



NSW GOVERNMENT
Department of Planning

***MAJOR PROJECTS ASSESSMENT:
Tourist and Commercial Development at
No 76 & 84 Greenwell Point Road
Greenwell Point and Goodnight Island
Orama Crescent Orient Point
Proposed by Studio Internationale***

Director-General's
Environmental Assessment Report
Section 75I of the
Environmental Planning and Assessment Act 1979

October 2009



Visual montage of Goodnight Island from Greenwell Point

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EXECUTIVE SUMMARY

This is a report on a Project Application by Studio Internationale ("the Proponent") to carry out a Tourist and Commercial development at No 76 Greenwell Point Road, No 84 Greenwell Point Road Greenwell Point and Goodnight Island Orama Crescent, Orient Point (Lot 1 DP 1070720, Lot 3 DP 589201 & Lot 52 DP 223963) ("the proposal").

There have been several similar projects proposed for the Island since the mid 1980's, with the most recent being approved by the Council in 1991. This previous approval was never enacted and proposed development over a larger footprint and within more sensitive environments than the current proposal.

The current proposal includes the following components across the three (3) sites:-

- No 76 Greenwell Point Road - demolition of existing structures, construction of a three (3) storey building, separated into three distinct portions comprising twenty (20) serviced apartments, 93 car parking spaces and a retail area, café, resort reception and private gym
- No 84 Greenwell Point Road - Construction of a three (3) storey building, separated into three distinct portions comprising seven (7) apartments, 9 car spaces and 2 retail tenancies;
- Goodnight Island – construction of a main complex building including fifteen (15) suites (10 x 1 bed & 5 x 2 bed) and associated resort services, fifteen (15) self-contained Pavilions located around the northeast to southeast portion of the island, a five (5) bedroom villa, 9 berth marina, under bore for services, amphitheatre, helipad and associated access, infrastructure and recreational services.

The current proposal has been amended in several significant ways from the original application, including design changes, reduction in bulk, revised flooding and wastewater information and altered car parking and access arrangements. This amended proposal as set out in the Preferred Project Report resolves the concerns the Department and several agencies expressed in relation to the original proposal.

The current proposal involves rehabilitation to an Endangered Ecological Community, provides for an on-site wastewater system that will not adversely affect water quality within the Crookhaven River and will provide adequate infrastructure services. The estimated project cost of the development is \$25 million. The proposal will create 150 full time equivalent construction jobs and 60 full time equivalent operational jobs.

During the exhibition period, the Department received a total of 10 submissions from public authorities and 32 submissions from the public. Key issues considered in the Department's assessment included:

- | | |
|--|--------------------------------------|
| • Water cycle, Estuarine and Riparian Management | • Geotechnical Assessment |
| • Urban Design, Scenic Quality and Amenity | • Acoustic Amenity |
| • Ecological Impacts | • Hazard Management and Mitigation |
| • Infrastructure Provision | • Construction Management |
| • Flooding and Climate Change | • Cumulative impacts |
| • Traffic and Access | • Sustainability and Public Interest |
| • Heritage and Archaeology | • Statement of Commitments |
| • Structures below Mean High Water Mark | • Section 94 Contributions |

The Department has assessed the merits of the project and is satisfied that the impacts of the proposed development have been addressed via the Proponent's Statement of Commitments and the Department's recommended conditions of approval, and can be suitably mitigated and/or managed to ensure a satisfactory level of environmental performance.

On these grounds, the Department is satisfied that the site is suitable for the proposed development and that the project will provide environmental, social and economic benefits to the region. All statutory requirements have been met. The Department recommends that the project be **approved**, subject to conditions.

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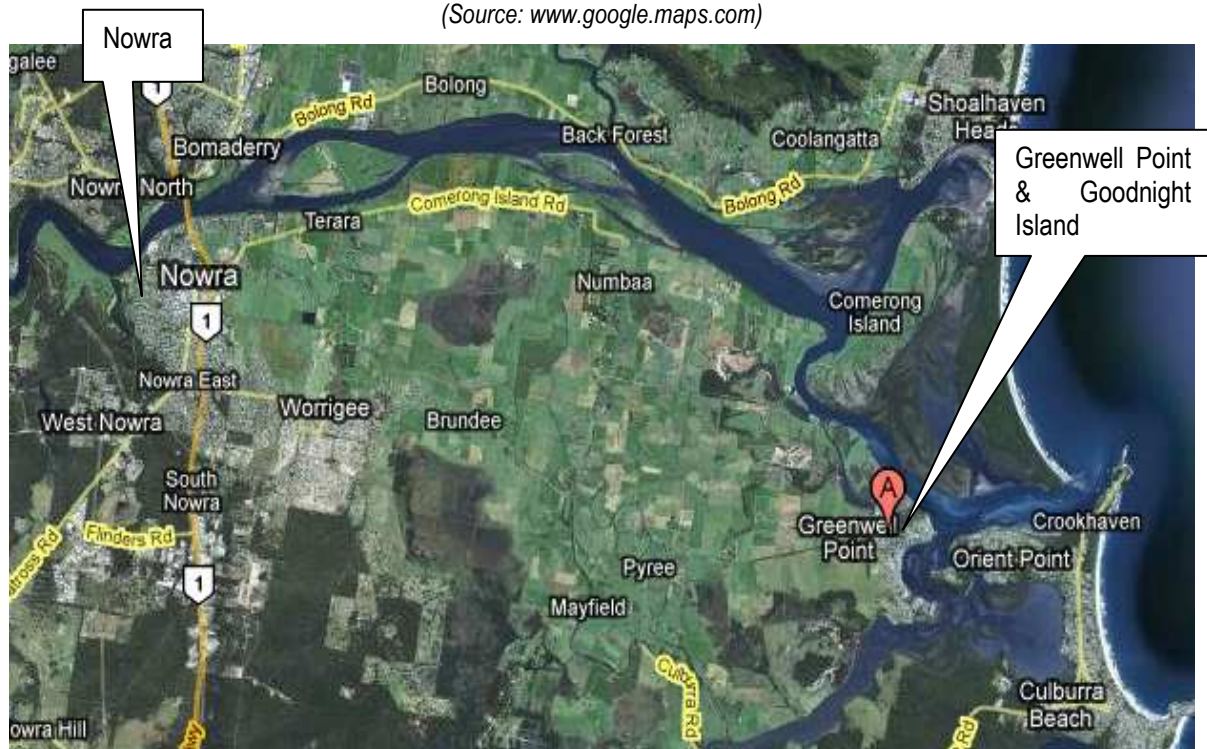
1 BACKGROUND

1.1 THE SITE

1.1.1 Site Context And Location

Greenwell Point is located approximately 170 kilometres south of Sydney and approximately 12 kilometres to the west of Nowra, one of three major regional centres on the south coast. Goodnight Island is approximately 500 metres east of Greenwell Point, located between Greenwell Point and Orient Point, and is a freehold island within the Crookhaven River estuary. Greenwell Point is accessed via Greenwell Point Road from Nowra, through a rural landscape known as 'Pyree', which is the main collector road within the township. The site location is illustrated in Figure 1.

Figure 1: Site Location
(Source: www.google.maps.com)



Greenwell Point is a small coastal town of approximately 1800 people with a maritime character and strong links to the oyster and fishing industries. Greenwell Point has a small group of shops, a service station, school and a public wharf and swimming pool located within a foreshore park along Greenwell Point Road.

1.1.2 Site Descriptions

The site of the proposed development comprises three separate land holdings comprising the following:-

- Lot 1 DP 1070720 (No 76) Greenwell Point Road, Greenwell Point;
- Lot 3 DP 589201 (No 84) Greenwell Point Road, Greenwell Point; and
- Lot 52 DP 223963 "Goodnight Island" Orama Crescent, Orient Point.

No 76 and 84 Greenwell Point Road ("the mainland sites") and Goodnight Island ("GNI") are collectively known as the site. The layout of the sites is illustrated in Figure 2

The site is located within the local government area of Shoalhaven and is owned by Mr Milad Raad (Milad Investments No 1 Pty Ltd). The Proponent is *Studio Internationale* ("the Proponent"), being the Architects and Project Managers engaged by the owner.

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1.1.3 Existing Site Features

The Mainland Sites

No 76 Greenwell Point Road is located on the corner of Greenwell Point Road and Jarvis Street and is a prominent foreshore property located at the entrance to the village area of Greenwell Point. This site has an area of approximately 3507m² and is bounded to the north by Greenwell Point Road, to the south by the Crookhaven River and to the west by Jarvis Street. The site falls by approximately 7 metres from Greenwell Point Road (north) to the foreshore (south) and several large trees are located along the Jarvis Street frontage (west) towards the foreshore. There are no other significant site features.

There is currently a commercial and tourist development on the site comprising 8 self-contained cabins, 2 shops along the Greenwell Point Road frontage, a residence with an attached shop, raised timber walkways and pergolas connecting the cabins, sealed car park area and a timber jetty below the mean high water mark ("MHW"). This site is illustrated in Figure 3.

Figure 3: No 76 Greenwell Point Road
(Source: www.google.maps.com)



No 84 Greenwell Point Road is located further to the east along Greenwell Point Road and also falls to the foreshore by approximately 5 metres from the northern (Greenwell Point Road) boundary. This site has an approximate area of 1308m² and has some larger trees within the foreshore area and within the road reserve.

Existing improvements on this site include a single storey weatherboard residence and garage located close to the MHW and within the foreshore building line as well as a small studio and on the MHW and a boatshed and timber jetty below the MHW. The front portion of the site is currently vacant and consists of a large grassed area. This site is illustrated in Figure 4.

Figure 4: No 84 Greenwell Point Road
(Source: Dept of Planning, 3 December 2008)



Goodnight Island (GNI)

GNI has an area of approximately 21.1 hectares, of which 13 hectares is located above MHWL and is generally elliptically shaped. The width of the Island from east to west is approximately 800m and 380m north to south, with the Island generally falling towards the MHWL from the grassy knoll by approximately 20 metres. Forested areas surround the Island to the north, east and south and entry is currently from a licensed deep water jetty on the north side of the Island with an adjoining barge/vehicular punt.

GNI contains wetlands listed under *State Environmental Planning Policy No 14 – Coastal Wetlands* ("SEPP 14"), including wetland No 355 along the eastern side of the Island (Orient Point side of Island) and wetland No 356 at the western tip of the Island (Greenwell Point side of Island).

The Island is generally vacant with the only improvements being several storage sheds, communications tower, some remnants of past uses including remains of the old guest house and entrance stairs as well as structures below MHWL including the jetty and punt areas. GNI is currently not serviced by reticulated power, water or sewerage supply. GNI is entirely surrounded by water, with no vehicle access available to the Island and ranges in height from 0m AHD up to 20.2m AHD at its peak (known as the grassy knoll).

Approximately 35% of the Island is covered by tall eucalypt forest. The Island is also surrounded by oyster leases, with the majority of the surrounding area categorised as 'priority oyster aquaculture areas'. The vegetation communities on the Island identified in the EA include the Bangalay Sand Forest of the Sydney Basin and South East Corner bioregions Endangered Ecological Community ("Bangalay SF EEC"), Saltmarsh/mangrove, frog ponds and cleared areas. GNI is almost completely surrounded by mangroves and, to a lesser extent, Saltmarsh which together form part of SEPP 14 wetlands.

The view of Goodnight Island from along Greenwell Point Road is illustrated in Figure 5.

Figure 5: Goodnight Island
(Source: Dept of Planning, 3 December 2008)



1.1.4 Surrounding development

The mainland sites are surrounded by a mix of residential and commercial development, with the northern side of Greenwell Point Road (refer to Figure 6) comprising primarily commercial development including a service station, general store, butcher and a pub. Residential development is largely located on the southern side of Greenwell Point Road and comprises mainly single storey cottages with a recent 2 storey rendered dwelling at No 96 Greenwell Point Road.

Holiday cottages and other rental accommodation are also located in the vicinity of the mainland sites. Greenwell Point Road is a sealed two lane carriageway, approximately 10 metres wide with kerb and guttering. On-street parking is available on both sides of the street.

The villages of Crookhaven and Culburra are located to the east along the coast.

A public boat ramp exists at Orient Point, illustrated in Figure 7), which is the proposed location of the under bore to provide services to Goodnight Island. This issue is discussed in Section 5 of this report.

Figure 6: Streetscape of Greenwell Point Road
(Source: www.google.maps.com)



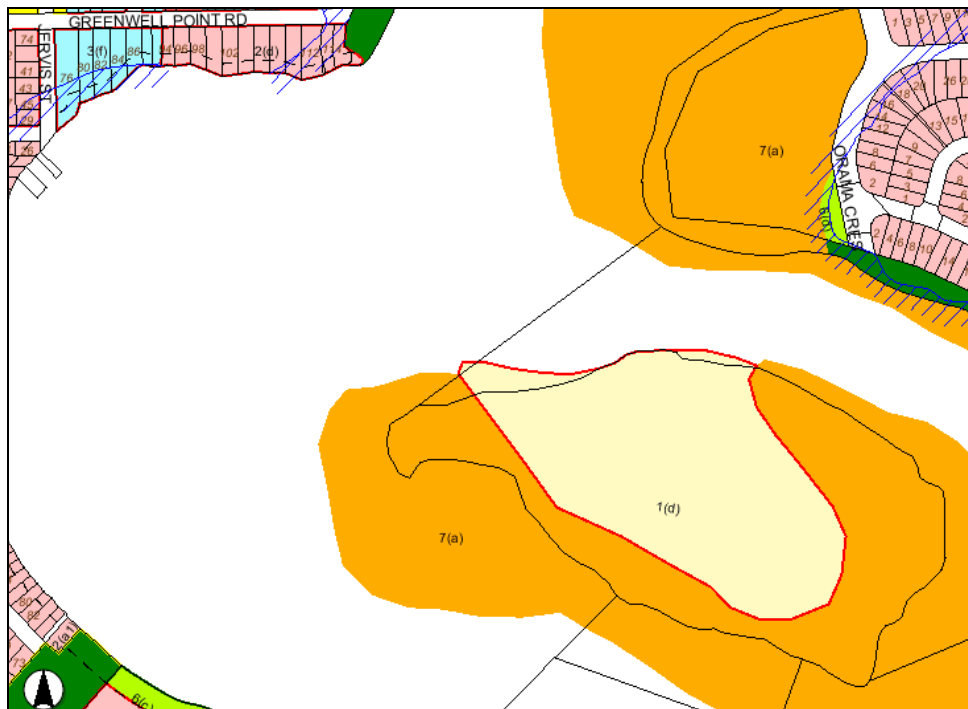
Figure 7: Orient Point Boat ramp and GNI – near under bore location
(Source: Dept of Planning, 10 January 2007)



1.1.5 Zoning

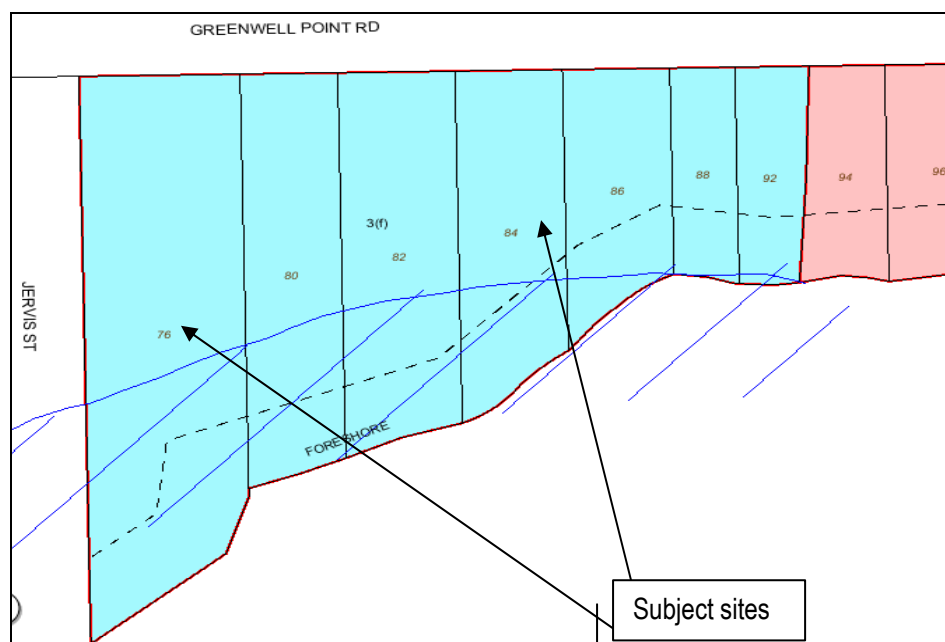
Pursuant to Clause 8 of the *Shoalhaven Local Environmental Plan 1985* ("the Shoalhaven LEP"), the mainland sites are located within the 3 (f) Business "F" (Village) Zone while GNI is zoned 1 (d) Rural "D" (General Rural) Zone and 7 (a) Environment Protection "A" (Ecology) Zone (illustrated in Figure 8).

Figure 8: Zoning of the Sites
(Source: www.shoalhaven.nsw.gov.au)



The mainland sites are affected by a 15.24 metre foreshore building line pursuant to Clause 34A of the Shoalhaven LEP and a flood line (refer to Figure 9). Only certain types of building or works may be carried out on land between this foreshore building line ("FSBL") and the tidal water in respect of which the FSBL is fixed including below-ground swimming pools, pedestrian access works, landscaping, barbeque facilities, or jetties. These issues are discussed in this report.

Figure 9: Site Constraints – No 76 & No 84 Greenwell Point Road
(Source: www.shoalhaven.nsw.gov.au)



1.2 SITE HISTORY

1.2.1 Historical Use

The Island was originally owned by Mr Alexander Berry, the first settler in the Shoalhaven district. A residence was constructed on the island in about 1905 and in the mid 1920s was converted into a Guest House. This Guest House was capable of accommodating 46 people and included a swimming pool, golf course, tennis court and a small dairy farm. The Guest House was still in operation in the 1950s, however, was destroyed by fire in 1966. Following the fire, the island has been used for periodic grazing.

1.2.2 Previous applications

Mainland Sites

The existing development at No 76 Greenwell Point Road, comprising the construction of 2 shops, installation of 8 tourist cabins, on-site parking and landscaping, was approved by the Council in February 2001 and use of the shops approved in 2006¹. There is no development history for No 84 Greenwell Point Road.

Goodnight Island

In 1986, a development application (DA 86/2819) was lodged for a tourist resort on GNI which proposed a central hotel building with lounge areas, restaurants, convention facilities, recreation areas as well as 84 units connected to the hotel by covered walkways and 29 self-contained fisherman's cottages. Workshops, storage sheds, recreation facilities including tennis courts, indoor pool and gym as well as services were proposed. Car parking was proposed to be provided at Lots A, B & C DP 339211 (now known as No 76 Greenwell Point Road).

This original application was refused primarily for environmental reasons, however, the applicant was invited to submit amended plans in accordance with specified parameters. The application was modified and subsequently approved by the Council in October 1987. The development consent was then modified in November 1989 which also extended the consent. Notwithstanding this extension, the consent subsequently lapsed.

The modified application, resubmitted in November 1989 (DA 91/2738 & BA 92/0238), proposed the same development, with the exception of the provision of 3 shops and car parking on a different mainland site. Development consent was issued by the Council for this proposal on 13 December 1991. The tourist resort consent conditions required, among other things, the following:-

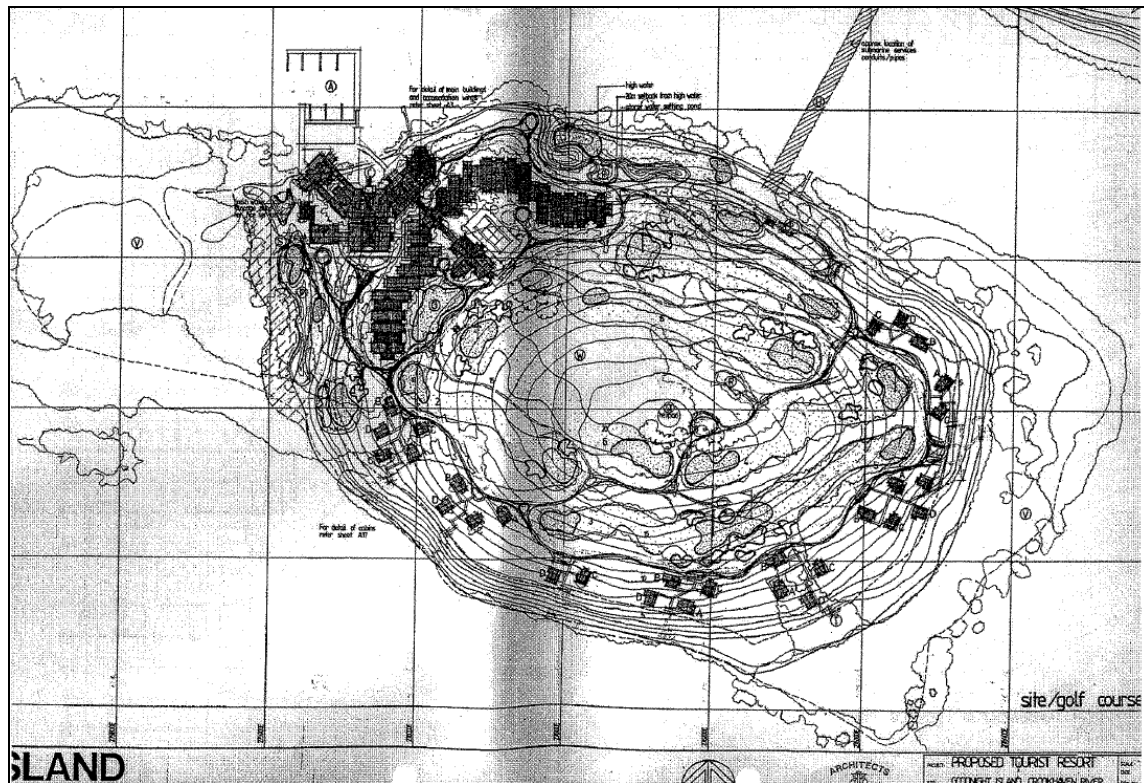
- No development permitted in SEPP 14 wetland including service conduits
- On-going monitoring of water quality and inter-tidal vegetation surrounding the island in accordance with Advisory committee
- Pedestrian pathways to be designated to ensure no damage to vegetated areas
- Buffer strip of 20 metres between the tourist facility and the intertidal zone
- Minimum floor level of 3.0m AHD
- Water and sewerage services were to be connected to Council's mainland systems.
- All buildings to be located below the 12 metre AHD contour
- No lighting into wetlands areas, natural barriers to be installed to prevent access to wetlands
- Conservation Plan required to address impacts on oyster and fishing industry and flora and fauna in intertidal zone
- Fire safety provisions
- Visual impact controls including use of no-reflective materials, vegetation screening etc.
- Car parking controls (250 spaces provided on mainland)

This development consent is illustrated in Figure 10. A helipad was not approved as part of this previous development consent. There have been several other development consents issued by the Council for GNI for dwellings and storage/machinery sheds².

¹ DA 00/3199, DA 06/2114 (Shop 1) and DA 06/2846 (Shop 2).

² DA 96/3012 (Dwelling & shed), BA 96/0553 (Machinery Shed) & DA 03/1682 (Dwelling, pool and water tank)

Figure 10: Previous consent for GNI (now lapsed) – December 1991
(Source: Shoalhaven Council)



1.3 STRATEGIC CONTEXT

The subject site is located within close proximity to Nowra, one of three major regional centres, along with Batemans Bay and Bega, outlined in the South Coast Regional Strategy, 2007 ("Regional Strategy"). The primary purpose of the Regional Strategy is to ensure that adequate land is available and appropriately located to sustainably accommodate the projected housing and employment needs of the Region's population over the next 25 years. The Strategy targets 14,400 new jobs for the Shoalhaven local government area, more than half of the target for the entire region, with increases expected in finance, administration, business services, health and aged care, as well as tourism. The sites are noted as being within the existing urban area. The proposal will assist in achieving the aims of the Regional Strategy by increasing employment in tourism and by providing quality tourism accommodation.

The project will assist in achieving the relevant key priorities in the *NSW Government State Plan* (2006), specifically addressing Priority P6 - Increased Business Investment in Rural and Regional NSW. In the protection and rehabilitation of endangered ecological communities and riparian vegetation the proposal will assist in achieving Priority E4 - Better Outcomes for Native Vegetation, Biodiversity, Land, Rivers and Coastal Waterways.

2 THE PROPOSED DEVELOPMENT

2.1 PROJECT DESCRIPTION

This is an application for Project approval for a mixed use Tourist and Commercial development comprising the following:-

No 76 Greenwell Point Road (Figure 11)

- Demolition of existing structures on the site;
- Construction of a three (3) storey building, separated into three distinct portions comprising twenty (20) serviced apartments, 93 car parking spaces and a retail area, café, resort reception and private gym:-
 - Basement (B1) Level – this level comprises a basement car park at a finished floor level (“F.F.L”) of 1.25 with no external entry point, access being provided via an internal ramp from the upper floor. This level contains 70 car parking spaces, 24 of which are provided in a car stacker and 20 are provided as tandem spaces (valet parking service for this level). A laundry, mechanical plant, lift and a small pool on the southern end of the building adjoins a landscaped area along the foreshore.
 - Lower ground floor – this level comprises parking and apartments, with 23 car parking spaces, loading zone and bin storage located at the northern end of this level accessed via a two lane, 6 metre access driveway from Greenwell Point Road. At the southern end of the building, four (4) x 2 bedroom apartments are accessed via a covered walkway from the upper floor.
 - Ground level – this level comprises a retail tenancy and a café along the Greenwell Point Road elevation as well as the resort reception and private gym for Island visitors. At the rear of this level, there are six (6) x 3 bedroom apartments with deck and raised garden bed areas, with two (2) accessible/adaptable units.
 - Level 1 – this level comprises six (6) x 2 bedroom units, located in two distinct blocks separated by raised garden beds.
 - Level 2 – this level comprises four (4) x 2 bedroom units located in a block along the front (northern) elevation along Greenwell Point Road.
- Removal of the existing timber jetty and the replacement with a 42.2m long and 2m wide jetty;
- Landscaping and associated infrastructure services.

No 84 Greenwell Point Road (Figure 12)

- Demolition of existing brick garage on the site;
- Retention of existing weatherboard cottage, studio, boatshed, concrete boat ramp and floating jetty;
- Construction of a three (3) storey building, separated into three distinct portions comprising seven (7) serviced apartments, 9 car parking spaces and two (2) retail tenancies:-
 - Basement (B1) Level – this level comprises a basement car park at FFL 3.8 with a single lane ramp providing access to Greenwell Point Road and 9 car parking spaces;
 - Ground floor level – this level comprises two (2) retail tenancies along the northern (Greenwell Point Road) frontage and two (2) x 2 bedroom apartments at the rear (southern) portion with deck areas facing out to the Crookhaven River;
 - Level 1 – this level comprises four (4) apartments, with 1 x 1 bedroom and 3 x 2 bedroom apartments. Deck areas face the front and rear of the site;
 - Level 2 – this level comprises one (1) x 2 bedroom apartment with deck areas facing the front and rear of the site.

A plan view of No 76 and No 84 Greenwell Point Road is illustrated in Figure 13.

