



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