Figure 11: Proposed Development at No 76 Greenwell Point Road
(Source: Studio Internationale dated 22/07/09)

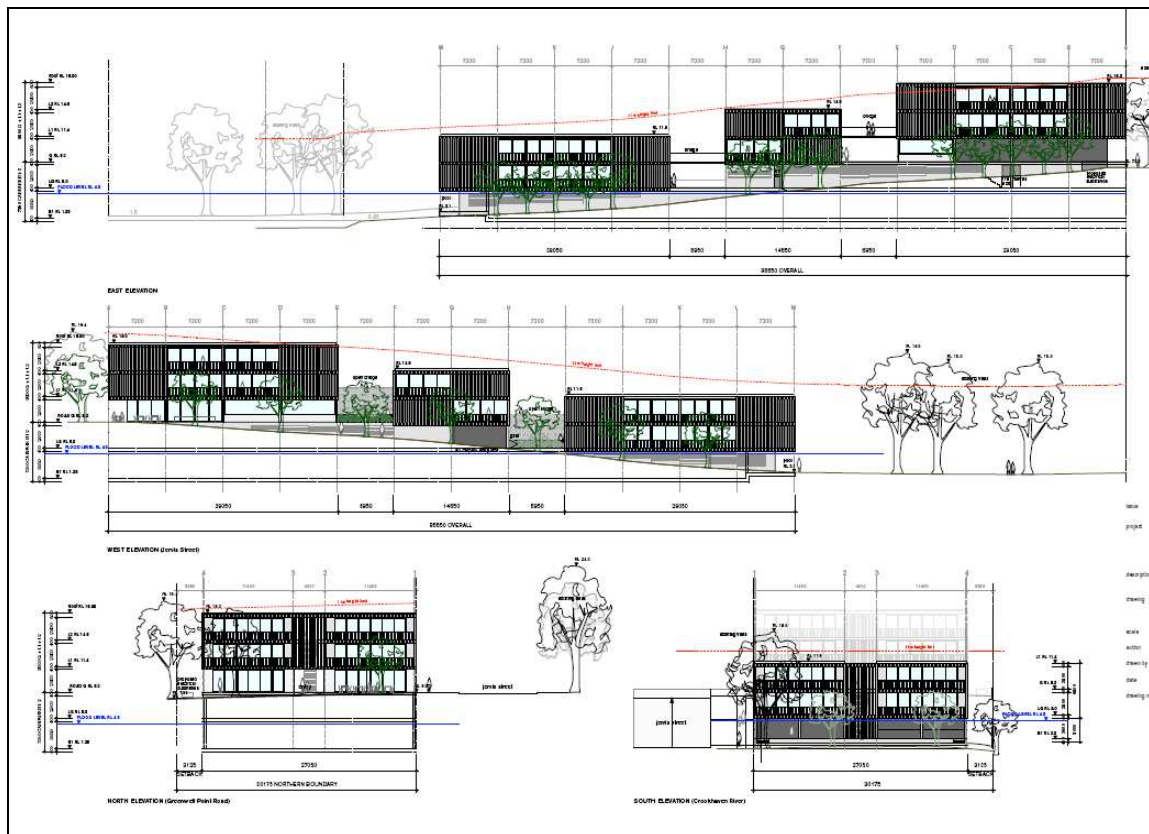


Figure 12: Proposed Development at No 84 Greenwell Point Road
(Source: Studio Internationale dated 22/07/09)

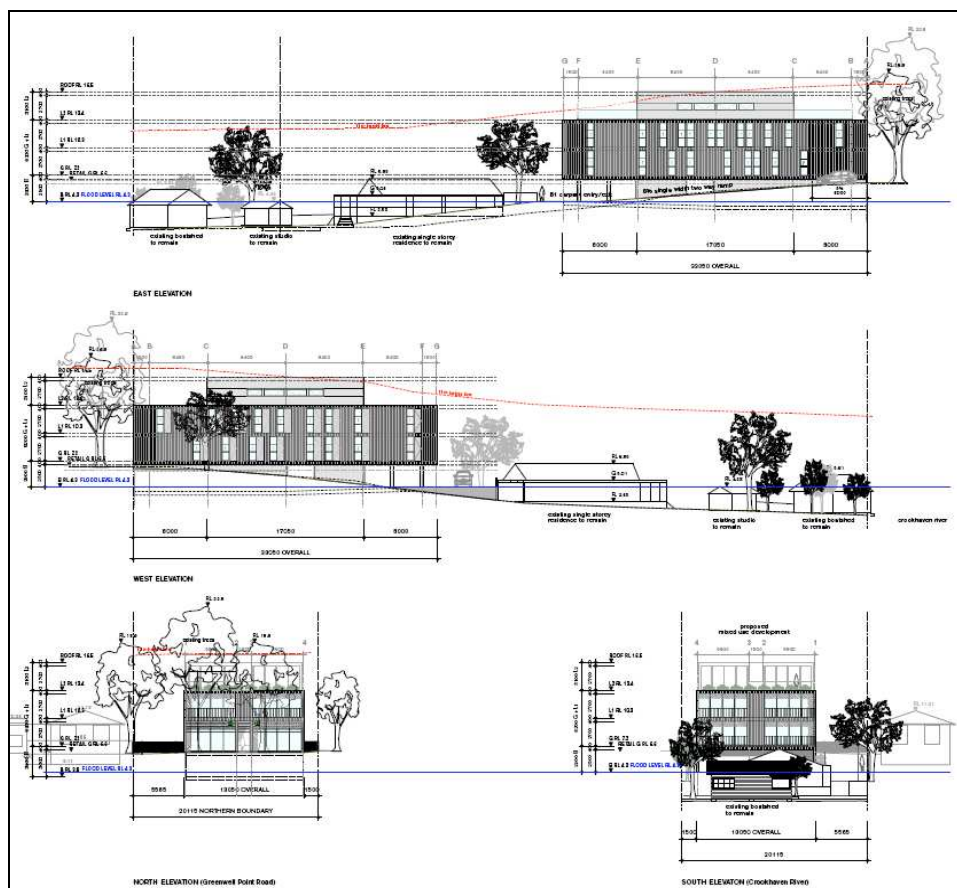
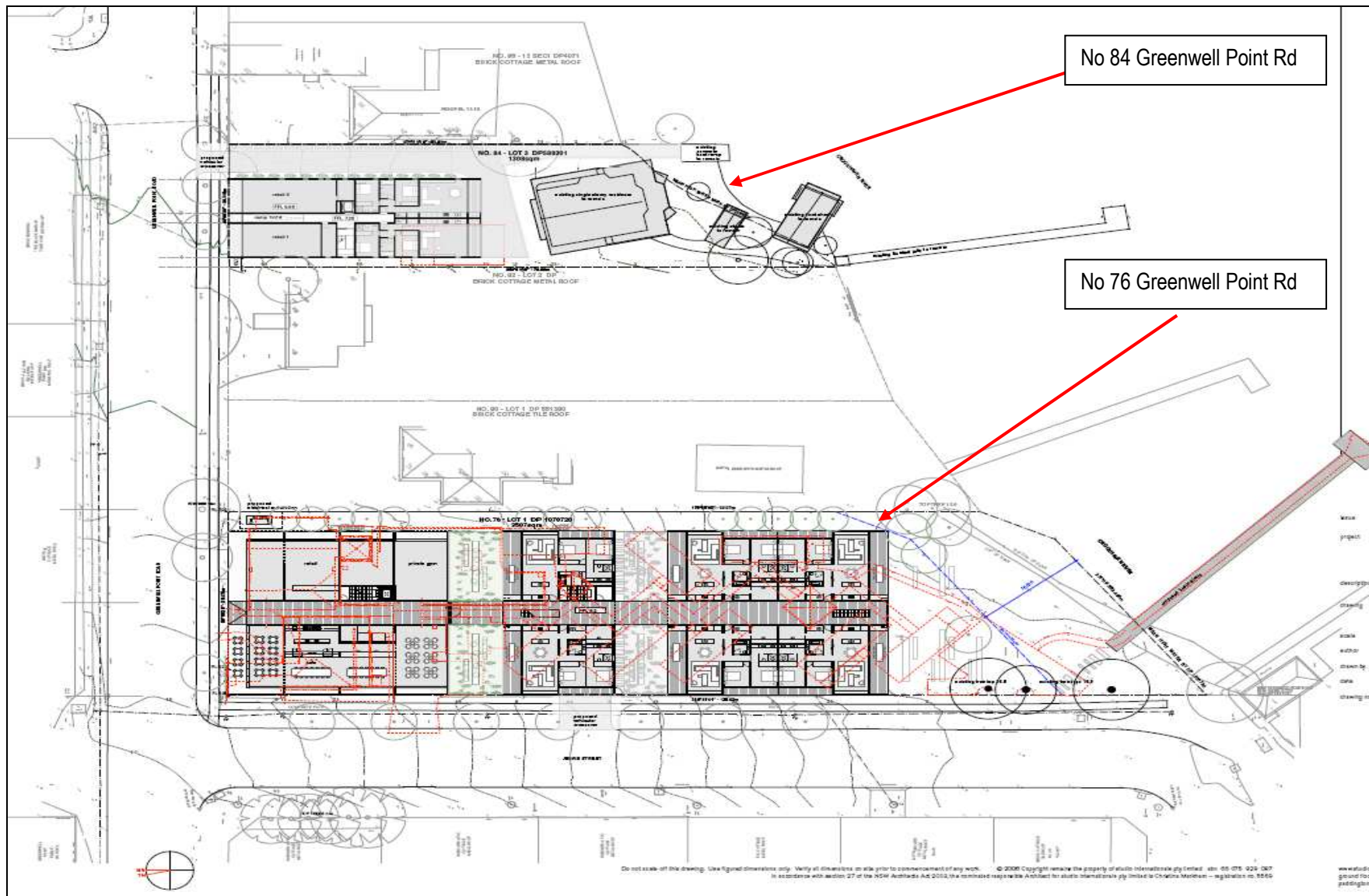


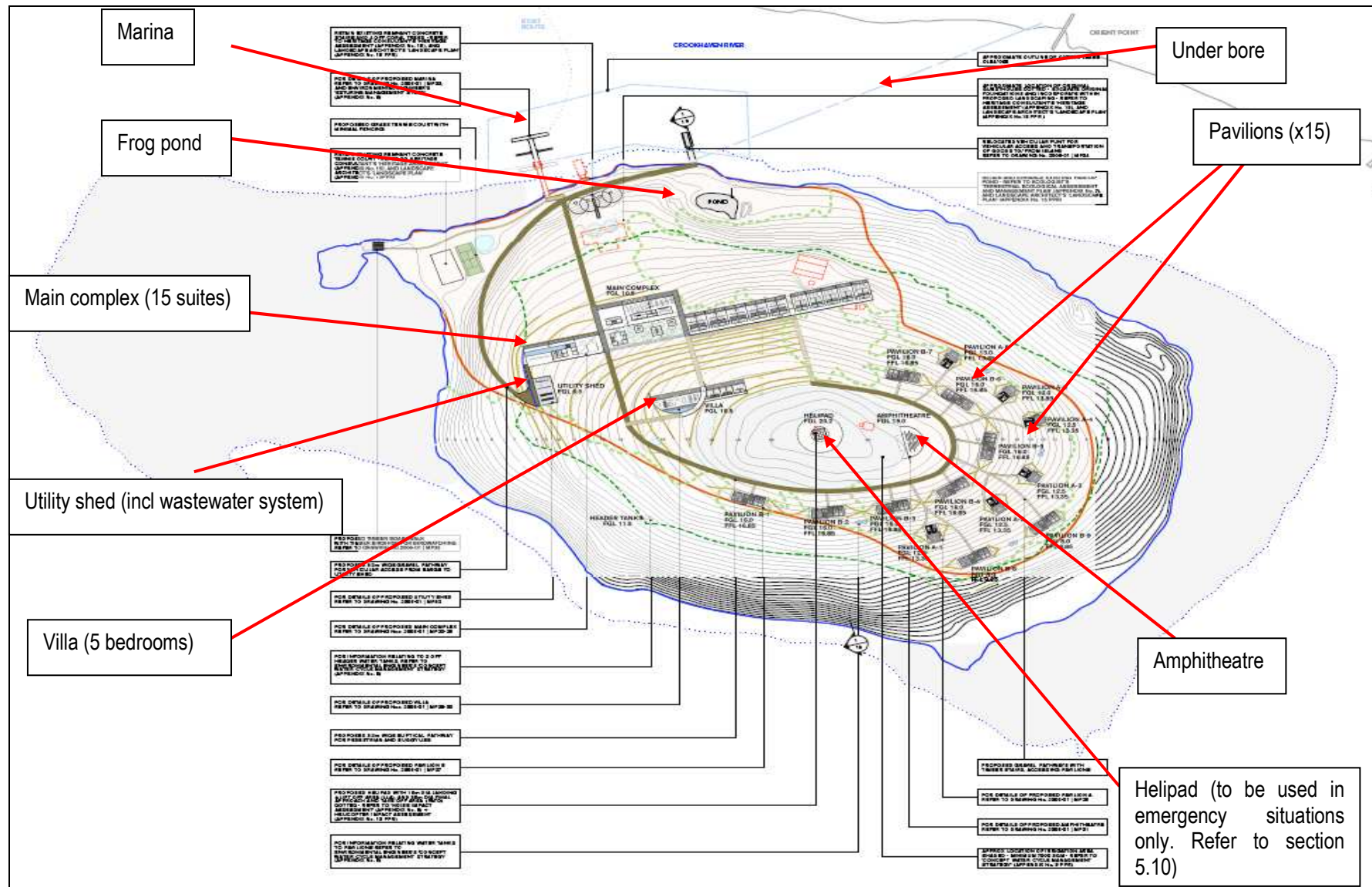
Figure 13: Proposed Development at No 76 & 84 Greenwell Point Road
(Source: Studio Internationale dated 22/07/09)



Goodnight Island (refer to Figure 14)

- Main complex - located in the north-western portion of GNI comprising the following separated by walkways:-
 - Fifteen (15) suites (10 x 1 bed & 5 x 2 bed),
 - Day spa, tea house and bathroom facilities set in an external garden as 'floating structures';
 - A concierge desk, restaurant, library/lounge, bar and cinemateque in public pavilion;
 - Gym, spa, sauna, swimming pool and amenities in 'recreation pavilion';
 - Staff accommodation and common facilities on lower ground floor;
- Pavilions - Fifteen (15) self-contained Pavilions located around the northeast to southeast portion of the island comprising 6 x Pavilion A (125m² GFA each) and 9 x Pavilion B (187m² GFA each) totalling 2423m² GFA;
- Villa - comprising five (5) bedrooms (bedroom pavilion), extensive deck areas and a lounge, dining, study, kitchen and indoor pool (living pavilion) consisting of 490m² GFA;
- Amphitheatre - comprising an outer structure with roof (3.2m high, 20m wide and approx 12m deep) and bench seating;
- Helipad - comprising 15m diameter landing and lift off area and 35m diameter final approach and take off area (Refer to discussion in Section 5.10.1 of this report. A design change condition has been imposed which only allows helicopters on the island in emergency situations only).
- Elliptical pathway – a 3.2m wide pathway from mesh ramp to utility shed, from marina to main complex and to self-contained pavilions and villa for buggy and pedestrian use.
- Bird hide - comprising signage, seating and an entry ramp (11.9m) comprising 46m² GFA;
- Marina – a 9 berth Marina with floating pontoon, ramp (23.5m long) and moorings either side and end of pontoon;
- Mesh ramp - to replace existing stone ramp for access by vehicular barge/punt (9.17m long);
- Underbore - services extension from Orient Point to northern tip of Island;
- Utility shed - storage of equipment (gas bottles, waste), vehicles (tractor, fire truck) and sewerage treatment plant and effluent storage reservoir comprising 240m² GFA with vegetated roof (southern elevation);
- Two header tanks - for water cycle management located on western side of island;
- Rainwater tanks – 1200KL capacity under the main complex building and additional tanks throughout site;
- Tennis court - located in north-western corner of Island adjoining bird hide.

Figure 14: Proposed Development at Goodnight Island
(Source: Studio Internationale, PPR dated 22/07/09)



2.2 PROJECT CHRONOLOGY

- On 22 February 2006, the Director-General, as delegate for the Minister for Planning, declared the proposal to be a Project to which Part 3A of the Act applies.
- On 25 July 2006, the Minister for Planning authorised a Concept Plan to be lodged for the project.
- Following a request from the Proponent on 4 August 2008, the Concept Plan authorisation will be revoked concurrently with the determination of the Project Application.
- On 24 August 2006, the DGRs were issued to the Proponent; however, these were subsequently updated on 13 February 2007 to include the requirement to address potential impacts on oysters and on 27 March 2008 to reflect the Project application only (and removal of the Concept Plan). The final DGRs were issued on 15 May 2008.
- The Proponent lodged a draft Environmental Assessment ("EA") for an adequacy review on 16 March 2007 and 26 November 2007, which was deemed to be inadequate on 11 February 2008. Issues relating to the inadequacy included insufficient consideration and assessment of the on-site effluent management system, stormwater management system, and general impacts on aquatic and estuarine environment surrounding the island, amenity and scale of the proposal and the lack of legal access to the island over existing oyster leases.
- Following several reviews and meetings, the EA was deemed to be adequate (subject to owners consent being provided prior to determination) on 20 June 2008. This final EA was received by the Department on 4 July 2008.
- The EA was placed on public exhibition from 21 July to 19 August 2008 and agency comments were sought in July to September 2008.
- On 5 September 2008, a summary of submissions including agency submissions was provided to the Proponent.
- On 4 November 2008, the Proponent was advised of all the outstanding issues and was requested to provide a response in the form of a Preferred Project Report ("PPR").
- Subsequent meetings and correspondence were held during December 2008 and January, March and May 2009 to further discuss the issues and refine the design of the proposal.
- On 12 August 2009, the proponent lodged the final Preferred Project Report ("PPR") with the Department. The PPR was accepted and assessment commenced on 11 September 2009 (following receipt of final comments from Council).

2.3 PROJECT AMENDMENTS

The main components of the proposal which were amended in the PPR include the following:-

- Reduction in scale of proposal at No 76 Greenwell Point Road and GNI – the original proposal included 19 units and 112 car parking spaces at No 76 Greenwell Point Road and 16 self-contained cabins and 15 suites in the main complex on the GNI. The PPR provides for 20 units and 93 car parking spaces at No 76 and 15 self-contained cabins and 15 suites in the main complex.
- Relocation of buildings on GNI – the self-contained cabins and caretakers dwelling originally located with the 7(a) zone and within the EEC has been removed and/or relocated such that there are no works proposed in these areas on GNI.
- Removal of alterations to existing cottage at No 84 Greenwell Point Road – the existing weatherboard cottage at No 84 Greenwell Point Road will no longer be altered in any way given its location below the foreshore building line.
- Additional information relating to technical issues – additional studies have been provided which further consider the technical issues associated with stormwater, estuarine management, water cycle management, Aboriginal cultural heritage and aquaculture management etc.

The PPR incorporated the following amendments:

No 76 Greenwell Point Road

- Reduction in overall height such that, apart from one minor encroachment, the building is less than 11m;
- Relocation of hotel lobby and café from south-west of the rear block to northwest corner of front block to activate street corner and to separate commercial and retail functions from accommodation component;
- Substantial reduction in extent of commercial floor space from five (5) units with approx 610m² of GFA, to 1 unit with approx 114m² of GFA;
- Reconfiguration of tourist accommodation to comprise twenty (20) x 2 bedroom units;
- Amended entry level of car park to RL 5.0 m AHD to ameliorate impacts of flooding and climate change;
- Reconfiguration and reduction in overall car parking to a total of ninety three (93) spaces, based on reduction in retail space and accommodation;
- Removal of direct vehicular access to lower car parking level (B2) to ameliorate impacts of flooding and climate change, with internal vehicular access provided via level B1;
- Modifications to the external design of the development with:
 - Greater articulation and modulation of the Jervis Street elevation by dividing the development into three blocks with approximately 7m of space between each block, (two originally proposed), staggered to respond to site topography and Jervis Street;
 - Reduction in footprint of lower level, along with reduced height of exposed car park to one storey;
 - Improved presentation to Jervis Street due to deletion of a vehicular entry driveway and reduced proportions of lower level;
 - Improved presentation to the Crookhaven River (southern elevation) due to reduced proportions of lower level and reduced height of exposed car park wall, improving overall proportions of building.
- The building has maximum of 3 storeys to each of the 3 separate blocks (previously the rear block had a maximum of 4 storeys with setback 5th storey);
- Provision of valet service to assist in site management, in respect of vehicle parking; and
- Installation of car stackers and tandem parking for valet use as needed.

No 84 Greenwell Point Road

- Alterations and additions no longer proposed to existing residence (managers' residence);
- Amendment to unit layout (removal of 3 bed unit) such that development consists of five x 2 bedroom units;
- Reduction in commercial floor space from approx 164m² to 139 m² GFA with 2 tenancies proposed;
- Amendment of car park entry to RL 4.3 m AHD and reconfigure parking layout to improve turning circles.

Goodnight Island

- Reduction in pavilion style accommodation units from seventeen (17) to fifteen (15), all one (1) bedroom;
- Removal of proposed caretakers' residence (staff accommodation maintained on Island);
- Reduced footprint and minor re-siting of development to avoid ecologically and visually constrained areas;
- Relocation of staff quarters in main complex (to basement of recreation pavilion), to avoid ecologically constrained areas;
- Resiting of villa further from apex of Island with maximum ground RL of 16.5m AHD (was 17.15m AHD);
- Slight resiting of utility shed;
- Reduction in extent of elliptical pathway system to avoid ecologically constrained areas;
- Removal of timber boardwalks from west / south-west of site to avoid ecologically constrained areas;
- Removal of pool to avoid ecologically constrained areas (increased pool size in main complex);
- Changes to accessibility/management of the Island - general public not permitted to day spa and only 25% of restaurant available to general public.

The PPR was referred to several agencies and a number of surrounding residents and previous submitters were notified that a PPR had been received. The PPR was placed on the Department's web site.

3 STATUTORY CONTEXT

3.1 PART 3A DECLARATION

The project is a Major Project under *State Environmental Planning Policy (Major Projects) 2005* ("the MP SEPP") being for a tourist facility wholly or partly in a sensitive coastal location (within 100 metres of the MWHM) for any number of persons (Schedule 2, 1(1)(f) – Coastal Areas). The opinion was formed by the Director-General as delegate for the Minister on 22 February 2006.

Recent changes to the classes of regional development and Part 3A projects were made through the establishment of the *State Environmental Planning Policy (Major Developments) 2005* ("the MD SEPP"). Under the provisions of MD SEPP, the project is still considered to be a Major Project being for a Tourist Facility that has a capital investment value of more than \$5 million (the project has a CIV of \$25 million) and is located in a sensitive coastal location (Schedule 1, Group 6, CI 17). The changes to the classes of Part 3A projects in the MD SEPP do not apply to any Part 3A applications that have been made but not determined prior to 1 July 2009 (in accordance with Part 4 clause 16 of the MD SEPP).

3.2 PERMISSIBILITY

Mainland Sites

Under the Shoalhaven Local Environmental Plan 1985, the mainland sites are zoned 3(f) Business 'f' (Village). The proposed tourist facility is permissible with development consent and as such the use is not prohibited in the zone.

The objectives of the 3(f) are to provide for village retail and business development to serve the needs of the village community and which is compatible with the village environment. The proposal is considered to be consistent with these objectives, which are discussed in detail in Appendix C.

The proposal is consistent with the objectives of the 3(f) zone and is listed as a permissible use in Clause 8. The proposal is therefore permissible subject to the Minister's approval.

Goodnight Island

GNI is zoned 1(d) Rural 'D' (General Rural) and 7(a) Environment Protection "A" (Ecology). The uses proposed within the 1(d) zone include 'tourist facilities', which are permissible with development consent as they are not prohibited in the zone. Tourist facilities are defined in the Model Provisions as an establishment providing for holiday accommodation or recreation and may include a boat landing facilities, holiday cabins, hotel, marina, refreshment room, water sport facilities or a club used in conjunction with any such activities. Prohibited uses in the zone include boarding houses, various industrial uses, cluster housing, dual occupancies (other than attached dwellings), residential flat buildings, service stations, shops and warehouses. There is no development proposed in the 7(a) zone within the island.

The objectives of the 1(d) zone include to provide opportunities for a range of rural land uses and other development, including those which by virtue of their character require moving away from urban areas and to ensure that wherever possible the location, design and management of development is consistent with the protection of important natural and cultural environments. The proposal is considered to be consistent with these objectives, which are discussed in detail in Appendix C.

The proposal is consistent with the objectives of the 1(d) and 7(a) zones and is listed as a permissible use in Clause 8. The proposal is therefore permissible subject to the Minister's approval.

3.3 EXHIBITION AND NOTIFICATION

The Department has exhibited the EA in accordance with section 75H (3) of the Act. The EA was placed on public

exhibition from 21 July 2008 until 19 August 2008 and submissions were invited in accordance with section 75(H) of the Act. The public exhibition and notification of the EA and PPR are discussed in detail in Section 4.1 of this report.

3.4 MINISTER'S POWER TO APPROVE

The purpose of this submission is for the Director-General to provide a report on the project to the Minister for the purposes of deciding whether or not to grant approval to the project pursuant to Section 75J of the Act. Section 75I(2) and Clause 8B of the Regulation set out the scope of the Director-General's report to the Minister. Each of the criteria set out therein are outlined in Table 2.

Table 2 – Compliance with Section 75I(2) and Clause 8B Criteria

Section 75I(2) Criteria	Response
A copy of the proponent's environmental assessment and any preferred project report	The proponent's EA is included at Appendix G whilst the preferred project report is set out for the Ministers consideration at Appendix F .
Any advice provided by public authorities on the project; and	All advice provided by public authorities on the project for the Minister's consideration is discussed in detail in Section 4 below.
A copy of any report of the Planning Assessment Commission in respect of the project, and	The Planning Assessment Commission was not involved in the assessment of this project.
A copy of or reference to the provisions of any State Environmental Planning Policy (SEPP) that substantially govern the carrying out of the project	An assessment of each relevant State Environmental Planning Policies that substantially govern the carrying out of the project is set in Appendix C .
A copy of or reference to the provisions of any environmental planning instrument that would (but for this Part) substantially govern the carrying out of the project and that have been taken into consideration in the environmental assessment of the project under this Division	An assessment of the development relative to the prevailing EPI's is provided in Appendix C .
Any environmental assessment undertaken by the Director General or other matter the Director General considers appropriate.	The environmental assessment of the project is this report in its entirety.
A statement relating to compliance with the environmental assessment requirements under this Division with respect to the project.	The environmental assessment requirements under this Division, issued on 15 May 2008 are in Appendix B . The Department is satisfied that the EA submitted in support of the project application complies with these requirements. A detailed assessment of how the proponent has addressed these issues is provided in Section 5 of this report.
Clause 8B Criteria	Response
An assessment of the environmental impact of the project.	All environmental impacts associated with the development are discussed in Section 5 of this Report. ESD is discussed in Section 3.7 of this Report.
Any aspect of the public interest that the Director-General considers relevant to the project.	The public interest is discussed in Section 5 of this Report.
The suitability of the site for the project.	The site is considered suitable for the project based on the mitigation of risk factors by comprehensive strategies proposed by the Proponent and the design of the proposal which limits removal of vegetation and changes to the natural features of the site. These aspects of the proposal are further discussed in Section 5 of this report.
Copies of submissions received by the Director-	All submissions provided by agencies are summarised

General in connection with public consultation under section 75H or a summary of the issues raised in those submissions.	at Section 4.3 and a summary of public submissions is attached at Appendix E .
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The Department has met its legal obligations and the Minister has the power to determine this project.

3.5 ENVIRONMENTAL PLANNING INSTRUMENTS (EPIs)

3.5.1 Application of EPIs to Part 3A of the Act

To satisfy the requirements of section 75I(2)(d) and (e) of the Act, this report includes references to the provisions of the environmental planning instruments that substantially govern the carrying out of the project and have been taken into consideration in the environmental assessment of the project.

The provisions, including development standards of local environmental plans, and development control plans are not required to be strictly applied in the assessment and determination of major projects under Part 3A of the Act. Notwithstanding, these standards and provisions are relevant considerations as the DGRs require the proponent to address such standards and provisions.

Accordingly the objectives of a number of EPIs and the development standards therein and other plans and policies that substantially govern the carrying out of the project are appropriate for consideration in this assessment. In summary, the relevant EPIs for this project include:

- State Environmental Planning Policy (Major Development) 2005;
- State Environmental Planning Policy No. 14 – Coastal Wetlands;
- State Environmental Planning Policy No. 55 – Remediation of Land;
- State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Buildings;
- State Environmental Planning Policy No. 62 – Sustainable Aquaculture;
- State Environmental Planning Policy No. 71 – Coastal Protection (“SEPP 71”);
- State Environmental Planning Policy (Infrastructure) 2007;
- Illawarra Regional Environmental Plan No 1;
- Drinking Water Catchments Regional Environmental Plan No 1;
- Shoalhaven Local Environmental Plan 1985 (“Shoalhaven LEP”).

A detailed assessment of compliance with the relevant EPIs is in **Appendix C**. The proposal is generally consistent with the objectives of these controls.

3.6 OTHER PLANS AND POLICIES

The proposal has been considered against the following non-statutory documents:

- 1) Shoalhaven City Council Development Control Plan 18 – Car Parking (“DCP 18”);
- 2) Shoalhaven City Council Development Control Plan 63 – Tourist Development in Rural Areas
- 3) Shoalhaven City Council Development Control Plan No.93 – Controls for Waste Minimisation and Management.
- 4) Shoalhaven City Council Development Control Plan 106 – Floodplain Management
- 5) NSW Coastal Policy 1997; and,
- 6) NSW Coastal Design Guidelines.

A detailed assessment against these controls can be found in **Appendix D**. The proposal is generally consistent with the objectives of these controls.

3.7 ECOLOGICALLY SUSTAINABLE DEVELOPMENT (ESD) PRINCIPLES

There are five accepted ESD principles:

- (a) decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations (the integration principle);
- (b) if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation (the precautionary principle);
- (c) the principle of inter-generational equity - that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations (the inter-generational principle);
- (d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making (the biodiversity principle); and
- (e) improved valuation, pricing and incentive mechanisms should be promoted (the valuation principle).

With respect to ESD, the Act adopts the definition in the *Protection of the Environment Administration Act 1991* including the precautionary principle, the principle of inter-generational equity, the principle of conservation of biological diversity and ecological integrity, and the principle of improved valuation, pricing and incentive mechanisms. The Department has considered the proposed development in relation to the ESD principles and has made the following conclusions:

- i) **Integration Principle** – The proposal has positive social and environmental impacts as outlined in this report and provides a positive re-development of the mainland sites. The impacts of the development have been appropriately mitigated as discussed in the report. The Department's assessment has duly considered all issues raised by the community and public authorities, and the proposal is recommended for approval.
- ii) **Precautionary Principle** – There is unlikely to be any serious or irreversible environmental damage as a result of the proposal given the mitigation measures proposed and while the site is known to be potentially affected by Acid Sulphate Soils ("ASS"), contamination and be in close proximity to oyster leases, such hazards will be appropriately managed and mitigated.
- iii) **Biodiversity Principle** – Following an assessment of the EA it is concluded that there is unlikely to be any serious or irreversible environmental damage as a result of the proposal. The proposed rehabilitation of the Bangalay SF EEC on GNI and the re-vegetation of the foreshore areas of the sites will ensure minimal impact upon biological diversity or ecological integrity. The mainland sites, in particular, have previously been developed and therefore have a as a low level of environmental sensitivity.
- iv) **Valuation Principle** – The approach taken for this project has been to assess the environmental impacts of the proposal and identify appropriate safeguards to mitigate adverse environmental effects. The mitigation measures include the cost of implementing these safeguards in the total project cost. The Proponent has committed to ESD principles and has reinforced this through the Revised Statement of Commitments and the Environmental Assessment which outlines key ESD opportunities.

The proponent is committed to ESD principles and has reinforced this through the Statement of Commitments and the Environmental Assessment which explores key ESD opportunities, including mechanical, electrical and hydraulic systems as well as architectural designs to ensure high environmental performance is delivered.

3.8 OBJECTS OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

The objects of any statute provide an overarching framework that informs the purpose and intent of the legislation and gives guidance to its operation. The Minister's consideration and determination of a project application under Part 3A must be informed by the relevant provisions of the Act, consistent with the backdrops of the objects of the Act.

The objects of the Act in section 5 are as follows:

- (a) to encourage:*
 - (i) the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,*
 - (ii) the promotion and co-ordination of the orderly and economic use and development of land,*
 - (iii) the protection, provision and co-ordination of communication and utility services,*
 - (iv) the provision of land for public purposes,*
 - (v) the provision and co-ordination of community services and facilities, and*
 - (vi) the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and*
 - (vii) ecologically sustainable development, and*
 - (viii) the provision and maintenance of affordable housing, and*
- (b) to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and*
- (c) to provide increased opportunity for public involvement and participation in environmental planning and assessment.*

Of particular relevance to the assessment of the subject application is consideration of the Objects under section 5(a). Relevantly, the Objects stipulated under section 5(a) (i), (ii), (iii), (vi) and (vii) are significant factors informing the determination of the application. The project does not raise significant issues with regards to (iv), (v) and (viii).

The Department has fully considered the objects of the Act, including the encouragement of ESD (considered above), in its assessment of the project application. The assessment integrates all significant economic and environmental considerations and seeks to avoid any potential serious or irreversible damage to the environment, based on an assessment of flora and fauna, water cycle management and infrastructure provision.

It is considered that on balance, with consideration of the benefits provided for in the proposal such as increased economic activity in the town, rehabilitation of the EEC and the improvements in design and access, overall the project application promotes the social and welfare of the community and provides a better built form or positive amenity environment. The proposal also promotes the orderly and economic use and development of the land.

The Department has considered the Objects of the Act, including the encouragement of ESD in the assessment of the project application and considers that such objects have been satisfied

4 CONSULTATION AND ISSUES RAISED

4.1 PUBLIC EXHIBITION DETAILS

The EA was exhibited for 30 days from 21 July 2008 to 19 August 2008. Notification of the exhibition was given in the *Nowra South Coast Register* on Friday 18 July 2008.

Exhibition locations were at:

- Department of Planning Head Office, 23 -33 Bridge Street Sydney;
- Department of Planning Southern Regional Office, Level 2, 84 Crown Street, Wollongong;
- Nature Conservation Council, Kent Street, Sydney; and
- Shoalhaven City Council, Bridge Road, Nowra.

The EA was also provided for download on the Department's website.

Letters were sent to adjoining landowners and relevant government agencies, including Council, notifying of the exhibition and inviting submissions. A total of 42 submissions were received, comprising 32 submissions from the public and 10 submissions from public authorities being:

1. Shoalhaven City Council
2. Department of Water and Energy
3. Department of Environment and Climate Change
4. Department of Primary Industries (Fisheries)
5. Department of Lands
6. Rural Fire Service
7. Southern Rivers Catchment Management Authority
8. Shoalhaven Water
9. Department of Defence
10. NSW Food Authority

The Department also engaged two specialist consultants to assist in the consideration of this project, including a wastewater consultant and a flooding consultant. Submissions have also been received from these engaged consultants, which are discussed in Section 5 of this report.

The 32 submissions from the public included 16 letters of objection and 16 letters of support including 2 petitions. Of the public authority submissions, the majority raised concerns with some aspects of the proposal. Some agencies provided conditions of approval with no objections being raised. These submissions are detailed in Section 4.3 of this report.

A final PPR was lodged on 14 August 2009. The final PPR was accepted on 11 September 2009. As the changes to the nature of the project were not significant, it was not re-exhibited but was placed on the Department's website.

4.2 SUBMISSIONS FROM THE PUBLIC

4.2.1 Summary of issues raised in public submissions

The following issues were raised in the public submissions:

- Noise impacts
- Amenities and character
- Social impacts
- Visual amenity
- Helipad
- Water supply
- On-site effluent
- Community consultation
- Impacts on water quality of Crookhaven River

- Impact on oyster farming
- Overshadowing (from No 84)
- Bulk and scale
- Construction impacts
- Structures below MHWL (punt, jetties etc)
- Impacts on flora and fauna
- Landscaping
- Climate change
- Emergency access to Island
- Service provision and under bore
- Economic benefits to town of increased supply of tourist accommodation and employment
- Increased visitor numbers to support local businesses including the Oyster Industry.
- Appropriate design and scale of development (height appropriate given slope of site)
- Unlikely to impact upon the existing businesses in the area.
- May increase resident population (tourists returning to live)
- Environmentally sound and low visual impact and aesthetically pleasing
- Encourage future “high – end” developments to the area
- Complies with legislation and effective consultation

An assessment of the key issues from the above list can be found in **Section 5** of this report. A summary of all public submissions received can be found in **Appendix E**. The proponent responded to these submissions in the PPR, which is in **Appendix F**.

4.2.2 SUBMISSIONS FROM PUBLIC AUTHORITIES

The following submissions were received from public authorities:

4.2.3 Shoalhaven City Council

Shoalhaven City Council (“the Council”) provided comments to the Department in correspondence dated 16 September 2008 which supported the general concept of the proposal subject to several issues being addressed by the Proponent. General conditions of approval were also provided. Further comments were provided in response to the PPR dated 8 September 2009, which generally satisfied the Council’s concerns. These issues are summarised in **Annexure H**.

There were some aspects of car parking, stormwater treatment, utility and servicing, flora and fauna and bushfire which the Council remained concerned which are further discussed in Section 5. The Council’s main concerns included:-

- Shoalhaven LEP 1985 permissibility
- DCP 63: Tourism Development in Rural Areas
- Flooding
- Traffic, Access and Car Parking
- Aquaculture
- On-site Effluent
- Flora and Fauna
- Noise
- Post Development Stormwater Treatment and Control
- Acid Sulphate Soils (ASS)
- General Utility and Servicing
- Urban Design
- Contamination
- Bushfire
- Department of Defence operations
- Section 94 contributions
- Trade waste and backflow
- Food premises construction
- Sediment and erosion control
- Building Code of Australia requirements
- Waste management
- Signage

4.2.4 NSW Office of Water within the Department of Environment, Climate Change and Water (“NOW”) (formerly Department of Water and Energy)

The NSW Office of Water within the Department of Environment, Climate Change and Water (“NOW”) provided comments to the Department in correspondence dated 1 September 2008 and included recommended conditions of approval. These approval conditions include, among other things, riparian corridor, management plan and license

requirements. The main concerns raised by DWE included the following:-

- a) Riparian corridors – DWE require a 50 meter buffer measured from the mean high water mark (MHWM) to the development footprint, comprising the minimum core riparian zone (CRZ) width of 40 metres (measured from the top of bank) along both sides of the watercourse as well as a 10 metre vegetated buffer. The mainland sites require a minimum 20 metre wide riparian corridor.
- b) Protection of SEPP 14 wetlands on GNI - DWE seeks clarification on the landward extent of the boundary of the SEPP 14 Wetlands and recommends, as a minimum that a 50m riparian setback is provided from the boundary of the SEPP 14 wetland, which needs to be clearly identified on a scaled map. DWE also state that any proposed boardwalks should be located outside the minimum riparian corridor widths so as not to interfere with the function of the riparian corridor.
- c) Groundwater - DWE state that a licence under Part 5 of the *Water Act 1912* is required for the proposal if it is likely to intercept or use groundwater, particularly with respect to temporary groundwater dewatering for the construction of the proposed basement car parks on the mainland sites.

The NOW raised the following issues with the PPR:-

- (i) On GNI, the proposed tennis court is within the 50m wide riparian corridor and is close to the SEPP 14 wetland;
- (ii) On the mainland sites, the proposal is within the 20m wide riparian corridor;
- (iii) The riparian corridors were to be rehabilitated with fully structured local native riparian vegetation (trees, shrubs and groundcover species) at a density that would occur naturally which has not been shown on the landscape plans with the PPR.

These issues are discussed in detail in Section 5 of this report.

4.2.5 Department of Environment, Climate Change and Water (“DECCW”) (formerly Department of Environment, and Climate Change)

The Department of Environment, Climate Change and Water (“DECCW”) provided comments to the Department in correspondence dated 19 August 2008 in relation to the EA. DECCW considered that the information provided is insufficient and inadequate for the following reasons:-

- Does not adequately address wet weather storage of wastewater including the management and treatment of sewage generated by the project. The wet weather storage facilities are insufficient to deal with potential long periods of wet weather when they are unable to irrigate the effluent.
- Does not adequately assess the potential impacts of the project on the Aboriginal Cultural Heritage associated with GNI as there is no report on Aboriginal heritage even though there are items in the vicinity.
- Does not adequately assess the indirect impact of the development on the endangered ecological communities (EECs) located on the site. The potential impacts of construction of boardwalks, filling of ponds and construction of pools and buildings within the EEC has not been adequately considered.
- Does not adequately assess the impacts on Marine ecosystems in that there is no assessment of the impact of the larger jetty and marina proposed and there is insufficient information on the impact that extended mooring and an increase in boat traffic will have on sea grasses and other marine flora. Potential pollution of oyster leases located within the estuary has also been inadequately assessed.
- Landscaping plan proposes the use of weed species (*Vinca major*);
- Signage and education as tools to reduce trampling of sensitive ecosystems will have limited affect in reducing damage to EECs and wetlands.
- Does not address the impacts of climate change on the marine or terrestrial ecosystems affected by the proposal.

DECCW considered the PPR in correspondence dated 9 September 2009. DECCW are satisfied with the PPR stating that it adequately addresses the issues raised previously in relation to ecological impacts, sewerage treatment and wastewater system and Aboriginal Cultural Heritage. These issues are discussed in detail in Section 6 of this report.

4.2.6 Industry and Investment (formerly Department of Primary Industries (Fisheries))

The Department of Primary Industries ("DPI") provided comments to the Department in correspondence dated 31 July 2008 and included recommended conditions of approval. These approval conditions include, among other things, requirements to comply with the relevant technical studies and management plans, the use of mesh decking for all jetties and the requirement to provide a Boating Management Plan and a NSW Shellfish Management Plan. The main concerns raised by DPI included the aquaculture and aquatic habitat issues.

- a) Aquaculture - there are a large number of Priority Aquaculture Oyster Leases located in the Crookhaven and Shoalhaven estuary, with oyster leases located directly adjacent to the mainland sites as well as GNI. It is therefore essential that the development does not have a deleterious effect on estuary water quality.
- b) Access over existing oyster lease area - access to the proposed marina on GNI is over an existing oyster lease (OL84/068) and therefore owners consent from both DPI (as lessor for the Crown) and the leaseholder is required for the proposal prior to determination.
- c) Buffer zone - DPI usually requires a 100 metre buffer zone adjacent to wetlands, riparian areas and important aquatic habitats such as the Coastal Saltmarsh Endangered Ecological Community ("EEC"). The EA provides a 50 metre setback which DPI consider satisfactory in this instance given the overall site constraints on GNI and the need to incorporate an area for the proposed on-site reclaimed water irrigation system. DPI also require an effective Sediment and Erosion Control Plan to be implemented for the sites during construction to minimise harm to the natural environment at the site as well as downstream.
- d) Wastewater & stormwater - DPI has no objection to the proposed on-site wastewater management system and the WSUD stormwater management system proposed on GNI and recommend that appropriate conditions of approval be imposed. DPI did, however, recommend that appropriate storage of overflows during any failures of the wastewater system is provided.
- e) Environmental Management Plan, Riparian Management Plan and the Estuary Management Plan - DPI is satisfied with these plans, in particular the proposed mitigation measures for the new jetties incorporating mesh decking and light wells. DPI requires a Boating Management Plan which is to include provisions relating to restrictions on the permanent mooring of vessels at the marina and using the outermost berths where possible. DPI was satisfied that risks to water quality were adequately identified and addressed. These issues are discussed in detail in Section 6 of this report.

In response to the PPR, DPI (now known as Industry and Investment "I&I") have no objection to the PPR, noting that the majority of their previous concerns have been incorporated into the amended proposal. I&I confirm they have received an application to transfer the ownership of aquaculture lease OL84/068 to the Proponent and do not envisage any problems with this transfer thereby removing their objection regarding legal tenure over the proposed marina area.

I&I have requested that the Proponent provide a 'Boat Effluent Pump out Facility' at the jetty adjoining No 84 Greenwell Point Road to be connected to the Council's sewerage system to further reduce the potential environmental impacts from increased boating activity

These issues are discussed in detail in Section 6 of this report.

4.2.7 Department of Lands

The Department of Lands ("DOL") provided comments to the Department in correspondence dated 28 July 2008 and did not raise any objections to the proposal. DOL advised that any proposal to remove the existing licensed deep water timber jetty on the northern side of GNI and the construction of a small marina will require a review of detailed plans by the DOL. Owners consent from DOL will be required prior to the commencement of any works to existing and proposed jetties below the mean high water mark given this is Crown land. This will be reflected in any relevant conditions of approval. These concerns have been resolved.

4.2.8 Rural Fire Service

The NSW Rural Fire Service ("RFS") provided comments to the Department in correspondence dated 28 July 2008 and did not raise any objections to the proposal. RFS advised that any new construction shall comply with Australian Standard AS3959 – 1999 'Construction of buildings in bushfire-prone areas' Level 1. The RFS also had no objection to the PPR based on their previous discussions with the Proponent regarding the use of a fire fighting vehicle on GNI (discussed in detail in Section 6 of this report). These concerns have been resolved.

4.2.9 Southern Rivers Catchment Management Authority

The Southern Rivers Catchment Management Authority (SRCMA) provided comments to the Department in correspondence dated 14 August 2008. The SRCMA is a consent authority under the *Native Vegetation Act 2003* ("NVA"), which applies to rural and rural residential land as well as environmental protection zones. GNI is zoned rural and environmental protection and therefore ordinarily the NVA would apply, however, Section 75U(e) of the Act provides that this does not apply. Notwithstanding this, the principles of the NVA encompass best practice in vegetation management, encouraging an "improve or maintain" assessment methodology which should be applied in this instance. The SRCMA recommends that the development footprint should be entirely located within the 1(a) zone and without impacting on the EECs on GNI. The vegetation clearing issue is discussed in detail in Section 6 of this report.

4.2.10 Shoalhaven Water

Shoalhaven Water provided comments to the Department in correspondence dated 24 July 2008 and provided standard conditions of approval. Shoalhaven Water did provide additional comments in relation to the provision of reticulated sewerage and water services from the mainland for GNI indicating that if such services were required, it would have significant impact on Council's existing water and sewer infrastructure. A further submission was also provided dated 26 August 2009 which provided conditions of approval. The provision of water and wastewater services on GNI is discussed in detail in Section 6 of this report.

4.2.11 Department of Defence

The Department of Defence provided comments to the Department in correspondence dated 5 September 2008, objecting to the proposal due to potential disruption to amenity caused by Defence activities in the Shoalhaven area. The objections included the following:-

- a) Noise - The site will be exposed to aircraft noise from HMAS Albatross and noise generated by military training and operations at and around Beecroft Weapons Range.
- b) Use of helipad – Defence advises that the subject site is located in an area of Restricted Airspace and that military operations take priority over commercial aircraft transits to and from the proposed resort. It should be noted that the Restricted Airspace is controlled by Defence and, as such, aircraft operating from the resort's helipad may not be guaranteed clearance to operate at the times they desire.

These issues are discussed in detail in Section 6 of this report.

4.2.12 NSW Food Authority

The NSW Shellfish program, part of the NSW Food Authority ("FA"), provided comments to the Department in an email dated 8 September 2008. Several concerns were raised which needed to be addressed to reduce the potential impact on oyster farming, including:-

- a) On-site effluent - estimated daily wastewater loads are insufficient and a bigger treatment plant is required and either a larger irrigation area or the proposed irrigation area with 1000KL of wet weather storage. Maintenance and management of the plant is to be a condition of approval given operator neglect is the most common cause of system failure (6 monthly Council inspections required).
- b) Emergency response plan - an emergency response management plan is created in the event of a system failure, which should include mitigation measures to minimise impacts.

In response to the PPR, the FA raised the following concerns:-

- (i) NSW Health should be consulted to ensure that the water supply meets the requirements for drinking water;
- (ii) Reporting protocols and emergency response procedures for spills and breaches of the NSW Environmental Guidelines for the Use of Effluent by Irrigation need to be established. All spills/breaches must be reported the NSW Food Authority as soon as possible to ensure that appropriate action is taken to protect public health.
- (iii) Routine Council inspections of the onsite water management facility to be conducted on a 6 monthly basis due to the sensitive nature of the surrounding environments. This will ensure best practice methods are employed and guarantee human health and safety is a premium.

NSW Health was not consulted as it was considered this requirement would be recommended to be imposed as a condition of approval (if granted). These concerns will be reflected in the recommended conditions of approval and are further discussed in Section 6 of this report.

5 ASSESSMENT OF ENVIRONMENTAL IMPACTS

Key issues considered in the Department's consideration of the Environmental Assessment and the Preferred Project Report includes the following:

- Bulk and scale
- Impacts on the 'Bangalay Sand Forest' Endangered Ecological Community
- Impacts on the Wetlands and surrounding areas
- Car parking
- Flooding and Evacuation
- Water and Wastewater (Goodnight Island)
- Foreshore building line at No 84 Greenwell Point Road
- Dwelling in 7(a) zone on Goodnight Island
- Aboriginal cultural heritage
- Climate change and sea level rise
- Acid sulphate soils
- Helipad
- Construction management
- Landscaping
- Punt and Jetties and consent from Oyster Lessee
- Fire safety
- Underbore
- Boardwalks and Bird hide
- Visual analysis

Some of these issues were resolved following consultation with the Proponent, or were directly addressed via the proponent's Statement of Commitments or the Department's recommended conditions of approval. Significant issues are discussed in detail below.

5.1 WATER CYCLE, ESTUARINE AND RIPARIAN MANAGEMENT

5.1.1 Water Cycle Management

The management of the water cycle on all three (3) sites has been considered in the "*Concept Water Cycle Management Strategy*" prepared by Martens Engineers dated April 2008 ("Martens 2008") and updated where required by the "*Addendum to the Concept Water Cycle Management Strategy*" prepared by Martens Engineers dated June 2009 ("Martens 2009"). The proposed management of the water cycle is considered below.

Mainland Sites

The mainland sites are proposed to be connected to the existing reticulated water mains supply, which will be supplemented with non-potable rainwater, collected from site hardstand areas and stored in rainwater tanks below the proposed buildings. The mainland sites are also proposed to be connected to the existing reticulated sewerage system. It is considered that the management of the water cycle on the mainland sites is satisfactory and sustainable.

Goodnight Island

Water Supply

GNI is to be supplied with potable water sourced from on-site roof areas and stored in a centralised 1200KL tank located underneath the main complex. Individual tanks adjacent to site buildings (pavilions) and transfer mains from these tanks to the central tank will be provided for the collection and transfer of collected rainwater from all site roofs to the central tank. Non-potable reclaimed water from the on-site reclaimed water plant will be used to supplement this on-site water supply for non-potable uses such as irrigation and toilet flushing.

A security analysis was undertaken to ensure an adequate supply of water was provided for GNI, which found that supplementing the supply would only be required in prolonged periods of extremely low rainfall at the site. Water conservation measures such as closing the day spa and pool when the volume of water in the storage tank was less than 20% was part of this security analysis and therefore will be reflected in the conditions of approval.

Wastewater Treatment System

GNI proposes an on-site wastewater management system, which will include the construction and operation of an on-site reclaimed water plant (RWP) and associated infrastructure, including pump stations, non-potable water storage tanks, transfer and sewer mains and on-site irrigation infrastructure. This system is outlined in Martens 2008 Martens 2009. The main elements of this system include:-

- Tertiary Sewerage Treatment Plant ("STP") – A Membrane Bioreactor (MBR) proposed for the site to provide tertiary treatment of all wastewater. All MBR technology is existing and readily available.
- Wet weather storage – 300KL facility proposed to be provided by either concrete/core filled block work tanks or appropriately lined dam with 300mm freeboard.
- Reclaimed water header tank – reclaimed water to be trickle-fed via a pump to 5KL header tank to provide 15m head pressure for internal non-potable reuse (toilet flushing) in all buildings.
- Irrigation area – excess wastewater to be delivered to the sub-surface irrigation area (min area 7100m²). Treated wastewater to be retained in the wet weather storage facility when field capacity is >95%.
- Sewage pump stations – a number of small sewerage pump stations (approx 1.5KL with macerating pump) will collect wastewater and deliver to the STP via a low pressure main.

To ensure the site is suitable for this type of system, the site's topography, hydrology, hydrogeology and climate were investigated through surface and borehole inspections (Martens 2008). No significant constraints to the recommended on-site effluent irrigation area were identified from site investigations. It was recommended by the consultant engineer that a minimum setback of 40 metres be established between the on-site effluent irrigation area and the Crookhaven River, which has been provided.

Whitehead & Associates Environmental Consultants ("W&A") undertook a technical assessment on behalf of the Department on the wastewater management aspects of the project. Following a review of Martens, 2008 report, W&A had the following concerns:-

1. Clarification on effluent disposal area and wet weather storage size based on W&A amended hydraulic loading;
2. An Operations and Maintenance Management Plan for the wastewater treatment plant and its disposal area is required;
3. A Wastewater Management Emergency Response Plan in respect to failure or accidental discharges to the waterway, taking into consideration the requirements of the NSW Shellfish program is to be prepared;
4. Clarification of the terms 'storage dams' and 'pump out' listed in Martens report;
5. Details on pool filters and if backwashing is required an amended water and nutrient balance must be prepared to accommodate additional backwash water; and
6. Detailed treatment plant design and engineering details are required to achieve the desired effluent quality as detailed in the Marten's report.

The system has been designed on the basis of a wastewater generation rate of approximately 10,690L/day. Martens (2009) undertook modelling to ensure that the site's soils and climate conditions could accommodate this daily load within the available effluent irrigation area of approximately 6617m². A wet weather storage area of 300KL has also been provided which will operate when the irrigation field cannot. W&A are satisfied with these parameters which will result in an average irrigation application rate of approximately 2.1mm/day being within the capabilities of the site's soils.

The RWP has been designed to meet the operating and effluent quality performance criteria specified in numerous guidelines and policies prepared by various State and Local Government agencies. In addition to these water quality criteria, W&A recommended set levels for total nitrogen and total phosphorus. W&A were satisfied that with the recommended irrigation area and wet weather storage proposed the nutrients should be readily assimilated by the soils and vegetation on the site, thereby reducing adverse impacts on surrounding land and waterways. W&A concluded that the proposed tertiary wastewater treatment plant and subsurface irrigation is in accordance with 'Best practice' onsite wastewater management.

Following a review of Martens 2009, W&A are satisfied all issues have been resolved subject to relevant conditions which have been reflected in the recommended conditions of approval.

Stormwater Management

Stormwater generated from the mainland sites will be directed to rainwater tanks for on-site re-use for non-potable uses, with any runoff from the site proposed to be directed to the Council's existing stormwater drainage system. The proposed stormwater management system for GNI includes the capture and re-use of stormwater runoff from site roofs for potable water uses, as well as the treatment of stormwater discharges from other site areas through the use of grassed buffers and treatment swales around the edge of the development area. The pathway within the centre of the development is proposed to be constructed of porous paving which will facilitate infiltration and reduce runoff.

In order to assess the effectiveness of the proposed stormwater quality management measures for GNI, water quality modeling was undertaken using the Model for Urban Stormwater Improvement Conceptualisation (MUSIC) program. This modeling indicated that there is a net neutral or beneficial impact on site stormwater runoff quality for post-development conditions as compared to existing conditions for the site. The Council had some concerns regarding post-development stormwater runoff, however, have provided recommendations that can be incorporated as conditions of approval. Appropriate temporary sediment and erosion control management measures during the site construction phase shall be included in the construction management plan as outlined in the Proponent's Statement of Commitments ("SOC").

It is considered that the proposed stormwater controls contain water sensitive urban design features and will not result in any significant adverse impact on the Crookhaven River subject to conditions of approval which have been recommended to be imposed.

Groundwater

The proposal is unlikely to adversely affect groundwater subject to conditions requiring temporary dewatering of excavation sites where required.

5.1.2 Estuarine Environment and Management

GNI is almost completely surrounded by mangroves and/or Saltmarsh which together form part of SEPP 14 wetlands, with the dominant mangrove species being the Grey Mangrove (*Avicennia marina*) and the dominant Saltmarsh species being Marine Couch (*Sporobolus virginicus*). The Lower Crookhaven estuary is dominated by the Seagrass Genus *Zostera* as well as several species of seaweed.

Water quality in the Shoalhaven/Crookhaven Rivers is monitored by the Council and is affected by catchment runoff, acid drainage from acid sulphate soils as well as point and diffuse sources of pollution (urban runoff and sewerage discharge).

The Crookhaven River is also an important area for oyster growing and commercial fishing, with 96 oyster leases contained within the River, with GNI surrounded by a number of these leases. The majority of these oyster leases are categorised as 'Priority oyster aquaculture areas' and therefore potential impact on the estuarine environment is an important consideration in this assessment. Figure 15 illustrates these oyster leases.

Development proposed in the estuary includes the removal of the existing timber jetty and construction of a 42.2m floating jetty with pontoon over the footprint of existing jetty at No 76 Greenwell Point Road and removal of the existing fixed timber jetty at GNI and construction of a new jetty approximately 23.5m long and a 9-berth marina comprising a 25.4m extension to the jetty. No changes to the structures within the estuary at No 84 Greenwell Point Road are proposed.

Figure 15: Oyster Leases in vicinity of GNI (green shading indicates 'Priority oyster aquaculture areas')
(Source: NSW Dept of Primary Industries, August 2006)



The *Estuarine Management Study* prepared by Martens Consulting Engineers, dated April 2008, provides an assessment of potential impacts which the proposal may have on the estuary and the mitigation measures proposed. The potential impacts of the proposal, resulting from increased boating activity, construction impacts and transportation of goods/waste to and from the Island include:

- Coastal erosion (increased boating activity)
- Decreased water quality (stormwater runoff and spills/leaks etc)
- Disturbance to marine flora and fauna (jetties and marina construction)
- Introduction of Marine pests
- Acid sulphate soils
- Impact on aquaculture (oysters and fishing)

The most significant of these impacts which may occur is the disturbance of marine flora and fauna due to the jetty and marina construction and decreased water quality which may adversely affect oyster leases.

Impact of Jetty and Marina Construction

The removal of the existing jetties will not involve any dredging of marine sediments and piling works for the construction of the new jetties and marina will be limited to a small number of holes for pile construction within the estuary. It is considered that if acid sulphate soils are encountered during this construction work, oxidation is unlikely to occur as these soils will remain under water. While there will be some removal of sea grasses and seaweed, estimated to be approximately 20m² following site surveying, once the construction is completed and with the use of mesh decking, it is considered that the majority of this marine vegetation is likely to recolonise. Such impacts, therefore, are considered to be short term and with the relevant conditions of approval and the SOC, it is considered that impacts on marine flora and fauna are not significant.

Impact on Oyster Leases and Water Quality

GNI is almost entirely surrounded by oyster leases and therefore it is imperative that the proposal comply with the various policy and regulation relating to aquaculture. The proposed marina is to be located in an area currently occupied by oyster lease OL84/068, which the owner of the site has negotiated to purchase as it is currently located within the proposed marina footprint. Boat traffic to and from the Island is to be restricted to the existing boat paths

which will ensure minimal boating activity within surrounding oyster leases. The main impact the proposal may have on aquaculture therefore is potential impacts on water quality.

State Environmental Planning Policy No 62 – Sustainable Aquaculture ("SEPP 62") requires consideration of the potential impact on oyster leases (Clause 15B, 15C & 15D). The consent authority is required to consider whether, because of its nature and location, the development may have an adverse effect on oyster aquaculture development or a priority oyster aquaculture area, and if it suspects that the development may have that effect, must give notice of the application to the Director-General of the Department of Primary Industries ("DPI") (CI 15B) and consider any comments received.

Given the close proximity of the priority oyster aquaculture area DPI were consulted (refer Section 4.3.4), and required that the development must not have a deleterious effect on estuary water quality and that access over the existing oyster lease to the proposed marina on GNI (OL84/068) must be provided in the form of owners consent and purchase. The impact on water quality is considered in this assessment and the access issue has been resolved given owners consent from the current lease holder has been provided and the sale of the lease to the owner of the site successfully negotiated.

The consent authority (pursuant to SEPP 62) may refuse to grant consent to development if it is satisfied that the development will have an adverse effect on, or impede or be incompatible with any oyster aquaculture development that is being carried out or may in the future or if it is not satisfied that appropriate measures will be taken to avoid or minimise any such adverse effect, impediment or incompatibility. The proposal has the potential to adversely affect water quality in the Crookhaven River, however, the proposed method of on-site effluent and stormwater management are of best practice and environmentally sustainable (discussed above). It is therefore considered that only accidental spillages or problems with the operation of the development are likely to result in an adverse impact on water quality. The provision of thorough management plans which deal with such incidences are considered imperative to ensure any impact on water quality is minimised. Such plans are provided for in the Habitat and Vegetation Management Plan ("HVMP") and the Operations Plan which are reflected in the conditions of approval.

The *NSW Oyster Industry Sustainable Aquaculture Strategy, 2006* ("OISAS") must also be considered which identifies those areas within NSW estuaries where oyster aquaculture is a suitable and priority outcome. The relevant objectives of the OISAS include identifying key water quality parameters necessary for sustainable oyster aquaculture and establishing a mechanism to maintain and where possible improve the environmental conditions required for sustainable oyster production.

The OISAS lists some specific actions that will contribute to the protection and/or improvement of water quality for oyster aquaculture. The Estuarine Management Study states that the proposal complies with OISAS given the following:-

- Educational and advisory signs to be implemented for recreational boating, warning of the need to protect sanitary water quality;
- Recreational/private boating to be excluded in specific oyster harvest areas to protect sanitary water quality;
- A suitable wastewater system will be implemented such that discharge of untreated water into the estuary does not occur;
- Sewer systems to be constructed and operated such that overflows do not occur. System will be set up such that visitors will be evacuated from the Island if on site sewerage treatment plant fails to prevent overflow;
- Stormwater runoff will be controlled to mitigate any potential stormwater impacts;
- The principles of ESD are rigorously followed to ensure that water quality is maintained and, where possible, improved such that oyster aquaculture is continued in the area for the benefit of both current and future generations.

It is considered that these measures adequately address the OISAS requirements as outlined above and are reflected in the conditions of approval and SOC.

The NSW Shellfish Program also seeks to protect aquaculture by protecting the health of shellfish consumers through administration and application procedures that assess risk to shellfish contamination, control harvesting and

protect shellfish from contamination after harvesting. A Management Plan in accordance with the NSW Shellfish Program is proposed to be prepared which would be implemented if an accidental spill or incident occurred. This is to form part of the HVMP (as part of the SOC).

Mitigation of Impacts on Estuary

The mitigation of potential impacts on the estuary include:-

- Preparation of *Pollution and Waste Management Plan* to ensure fuel and chemical spills are avoided and that goods and waste are transported correctly to and from the Island;
- Provision of rainwater tanks to collect all runoff from roofs and WSUD to manage site stormwater;
- Prohibition of guests fishing from Island;
- Provision of light wells and mesh decking for proposed jetties and marine to reduce shading on seagrasses;
- Continual monitoring of the site for marine pests in the HVMP (in the SOC); and
- Guest education, restricting access to estuary and provision of footpaths (to be addressed in Operations Plan to be reflected in conditions).

These mitigation measures are considered satisfactory to ensure minimal impact on the estuary subject to the relevant conditions of approval and the implementation of the SOC.

5.1.3 Riparian Management

The riparian zone for GNI consists of a 50 metre buffer zone from the mean high water mark (MHW) zoned 7(a) Ecology and largely consists of the SEPP 14 wetland (Saltmarsh EEC and mangroves) as well as a small section of cleared area and Bangalay Sand Forest EEC. Development proposed in this riparian zone includes excavation of the heritage remains, filling of artificial waterbodies (outside of the SEPP 14 wetland) and the construction of a boardwalk, bird hide and tennis court.

The *Riparian Management Plan* prepared by Martens Consulting Engineers dated March 2007 lists the potential risks to the riparian communities as increased sedimentation from increased runoff from the development footprint, weed introduction and trampling of species via unauthorised access to this area.

DWE (now known as NOW) are concerned that a tennis court is proposed within the riparian zones on GNI, while the riparian zone at No 76 Greenwell Point Road is only 15 metres instead of 20 metres and no setback is provided at No 84 Greenwell Point Road. It is considered that the proposed tennis court will not adversely affect the SEPP 14 wetland or the Crookhaven River given its small size and lack of vegetation required to be removed. Furthermore, it is considered there is no alternate position for this facility on the island. The retention of the remains of the former tennis court adjoining this new court is not required. This area, however, will be required to be rehabilitated to provide remnant vegetative screen to ensure visual amenity is maintained in this riparian area. The 50 metre riparian zone provided around the remainder of GNI will ensure minimal impact from the development on the River and wetland areas and is considered satisfactory.

In relation to the mainland sites, it is considered that a 15 metre setback to be naturally vegetated is sufficient for No 76 given the existing use of this and surrounding sites are of low impact. With respect to No 84, the existing development on the foreshore is to remain and therefore there is no scope for a riparian zone, which is considered unnecessary given the low impact of the proposed use and the sufficient controls in relation to stormwater management for these mainland sites.

The management actions proposed to ensure the riparian zone is protected include:

- Prevent access to riparian zone
- Weed eradication program
- Revegetation program
- Sediment control
- Preventing removal of seeds, shells etc through signage
- Site environmental management plan

These actions are contained in the HVMP and form part of the SOC.

It is considered the potential impacts on the riparian and estuarine environments have been adequately mitigated and the water cycle has been appropriately managed for the development. Relevant conditions of approval and implementation of the SOC are recommended.

Resolution – It is considered that subject to the recommended conditions of approval outlined above and the Proponent's Statement of Commitments, the proposal has adequately addressed the management of the water cycle, on the site as well as the estuary and riparian areas of the site.

5.2 URBAN DESIGN, SCENIC QUALITY AND AMENITY

The design of the proposed buildings on the sites is an important consideration, given the site's high visibility, particularly in relation to height, scenic quality and amenity issues relating to view loss, privacy and solar access. The urban design aspects of this project were considered in the *Urban Design Analysis* dated 9 March 2007 prepared by Architectural Projects Pty Ltd lodged with the EA as well as shadow diagrams and view analysis. The urban design issues are addressed in the PPR report prepared by Cowman Stoddart as well as in the visual analysis and shadow diagrams.

The recommendations of the Urban Design Analysis include:-

- Buildings scale should relate to topographic features and tree canopy
- Development is to be undertaken in a manner which reduces its bulk and scale and does not adversely affect the visual amenity of the locality
- Break up large buildings into smaller scale elements to reduce bulk
- Avoid large unbroken and overly complex roof forms
- Enhance view lines from the town centre to the River
- Facades should not occupy more than three quarters of the street frontage
- Height of building on land zoned for business shall have a maximum height of 3 storeys.
- Parking to be provided at rear or beneath building.

There are various environmental planning instruments which deal with these issues including SEPP 71, *Shoalhaven LEP 1985*, the *Coastal Design Guidelines of NSW* and the *NSW Coastal Policy, 1997*. The relevant matters in SEPP 71 include clauses 2(e), 2(k), 8(d), 8(e) and 8(f) which require the following matters to be considered:-

- *To ensure that the visual amenity of the coast is protected,*
- *To ensure that the type, bulk, scale and size of development is appropriate for the location and protects and improves the natural scenic quality of the surrounding area,*
- *The suitability of development given its type, location and design and its relationship with the surrounding area,*
- *Any detrimental impact that development may have on the amenity of the coastal foreshore, including any significant overshadowing of the coastal foreshore and any significant loss of views from a public place to the coastal foreshore, and*
- *The scenic qualities of the New South Wales coast, and means to protect and improve these qualities.*

The *Coastal Design Guidelines for NSW* provides desired future character principles for new developments in coastal villages, such as Greenwell Point. The desired future character of coastal villages is to reinforce scenic and tourist values by maintaining and improving the distinctive way in which the settlement sits within the landscape. The village centre is reinforced with a mix of uses that supports tourism and local activities to ensure the long-term viability of the settlement's main street.

The important principles for this project include controls relating to buildings (Clause 5) and Height (clause 6):-

- *Buildings - within the village main street and centre an appropriate mix may contain community, education, retail, commercial buildings, shop-top housing, town houses, detached housing for either residential or*

tourist uses. These buildings are oriented towards and address the street and have on-grade, active street level uses on the main street.

- Height - the village centre and the main street have a maximum of up to three storeys. Heights are subject to place-specific urban design studies. New development is appropriate to the predominant form and scale of surrounding development (either present or future), surrounding landforms and the visual setting of the settlement. Buildings avoid overshadowing of public open spaces, the foreshore and beaches in centres before 3pm midwinter and 6.30pm Summer Daylight Saving Time. Elsewhere avoid overshadowing of public open spaces, the foreshore and beaches before 4pm midwinter and 7pm Summer Daylight Saving Time.

The matters for consideration of density and height, overshadowing, views and privacy are discussed below, with references to the EPIs where relevant.

Design and Height

The designs of the buildings on the mainland sites and on GNI have been the subject of extensive debate between the Department and the Proponent, which have largely been addressed in the redesign of the proposal in the PPR.

a) No 76 Greenwell Point Road

The original proposal for No 76 comprised a five (5) storey building which included 2 storeys of basement car parking which consisted of sandstone cladding with the middle floors overhanging the basement parking. This original building also comprised two large building masses, separated by a void area. The presence of a 6 metre high blank basement wall to the waterfront elevation was unacceptable in relation to the matters for consideration under SEPP 71 and other coastal policy documents. It was considered that the building height should not exceed 11 metres at any point as outlined in the Proponent's urban design advice provided with the application and the *Coastal Design Guidelines* (3 storeys). The original building was totally out of character with the surrounding development.

The amended design in the PPR satisfactorily addresses these concerns for this building which now steps down the site with a lower basement parking level and the breaking up of the building into three (3) separate portions assisting to reduce the bulk and scale. The stepping in of the upper storey and the change to external appearance ensures this building now integrates more effectively into the site and the surrounding area. Existing and proposed landscaping also assists with screening and providing a sense of scale.

While the building is larger than surrounding development, it is characteristic of the future character of the area, being located within a Business Village zone and within the main street of the village. The overall height of this building is 11 metres which is consistent with the Urban Design Analysis (with the exception of a small corner of the roof of the upper floor), the *Coastal Design Guidelines* which provide for a three (3) storey limit for coastal villages (the basement parking is predominantly below ground and therefore not a storey) and the 11 metre height limit under the *Illawarra Regional Environmental Plan*. The safety and security aspects of this building have also been improved with greater separation and access control between the public (retail areas and reception) and private (serviced apartments) areas. Accessibility has also been considered, with several adaptable units being provided as well as access to and from the car parking, pool and other public areas being provided (primarily via lift access). The use of this building for commercial and tourist uses is appropriate given its location within the village centre.

The façade along Greenwell Point Road provides a 4 metre entry way through to the rear portion of the building, assists in breaking up the façade. It is considered that this building is consistent with the relevant planning controls and is satisfactory in terms of height and design.

b) No 84 Greenwell Point Road

The building at No 84 Greenwell Point Road has been slightly increased in height to ensure the basement parking level is effective. This building is a smaller scale to that at No 76, although is larger than the existing development adjoining this site. The overall height of the building is 11 metres, which is consistent with the Coastal Design Guidelines, the Urban Design Analysis (up to 3 storeys) and the *Illawarra Regional Environmental Plan*. The change in materials from horizontal to vertical detailing has improved the design of the building, reducing the bulk.

The removal of the extensive alterations and additions to the existing weatherboard cottage has reduced the bulk of development and reduces its visual impact from the water. The setting back of the upper floor well into the floor plate of the lower levels reduces the overall bulk of the building. The scale of the building when viewed from the water is satisfactory given the height corresponds with the existing trees in the street setback and the two storey nature of the building in this location.

c) Goodnight Island

The density and design of the original development proposed for the Island was greater than would be expected in a rural context. The number of cabins and the need for separation between them meant that they covered a large portion of the site and interfered with existing vegetation at the outer limit of their extent. Reducing the number of cabins allowed a more comfortable separation between the existing trees and the cabins (this is further discussed in the ecological issues). Generally the amount of accommodation on the island has been reduced in response to the limited amount of car parking available in the land-based buildings (car parking is discussed separately) and density concerns.

The design philosophy for the Island development was to retain the visibility of the grassy knoll from Greenwell Point and a green fringe around the waters edge. While the Department concurs with this philosophy, it is generally considered that this outcome was not necessarily achieved. Some of the grassy knoll is visible, however, it is largely obscured. High quality detailing in the final design is critical to ensure that the buildings have as positive impact as possible on their surroundings. Roof edges and columns on the north side should be as fine as possible and the specified glass should be as transparent as possible. It is considered the design achieves this level of quality (to be imposed as a condition of approval to ensure design quality).

The main complex building's length is broken up by vegetation in the foreground and by passageways through the building. The building generally reads as a series of pavilions. It is acknowledged that when circulating about the island, the rigidity of the proposed building lessens and the viewer has the potential to experience the building from different angles. The roof appears to assist in breaking up the length of the building.

The villa building has been reduced slightly from its original design and more strategic placement of landscaping has allowed this area to become marginally more private, given its location in the centre of the Island.

The height of all buildings proposed on GNI is restricted to single storey including the main complex, pavilions, villa and utility shed, an appropriate height given the Island's natural and isolated context. The design of the amended proposal is acceptable.

Scenic Quality

The scenic quality of the area has been considered in the visual analysis diagrams provided with the PPR. The proposed buildings at No 76 and No 84 Greenwell Point Road, while larger than the surrounding buildings, are consistent with the future character of the area and the *Coastal Design Guidelines* which allow higher density development in village centres. The trees within the sites and adjoining sites set a height scale within which the proposal conforms, thereby reducing bulk and providing a screen and scale to the buildings. Further landscaping in the foreshore area of No 76 (requested by DWE) will ensure further screening and integration of the building into its surroundings. The proposed buildings on the mainland sites are illustrated in Figure 16.

In relation to GNI, the proposed main complex is a significant building in its context; however, vegetation assists in screening the building and giving it some degree of scale. The surrounding EEC vegetation along the sides of the Island, when viewed from Greenwell Point, is significantly higher than the proposed building and provides a contrasting backdrop to the built form. The single storey nature of the proposed building and the open form of the front elevation, coupled with the use of lightweight materials and breaking up of the building into several pavilions assist in minimising bulk and integrating the built form into its natural surroundings (visual analysis is on front cover). The separation of the proposed villa behind the main complex reduces the scale of the development, instead of enlarging the main complex. The pavilions on the other side of the Island are of low scale and are largely screened by the relatively dense EEC vegetation and their single storey detached nature minimise their visual presence.

It is considered that the built forms at No 76, 84 and GNI do not detract from the scenic quality of the surrounding

area. Further landscaping of the foreshore areas has been reflected in conditions to enhance environmental and scenic quality amenity issues.

Figure 16: View Analysis – No 76 & 84 Greenwell Point Road Greenwell Point
(Source: PPR, Studio Internationale, Drawing No 2006-01 | MP35/2 D)



Overshadowing

The overshadowing controls focus primarily on coastal features such as open space, beaches and the foreshore and state that such areas should not be overshadowed in the afternoon in midwinter. The primary overshadowing control requires neighbouring properties to achieve at least 3 hours of solar access daily during midwinter.

The proposed building at No 76 will overshadow Jervis Street in the morning during mid-winter and the adjoining property to the east and parts of the foreshore in the afternoon of midwinter. This building is setback from the common boundary by approximately 3 metres which is satisfactory. While Jervis Street is a public area, the lack of solar access in this area is unlikely to adversely affect the amenity of the area. The overshadowing of the adjoining eastern property (known as No 80 Greenwell Point Road) will occur in the afternoon from about 3pm. This property should enjoy adequate solar access in the morning during midwinter and further into the afternoon at other times of the year. This amount of solar access is consistent with the relevant planning controls.

The proposed building at No 84 will overshadow the adjoining property to the west (No 82 Greenwell Point Road) in the morning during midwinter and the adjoining property to the east (No 86 Greenwell Point Road) in the afternoon. Both of these properties will receive adequate solar access, at least 3 hours, in the morning (No 86) or the afternoon (No 82).

The cumulative impact of the proposal is the most significant at No 82 Greenwell Point Road which will be overshadowed to some extent by both buildings throughout the course of the day in midwinter. A significant portion of the rear yard and dwelling at No 82 will be overshadowed by the proposed building at No 84 in the morning while in the afternoon, some shadow will be cast over the southern portion of the rear yard of this property by the proposed building at No 76. The rear yard of No 82 is a large area and only a small proportion of it will be overshadowed, with the foreshore area of this block not in shadow at any time of the day. It is therefore considered that No 82 will receive adequate solar access to the dwelling in the afternoon and the majority of the rear yard will receive at least 3 hours of sunlight throughout the day in midwinter. It is therefore considered that while the proposed buildings will cast shadows over adjoining properties, such shadowing is acceptable and adequate solar access will be provided to adjoining properties.

On GNI, proposed pavilion B-9 may result in some overshadowing of the adjoining EEC vegetation, however, this is likely to be insignificant as it would primarily occur in midwinter only and would be for a short duration. It is considered that the proposal on GNI will not result in any significant adverse overshadowing.

Privacy

The building at No 76 is primarily orientated towards the adjoining streets, being Greenwell Point Road and Jervis street, and to the foreshore and away from adjoining properties. Privacy within the building is maintained by the presence of the internal landscaped bridges which connect the portions of the building and the orientation of the main living areas towards the street and the foreshore. The bedroom areas are largely confined to the middle portions of each block such that internal privacy is maintained. There are some windows that face the adjoining property (No 80 Greenwell Point Road), however, these are primarily bedroom windows which do not generally adversely impact on privacy while deck areas which may allow some overlooking have privacy screens fitted at the eastern end. There is also some screen planting proposed in the 3.1m side (eastern) setback. It is considered that privacy is maintained for adjoining properties to No 76.

In relation to No 84, the side setback to the western boundary is 1.5 metres and 5.5 metres from the eastern side boundary due to the location of the driveway. The majority of windows which face adjoining properties consist of bedroom and bathroom windows which do not generally result in privacy loss. The retail areas are orientated to the street and the living areas primarily towards the front and rear of the site. There is currently no landscaping proposed for this site along side boundaries which would assist in maintaining privacy between properties. This requirement will be reflected in the recommended conditions of approval to ensure overlooking opportunities are minimised. In general, it is considered that given the primary areas of overlooking occur from living areas, which in this case are directed to the foreshore and the street, that privacy is largely maintained for adjoining properties.

The proposal on GNI is unlikely to adversely affect privacy of existing residents given its isolated location and internal privacy is maintained through the dispersed nature of the buildings on the Island.

View Loss

The proposed buildings at the mainland sites will not further adversely obstruct views for nearby development given the height of the existing development on the site and the topography of the land in this location. In relation to GNI, there will be no obstruction of water views as there is no adjoining or nearby properties which will be affected.

Resolution - It is considered that the design and impact on amenity is satisfactory for the proposal subject to recommended conditions of approval.

5.3 ECOLOGICAL IMPACTS

The mainland sites are highly modified and predominantly devoid of any remnant vegetation, with street trees on these sites forming the main ecological constraints to development, which are to be retained. GNI has large areas of remnant vegetation and it is this aspect of the proposal which requires further consideration of ecological impacts.

The *Terrestrial Ecological Assessment and Management Plan* prepared by Eco-Logical Australia dated March 2007 ("Ecological Report"), the *Environmental Management Plan* prepared by Martens Consulting Engineers dated March 2007 and the *Riparian Management Plan* prepared by Martens Consulting Engineers dated March 2007 ("Riparian Report") have been prepared by the Proponent to consider the ecological issues. A *Habitat and Vegetation Management Plan* to be prepared by Eco Logical Australia is part of the Statement of Commitments ("SOC"), with a framework document provided as part of the PPR.

Flora

The Ecological Report describes GNI as consisting of an elevated forested area, a cleared central area and intertidal wetlands at either end with the following vegetation communities (refer Figure 17) -

- Bangalay Sand Forest
- Saltmarsh/mangroves
- Cleared grassy area and frog pond.

The Bangalay Sand Forest is consistent with the *Bangalay Sand Forest of the Sydney Basin and South East Corner Bioregions*, listed as an Endangered Ecological Community ("EEC") ("Bangalay SF EEC") under the Threatened Species Conservation Act 1995 ("TSC Act") while the Saltmarsh community is also consistent with the *Coastal Saltmarsh in the NSW North Coast, Sydney Basin and South East Corner Bioregions* ("Saltmarsh EEC"), listed as an EEC under the TSC Act. The mangrove and Saltmarsh communities are protected under SEPP 14.

Figure 17: Vegetation Communities on GNI
(Source: Ecological Report, Martens Consulting Engineers, March 2007)



Based on the vegetation community type and condition, the site was divided into 7 zones (also shown in Figure 17) comprising Zone 1 (Saltmarsh/mangrove western end), Zone 2 (Saltmarsh/mangrove eastern end), Zone 3 (Bangalay SF with understorey), Zone 4 (Bangalay SF understorey recently cleared), Zone 5 (Bangalay SF – northern side), Zone 6 (cleared grassy area) and Zone 7 (pond).

There are currently seven (7) ponds located on GNI including three (3) within the SEPP 14 wetlands, three (3) in higher areas on the Island and another in the northeast. These ponds are illustrated in Figure 18.

The ponds within the SEPP 14 wetland are to be retained in their current form, while the 3 higher ponds are to be filled in as they are not hydraulically linked to the estuary or SEPP 14 wetland and were believed to be constructed as part of a golf course.

The other pond (known as 'Pond 7') to the northeast is to be retained for conservation purposes as the presence of *Typha* sp. within this pond provides frog habitat and potential habitat for the Green and Golden Bell Frog (*Litoria aurea*). Landscaping is proposed around it to incorporate such habitat requirements. It is considered that the filling of the higher ponds and the retention of the remaining ponds provides a satisfactory ecological outcome.

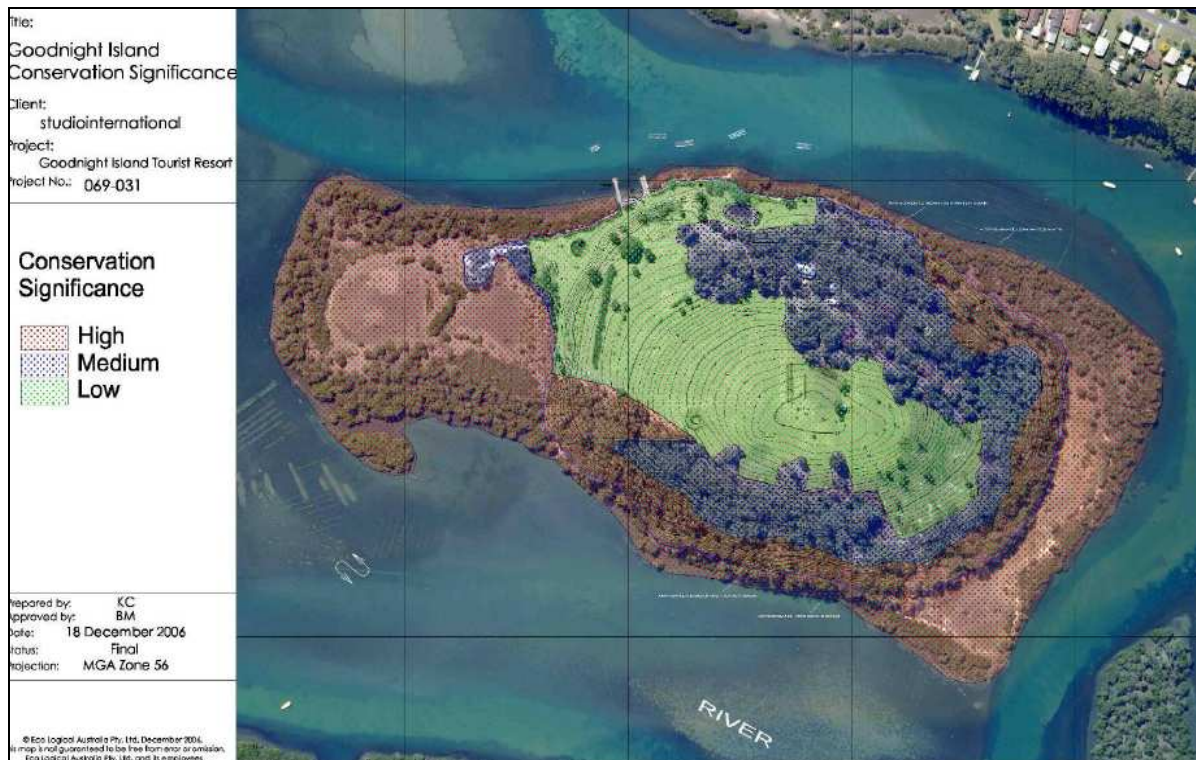
Figure 18: Ponds on Goodnight Island
(Source: Ecological Report, Martens Consulting Engineers, March 2007)



The site was then ascribed low, medium or high conservation significance status based on the vegetation zones and potential habitat as outlined in Figure 19 below. The areas of high and low conservation significance are supported as they represent the most constrained and least constrained areas, however, the medium conservation significance areas are of concern. Some parts of the Bangalay SF EEC were ascribed only medium conservation significance based on the absence of, or lack of diversity within, the understorey.

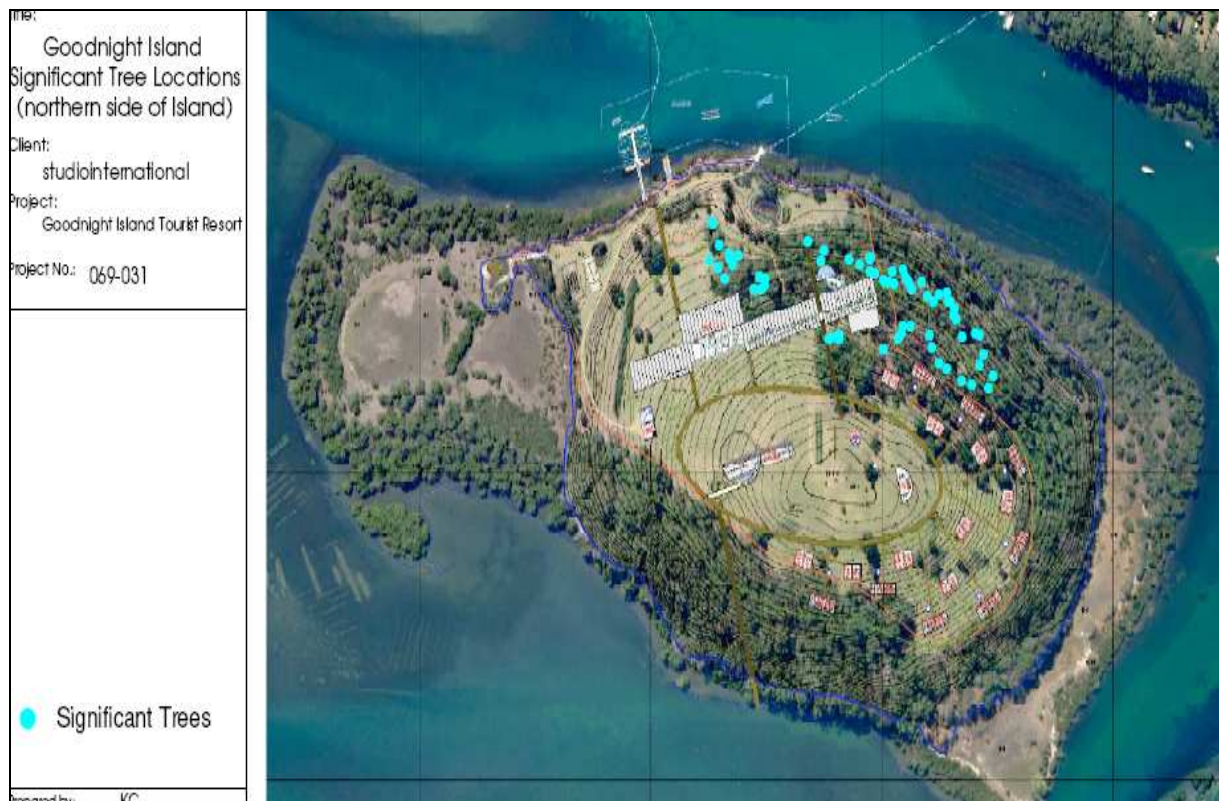
While the Ecological report made it clear this was due to the slashing of the understorey and the subsequent weed infestations, this removal should represent an opportunity to restore the EEC rather than to hasten its destruction. Accordingly, the Proponent was advised to reconsider the layout of the development on GNI such that the development footprint was outside the EEC.

Figure 19: Areas of Conservation Significance on GNI
(Source: Ecological Report, Martens Consulting Engineers, March 2007)



The Ecological Report also nominated 'significant trees' which are located along the northern side of the Island, defined as trees with a diameter, base, height ("dbh") measurement of >40cm, some of which contain hollows (illustrated in Figure 20).

Figure 20: Significant Trees on GNI
(Source: Ecological Report, Martens Consulting Engineers, March 2007)



Fauna

In relation to fauna, 74 species were recorded during site surveys, consisting of 66 birds, 5 mammals (all microchiropteran bats) and 3 frogs. Of those observed, only the pied oystercatcher (*Haematopus longirostris*) and the sooty oystercatcher (*Haematopus fuliginosus*), which were observed near the site, are threatened species under the TSC Act. No arboreal mammals or threatened species of bats were observed during the surveys and only one boobook owl (*Ninox novaeseelandiae*) was heard calling. Three (3) species of frogs, including the common eastern froglet (*Crinia signifiera*), striped marsh frog (*Limnodynastes peronii*) and Peron's tree frog (*Litoria peronii*), were recorded in Pond 7.

Impact Assessment - Improve or Maintain

An impact assessment was undertaken on 39 species based on a 'likelihood of occurrence' which was reviewed following the surveying to determine which species were likely to be affected by the proposal. Factors considered included available habitat, consideration of species range and previous records in the locality. These impact assessments were undertaken in accordance with DECC guidelines with scores between 1 and 10, with 1 being the least impact and 10 being the most significant impact requiring further assessment.

This assessment revealed that all hollow-dependant species scored a 5 indicating that a high impact may result from the proposal, thus requiring off-setting. These species included the powerful owl (*Ninox strenua*), masked owl (*Tyto novaehollandiae*), gang-gang cockatoo (*Callocephalon fimbriatum*), Eastern little mastiff-bat (*Mormopterus norfolkensis*), great pipistrelle (*Falsistrellus tasmaniensis*), greater broad-nosed bat (*Scoteanax rueppellii*) and the White-footed Dunnart (*Sminthopsis leucopus*). The large-footed myotis (*Myotis adversus*) scored a 3, as this species is not entirely dependent on hollows and may use other structures for roosting (e.g. underneath timber bridges).

None of these species were recorded on the site, but their occurrence is possible, especially for the mobile species (birds and bats) that may use the site from time to time. The removal of trees with hollows therefore is likely to have an impact on these species, however, given the extent of vegetation on the site, some removal of such trees is unlikely to significantly impact on these species.

Wading/estuarine birds scored a 3 including the pied oystercatcher (*Haematopus fuliginosus*) and sooty oystercatcher (*Haematopus longirostris*) which were observed within the estuary close to the island. These species may breed and roost on the island within the wetlands and therefore, it is important that the wetlands are not disturbed, that only minimal clearing of mangroves along the southern edge of the island occurs to allow for the boardwalk construction, and that predators are eliminated and prevented from being introduced.

The green and golden bell frog (*Litoria aurea*) scored a 2, which while not confirmed to be on the island, it has been recorded close by on mainland sites. Potential habitat for this species occurs at the frog pond containing *Typha* sp, which will be retained on the site. The Bangalay SF EEC scored a 7, indicating that impacts to this community were high and that as an EEC, all attempts to conserve and enhance the community should be undertaken. The impacts will result from clearing of the community, particularly canopy species to allow for construction of the cabins, main building and other structures.

The original proposal involved the removal of approximately 65 trees (including both significant and non-significant trees) which were located within the building envelopes for the proposal and an additional 44 trees that may be affected by the development (through root damage, drainage etc). The proposal was subsequently amended such that a significant reduction in the removal of Bangalay SF EEC is now proposed and the significant trees nominated in the Ecological report are to be retained. While some 49 trees are still proposed to be removed, the development footprint has been reduced thereby reducing the overall impact to the Bangalay SF EEC with minimal 'significant trees' as noted by the Ecological Report now proposed for removal.

The reduction in the number of pavilions as well as their more strategic position has led to an increase in Bangalay SF EEC and significant trees being retained. This is particularly important for the hollow-bearing trees, which along with the frog pond, provide the most important habitat element for the threatened and migratory species likely to use the site.

removal of vegetation associated with the development should be limited to avoid native vegetation containing hollows or comprising Bangalay SF ECC. Appropriate conditions will be imposed restricting vegetation removal to only those trees and vegetation which are located within the development footprint.

Furthermore, to offset the loss of canopy trees, the proposal involves all areas of high conservation value with a native understorey and recovery potential being set-aside for regeneration. This area is approximately 2.79 ha and is seen as an appropriate offset for development on the site.

The recommendations and mitigation measures of the Ecological Report included:-

- Retention of all significant trees;
- Retention of the frog pond containing *Typha* sp. and filling of the other three ponds. No use of herbicides, pesticides and other chemicals up-slope of, and within 20m surrounding the frog pond;
- No disturbance within the SEPP14 wetlands (except as discussed below);
- Construction of a nature trail around western side of the island linking with a boardwalk and bird hide within the disturbed area of the western wetland where there are artificial waterbodies. Restoration and weeding of this area of the wetlands including the filling of the ponds or increasing their tidal flushing capacity to improve water quality and decrease mosquito breeding. The nature trail could also link with a section of boardwalk overhanging the water along the southern boundary of the island and possibly be incorporated into a designated swimming area. Interpretive signage along the way;
- Use of previously cleared areas of low conservation value for development footprint;
- Positioning cabins outside of the high conservation value;
- No cats and dogs allowed on the island;
- Bush regeneration of high conservation value areas, through implementation of the conservation and land use management plan;
- Landscaping with native species or non-invasive cultivated species (landscaped areas only);
- Abide by the principles of "improve or maintain";
- Checking trees prior to felling to allow relocation of wildlife; and
- Relocation of tree hollows prior to felling to appropriate area on the site.

The proposed restoration and rehabilitation of the Bangalay SF ECC via the *Environmental Management Plan* and the *Habitat and Vegetation Management Plan* (HVMP) (provided in the Statement of Commitments) will ensure the ECC is restored such that the ecological significance of the site will be improved by the proposed. Active weed management, access issues, retention of tree hollows and restoration of the Bangalay SF ECC are management issues to be addressed in the HVMP to ensure the ecological integrity of the site is maintained. While some significant trees will be removed, the vast majority of them will be retained by the amended proposal.

Landscape Plan

Landscape Plans have been prepared by *Oculus* for GNI and No 76 Greenwell Point Road as well as a "Tree Removal" plan prepared by *Ecological*. The landscaping proposed for GNI is satisfactory, albeit very simplistic, while the plan for No 76 is also simple with no structured vegetative restoration of the riparian zone, which is required by NOW. This requirement will be reflected in the recommended conditions of approval. The tree removal plan appears to show trees being removed which are not within the footprint of the main complex or the pavilions and appear to be for the pathway. These trees are to be retained and a condition will be imposed restricting tree removal to those directly within the footprints of the buildings on the site.

Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* ("EPBC Act") requires that if a proposal is likely to have an impact on a matter of National Environmental Significance, then a referral to the Department of Environment and Water Resources is required. The EPBC Act Administrative Guidelines set out 'significant impact criteria' that are used to assist in determining whether a proposed action is likely to have a significant impact on matters of National Environmental Significance.

The matters of relevance to the current proposal are potential environmental impact on Commonwealth listed

Threatened Species and Ecological Communities and any environmental impact on Commonwealth listed Migratory Species. In relation to Commonwealth listed Threatened Species, the Green and Golden Bell Frog (*Litoria aurea*), Grey-headed Flying-fox (*Pteropus poliocephalus*), Leafless Tongue-orchid (*Cryptostylis hunteriana*), Swift Parrot (*Lathamus discolor*), and Regent Honeyeater (*Xanthomyza phrygia*) are considered likely to occur at the site. The assessment of significance found that the proposal is unlikely to interfere with the recovery of the species.

The White-bellied Sea-Eagle (*Haliaeetus leucogaster*), White-throated Needletail (*Hirundapus caudacutus*), Black-faced Monarch (*Monarcha melanopsis*), Rufous Fantail (*Rhipidura rufifrons*), Lesser Sand Plover (*Charadrius mongolus*), Eastern Curlew (*Numenius madagascariensis*) and Pacific Golden Plover (*Pluvialis fulva*) are all Commonwealth listed Migratory Species considered likely to occur at the site, however, it was also found that the proposal is unlikely to seriously disrupt the lifecycle of an ecologically significant proportion of the population of these species.

It was therefore concluded that the proposal is unlikely to have a significant impact on Matters of National Environmental Significance and therefore a Commonwealth referral is considered unnecessary in this instance.

Council's Concerns

Following review of the PPR, the Council still had several concerns with the proposal including:-

- Development footprint still overlaps with Bangalay Sand Forest EEC with an unspecified, but substantial (40 to 50) number of trees proposed to be removed (Tree removal plan in section 15 of the PPR). It is not specified if any of trees to be removed are hollow-bearing.
- Landscaping of proposal includes non-native species (exotic vine Star Jasmine *Trachelospermum jasminoides* proposed to be planted on GNI). Exotic vines and scramblers are listed as a Key Threatening Process (NSW TSC Act) and remnant vegetation on island is classified as an EEC - exotic plant species on island should be prohibited.
- The applicant's provided Habitat Vegetation Management Plan (HVMP) outline doesn't contain enough detail for Council to make an assessment of its adequacy.
- Previous comments and issues in relation to fauna survey effort and biodiversity assessment (maintain or improve test) haven't been addressed.

It is considered that these issues can be adequately addressed in conditions of approval, including tree removal being restricted to those trees which are located within the development footprint only and the final landscape plan including only native species. The final HVMP shall be provided to the satisfaction of the Department prior to the issue of Construction Certificate, at which time the Department will consult with DECCW.

Resolution - The ecological issues with the proposal have been satisfactorily addressed in the PPR and the SOC.

5.4 INFRASTRUCTURE PROVISION

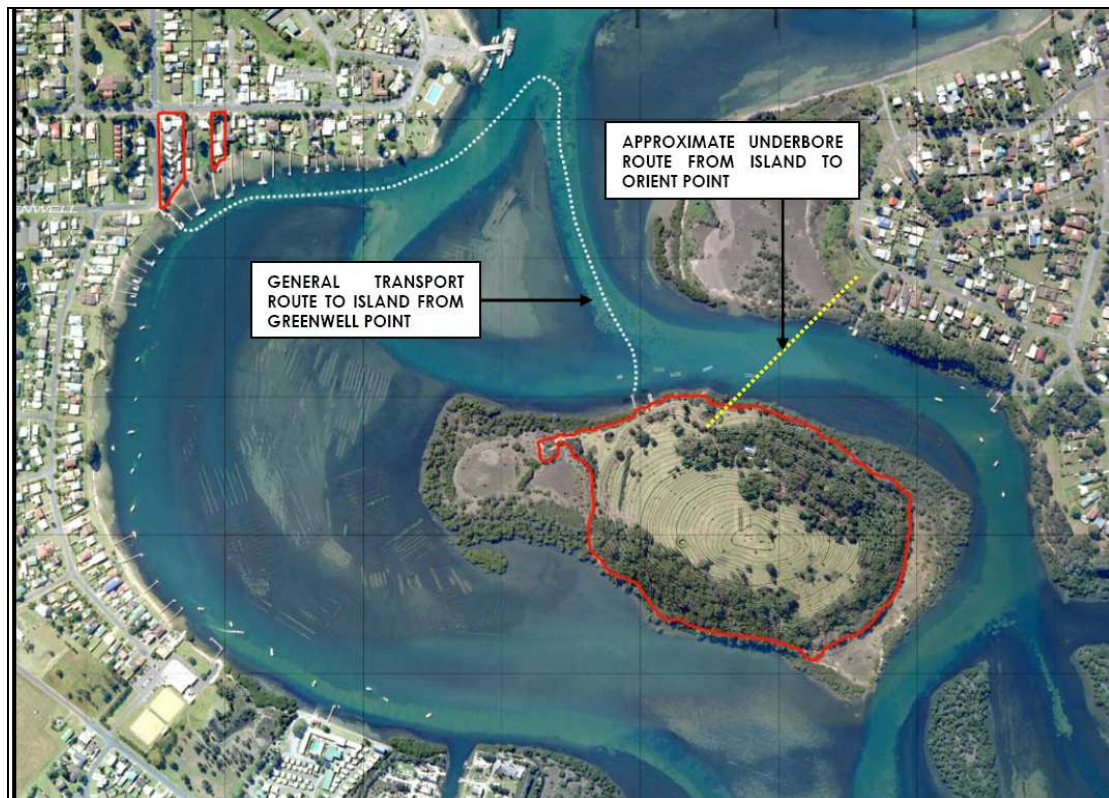
The mainland sites can be adequately serviced with electricity, telecommunication, reticulated water supply and sewerage services and stormwater systems through the extension of services currently available in the vicinity and within the site. Appropriate conditions of approval have been recommended to be imposed to reflect the requirements of the relevant service authorities.

Goodnight Island, however, is currently not serviced by any of the above services and therefore all services required on the Island for the proposal are required to be provided from the mainland. The proponent proposes an underbore from Orient Point to provide such services including connection to a 300kVA Integral Energy line with a point of supply available at Orient Point, with communications cables (phone and optic fibre cables) also proposed to be supplied from the same location at Orient Point (see Figure 21). Water and wastewater services are proposed to be provided on-site as outlined in Section 5.1 of this report.

The *Underbore Impact Report* prepared by Martens Consulting Engineers dated June 2009 stated that sea grasses will be avoided and there does not appear to be any current oyster leases which would be adversely affected by the underbore (Figure 15 of this report shows this area to be a former oyster lease).

Figure 21: Location of the Proposed Underbore

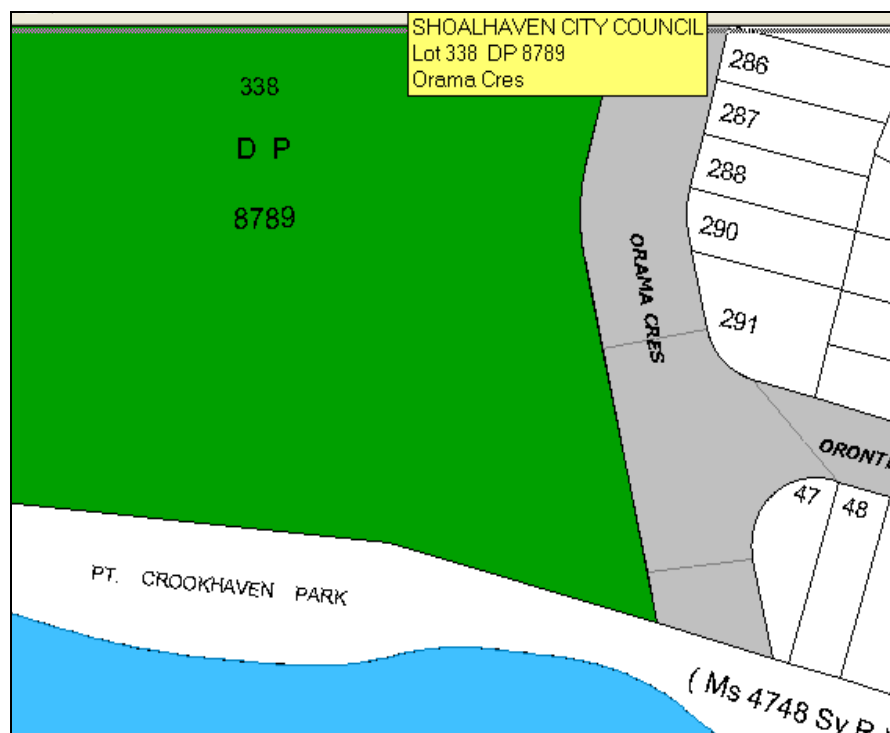
(Source: Underbore Impact at Goodnight Island, NSW, Martens Consulting Engineers, June 2009)



The Council was concerned with the location of the proposed underbore as it is located within a property owned by the Council (Lot 338 DP 8789 Orama Crescent Orient Point) and classified as "Community land" under the *Local Government Act 1993*. The Council has since confirmed that the Proponent has sought to locate a power pole in the southeast corner of Lot 338 and that there is an adjacent roads reserve that connects with the waterway (see Figure 22). The final position of the underbore is subject to final detailed design prior to the issue of a Construction Certificate.

Figure 22: Location of the Proposed Underbore

(Source: Shoalhaven City Council GIS extract, provided 6/10/09)



The Council is satisfied that appropriate conditions can be imposed which require the Proponent to obtain approval from the Council to locate the electricity service upon Lot 338, in the same way there will be a condition that requires a Section 138 under the *Roads Act 1993* approval for locating electricity services within the road reserve. The proponent may decide to connect the service from GNI directly into the road reserve rather than using Lot 338. Relevant conditions of approval have been recommended to be imposed to reflect the Council's requirements. Therefore, it is considered that infrastructure provision has been satisfactorily considered by the project subject to relevant conditions.

Resolution – The underbore has been satisfactorily considered and appropriate conditions of approval are to be imposed.

5.5 FLOODING & CLIMATE CHANGE

The mainland sites and GNI are affected by flooding from both the Crookhaven and Shoalhaven Rivers. The potential impact of flooding on the proposal has been addressed in the *Flood Risk Management Plan* ("the Flooding Report") prepared by Martens Engineers dated August 2007 lodged with the EA and the *Addendum to Flooding Assessment* prepared by Martens Consulting Engineers dated June 2009 lodged with the PPR. A *Climate Change and Sea Level Rise* report prepared by Martens Consulting Engineers dated June 2009 was also submitted with the PPR.

The following issues require consideration in relation to flooding pursuant to Clause 29 of the Shoalhaven LEP:-

- likely levels, velocity, sedimentation and debris carrying effects of flooding,
- structural sufficiency of any building the subject of the application and its ability to withstand flooding,
- effect which the development, if carried out, will or is likely to have on the flow characteristics of floodwaters,
- whether or not access to the site will be possible during a flood, and
- likely increased demand for assistance from emergency services during a flood.

The Flooding Report examines the various flood risk management issues for the area of the proposal including existing flood levels, flood risk, potential for changes to hydrological regime, ingress and egress routes, risk management measures, and flood risk management plan in compliance with *NSW Floodplain Management Manual (2005)*. The relevant issues in Clause 29 of the LEP have been addressed in this Report and the Flooding Report.

Following review of the EA by WMA Water ("WMA"), an external consultant acting on behalf of the Department, there were several flooding issues which required further consideration by the Proponent including the following:-

- Demonstrate no significant increase in total population isolated at Greenwell Point during floods and thereby increasing the existing burden on the SES.
- Existing house at 84 Greenwell Point Rd must have its habitable floor at or above the Flood Planning Level ("FPL").
- All basement car parks must be protected from inundation until at least the FPL and preferably higher level with alternative access available should inundation occur.
- Proposed earthen bund at 84 Greenwell Point is an unacceptable form of flood protection as it can be relatively easily modified or eroded.
- Use of flood proof doors at 76 Greenwell Point Rd is not failsafe. For a new development the risk of inundation must be 'designed out' and not rely upon implementation of measures during an actual flood.
- Any evacuation strategy (from basement car parks or from Greenwell Point itself) cannot be relied upon as a damage minimisation strategy due to lack of adequate warning time.
- Use of evacuation plan or flood awareness program is supported, however these measures cannot be relied upon to reduce the level of flood risk or flood damages.
- Demonstrate how proposed boat access area at Greenwell Point and at Orient Point, for use in flood evacuation, can be achieved on land outside its ownership.
- Demonstrate that proposed boat access from Goodnight Island during a flood can be relied upon. An alternative is to develop a strategy that relies upon not evacuating from the Island during a flood
- Provide further details regarding definition of high hazard flood areas and appropriateness of proposal in flood liable areas.

- Possible impact of climate change on flood levels not considered.

The PPR addressed these issues with the following amendments/additional information:

- The proposal will only increase the population by 2.3% which is a small increase and is not an unreasonable increased burden for the SES – WMA stated that this figure was reached by including surrounding towns of Orient Point and Culburra Beach, however, it is considered that this is reasonable given all of these people would need to be evacuated if one was required. Given the measures proposed by the development, such evacuation is only envisaged in extreme situations.
- The existing house at No 84 is not part of the proposal – the existing cottage at No 84 is not proposed to be altered in any way and therefore it is considered that the floor level will remain as it is.
- The Flood Planning Level (FPL) has been increased from 3.7m AHD to 4.3m AHD to account for sea level rise and the entries to the basement car parks have been increased to be protected from inundation. The FPL comprises 1% annual exceedance probability flood level (3.2m AHD) plus 0.5m freeboard and 0.6m allowance for climate change (based on a sea level rise of 0.91m and a 10% rainfall increase due to climate change) – this resolves the issue.
- Earth bund at No 84 has been removed and is no longer required for flood protection – issue resolved.
- Flood proof doors and other items at No 76 have been removed as they are no longer needed for flood protection given basements are above the FPL – issue resolved.
- Resort sites are all above the FPL and therefore evacuation is not required. Adequate supplies for 1 week will also be provided – issue resolved.
- Evacuation Plan and Flood Awareness Program to be conditioned – issue resolved.
- Public wharf access is provided at Orient Point and Greenwell Point in the event emergency boat exit is required – issue resolved.
- Adequate emergency provisions are to be provided on GNI for 1 week as evacuation is not required and staff and patrons will stay on the Island until flood waters recede (< 3 days) – issue resolved.
- Some development in high hazard areas which is existing while new development is flood proofed by complying with FPL – issue resolved.
- Climate change – the proponent has undertaken further sensitivity analysis to account for possible impacts of climate change on flood levels, using potential sea level rises of 0.6m and 0.9m. This is consistent with the NSW benchmark for expected sea level rise which is 0.9m by 2100. Subsequently, the FPL for the development at Greenwell Point and GNI has been increased to 4.3mAHD to include an allowance for climate change.

Resolution - It is considered that subject to the conditions outlined above being imposed, the flooding and climate change aspects of this proposal have been adequately considered and addressed. The development on the mainland sites and GNI are above the FPL and evacuation from GNI is not envisaged (except in extreme circumstances). Therefore, flooding and potential impacts of climate change have been adequately considered and addressed.

5.6 TRAFFIC AND ACCESS

There have been several concerns with the traffic generation, access and car parking provisions of the proposal for the mainland sites. The GNI component of the project is considered within the No 76 Greenwell Point Road site. These issues are addressed in the 'Traffic Impact Assessment' prepared by Martens Consulting Engineers dated March 2007 provided with the EA and the 'Addendum to Traffic Impact Assessment' prepared by Martens Consulting Engineers dated June 2009 provided with the PPR. The Council has provided detailed comments in relation to this issue, which has been instructive given the experts available within the Council.

Traffic Generation

The Council was concerned that the traffic counts were not accurate, however, considered that even at peak volumes (382 vehicles per hour ("vph")) recorded by Council, traffic capacity at intersections is unlikely to be of concern. The projected development volumes as they impact on Jervis Street, conflicting with volumes on Greenwell Point Road are well below the acceptable range indicated in the AUSTROADS road capacity manual. Given the development will generate additional traffic, it is imperative that car parking and pedestrian activity associated with the development is addressed to offset any adverse impacts of the proposal.

Vehicular and Pedestrian Access

Vehicular access to No 76 Greenwell Point Road has been amended in the PPR to be consolidated into one entry point above the flood planning level. This entry is 6.75m wide and is located along Jervis Street. In relation to No 84 Greenwell Point Road, there is one combined 3.6m wide access point to Greenwell Point Road. The Council considered that the entry to No 84 Greenwell Point Road should be a 6 metre wide two-way central access driveway, however, it is considered that the proposed building is relatively small (consisting of only 2 retail tenancies and 5 units) and is a relatively narrow block at 20 metres. A combined entry driveway along the side elevation which accesses only 9 car parking spaces is sufficient.

The Council is concerned that these access points need to be modified to mitigate adverse traffic and pedestrian impacts and therefore requires tapered access points to ensure sight distance is available for pedestrians. The Council also considers that "No Stopping" signs should be erected on both sides of the respective access driveways to ensure sight distance is maintained by vehicles entering and leaving the car parking areas of the proposal. These requirements have been reflected in the recommended conditions of approval.

An increased presence of pedestrians in the vicinity of the site is likely, which may create an unsafe crossing situation on Jervis Street and Greenwell Point Road. The Council has recommended that an appropriate pedestrian crossing facility be provided on Jervis Street as close as practical to restaurant/bar/café access. An appropriate pedestrian crossing facility (pedestrian refuge or blisters) should also be provided on Greenwell Point Road as close as practical to the Medical Centre access. It is considered that pedestrian safety in the vicinity is imperative and therefore the requirements of the Council have been reflected in the recommended conditions of approval.

The Council is also concerned that the carriageway of Jervis Street would be reduced to a width of 4.5m if on-street car parking occurred on both sides of the road, which is inconsistent with the required minimum of 6 metres. Given a portion of the street is located within a School Zone and there is likely to be overflow parking onto the street as a result of the development, the setback of development from Jervis Street is required. This requirement has been reflected in the recommended conditions of approval.

The provision of access, including disabled access from the designated disabled car park areas and from Jervis Street and Greenwell Point Road is required to address Australian Standards. Access has been demonstrated from the lower ground level to the upper floors, while access from the street into the development will be a condition of approval. Construction vehicle management will also be included as a condition of approval.

Car Parking

Car parking required for developments in the Shoalhaven is outlined in *Development Control Plan 18 – Car Parking Code* ("DCP 18"). The Council had significant concerns with the amount of car parking proposed in the original application which was deficient by approximately 52 spaces. Following the provision of the PPR, the project was amended to reduce the scale of the development such that car parking demand was reduced and the design of the car parking at both of the mainland sites was revised. The car parking now proposed to be provided and considered against the requirements of Council's DCP 18 is outlined in Table 3.

Table 3: Car Parking Provisions³

Land use	Parking Requirement	Parking Provided	Comply
Clause 2.1 – Car Parking Requirements			
No 76 Greenwell Point Road Greenwell Point			
Retail (shops) (x1)	1 space per 24m ² = 3.6 spaces (75% of gfa equiv to glfa = 85.5m ²)	4 spaces	Yes
Café	1 space per 6.5m ² of public dining area (25% reduction for co-use on site) = 9.8 spaces	10 spaces	Yes
Apartments (x20)	1 space per 2 bed unit + 1 space for Manager = 21 spaces	21 spaces	Yes
No 84 Greenwell Point Road Greenwell Point			
Serviced apartments (x7)	1 space per 2 bed unit = 7 spaces	7 spaces	Yes
Retail	1 space per 24m ² = 3.6 spaces (75% of gfa equiv to glfa = 104.25m ²) = 4.3 spaces	1 space	No (see below)
Manager's residence	1 space for Manager (apartments) = 1 space	1 space	Yes
Goodnight Island, Orient Point			
Serviced apartments (x15)	1 space per 2 bed unit + 1 space for Manager = 21 spaces = 16 spaces	16 spaces	Yes
Pavilions (x15)	1 space per 2 bed unit + 1 space for Manager = 21 spaces = 15 spaces	15 spaces	Yes
Villa (x1)	1 space per room = 5 spaces	5 spaces	Yes
Restaurant	1 space per 6.5m ² (58m ² available to public) = 8.9 spaces	11 spaces	Yes
Staff	Nil = 0 spaces	11	Yes

It is clear from Table 3 that the car parking now proposed to be provided generally complies with DCP 18, with the exception of No 84 Greenwell Point Road which is deficient by 3 spaces for the retail use of these premises. It is considered that there is ample street parking in the vicinity of this site and that potential customers are likely to use the other retail uses in Greenwell Point. These other retail uses generally do not provide off-street car parking. It is therefore considered that this minor no-compliance is acceptable.

The Council were concerned with these calculations as *Gross Leaseable Floor Area* ("GLFA") defined under DCP 18 does not provide a discount potential of 25% of gross floor area ("GFA") as outlined in the PPR. The RTA's 'Guide to Traffic Generating Developments' does state that GLFA is preferred to GFA for retail land use category as it refers most specifically to the factor that generates / attracts trips and states that as a guide, about 75% of GFA is deemed GLFA. This is to account for amenities, storage areas and the like which do not necessarily generate car trips and therefore parking. It is considered that reducing the GFA by 25% is acceptable given such areas do not generate demand for car parking and that parking based on this reduced floor area will ensure adequate parking is provided.

The Council were satisfied that the car parking required to serve No 76 and GNI may be provided on No 76 and due to proposed valet parking service, proposed stack parking (vertical and horizontal) will be accepted for GNI. This acceptance was on the basis of approval conditions requiring a Restriction as to User to ensure the operations of both No 76 and GNI are combined and a management plan be provided to retain a valet parking service for GNI. There were originally concerns with aisle widths and car stacking within the basement levels of No 76 Greenwell Point Road, however, these have been resolved in the PPR.

The proposed loading zone arrangements for No 76 are not ideal, with the Car Parking DCP requiring the following for service areas (Clause 2.5):-

- Service areas should operate independently of other parking areas;
- All vehicles shall enter and leave the site in a forward direction;
- Service docks shall be designed to cater for the largest vehicle anticipated to use the premises.

³ Gfa = gross floor area; glfa = gross leaseable floor area
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October 2009

The proposed loading area within No 76 is located at the entrance to the lower ground level car parking area, which is not independent of the parking area and the height of this level being 2.8 metres high, restricts the use of this loading area to vans and light trucks. Service vehicles can enter and leave the site in a forward direction. While this service area is not ideal, service vehicles of a certain size may access the site and this will be a limiting factor for the development as a condition of approval will restrict use of the street for loading and unloading in accordance with the DCP.

There were several other concerns raised by the Council regarding the car parking, including construction vehicle management, pedestrian and road widening works off-site being included as approval conditions as well as the motorised door to the basement parking level at No 76 being removed to ensure access to car parking. These conditions have been reflected in the recommended conditions of approval.

Resolution – The car parking, access and traffic issues have been adequately addressed subject to conditions of approval.

5.7 HERITAGE AND ARCHAEOLOGY

Aboriginal Cultural Heritage

An *Aboriginal Cultural Heritage Assessment Report* dated May 2009 was prepared by Cathy Dunn and was lodged with the PPR. This report revealed that GNI is not currently the subject of any a Native Title Claim and a search of the DECC Aboriginal Heritage Information Management System (AHIMS) was undertaken which revealed one (1) Aboriginal object (midden) and an Aboriginal place were recorded near the site study area, located at Pelican Rocks Orient Point on the mainland, which is not visible from GNI.

This report concluded that the study area of GNI has an Aboriginal social significance only due to its location within the boundaries of the Jerrinja Local Land Council and that no Aboriginal objects and / or artefacts were discovered on GNI. The report recommended that while it is unlikely that the project will directly impact any known or unknown Aboriginal archaeological site/s or heritage, the Jerrinja Land Council Site officers should be called if any Aboriginal object is located during construction of the proposed development.

DECCW considers that the PPR adequately addresses potential impacts of the project on Aboriginal Cultural Heritage and supports the report's conclusion that the study area has social significance because of its importance to the Jerrinja people as part of their land. DECCW was also supportive of the recommendation that it is unlikely that the project will have the potential to directly impact on any known Aboriginal archaeological site(s) or heritage and should any Aboriginal object(s) be located, a stop work be triggered and contact made with DECCW and Jerrinja Local Aboriginal Land Council.

European Heritage

The proposal intends to reveal the historic remnants of the original entry stairs, foundations of guest house and tennis court and to include these elements in the proposed landscape. The remnants of the former tennis court are not required to be uncovered, but rather vegetated as outlined in the Landscape Plan. The exposure of the foundations of the original guest house and the use of the original stairs to be incorporated into the landscaping of the site is appropriate given the historical use of the site. There is no other nearby heritage items which would be adversely affected by the proposal.

Resolution - It is considered that subject to relevant conditions, the heritage aspects of the proposal have been adequately addressed.

5.8 STRUCTURES BELOW MEAN HIGH WATER MARK

Mainland sites

There are several structures below Mean High Water Mark ("MHW") proposed as part of the proposal as well as several to be retained (refer to Figure 13). The existing floating jetty is to remain at No 84 while the existing jetty at No 76 is to be removed and replaced with a floating jetty of the same dimensions. The NSW DPI (Fisheries), now

known as Industry and Investment has requested that a boat effluent pump-out facility which is connected to the Council's sewerage system is provided at the jetty at No 84. This pump out facility has been requested to further reduce the potential environmental impacts from increased boating activity associated with the development (including the new marina). This is due to the potential for the proposal to attract more boats to the area.

It is considered that this is a reasonable and appropriate request given this increased potential for boating activity which may otherwise lead to increased pollution in the vicinity of the site, however, it is more appropriately located at No 76 as this site will be linked to GNI for the duration of the development.

On GNI, a 9 berth marina is proposed to be constructed as well as a vehicular punt (to replace an existing punt), both to be located on the northern side of the Island, between Orient and Greenwell Points. The proposed marina is to be located over an existing aquaculture lease known as OL84/068. The current lessees of OL84/068 have provided owners consent (and formally rescinded their objection to the proposal) and the Proponent has entered into a contract to purchase this oyster lease upon an approval being issued for the proposal. The NSW DPI has also provided owners consent for the proposed structures below MHWL and will require detailed plans prior to a final approval for such structures.

Resolution – It is considered that subject to standard conditions regarding structures below MHWL, the proposal is satisfactory.

5.9 GEOTECHNICAL ASSESSMENT

The Geotechnical aspects of the proposal were considered in the *Preliminary Geotechnical Assessment* prepared by Marten's Consulting Engineers dated March 2006. There will be some excavation on GNI for the main complex building, utility shed and header tanks and individual tanks associated with the on-site wastewater system. On the mainland sites, excavation of up to 7 metres is proposed for the basement parking levels.

The Geotechnical report assessed the geotechnical constraints of the site and concluded that the site presents a 'low' risk from slope instability and a 'low' soil erodibility rating and recommended that future construction activities be conducted in accordance with the recommendations presented in Section 3.7 of the report and in accordance with good hill-slope engineering practices. The Geotechnical report concludes that potential site development is not limited by geotechnical constraints provided the recommendations for management plans and construction as defined in the geotechnical report are implemented.

Resolution: It is considered that subject to standard conditions regarding geotechnical matters, the proposal is satisfactory.

5.10 ACOUSTIC AMENITY

The main areas of concern in relation to acoustic amenity of the site relate to the proposed heli-pad and use of the site by helicopters, the amphitheatre, construction noise and plant and machinery noise. An Acoustic Report has been prepared by Marshall Day Acoustics dated 6 March 2007 which was lodged with the EA.

5.10.1 Helipad

The Proponent proposes a helipad be installed on the grassy knoll at RL 20.2, which comprises a 7m x 7m 100mm reinforced concrete slab and associated markings and drainage which constitutes the "Landing and Lift-Off Area" (LLA) (refer to Figure 14 for site location). The Proponent has provided a *Helicopter Impact Assessment* ("HIA") prepared by Heli-Consultants Pty Limited dated May 2009 as well as a report '*Helicopter Impact on Flora and Fauna*' prepared by Ecological Australia dated 19 May 2009. These reports support the use of a helicopter on the Island for guests arrival and pick up, limiting the helicopter trips to twice a week, resulting in 4 movements (take-offs and landings). Emergency use of the helipad by relevant rescue and emergency helicopters is also proposed.

The HIA is largely a technical report which sets out the restrictions on flying in the area as a result of military operations and largely refutes the submission from the Department of Defence ("DOD"). The Department of Planning acknowledges that the main concerns of the DOD are that their operations may impact on the amenity of resort

guests and that helicopter would be subject to their clearance. The Department of Planning acknowledges that the DOD is not entirely ruling out the use of the site by helicopters.

The helicopter ecological assessment acknowledges that impacts to fauna may occur through wind, noise and direct strike and states that the largest potential impact is likely to be to birds, through bird strike and disturbing breeding activities and mostly to waders and migratory birds associated with the wetland. The report concludes that since the helicopters are unlikely to fly over the wetlands (given assumed flight paths), the topography of the site requiring helicopters to rise sharply and not directly over the wetlands, the likely low speed during take off and landings and the low frequency of movements, that there is a low probability of bird strike and disruption to breeding. While the ecological report indicates that potential impact is likely to be minimal on bird life, it is nevertheless a possible result of helicopters using the site.

The amenity of the surrounding area must also be considered in the assessment of whether use of helicopters on the site is appropriate. Greenwell Point and Orient Point are coastal villages which are essentially quiet and peaceful. The noise associated with helicopters arriving and departing the Island is contrary to the village ambience. Furthermore, the use of helicopters at the site appears to be at odds with the intent of the proposal, which would seem to be a peaceful and relaxing getaway destination. The likely adverse impact as a result of the use of helicopters on the site was raised in seven (7) of the public submissions, raising issues relating to increased noise pollution and potential negative impacts on migratory and water bird habitat and the estuary in general.

It is therefore considered that the use of helicopters on the Island is unacceptable and therefore the helipad is not supported. However, an area must be provided which is to be set aside for use by helicopters in emergencies only. This has been recommended in the conditions of approval.

5.10.2 Amphitheatre

The use of the amphitheatre is not detailed in the EA, including the hours of operation, the use of the area and the likely patronage of events held. The nearest sensitive receivers are residential development, located approximately 350 metres from the main complex, to the northeast at Orient Point. The Council recommended restrictions should be imposed on the use of this area including hours of operation, prohibition on amplified music and noise control provisions relating to noise level maximums at nearest sensitive receivers. The Department supports the Council's recommendation to prohibit amplified music given such noise would easily travel across the water and impact on the acoustic amenity of nearby residential development, while restricting hours of operation and enforcing noise limits are also supported given the proximity of residential development. It is considered that with strict conditions, potential noise impacts from the amphitheatre are acceptable.

5.10.3 Construction Noise

The noise from construction of the development will be short term and subject to standard conditions requiring the Proponent to comply with noise standards and hours of operation. Therefore, it is considered that construction noise impacts are acceptable.

5.10.4 Plant and Machinery

The plant and machinery proposed to be used for the development on the mainland sites involves lifts, car stacker, air conditioning and pool equipment while on the Island, the main noise would be from the on-site wastewater system, water supply and the amphitheatre (discussed above). Plant and machinery are to be located in the basement parking level at No 76 and No 84 and within the utility shed on GNI thereby reducing potential noise for surrounding residents and patrons. Subject to standard noise control conditions, it is considered that it is unlikely that noise from plant and machinery will adversely affect the amenity of the surrounding area.

Resolution – Subject to relevant conditions, acoustic amenity has been satisfactorily addressed. The helipad is considered to be unacceptable in this location and is therefore not supported. A design change requiring the removal of the helipad has been reflected in the conditions of approval.

5.11 HAZARD MANAGEMENT & MITIGATION

Contamination

In relation to site contamination, it is considered that the mainland sites have been used for residential or commercial uses in the past and there is nothing in the land use history to suspect contamination. It is considered that no further consideration of the mainland sites is warranted in relation to contamination.

In relation to GNI, a Stage 1 Preliminary Assessment has been carried out by Martens Consulting Engineers, "Stage 1 Contamination Assessment: Goodnight Island, Crookhaven River, NSW" dated March 2007. This Stage 1 report noted that there were no obvious signs of gross contamination such as soil staining or plant stress, however due to the site's land use history, including potential cropping areas, numerous storage sheds and dwellings, there is potential that contamination has occurred on the site. This report noted several areas associated with the broad acre farming activities and dwellings and sheds where potential shallow soil contamination may occur.

The report recommended a Stage 2 contamination sampling program would need to be undertaken to quantify the extent of any potential contamination. This requirement will be reflected in the conditions of approval. It is considered that contamination of the site has been adequately considered.

Resolution - It is considered that contamination of the site has been adequately considered. This issue is addressed in the recommended conditions of approval and the Proponent's Statement of Commitments.

Acid Sulphate Soils

Acid Sulphate Soils ("ASS") have been addressed in the *Environmental Risk Assessment Study* (dated March 2007), *Environmental Management Plan* (dated March 2007), the *Preliminary Geotechnical Assessment* (dated March 2006), and the *Estuarine Management Study* (dated April 2008) prepared by Martens Consulting Engineers lodged with the EA.

The Risk Assessment stated that excavation should be limited on low lying land and that further testing to quantify extent of ASS was required. The Environmental Management Plan stated that the foreshore area surrounding GNI is classed as having a high probability of Acid Sulphate Soils (ASS) located at or near the ground surface. The Geotechnical Report stated that the ASS maps prepared by the Council classify the site as ASS Risk. A preliminary assessment was which revealed potential ASS existed on the Island. On this basis, the report concluded that further site testing and a site specific management plan is recommended for all site works where excavation is required at or below the 2.5 m AHD level. The Estuarine Management Plan recognised that ASS had the potential to result in reduced water quality, acidification of waterways, reduction of land productivity, loss of marine species and impacts on aquaculture.

The ASS reports in the EA did not survey all areas of GNI nor did it investigate the mainland sites, notwithstanding that they are classified as being affected by ASS within 1 metre of the ground surface. The Proponent was required to address this issue in the PPR. The '*Addendum to Acid Sulphate Soils Assessment*' prepared by Marten's Consulting Engineers dated May and June 2009 was received with the PPR.

In relation to GNI, the main areas of potential impact on ASS include the underbore, vehicle punt, bird hide, marina and tennis court. The Addendum report states that the underbore, bird hide and marina are high risk and so have assumed all soils excavated will require liming. Similarly, the construction of the tennis court is considered to be medium to low risk of ASS impact. Final liming rates are to be determined at the Construction Certificate stage and an ASS Management Plan is recommended to be provided following laboratory testing. The vehicle punt is considered to be low risk as driven piles will be utilised in this area, therefore minimal disturbance would be made to ASS.

In relation to the mainland sites, the Addendum report stated that the sites are classified by Council's mapping as low ASS risk within 1 metre of the ground surface. The report determines that there is a high risk due to the disturbance of likely ASS material in the waterway, duration of disturbance, volume to be excavated and depth of disturbance. The basement parking levels and foundations will require excavation up to 7 metres and therefore ASS must be considered. The conclusion for the mainland sites was that there is a high risk of encountering Potential ASS or

Actual ASS during site works and that excavated soils will require treatment by way of liming, with the final liming rates to be determined following appropriate further sampling in the detailed design stage of the development. An ASS Management Plan is to be provided.

Resolution - Further testing and an ASS Management Plan are required for both the mainland sites and GNI prior to work commencing (also recommended by the Council) and are recommended as conditions of approval.

Bushfire and Fire Safety

The site is not classified as Bushfire Prone Land and subsequently, a referral to the NSW Rural Fire Service was not required, however, the Proponent was requested to address the issue of bushfires in the PPR. Given that the site is not easily serviced by the NSW Fire Brigades ("NSWFB"), the Proponent was also required to address general fire safety on GNI also. The Proponent had discussions with both the NSWFB and the NSW RFS, with the PPR being referred to the RFS.

The NSW Fire Brigades provided the following recommendations regarding general fire safety on GNI:-

- Internal sprinkler system for all buildings on the Island. Sprinkler system to be designed in accordance with AS 2118 Part 5 (for the cabins) and AS 2118 Part 4 (for the larger unit block and villa).
- Smoke alarms in all habitable rooms.
- An on-site fire crew to be trained by NSWFB or other appropriate agency.
- An on-site fire fighting vehicle/trailer, with appropriately sized pump, water cart and protective equipment.
- Provide hydrants off the proposed ring main attached to the potable water source. Hydrants to be spaced at no more than 2 hose lengths (and preferably 1 hose length) to all buildings. A typical hose length is 30m.
- Hydraulic consultant should be engaged to provide detailed designs of sprinklers and hydrants.
- Prepare an emergency response plan between the NSWFB, NSW RFS and Goodnight Island.

The Proponent has undertaken to resolve this issue by having a fully equipped fire fighting vehicle permanently stationed on GNI. The comments of the NSWFB will be incorporated as conditions of approval.

Resolution - It is considered that subject to relevant conditions, the bushfire and fire safety aspects of the proposal have been adequately addressed

5.12 CONSTRUCTION MANAGEMENT

The Proponent has, in the SOC, undertaken to prepare a comprehensive Construction Management Plan to fully detail the works proposed and mitigation and amelioration measures in order to avoid and reduce environmental impacts. In general, it is proposed that all construction equipment and materials will be temporarily stored and transported from No 84 Greenwell Point to GNI via the existing barge. Due to the shallow nature of the estuary in the vicinity of the boat ramp at Greenwell Point, a crane will be used to move materials from the mainland to the barge, where it will be appropriately placed and taken across the estuary via the proposed boat route (Figure 23).

Figure 23: Boat and Barge Paths for Construction Management

(Source: Construction Management Plan, prepared by Marten's Consulting Engineers dated June 2009)



Similarly, at GNI, materials will be taken from the barge onto the Island via another crane which will remain on the Island throughout construction works. Any machinery / vehicles required to be transported to/from the Island will be taken via the barge to/from Orient Point (Figure 23).

The Proponent has requested that the consent be issued separately for each property. This request cannot be granted given the development has been submitted as a single project as a single application. Furthermore, a restriction on the title for No 76 Greenwell Point Road and GNI is required to ensure that these parcels remain together for the life of the development given the car parking and other access requirements for GNI are provided at No 76 Greenwell Point Road.

5.13 CUMULATIVE IMPACTS

The project has been assessed in relation to cumulative impacts including traffic generation, services provision and ecological issues. It is considered that there will be minimal adverse impacts as a result of the project given the proposal is consistent with zone objectives, is permissible and will provide adequate services to the site. Adequate construction management conditions are reflected in the recommended conditions of approval to ensure minimal impact on the environment during construction

Resolution – There will be minimal adverse cumulative impacts as a result of the proposal, subject to relevant conditions of approval being imposed.

5.14 SUSTAINABILITY AND PUBLIC INTEREST

The issue of sustainability and ecological sustainable development (ESD) have been addressed by the proposal and have been discussed in detail in Section 3.7 of this report. In summary, the project satisfies the principles of ESD in the following ways:-

- The layout of buildings allows for north-south orientation which provides for good solar access;
- Rehabilitation of the EEC on GNI ensures the conservation of biological diversity;
- Water sensitive urban design measures in relation to water cycle management are proposed as well as a reuse of wastewater on the site (GNI in particular);
- Climate change impacts on coastal flooding has been considered and found to be satisfactory (Section 5.1 of this report).

In relation to the public interest, it is considered that the project is in the public interest in the following ways:

- The project will provide 210 construction and operational jobs in the region and stimulate economic activity;
- The provision of public open space areas will allow for public recreation opportunities which serve the public interest;
- The protection of important ecological areas is in the public interest given the conservation of biological diversity and open space areas;
- The project is consistent with the principles of ESD which is in the public interest.

Resolution - The project addresses ESD and the public interest subject to relevant conditions of approval being imposed.

5.15 COMMENTS ON DRAFT STATEMENT OF COMMITMENTS

The Proponent has provided certain undertakings in the Statement of Commitments (SOC) which aim to reduce potential impacts arising from the proposal. These commitments include issues relating to construction management, ecological, wastewater management, ASS, waste management, fire management, flooding, cultural heritage, infrastructure, landscaping, developer contributions and signage.

Resolution - It is considered that these commitments are satisfactory and are recommended to be imposed on any approval granted for the project (with the exception of helicopter management commitments).

5.16 SECTION 94 AND OTHER CONTRIBUTIONS

Prior to the issue of a Construction Certificate, the Proponent must pay, in proportion to the additional lots (minus any credits for existing lot entitlements), the following contributions to Council pursuant to Section 94 of the *Environmental Planning and Assessment Act (1979)* (refer Table 4). The relevant plan is the *Shoalhaven City Council Contribution Plan 1993 and 2004*.

Table 4: Section 94 Contributions Payable for the Project – No 76 & GNI

(Source: Shoalhaven City Council, 7 October 2009)

Project	Description	Rate	Qty	Total (including GST)
01 Road 2099	Greenwell Point Rd	\$29.19	37.7 ⁴	\$1,100.46
01 ROAD 2100	Greenwell Point Rd	\$60.32	37.7	\$2,274.06
CW CFAC 0002	Shoalhaven Multi Purpose Cultural & Convention Centre	\$639.60	37.7	\$24,112.92
CW FIRE 0001	Citywide Fire & Emergency Services	\$156.61	37.7	\$5,904.20
CW FIRE 0002	Shoalhaven Fire Control Centre	\$205.04	37.7	\$7,730.01
CW MGMT 2001	Section 94 Administration	\$425.47	37.7	\$16,040.22
CW OREC 0001	Embellishment of Icon and District Parks and Walking Tracks	\$163.87	37.7	\$6,177.90

Estimate Total: \$63,339.77

Table 5: Section 94 Contributions Payable for the Project – No 84

(Source: Shoalhaven City Council, 7 October 2009)

Project	Description	Rate	Qty	Total (including GST)
01 Road 2099	Greenwell Point Rd	\$29.19	15.9 ⁵	\$464.12
01 ROAD 2100	Greenwell Point Rd	\$60.32	15.9	\$959.09
CW CFAC 0002	Shoalhaven Multi Purpose Cultural & Convention Centre	\$639.60	15.9	\$10,169.64
CW FIRE 0001	Citywide Fire & Emergency Services	\$156.61	15.9	\$2,490.10
CW FIRE 0002	Shoalhaven Fire Control Centre	\$205.04	15.9	\$3,260.14
CW MGMT 2001	Section 94 Administration	\$425.47	15.9	\$6,764.97
CW OREC 0001	Embellishment of Icon and District Parks and Walking Tracks	\$163.87	15.9	\$2,605.53

Estimate Total: \$26,713.59

A Development Servicing Plan (DSP) enables Council, under Section 64 of the *Local Government Act 1993*, to levy contributions where the anticipated development will or is likely to increase the demand for water supply services. Relevant conditions have been recommended to be imposed as required by Shoalhaven Water.

Resolution - It is considered that relevant contributions have been recommended to be imposed as conditions of approval.

⁴ No 76 - 20 x 2 bedroom units = 8 ETs; Retail (114m²) = 11.4 ETs; Café/Restaurant (85m²) = 5.6 ETs; Total = 25 ETs
GNI - 15 Serviced Apartments = 6 ETs; 15 Rooms/ Pavilion = 6 ETs; 5 Rooms/ Villa = 2 ETs; Restaurant 58m² = 3.9 ETs; Total 17.9 ETs
Total - 42.9 - 5.2 (Credit) = 37.7 ETs.

⁵No 84 - 5 x 2 bedroom units = 2 ETs; Retail (139m²) = 13.9 ETs; Managers residence – Existing; Total = 15.9 ETs.

6 CONCLUSION

The Department has assessed the EA and PPR and considered the submissions in response to the proposal. The key issues raised in submissions related to water cycle management, design and amenity, ecological issues, infrastructure provision, car parking and management and mitigation of construction impacts. The Department has considered these issues and a number of conditions are recommended in conjunction with the proponent's Statement of Commitments to ensure these issues are satisfactorily addressed of these issues and the proposal has minimal impacts.

The proposed development will allow for additional commercial and tourist investment in Greenwell Point while also providing rehabilitation of an EEC, additional open space areas within a visually attractive development and environmental safeguards to ensure the protection of the Crookhaven River and associated oyster leases. Furthermore, the proposal has largely demonstrated compliance with the existing environmental planning instruments.

On these grounds, the Department considers the site to be suitable for the proposed project and that it is in the public interest. Consequently, the Department recommends that the project be approved, subject to the conditions of approval and the proponent's Statement of Commitments.

7 RECOMMENDATION

It is recommended that the Minister:

- (A) consider the findings and recommendations of this Report;
- (B) approve the carrying out of the project, under Section 75J *Environmental Planning and Assessment Act, 1979*; subject to conditions and sign the Determination of the Major Project; and,
- (C) sign the Instrument of Approval at **Appendix A**.

Prepared by:

Endorsed by:

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APPENDIX A. INSTRUMENT OF APPROVAL

APPENDIX B. DIRECTOR-GENERAL'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

Application number
06_0034
Project
Proposed Tourist and Commercial development at 76 and 84 Greenwell Point Road, and Goodnight Island, Orient Point (Crookhaven River)
Location
Lot 52 DP223963 Orama Crescent (Goodnight Island), Orient Point; Lot 1 DP1070720, and Lot 3 DP589201, Greenwell Point Road, Greenwell Point, NSW
Proponent
Studio Internationale
Date issued
15 May 2008
Expiry date
2 years from date of issue
General requirements
<p>The Environmental Assessment (EA) for the Project Application must include:</p> <ol style="list-style-type: none"> 1. An executive summary; 2. An outline of the scope of the project including: <ul style="list-style-type: none"> • any development options; • justification for the project taking into consideration any environmental impacts of the project, the suitability of the site and whether the project is in the public interest; • outline of the staged implementation of the project if applicable; 3. A thorough site analysis including constraints mapping and description of the existing environment; 4. Consideration of the consistency of the project with the objects of the <i>Environmental Planning and Assessment Act 1979</i> 5. Consideration of any relevant statutory and non-statutory provisions and identification of any non-compliances with such provisions, in particular relevant provisions arising from environmental planning instruments, Regional Strategies (including draft Regional Strategies) and Development Control Plans. 6. Consideration of impacts, if any, on matters of national environmental significance under the Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i>; 7. An assessment of the potential impacts of the project and a draft Statement of Commitments, outlining environmental management, mitigation and monitoring measures to be implemented to minimise any potential impacts of the project; 8. The plans and documents outlined in Attachment 2; 9. A signed statement from the author of the Environmental Assessment certifying that the information contained in the report is neither false nor misleading; 10. A Quantity Surveyor's Certificate of Cost to verify the capital investment value of the project; and

11. An assessment of the key issues specified below and a table outlining how these key issues have been addressed.
Key Issues
The EA must address the following key issues:
1. Urban Design, Visual Impact and Sustainability
<p>1.1 Demonstrate suitability of the proposal with the surrounding area in relation to bulk, scale, amenity (including noise) and visual amenity having regard to the <i>Coastal Design Guidelines of NSW</i> (2003) and the <i>NSW Coastal Policy 1997</i>.</p> <p>1.2 Address the visual impact of the proposal in the context of surrounding development and relevant mitigation measures. In particular address impacts on the amenity of the foreshore, overshadowing of public reserves, loss of views from public places and cumulative impacts.</p> <p>1.3 Use visual aids such as scale model and photomontage to demonstrate visual impacts. Amelioration of visual impacts through design, use of appropriate colours and building materials, landscaping and buffer areas must be addressed.</p> <p>1.4 Demonstrate compliance with SEPP 65 and BASIX.</p> <p>1.5 An indicative external materials and finishes schedule is to be submitted.</p> <p>1.6 Provide a Building Management Plan providing details in relation to occupancy, management systems, use of amenities and facilities and body corporate roles and responsibilities etc.</p>
2. Infrastructure Provision
<p>2.1 Address existing capacity and requirements of the development for sewerage, water, electricity, waste disposal, telecommunications and gas in consultation with relevant agencies. Identify and describe staging, if any, of infrastructure works. Evidence that capacity exists within Council's sewerage infrastructure to support the development must be provided and compliance with Council's <i>On-Site Sewage Management (Development Control Plan No. 78)</i> must be demonstrated.</p> <p>2.2 Address and provide the likely scope of an planning agreement and/or developer contributions with Council/ Government agencies.'</p> <p>2.3 Identify potential sources of waste associated with the proposal (such as litter, solid waste, sewage, grey water), explain how this waste will be managed and proposed measures to prevent or mitigate any adverse impacts.</p>
3. Traffic and Access
<p>3.1 Prepare a traffic impact study in accordance with Table 2.1 of the RTA's Guide to Traffic Generating Developments which addresses, but is not limited to the following matters:</p> <ul style="list-style-type: none"> • The capacity of the road network to safely and efficiently cater for the additional traffic generated; • Access to and within the site, including car parking arrangements for guests, staff, goods and services to and from the Island (including the mainland access point) • Intersection site distances; • Connectivity to existing developments; • Impact on public transport (including school bus routes); • Provision of access for pedestrians and cyclists to, through and within the site; and • Identify suitable mitigation measures, if required to ensure the efficient functioning of the road network. <p>3.2 Protect existing public access to the coastal foreshore and provide, where appropriate, new opportunities for controlled public access. Consider access for the disabled, where appropriate.</p>
4. Hazard Management and Mitigation

<i>Contamination</i>
4.1 Identify any contamination on site and appropriate mitigation measures in accordance with the provisions of SEPP 55 – Remediation of Land.
<i>Coastal Processes</i>
4.2 Address coastal hazards and the provisions of the Coastline Management Manual. In particular consider impacts associated with wave and wind action, coastal erosion, sea level rise and more frequent and intense storms.
<i>Acid Sulfate Soils</i>
4.3 Identify the presence and extent of acid sulfate soils on the site and, where relevant, appropriate mitigation measures.
<i>Evacuation</i>
4.4 Prepare an Emergency Evacuation Plan
<i>Water and Air Quality</i>
4.5 Identify all potential sources of water and air pollution associated with the proposal during construction and operation, and proposed measures to prevent or mitigate the pollut
<i>Flooding</i>
4.6 Provide an assessment of any flood risk on site in consideration of any relevant provisions of the NSW Floodplain Development Manual (2005) including the potential effects of sea level rise and an increase in rainfall intensity.
4.7 Consider the potential impacts of any filling on the flood regime of the site and adjacent lands.
<i>Environmental Risk Assessment</i>
4.8 A risk assessment of: <ul style="list-style-type: none"> a) <u>Effluent disposal</u> - potential impacts and relevant mitigation measures in the event of a failure of the effluent disposal system; b) <u>Dangerous goods</u> - potential impacts and relevant mitigation measures in the event of a spillage of potentially dangerous or contaminated goods ferried to and from the Island, including details of the nature and type of goods; c) <u>Impact on Fishing Industry</u> - potential impacts (physical and economic) and relevant mitigation measures on commercial fishing industry (particularly oyster leases) in the vicinity of the site. d) <u>Impact on fauna and residential amenities</u> - potential impacts on fauna and residential amenities.
<i>Bushfire</i>
4.9 Address the requirements of Planning for Bush Fire Protection 2006 (RFS).
5. Water Cycle and Aquaculture Management
5.1 Address potential impacts on the water quality of surface and groundwater including, but not limited to, the Crookhaven River and any State Environmental Planning Policy No 14 (SEPP 14) Wetlands, having regard to the relevant State Groundwater, Rivers, Wetlands and Estuary Policies. In particular, consideration of pollutant runoff loads from the site, treatment of waste and suitable land for effluent disposal, sediment and erosion control, cumulative effect of additional on-site sewage management systems within the Crookhaven River catchment, potential impacts on the nearby oyster leases and recreational and commercial fishing in the Crookhaven / Shoalhaven River, especially in terms of water quality, food safety impacts and increased boat traffic, potential impacts of the project on the groundwater table and management during flood events must be provided. Demonstrate consistency with

<p>recommendations of the <i>Independent Inquiry into the Shoalhaven River System</i> and the Independent Review of the <i>'Relationship between Healthy Oysters and Healthy Rivers'</i> by the <i>Healthy Rivers Commission</i> and the <i>Fisheries Management Act 1994</i>. Demonstrate an acceptable level of water quality protection with respect to downstream receiving waters during and after construction.</p> <p>5.2 Demonstrate suitable protection of adjacent SEPP 14 wetland, including a minimum of 50 metres riparian zone buffers to the wetland and creek to provide a buffer between the development areas and adjacent waterways or natural drainage lines. Address management of riparian buffers including retention and replanting of native riparian vegetation.</p> <p>5.3 Provide an Integrated Water Cycle Management (IWCM) Plan based upon Water Sensitive Urban Design principles in accordance with Shoalhaven City Councils <i>Integrated Water Cycle Management Plan</i> (currently being developed). Address the requirements of the <i>NSW Floodplain Management Manual</i> and address drainage issues associated with changes in the hydrological regime of the catchment as a result of the project. Address issues relating to sections 198-203 and 205 of the <i>Fisheries Management Act 1994</i>.</p> <p>5.4 Marina Development - Full description of the construction and operation of the marina including any dredging, excavation, demolition, piling activity, use of machinery/plant, the size and number of vessels that are likely to be accommodated, likely boat repair and maintenance activities to be carried out, hours of operation, licensing arrangements, access to the moorings, potential for contamination from disturbance of the seabed from piling activities, quantum of any dredged and excavated materials and proposed measures to prevent/mitigate impact on any threatened species, populations, or ecological communities of fish or marine vegetation or their critical habitat.</p>	<p>6. Heritage and Archaeology</p>
<p>6.1 Identify whether the site has significance to Aboriginal cultural heritage and identify appropriate measures to preserve any significance (Aboriginal community consultation should be undertaken in accordance with DEC's <i>Interim Community Consultation Requirements for Applicants</i>).</p> <p>6.2 Identify any items of European heritage significance and, where relevant, provide measures for the conservation of such items.</p>	<p>7. Flora and Fauna</p>
<p>7.1 Outline measures for the conservation of flora and fauna and their habitats within the meaning of the <i>Threatened Species Conservation Act 1995</i>, including, but not limited to, the Green and Golden Bell Frog, Powerful Owl, Grey headed Flying Fox, Gang-Gang Cockatoo, Pied Oystercatcher, and the Bangalay Sand Forest in the Sydney Basin and South East Corner Bioregions and Coastal Sandmarsh in the NSW North Coast, Sydney Basin and South East Corner Bioregions Endangered Ecological Communities must be specifically assessed. Address impacts on aquatic species of the Crookhaven River.</p> <p>7.2 Outline measures for the conservation of existing wildlife corridor values and/or connective importance of any vegetation on the subject land.</p> <p>7.3 Land/Water interface – Consider and mitigate impacts on the intertidal areas including mangroves, seagrasses and other marine vegetation and demonstrate management of the coastal zone is in accordance with the principles of ecologically sustainable development. Detail construction methods (e.g. dredging, under boring or overhead supply) and the impacts on the hydrodynamics of the estuary associated with the proposed marina, new jetty facilities and existing jetty removal works.</p>	<p>8. Noise</p>
<p>8.1 Address potential noise impacts for residents, in particular road traffic noise, boat traffic noise movements of supplies and waste to and from the island, and appropriate mitigation measures. The report shall address the nature of movements, hours and frequency, noise mitigation measures and/or acoustic treatments.</p> <p>8.2 Helicopter Noise: Prepare a noise assessment report by a suitably qualified acoustic consultant to investigate potential noise impacts associated with the taking off, approaching and enroute of helicopters to the helipad. The report shall address the potential impacts on residential amenities; fauna or their habitats in particular threatened species mentioned in key issue No. 2; any threatened species, populations, or ecological communities of fish or marine vegetation or their critical habitat.</p>	

<p>The report shall include hours and frequency of operation, noise contours/levels, route and noise mitigation measures and/or acoustic treatments. Best practice in the measurement and prevention/mitigation of noise impacts shall be adopted.</p>
<p>Consultation</p>
<p>You should undertake an appropriate and justified level of consultation with the following agencies during the preparation of the environmental assessment:</p> <p>(a) Agencies or other authorities:</p> <ul style="list-style-type: none"> • Shoalhaven Council; • NSW Department of Environment and Conservation; • NSW Department of Natural Resources; • Shoalhaven Water; • NSW Department of Primary Industries (NSW Fisheries); • NSW Catchment Management Authority; • NSW Department of Planning (South Coast Regional Office); • NSW Department of Lands; • NSW Maritime; • Roads and Traffic Authority; • Rural Fire Service; • Local Aboriginal Land Councils • Commonwealth Department of Environment and Heritage; <p>(b) Public:</p> <ul style="list-style-type: none"> • Document all community consultation undertaken to date or discuss the proposed strategy for undertaking community consultation. This should include any contingencies for addressing any issues arising from the community consultation and an effective communications strategy. <p>The consultation process and the issues raised should be described in the Environmental Assessment.</p>
<p>Deemed Refusal Period</p>
<p>60 days</p>

APPENDIX C. COMPLIANCE WITH ENVIRONMENTAL PLANNING INSTRUMENTS

State Environmental Planning Policy (Major Development) 2005

The project is a Major Project under *State Environmental Planning Policy (Major Projects) 2005* ("the MP SEPP") being for a tourist facility wholly or partly in a sensitive coastal location (within 100 metres of the MWHM) for any number of persons (Schedule 2, 1(1)(f) – Coastal Areas). The opinion was formed by the Director-General as delegate for the Minister on 22 February 2006. Recent changes to the classes of regional development and Part 3A projects were made through the establishment of the *State Environmental Planning Policy (Major Developments) 2005* ("the MD SEPP") and are discussed in Section 3.1 of the report.

State Environmental Planning Policy No. 14 – Coastal Wetlands

State Environmental Planning Policy No 14 – Coastal Wetlands ("SEPP 14") aims to ensure that identified coastal wetlands are preserved and protected in the environmental and economic interests of the State. The site contains two wetlands listed under SEPP 14. Clause 7 states that a person shall not clear, construct a levee on, drain or fill land that is a SEPP 14 wetland except with Council consent or concurrence for the Director. No works are proposed to the SEPP 14 on the site and therefore the project is consistent with this SEPP. The potential impacts on the SEPP 14 wetland are considered in Section 5.1 and 5.3 of this report and the project is considered to be consistent with the SEPP 14.

State Environmental Planning Policy No. 55 – Remediation of Land

State Environmental Planning Policy No 55 – Remediation of Land ("SEPP 55") deals with the remediation of contaminated land. In relation to GNI, investigations indicate that the present land condition and site history indicates that contamination associated with past structures, broad acre farming and agriculture is potentially present on the site and that a Stage 2 Contamination sampling program should be undertaken. This issue is discussed in Section 5.11 of the report. The project is consistent with SEPP 55.

State Environmental Planning Policy No. 71 – Coastal Protection

State Environmental Planning Policy 71 - Coastal Protection ("SEPP 71") applies to the site as it is located within the coastal zone of NSW. The aims and matters for consideration of SEPP 71 are addressed in Table 1.

Table 1: SEPP 71

MATTERS	COMPLY	COMMENT
CLAUSE 2: AIMS OF POLICY		
(a) To protect and manage the natural, cultural, recreational and economic attributes of New South Wales coast and	YES	The proposal will not adversely affect the natural attributes of the NSW coast given the retention of large areas of vegetation along the edges of GNI.
(b) To protect and improve existing public access to and along coastal foreshores to the extent that it is compatible with the natural attributes of the coastal foreshore, and	YES	The proposed development does not affect pedestrian access along the foreshore.
(c) To ensure that new opportunities for public access to and along coastal foreshores are identified and realised to the extent that this is compatible with the natural attributes of the coastal foreshore, and	YES	As above.
(d) To protect and preserve Aboriginal cultural heritage, and Aboriginal places, values, customs, beliefs and traditional knowledge, and	YES	An assessment of Aboriginal Heritage significance of the site was undertaken and is discussed in Section 5.7 of the report.

(e) To ensure that the visual amenity of the coast is protected, and	YES	It is acknowledged that the proposed development will not be visually prominent when viewed from foreshore and surrounding residential area, largely due to the design of the project. The proposal involves retaining large areas of vegetation within and along the perimeter of the GNI site and proposes single detached buildings, set within landscaped areas of open space planted with native species. The visual amenity of the area is unlikely to be adversely affected by the proposal. This is further discussed in Section 5.2 of the report.
(f) To protect and preserve beach environments and beach amenity, and	N/A	The proposed development is not located within the vicinity of the beach environment.
(g) To protect and preserve native coastal vegetation, and	YES	The proposed development involves a small amount of removal of coastal vegetation (refer 5.3 of the report).
(h) To protect and preserve the marine environment of New South Wales, and	YES	There is no development proposed within the wetland portion of the site and on-site effluent is proposed to be contained and managed to best-practice standards. The mainland sites will be connected to the reticulated systems.
(i) To protect and preserve rock platforms, and	N/A	There are no rock platforms on or in the vicinity of the site which would be affected by the proposed development.
(j) To manage the coastal zone in accordance with the principles of ecologically sustainable development (within the meaning of section 6(2) of the <i>Protection of the Environment Administration Act 1991</i>), and	YES	The proposal will be consistent with the relevant principles of ESD and is further discussed in Section 5.14 of the report.
(k) To ensure that the type, bulk, scale and size of development is appropriate for the location and protects and improves the natural scenic quality of the surrounding area, and	YES	The scale and size of the proposed development is appropriate for the location as the development will not adversely affect the visual amenity of the locality particularly when viewed from the foreshore, is compatible with existing development in the locality and the proposed building envelopes are sited on the less constrained portions of the site (refer to Section 5.1 of the report).
(l) To encourage a strategic approach to coastal management.	YES	The proposal is consistent with the aims of SEPP 71 (see above) and therefore considered to represent a strategic approach to coastal management.
CLAUSE 8: MATTERS FOR CONSIDERATION		
(a) The aims of this Policy set out in clause 2	YES	See above
(b) Existing public access to and along the coastal foreshore for pedestrians or persons with a disability should be retained and, where possible, public access to and along the coastal foreshore for pedestrians or persons with a disability should be improved	YES	The proposed development does not change public access along the foreshore.
(c) Opportunities to provide new public access to and along the coastal foreshore for pedestrians or persons with a disability	YES	See above.
(d) The suitability of development given its type, location and design and its relationship with the surrounding area	YES	The proposed development is considered suitable for its location given the scale of the proposal is similar to the character of surrounding development and the proposal is located outside the highly constrained parts of the site.
(e) Any detrimental impact that development may have on the amenity of the coastal foreshore, including any significant overshadowing of the coastal foreshore and any significant loss of views from a public place to the coastal foreshore	YES	The proposed development will not adversely affect the coastal foreshore due to the mitigation measures proposed in the project (refer to section 5.1 of the report).

(f) The scenic qualities of the New South Wales coast, and means to protect and improve these qualities	YES	In general, the proposed development will not adversely affect the visual amenity of the locality as discussed in Section 5.2 of the report.
(g) Measures to conserve animals (within the meaning of the Threatened Species Conservation Act 1995) and plants (within the meaning of that Act) and their habitats	YES	The proposed development will result in the retention of significant amounts of vegetation and accordingly will not have a significant impact on ecological values and corridors (further discussed in section 5.3 of the report).
(h) Measures to conserve fish (within the meaning of Part 7A of the <i>Fisheries Management Act</i> 1994) and plants (within the meaning of that Act), and their habitats	YES	The proposed development will not adversely affect fish in the vicinity of the site (refer to Section 5.1 of the report).
(i) Existing wildlife corridors and the impact of development on these corridors	YES	The proposed development is unlikely to adversely affect existing wildlife corridors (see Section 5.3 of the report).
(j) The likely impact of coastal processes and coastal hazards on development and any likely impacts of development on coastal processes and coastal hazards.	YES	The mainland sites will not be affected by coastal processes given the setback proposed. GNI is unlikely to be subject to coastal hazards as it is located within an estuary and comprises bedrock which is not easily eroded.
(k) Measures to reduce the potential for conflict between land based and water based coastal activities.	YES	There is unlikely to be any conflict between land based and water based coastal activities as Dept of Lands are giving consideration to these issues (refer Section 5.8 of the report).
(l) Measures to protect the cultural places, values, customs, beliefs and traditional knowledge of Aboriginals	YES	Refer above.
(m) Likely impacts of development on the water quality of coastal water bodies	YES	There is unlikely to be any unacceptable impacts on the water quality of coastal water bodies given the proposed measures to treat effluent on-site and the stormwater controls proposed will ensure minimal runoff from the site to nearby watercourses (refer Section 5.1 of the report).
(n) The conservation and preservation of items of heritage, archaeological or historic significance	YES	Refer above.
(p) Only in cases in which a development application in relation to proposed development is determined: (i) the cumulative impacts of the proposed development on the environment, and (ii) measures to ensure that water and energy usage by the proposed development is efficient.	YES	Sustainability is discussed in Section 5.14 of the report. There is unlikely to be any adverse cumulative impacts of the proposal as the project is consistent with the objectives of the zone and relevant controls.

SEPP 71 also requires that public access (CI 14), effluent disposal (CI 15) and stormwater disposal (CI 16) be considered. The proposed development does not change existing public access to the foreshore. In relation to effluent disposal, the mainland sites will be connected to the existing reticulated system while GNI will provide on-site effluent disposal. Similarly, in relation to stormwater, the mainland sites will drain to the reticulated system while GNI will provide stormwater controls. These issues have been satisfactorily considered by the project and are further discussed in section 5.1 of the report. The project is considered to be consistent with the requirements of SEPP 71.

State Environmental Planning Policy No. 62 – Sustainable Aquaculture

State Environmental Planning Policy No 62 – Sustainable Aquaculture ("SEPP 62") aims to encourage sustainable aquaculture in the State, namely, aquaculture development which uses, conserves and enhances the community's resources so that the total quality of life now and in the future can be preserved and enhanced. SEPP 62 requires consideration of any adverse effect on oyster aquaculture development or a priority oyster

aquaculture area, and must give notice of the application to DPI if potential impacts are identified. DPIs comments are to be considered, along with the *NSW Oyster Industry Sustainable Aquaculture Strategy*. The potential impact on oyster leases is considered in Section 5.1 of this Report and the project is considered to be consistent with this SEPP.

State Environmental Planning Policy (Infrastructure) 2007

State Environmental Planning Policy (Infrastructure) 2007 ("the Infrastructure SEPP") aims to facilitate the effective delivery of infrastructure across the State. Pursuant to the Savings provision in Clause 11 of the Infrastructure SEPP, the policy does not apply to or in respect of the determination of a project application made under Part 3A of the Act, but not finally determined before the commencement of this Policy (being 1 January 2008). Accordingly, this SEPP does not apply to this project.

State Environmental Planning Policy No 11—Traffic Generating Developments

State Environmental Planning Policy No 11 – Traffic Generating Developments ("SEPP 11"), now repealed, aimed to allow the Traffic Authority to make representations in respect of certain developments which were listed in the schedule as traffic generating. The proposed project did not satisfy the criteria under the schedules and therefore SEPP 11 did not apply to the project.

Illawarra Regional Environmental Plan No 1

The Illawarra Regional Environmental Plan No 1 ("IREP") is taken to be a State environmental planning policy from 1 July 2009. The aims of this Policy are to maximise the opportunities for the people of the region and the State to meet their individual and community economic and social needs. The IREP contains several relevant objectives for the project including in relation to rural lands, commercial centres, coastal lands and high rise buildings, discussed below:-

- The objectives relating to rural lands (CI 11) relevant to the project include protecting valuable natural environments, to effectively manage the development of rural lands having regard to flood potential, bushfire risks, salinisation, soil degradation, erosion and weed infestation, to allow for the development of small rural holdings in appropriate locations and to retain the scenic attributes of rural areas. The project is consistent with these objectives given these hazards have been mitigated and the scenic values of GNI are retained.
- The objectives relating to commercial centres (CI 74) include ensuring that commercial service centres are developed to suit the convenience of consumers and to promote shopping and pedestrian amenity in all commercial centres. The project is consistent with these objectives given the limited scale of commercial development now proposed in the project which is compatible with the existing village character of Greenwell Point.
- The relevant objectives relating to coastal lands, wetlands and other water bodies (CI 105) include protecting the productive ecosystems and natural habitats of the region's estuaries, wetlands, lakes and lagoons and their scenic attributes. The project is consistent with this objective given the protection of the SEPP 14 wetland and surrounding water quality within the estuary. When considering development (CI 107) on land adjacent to, or in close proximity to a river or the coast, the consent authority shall take into consideration the need to facilitate public access to the waterfront by requiring dedication of appropriate land, for open space purposes. Public access is improved by the project via the marina and improved jetty facilities at both the mainland sites and GNI.
- The relevant objective (CI 138) relating to high-rise buildings is to preserve the landscape quality of coastal and foreshore land by encouraging the erection of buildings which are designed in harmony with that landscape. The concurrence of the Director is required to erect a building having a height of more than 11 metres at which time the following matters are to be considered:-
 - a) the height, scale, bulk and density of the proposed building,

- b) the external appearance and materials used on the exterior of the proposed building,
- c) the relationship of the proposed building to the streetscape or landscape,
- d) the effect of the proposed building on public amenity, including pedestrian amenity,
- e) the effect of the proposed building on wind patterns and wind velocity in public places,
- f) the effect of the proposed building on overshadowing of public places,
- g) the effect of the proposed building on views from public places,
- h) the effect of the proposed building on any item of the environmental heritage in the vicinity, and
- i) the effect of reflections from the exterior of the proposed building on roads, public places and buildings in the vicinity.

The design of the buildings greater than 11 metres (at the mainland sites) has been considered in Section 5.2 of the report.

The project is considered to be consistent with the aims, objectives and controls of the IREP.

Drinking Water Catchments Regional Environmental Plan No. 1

The Drinking Water Catchments Regional Environmental Plan No. 1 ("the DW REP") sets out obligations relating to planning and regulating new development in the catchments, and preparing plans to rectify the effects of existing development on the catchments. The DW REP, which came into effect on 1 January 2007, does not apply to the subject site as it only relates to the mid and upper sections of the Shoalhaven River as these are the areas which potentially impact on Sydney's water catchment areas. Accordingly, the DWE REP is not a relevant consideration in this assessment.

Shoalhaven Local Environmental Plan 1985

The *Shoalhaven Local Environmental Plan 1985* ("the Shoalhaven LEP") is applicable to the site and provides development controls for development in the Shoalhaven local government area. Pursuant to Clause 8 of the Shoalhaven LEP, the mainland sites are zoned 3(f) Business "F" (Village) and GNI is zoned 1(d) Rural "D" (General Rural) and 7(a) Environment Protection "A" (Ecology). The Department is satisfied that the project can be conducted in a manner that is consistent with the relevant environmental and special provisions of the Shoalhaven LEP as outlined below.

- a) **Clause 9 – Zone objectives and Development Control Table** – the objectives of the zone and the permissible uses are outlined below:-
 - (i) 1(d) General Rural Zone (Goodnight island) -The objectives of the zone are:
 - a) *to provide opportunities for a range of rural land uses and other development, including those which by virtue of their character require siting away from urban areas,*
 - b) *to recognise the potential for high intensity bush fire over wide areas of the zone and to ensure that development does not lead to significant risks to life or property from bush fire or to the implementation of bush fire mitigation measures which will have a significant environmental impact, and*
 - c) *to ensure that wherever possible the location, design and management of development is consistent with:*
 - (i) *the protection of important natural and cultural environments,*
 - (ii) *the conservation of renewable natural resources such as forests and prime crop and pasture land,*
 - (iii) *the maintenance of opportunities for economic development of important extractive resources,*
 - (iv) *minimising conflict between land uses, and*
 - (v) *any plans for public infrastructure provision or management.*

The project is consistent with these objectives given the hazards have been mitigated and the natural environmental attributes of the site have been conserved. The proposed works in this zone include tourist facilities which are permissible with consent. Tourist facilities is defined in the Model Provisions

(now repealed) which are adopted by the Shoalhaven LEP in Clause 5 to include an establishment providing for holiday accommodation or recreation and may include a boat shed, boat landing facilities, camping ground, caravan park, holiday cabins, hotel, house boat, marina, motel, playground, refreshment room, water sport facilities or a club used in conjunction with any such activities.

- (ii) 3(f) Business (Village) Zone (mainland sites) -The objective of the zone is to provide for village retail and business development to serve the needs of the village community and which is compatible with the village environment.

The project is consistent with these objectives given the retail and tourist uses are compatible with existing development in terms of design and scale. The proposed works in this zone include shops, commercial premises and tourist facilities (see above), which are permissible with consent.

- b) **Clause 26 - Soil, water and effluent management** – satisfactory arrangements must be made with the Council for the provision of water supply, sewerage removal and stormwater and other surface water drainage from the site. These arrangements must satisfy the following objectives:-

- a) economical feasibility and practicality in terms of design, installation and maintenance,
- b) protection of public health,
- c) protection of surface water,
- d) protection of ground water,
- e) encouragement of the utilisation of wastewaters as a resource rather than a waste for disposal, and
- f) protection of community amenity.

The issue of soil, water and effluent management is considered in detail in Section 5.1 of the report and the project is considered to be consistent with the Shoalhaven LEP provisions.

- c) **Clause 27 - Development on acid sulfate soils** - This clause applies to land identified as having high probability to be affected by acid sulfate soils on the map prepared by the Department of Land and Water Conservation entitled "Acid Sulfate Soil Risk Map" dated December 1997 and available for public inspection at the office of the Council. The consent of the Council is required for any development which involves or is likely to involve, through drainage, earthworks, or any other means, the exposure to the atmosphere of any part of soil which contains iron pyrites within land to which this clause applies. The Council must be satisfied that measures can and will be taken to avoid or mitigate the actual or potential contamination of waterways in the vicinity of the land concerned by acid from acid sulfate soils. This issue is discussed in Section 5.11 of the report and is considered to be consistent with this Clause.
- d) **Clause 28 - Danger of bush fire** - The site is not located on land described in an EPI as bush fire prone, however, has been considered in Section 5.11 of the report and is consistent with this Clause.
- e) **Clause 29 - Development of flood liable land** – the Council must consider a flood assessment report when assessing development on flood liable land. The Council must make an assessment of a number of flood-related factors, which are discussed in Section 5.5 of the report. The project is considered to be consistent with this Clause of the LEP.
- f) **Clause 33 - Height of buildings** - A building must not be erected to a height greater than 2 storeys, including any parking space, above natural ground level, without the consent of the Council. This issue is discussed in Section 5.2 of the report and is considered to be generally consistent with this Clause.
- g) **Clause 34A Foreshore building lines** – the mainland sites are affected by a 15.24 metre foreshore building line which restricts further development works beyond that line to, among other things, boat sheds, swimming pools, pedestrian access works, landscaping and jetties. There is no development proposed beyond the foreshore building lines on the mainland sites which is contrary to this Clause.

It is considered that the project is generally consistent with the aims, objectives and controls of the Shoalhaven LEP.

APPENDIX D. COMPLIANCE WITH OTHER PLANS AND POLICIES

DCP 18 – Car Parking

Development Control Plan 18 – Car Parking (“DCP 18”) applies to all development within Shoalhaven and ensures that adequate off street car parking is provided in conjunction with development, that car parking areas are functional and operate efficiently and ensures that manoeuvring of vehicles takes place within the site. DCP 18 provides the car parking requirements for various land uses (Clause 2.1) outlined in Table 1.

Table 1: DCP 18 – Car Parking Requirements

Land use	Parking Requirement	Parking Provided	Comply
Clause 2.1 – Car Parking Requirements			
No 76 Greenwell Point Road Greenwell Point			
Retail (shops) (x1)	1 spacer per 24m ² = 3.6 spaces (75% of gfa equiv to glfa = 85.5m ²)	4 spaces	Yes
Café	1 space per 6.5m ² of public dining area (25% reduction for co-use on site) = 9.8 spaces	10 spaces	Yes
Apartments (x20)	1 space per 2 bed unit + 1 space for Manager = 21 spaces	21 spaces	Yes
No 84 Greenwell Point Road Greenwell Point			
Serviced apartments (x7)	1 space per 2 bed unit = 7 spaces	7 spaces	Yes
Retail	1 spacer per 24m ² = 3.6 spaces (75% of gfa equiv to glfa = 104.25m ²) = 4.3 spaces	1 space	No
Manager's residence	1 space for Manager (apartments)	1 space	Yes
Goodnight Island, Orient Point			
Serviced apartments (x15)	1 space per 2 bed unit + 1 space for Manager = 16 spaces	16 spaces	Yes
Pavilions (x15)	1 space per 2 bed unit + 1 space for Manager = 15 spaces	15 spaces	Yes
Villa (x1)	1 space per room = 5 spaces	5 spaces	Yes
Restaurant	1 space per 6.5m ² (58m ² available to public) = 8.9 spaces	11 spaces	Yes
Staff	Nil	11	Yes

The technical standards for parking layout, access, and manoeuvrability (CII 2.2 – 2.10) include the following:

- Car parking and loading areas to be accessible and marked from road frontage;
- Dead-end parking aisles < 15m, (staff spaces exempt);
- Spaces to be 5.5m deep, aisles to be 7m wide;
- ‘Stack’ parking of vehicles not supported;
- Vehicles enter and leave in a forward direction;
- Each site shall minimise ingress/egress points (> 50 spaces - separate ingress and egress);
- Buildings designed to ensure adequate sight distance at intersections and driveways (min 1m from side);
- Threshold treatments provided where driveway crosses footpath, ramps not across footpath;
- Service areas to operate independently of other parking areas and cater for largest vehicle to use site;
- Disabled parking - min 1 space, located close to entry, on ground level and comply with AS 2890.1.
- Associated stormwater drainage in accordance with the relevant Australian Standards;
- Min height between the floor surface and the lowest overhead obstruction shall be 2.2m;
- Straight Ramps - maximum Grades - 12.5% for ramps > 20m; 4% for ramped floor for angle parking less than 900; width of Ramps – 3.6m lane width (1-way with sharp turn approach), 4.0m lane width (2-way sharp turn approach); circular Ramps - maximum grade = 10%; inside kerb radius = 4.0m; Outside kerb radius = 7.6m (1-way); inside & outside lane width = 3.6m.

- 6–9m combined entry width; 1m splay at kerbline.
- Desired traffic movement - highly visible pavement arrows
- Speed humps to comply with AS2890.1 – 1993.
- Lighting within car park - wall mounted or free standing poles or bollard lights.
- Bicycle parking/storage facilities

The proposal involves 2 basement car parking areas (at No 76 and No 84 Greenwell Point Road), which comprise car parking spaces which comply with the requirements including 5.5m deep spaces, 7m wide aisles, loading facilities, disabled parking, and straight and curved ramps (No 76 – 10% and 12.5% gradient, 4.4m wide and up to 21.6m long and No 84 – 5% and 8% gradients, lengths of 10.1m and 26.64m, 3.6m wide and 7.6m outside radius). The proposal is considered to be generally consistent with the controls of DCP 18 as outlined in the technical report from the Proponent.

DCP 63 - Tourist Developments in Rural Areas

Development Control Plan No. 63 - Tourism Development in Rural Areas ("DCP 63") aims of to foster economic growth through the promotion of tourism which is compatible with the scenic quality, natural environment and relaxed lifestyle of Shoalhaven whilst conserving and protecting the natural environment and character of the Shoalhaven, upon which the tourism economy depends. DCP 63 provides development guidelines for tourist development in rural areas, in relation to tourist cabins, guesthouse accommodation and Tourist accommodation/resort. The proposal is defined as a Tourist accommodation/resort based on this DCP.

DCP 63 contains density standards (Cl2.2) for Tourist Accommodation/Resort, such that there is a minimum area requirement of ten (10) hectares. The overall site area of GNI is 16.54Ha, however, the area zoned 1(d) is less than 10 hectares, being approximately 9.5Ha. It is considered that this is a minor non-compliance and that the overall effect of this density control is to limit bulk and scale on smaller rural lots. In the case of GNI, there is sufficient area on the site to accommodate the proposal and still provide sufficient areas of retained vegetation and other areas for infrastructure and on-site effluent disposal. The DCP also provides controls in relation to car parking, sewerage and other matters which are addressed in other planning instruments. It is considered the proposal is consistent with DCP 63.

DCP 78 – Sewerage Management

The *Shoalhaven Development Control Plan No. 78 – On-site Sewage Management in Unsewered Areas* ("On-site Sewage DCP") has been prepared to detail the information required to be provided with applications. Information including (section 3.5.3 of the DCP) among other things, the proposed wastewater treatment and application system, site information including climate, areas unsuitable for effluent application and possible area(s) suitable for effluent application purposes, details of soils and geology, permeability, pH, depth to groundwater and bedrock, underlying geology, topography, flood and erosion potential, assessment of native vegetation, presence of environmentally sensitive vegetation types, location of ground water recharge areas, surface waters, effluent load, impact of nutrients, and wet weather storage is required to be provided. This information has been provided and has been reviewed by consultants engaged by the Department (refer to Section 5.1 of the report). The proposal is consistent with this DCP.

DCP 93 – Controls for Waste Minimisation and Management

The *Shoalhaven City Council's Development Control Plan: Controls for Waste Minimisation and Management* ("Waste DCP") requires that a Waste Minimisation and Management Plan ("WMMP") be submitted which details the volume and type of waste to be generated during the project, how waste is to be stored and treated on site, how waste is to be disposed of and how on-going management will operate at the site. The WMMP is reflected in the conditions of approval and therefore the proposal is consistent with this DCP.

South Coast Regional Strategy, 2007

The *South Coast Regional Strategy, 2007* is a 25-year land-use blueprint and covers the Shoalhaven, Eurobodalla and Bega Valley local government areas and will guide sustainable growth, providing places to live

and work while protecting valuable agricultural and natural assets. The Strategy caters for a population increase of 60,000 by 2031. These residents will require an additional 45,600 dwellings and 25,800 new jobs. The site is located within the existing urban area.

The relevant aims of the Regional Strategy for this project include:

- *Protect high value environments including pristine coastal lakes, estuaries, aquifers, threatened species, vegetation communities and habitat corridors by ensuring that no new urban development occurs in these important areas and their catchments.*
- *Limit development in places constrained by coastal processes, flooding, wetlands, important primary industry resources and significant scenic and cultural landscapes.*
- *Protect the cultural and Aboriginal heritage values and visual character of rural and coastal towns and villages and surrounding landscapes.*

The project is considered to be consistent with the Regional Strategy as the area on GNI of high ecological importance being the EECs, SEPP 14 wetland and surrounding estuary, have been adequately protected through the mitigation measures proposed in the project and the natural hazards on the site have also been adequately mitigated. Aboriginal cultural heritage has been adequate consideration (refer to sections 5.1, 5.3 and 5.7 of the report for further discussion on these issues). It is considered that the project is consistent with the Regional Strategy.

Coastal Design Guidelines

MATTERS	COMPLY	COMMENTS
Part 1 Determining a hierarchy of settlements		
Coastal Village -	✓	Greenwell Point is classified as a Coastal Village.
Part 2 Design principles for coastal settlements		
Defining the footprint and boundary	YES	The proposal continues the urban structure of existing development as the mainland sites are located within the town centre while GNI is located in close proximity to the centres of Greenwell Point and Orient Point.
Connecting open spaces	YES	Public access is not adversely affected on the mainland sites as these sites are privately owned, while public access to GNI will be improved by the project as the jetty will be upgraded.
Protecting then natural edges	YES	The natural edges are protected in the proposal as it involves the retention of large areas of natural vegetation within the edges of GNI and some significant trees within the street adjoining the mainland sites. Setbacks to the waterfront on the mainland sites comply with the restrictions of the FSBL while a 50m setback on GNI complies with the requirements of DPI.
Reinforcing the street pattern	YES	The project does not impact on the street pattern.
Appropriate buildings for a coastal context	YES	<u>Mainland sites</u> - the proposal involves buildings which are of an appropriate scale for the site given the existing residential and commercial development in the area being limited to 2 storeys. The project involves 3 storeys above ground at any one point. <u>GNI</u> – the buildings are all single storey and largely detached structures and the majority of vegetation around the edges is maintained which assist in screening some of the buildings. The main complex is a larger building which is sighted lower in the landscape to reduce its visual impact.

Coastal Policy 1997

MATTERS	COMPLY	COMMENTS
Protecting, rehabilitating and improving the natural	YES	The proposed development will not adversely affect the natural environment of the coastal zone (see 5.1 and 5.3 of the report).

environment of the coastal zone.		
Recognising and accommodating the natural processes of the coastal zone.	YES	The proposed development will not affect coastal processes given the setback of the development on GNI to the MHWM and the mitigation measures proposed for the on-site effluent and stormwater controls.
Protecting and enhancing the aesthetic qualities of the coastal zone	YES	The proposed development will not adversely affect the visual amenity of the locality given the design and height of the buildings on the mainland and GNI and the retention of existing vegetation along the edges of the sites.
Protecting and conserving the cultural heritage of the coastal zone.	YES	The potential heritage and cultural significance of the site has been adequately assessed and will be conserved (see section 5.7 of the report).
Providing for ecologically sustainable development and use of resources.	YES	The proposed development does not involve a significant impact on threatened species or corridor values and provides for energy efficiency to be incorporated into the proposal in these ways, the proposal considered to be ecologically sustainable development (further discussed in section 3.7 and 5.14 of the report).
Providing for ecologically sustainable human settlement in the coastal zone.	YES	See above.
Providing for appropriate public access and use.	YES	The development does not adversely affect public access or use of the coastal zone and provides further pedestrian and cyclist access in the vicinity of the mainland sites.
Providing information to enable effective management of the coastal zone.	YES	The proposal adequately identified site constraints and has designed the project having regard to such constraints.

APPENDIX E. SUMMARY OF PUBLIC SUBMISSIONS

No	Nature	Comments
1	Object	<ul style="list-style-type: none"> Noise impact - sound travelling across the water to Orient Point from helipad and general use of the Island Social impacts including introduction of a Liquor licence, with late trading hours, the development will change the ambience of Greenwell Point and adjacent suburbs, being a generally a quiet coastal/ rural lifestyle/location.
2	Object	<ul style="list-style-type: none"> The helipad would cause a noise impact on the human population as well as upon the flying foxes in the area, especially after 6pm. A helipad was refused in the previous DA to Council due to impacts upon the population of Greenwell Point and upon the operations at HMAS Albatross. The amphitheatre may have noise impacts upon Greenwell Point and Orient Point, use of the amphitheatre should be restricted to daylight hours. Concerns regarding the island being self-sufficient in terms of rain water collection. Will the water collected on the Island be sufficient to cater for drinking water and other water use? If it was deemed that the site be connected to "town water" then the mains pressure would decrease, the developer would be required to upgrade the system to reduce impacts on mains pressure. Further concerns regarding water relate bushfire protection and if the buildings on the Island will be able to be protected with water in the proposed tanks. Concerns that no further Community Consultation has occurred since 2004, where the above issues could have been raised and discussed.
3	Object	<ul style="list-style-type: none"> Development not compatible with Oyster Farming Seeking compensation for loss of business of existing Oyster lease pursuant to S175(4) of the Fisheries Management Act*
4	Object	<ul style="list-style-type: none"> Proposed development on mainland at 84 Greenwell Point Road , would over shadow the dwelling at 86 Greenwell Point Road in the afternoon, and cause loss of residential amenity, including impacts upon privacy due to increase in height above existing structure on suite, as well as due to intensification of use of #84 Bulk and scale of development on both mainland sites is out of character with existing development*previous plans presented to the town showed the development at 76 Greenwell Point Road, as being 2 storeys not 5*
5	Object	<ul style="list-style-type: none"> Impact on residential amenity of residents of Orient Point, given the proximity of the Island to the settlement*Over development of the Island Impacts of additional boat trips/ traffic from the marina will impact upon water quality of the Crookhaven River Increase noise pollution from the proposed helicopter/helipad Will there also be joy flights (using the helicopter) running from the Island which will also impact upon noise levels, joy flights are not supported
6	Object	<ul style="list-style-type: none"> Will dredging affect the water quality of the river, what mitigation measures are proposed to prevent this? What impact will dredging have upon the aquatic fauna, including impacts upon the Oyster farming? Will there be any runoff into the river from the onsite effluent treatment system? What mitigation measures are in place to prevent this from occurring?

7	Object	<ul style="list-style-type: none"> The stone "ramp" is not a ramp, It is part of an existing seawall to the east of the proposed marina. It would not be "upgraded" as it is not existing. What is the nature of the "upgrade", and what impacts will this have upon water quality including disturbance of any acid sulphate soils? Use of vehicular punt/ barge" to Orient Point - There would be an increase number of barge/punt trips especially during construction. This would impact on the number of small craft using the narrow navigable water way. What effect would the wake from the punt/ barge have, especially at low tide, upon small craft and upon the mudflats? Details of the punt needs to be provided such as dimensions, number of likely trips per day, and an accurate assessment of impacts both at low and high tide upon the waterway and other boat users Negative impact from helicopter noise. Clarification is required if the one event per day includes take -off or landing OR take-off and landing Requests an independent assessment of the report provided by the Proponent prepared by Marshall Day Noise impact will vary especially if the helicopter does not adhere to proposed route, who will monitor / regulate this flight path? What is the noise range for a Eurocopter BK117? Will other craft be used which may be noisier? There is no need to construct a helipad for infrequent flights such as those proposed, they can land on a level grassed area*is there an opportunity to use the helicopter for the benefit of the public such as evacuation and rescue missions?*
8	Object	<ul style="list-style-type: none"> Scale and Ecological Sensitivity of the development on the island Potential negative impacts of increased stormwater generation (relating to the Island development) on the marine/aquatic environment, including are the proposed mitigation controls adequate to minimise impacts upon water quality. Submitter considers that the modelling completed in the Environmental Assessment under estimates impacts Helicopter impact: The flight path should no track over migratory and water bird habitat; negative impacts from the noise generated by the proposed helicopter flights, including impacts upon residents and upon native species, including microchiropteran bats of Goodnight Island, Comerong Island and the estuary in general. Inadequate flora and fauna assessment including survey length Concerns regarding the loss of vegetation, including mature/ hollow bearing trees in the Bangalay Sand Forest. Units should be relocated out of this area to reduce clearing Concerns with the type of vegetation being planted on the Island Impact upon water quality and marine species – lack of certainty that the water quality of the estuary can be protected. Will there be any impacts from increased sedimentation, nutrient and organic enrichment, and are the controls proposed by the developer adequate. Concerns regarding the potential impact of increased nitrogen levels and phosphorus on water quality, including impacts upon seagrass, seaweed and aquatic fauna species. This issue has not really been addressed in the Environmental Assessment. Environmental Assessment has not seriously considered the impact of heavy rainfall events, in particular in relation to the inability of water pollution controls to cope with the events, and any potential failures. No assessment of pre development and post development loads of nitrogen and phosphorus Water pollution controls measures should reach certain points of efficiency, Sites the Long Bow Point COI 1996-2000 In effective management of nutrient especially nitrogen levels could cause a severe microalgae growth in the vicinity of the Island, and impact upon the oyster industry and seagrasses Large inputs of phosphorus can result in significant blooms of blue-green algae Concerns over complete failure of proposed water pollution controls measures, and has occurred in the past at Henry Kendall Retirement Village on St Georges basin n May 2003. Risk of contamination from the proposed in site effluent disposal system. How will failures be contained? Climate Change has not been addressed

9	Object	<ul style="list-style-type: none"> Noise impact, particularly upon residential amenity of Orient Point and retirees in the area Possible negative impact upon the oyster leases surrounding the island Proposed buildings out of character with the existing villages Visual amenity degraded by proposed 3 storey buildings at Greenwell Point Intensification of use of the Island, resulting in increased noise from boating activity and general use of the island Helipad and Amphitheatre increasing impacting negatively on current noise levels of surrounding villages to the local area Difficulty for emergency services to access the Island via boat Noise impact during construction Three proposed power poles will have a negative visual impact upon the natural beauty of the area, and will also be in direct view of submitter when looking at the River. The island development should rely on solar power Not in support of helipad
10	Object	<ul style="list-style-type: none"> No consultation with Jetty Licence holders affected by the proposal Electricity supply to Orient Point: how many underbores are proposed? How deep is the underbore - 2m below MHW or 2m below the riverbed? Have the boat movements in the area of the jetty at Orient point been taken into account when proposing the location of the underbore, as the boat movements have created depressions in the river bed? Where are the three new power poles to be located, this has not been identified? EA Appendix 16, Attachment A has been omitted from the report, therefore it is difficult to determine if any geotechnical investigations have been undertaken in the vicinity of the jetties at Orient Point. There is concern that any works relating to the underbore may undermine moorings/ piers of the jetties, further detail should be provided to determine impact upon jetty as a result of underbore construction There is no indication as to location of the launch pit/s for the underbore/s. Will their location obstruct jetty access during construction? The EA has not adequately addressed Section 7.3 of the DGRs (land /water interface) further information should be submitted regarding construction and management of underboring and power supply, and impacts upon jetty use Will there be an increased occurrence of lightning strike upon moored vessels due to the location of new high voltage infrastructure adjacent to the jetty, how will the proponent decrease the risk?
11	Object	<ul style="list-style-type: none"> Noise impact upon residents of Orient Point, from helicopters, increased boat traffic and use of the Island
12	Object	<ul style="list-style-type: none"> Addition of an under-bore pipeline connecting into Shoalhaven Water sewage reticulation system to ensure removal of waste water during system failure emergency or extended high rainfall conditions. Provision for a boat pump out facility at the marina on the island. That main SPS and any additional small SPS be installed with a 2 pump system in case of a pump failure. Stewardship of the river in partnership with the local oyster industry. Be required to have pollution booms in case of capsizing or sinking of any vessel at the marina. To implement an "emergency response plan" for pollution event, chemical or sewage
13	Object	<ul style="list-style-type: none"> Addition of an under-bore pipeline connecting into Shoalhaven Water sewage reticulation system to ensure removal of waste water during system failure emergency or extended high rainfall conditions. Provision for a boat pump out facility at the marina on the island. That main SPS and any additional small SPS be installed with a 2 pump system in case of a pump failure. To implement an "emergency response plan" for pollution event, chemical or sewage
14	Object	<ul style="list-style-type: none"> Addition of an under-bore pipeline connecting into Shoalhaven Water sewage reticulation system to ensure removal of waste water during system failure emergency or

		<p>extended high rainfall conditions.</p> <ul style="list-style-type: none"> • Provision for a boat pump out facility at the marina on the island. • That main SPS and any additional small SPS be installed with a 2 pump system in case of a pump failure. • Be required to have pollution booms in case of capsize or sinking of any vessel at the marina. • To implement an “emergency response plan” for pollution event, chemical or sewage. • That the on-site system be rated as “High” priority and inspected and audited on a 6 month basis. • That the “Water Cycle System Manager” be on good terms with SSQAP and work in partnership in the stewardship of the river in monitoring, testing and have good communication of water quality issues and concerns with the co-ordinator of the SSQAP. • That storm water management on the mainland sites be as state of the art as that proposed for the Island • Does the chlorinated pool water get added to the waste water treatment? If so does it affect the first stage of bacterial filtration? • There is always an amount of solids left after treatment when how and where will this be disposed of?
15	Object	<ul style="list-style-type: none"> • Bulk and overshadowing • Overlooking • Out of scale with surrounding town
16	Object	<ul style="list-style-type: none"> • On-site effluent disposal and potential impact on oyster leases • No pump-out facility for the increased number of boats to use
a	Support	<ul style="list-style-type: none"> • Positive benefit to the community by increasing the supply of holiday accommodation, and increasing tourist numbers to the area including Culburra Beach
b	Support	<ul style="list-style-type: none"> • Positive economic benefit to Greenwell Point, increasing visitor numbers to the area will support local businesses including the Oyster Industry • The height of the proposed buildings on the mainland will not have an impact upon the existing character of Greenwell Point, given the slope of the sites • The introduction of further retail opportunity and type of tourist accommodation will increase patronage and variety of patrons to the areas • The mainland development is appropriately located in a business zoning, and unlikely to impact upon the existing businesses in the area.
c	Support	<ul style="list-style-type: none"> • Offers employment opportunities to the residents particularly youth, both during and post construction • Benefit to existing businesses in the area, by increasing visitor numbers to the area • Boost tourist numbers to the area
d	Support	<ul style="list-style-type: none"> • Offers employment opportunities to the residents, both during and post construction • Benefit to existing businesses in the area, by increasing visitor numbers to the area
e	Support	<ul style="list-style-type: none"> • Offers employment opportunities to the residents particularly youth, both during and post construction • Benefit to existing businesses in the area, by increasing visitor numbers to the area, and thus allowing existing business to also employ more staff
f	Support	<ul style="list-style-type: none"> • Offers employment opportunities to the residents particularly youth, both during and post construction • Benefit to existing businesses in the area, by increasing visitor numbers to the area, and thus allowing existing business to also employ more staff
g	Support	<ul style="list-style-type: none"> • Promotes increased tourism to the area, including benefits for commercial and recreational fishing and the oyster industry.
h	Support	<ul style="list-style-type: none"> • Creates employment opportunity for the residents of the area • Proposal is eco- friendly • Increase tourist numbers to the area all year around

i	Support	<ul style="list-style-type: none"> • More employment opportunities for the local residents/ community both during and post construction • Increase tourist numbers, thus in turn boosting the local economy • Some tourist who visit the area, may decide to relocate to the area, thus increasing population • Proposal is considered to be a sustainable development
j	Support	<ul style="list-style-type: none"> • The proposal would increase employment opportunity for the youth of the area, including facilitating a higher level of training in the hospitality industry • Increase tourist numbers to the area, in turn boosting the local economy and attract more long term residents to the area • Visual impact is considered to be low • Environmentally sound development
k	Support	<ul style="list-style-type: none"> • Increase tourist numbers to the area, in turn boosting the local economy and attract more long term residents to the area • Creates employment opportunity for the residents of the area both during and post construction • Supporting of the fact that the development appears to be “eco – friendly”
l	Support	<ul style="list-style-type: none"> • Increase tourist numbers to the Shoalhaven area • High quality tourist development • Encourage other, future “high – end” developments to the area, filling a niche market in the Shoalhaven • Filling a void in the Shoalhaven tourist market, by providing high quality tourist accommodation
m	Support	<ul style="list-style-type: none"> • Complies with legislation • Effective consultation • Relatively low key and aesthetically pleasing
n	-	<ul style="list-style-type: none"> • Had not been advised of application until PPR
o	support	<ul style="list-style-type: none"> • Increased tourist activity • Increased investment in the town
p	support	<ul style="list-style-type: none"> • Positive economic and social benefits • Re-birth of Goodnight Island as a modern tourist facility

APPENDIX F. RESPONSE TO SUBMISSIONS/PPR

APPENDIX G. ENVIRONMENTAL ASSESSMENT

APPENDIX H. SHOALHAVEN CITY COUNCIL'S COMMENTS

Issue	EA Comments	PPR Comments	Resolved (subject to conditions)
Compliance with LEP 1985	<ul style="list-style-type: none"> i) Proposed building at No 84 should be amended to reposition all new development to behind FSBL (CI 34A) or restrict modifications to alterations and additions and comply with DCP 106; ii) Caretakers dwelling proposed to be located within 7(a) zone on GNI is prohibited and should be relocated; iii) Confirmation be provided that all dwelling structures proposed on GNI are located wholly within the 1(d) zone. 	That the determination includes a requirement that all structures on GNI be contained within 1(d) Zone.	Yes
DCP 63: Tourism Development in Rural Areas	Minimum site area for tourist accommodation/resorts is 10Ha, however, GNI has an area of only 9.5Ha Justification must be provided for variation, which considers if proposal is consistent with DCP objectives and satisfies performance criteria. Justification not provided.	Council accepts PPR generally satisfies the requirements and variations permitted in DCP 63.	Yes
Flooding	EA doesn't adequately demonstrate t buildings proposed at No.76 and 84 will be able to withstand force of flowing water, whether permanent, fail-safe, maintenance-free measures are incorporated into development to ensure timely, orderly and safe evacuation of people is possible from area, that it will not add significant cost and disruption to community or SES and that proposal will not increase flood hazard or flood damage to other properties or adversely affect flood behaviour. Basement parking areas at mainland sites are below FPL of 3.7m AHD which is unacceptable. Fails to consider whether evacuation from GNI is required during flood event.	The amendments described in PPR are acceptable in meeting previous concerns regarding flooding and coastal hazard impact and there are no further comments. Appropriate conditions of consent should reinforce the Flood Level criteria.	Yes
Traffic, Access and Car Parking	<p><u>No 76 & GNI –</u></p> <ul style="list-style-type: none"> i) 165 spaces should be provided on site including adequate off street car parking for development (156 spaces) plus provision for 9 additional spaces should the 25% deduction re GNI not be substantiated (above figure not including 12 on street car parking spaces that will be lost). ii) Concerns with layout of B1 and B2 car parking levels:- <ul style="list-style-type: none"> ▪ Aisle widths too narrow (5.4m is too narrow for one way aisle with 90 degree angled car parking and inconsistent with AS2890.1; minimum is 5.8m). ▪ Speed humps required to be provided: ▪ Tapering of the driveway access points: ▪ Provision of No Stopping signage on both sides of each access in Jervis 	<ul style="list-style-type: none"> i) A proposed motorised door at car park entry may impede café/restaurant patrons using car park with resultant increase in on-street demand. ii) All loading and service vehicles perform their tasks on-site (DCP 18). On street loading is unacceptable. The PPR doesn't demonstrate that loading space shown on car park B1 level (No 76) and Level B1 (No 84) achieves this for typical service and waste vehicles. This requires further amendment to the proposal. iii) Calculation of required car spaces (Table 1, Page 13-14) is not accepted and needs to be recalculated: 	No *

	<p>Street to ensure no permanent obstructions in these areas and to achieve minimum sight distance at the access in accordance with AS2890.1.</p> <ul style="list-style-type: none"> ▪ On street loading zones in Jervis Street unacceptable. ▪ Taxi rank in Jervis Street is not supported ▪ Narrowing of existing road by on-street parking (only 4.5m available road width for two-way traffic; minimum 6m) ▪ Lack of maintenance/Servicing provisions for GNI. <p><u>No 84 –</u></p> <ul style="list-style-type: none"> i) 18 spaces would be required and only 11 spaces are provided (EA stated only 15 spaces were required). Will not accept on-street parking in lieu of providing car parking required on site for development. iii) Access arrangement unacceptable. A 6m two-way central access is recommended. Driveway access must be tapered where it meets road reserve to ensure sight distance is available to/from pedestrians (affects both sides of driveway). iv) No stopping signage must be provided on both sides of the access to Greenwell Point Road to ensure no permanent obstructions in this area and to achieve minimum sight distance in accordance with AS2890.1. v) Sight distance inadequate (tree in road reserve be removed). vi) All loading/unloading, maintenance and waste servicing of the development is to be undertaken on site in accordance with Council's DCP18. <p><u>General</u></p> <ul style="list-style-type: none"> i) Traffic counts - the traffic turning movement count surveys that have been undertaken were not undertaken on a suitable day, and the estimation of peak hour did not use data that has been made available by Council, with the resulting estimate being more than three times lower than the actual peak flow surveyed three years ago by Council. ii) Pedestrian safety - the proposal will create pedestrian demands for vulnerable pedestrian types creating an unsafe crossing situation on Jervis Street and Greenwell Point Road. It is recommended that an appropriate pedestrian crossing facility be provided on Jervis Street as close as practical to restaurant/bar/café access, <u>and</u> an appropriate pedestrian crossing facility (pedestrian refuge or blisters) be provided on Greenwell Point Road as close as practical to the Medical Centre access. iii) Construction vehicle management - No information has been submitted on how construction works will be handled. 	<ul style="list-style-type: none"> • Gross Leaseable Floor Area (GLFA) defined under DCP18 does not discount potential 25% of GFA as proposed; • Shortfall for 3 car parking at No 84 to be provided at 76 is unacceptable since lots may be separated. The required number for No 84 should be provided there. • The required numbers to serve No 76 and GNI may be provided on No 76 and due to proposed valet parking service, proposed stack parking (vertical and horizontal) will be accepted for GNI, with staff component being as per DCP18. The stacked spaces should allow for stacking structure in width provisions. <ul style="list-style-type: none"> iv) Construction Vehicle management should be included as a condition of consent v) Works off site that are a consequence of this proposal should be addressed in conditions of consent - crossing points and setback of development from Jervis Street. vi) A Restriction as to User to ensure the operations of both No 76 and GNI are combined and a management plan to retain a valet parking service for GNI. vii) The applicant should be required to address Australian Standards for provision of access including disabled from the designated disabled car park areas and from Jervis Street and Greenwell Point Road. 	
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Aquaculture	Concerned that access arrangements to GNI over existing oyster lease, on-going management of potential polluting activities such as wastewater/effluent system and potential construction impacts both in terms of transporting materials to and from as well as construction on GNI.	Issues concerning impacts of marina and service barge jetty on oyster leases to be addressed by other agencies under SEPP62, including appropriate amendments to oyster leases and management arrangements. Council does not have additional comments.	Yes
On-site Effluent	<p>i) Plant system is proposed under slab of utility shed, which is also to accommodate the electrical substation, gas generator, gas LPG bottles, waste storage and processing, machinery and general storage. Any risks should be identified with this arrangement;</p> <p>ii) Individual pump stations and reclaimed water header tank are not represented on site plan and therefore impact of this additional infrastructure in relation to amenity, clearing of vegetation and associated flora/fauna issues cannot be determined. The footprint of system may be considerably larger than planned given equipment required to achieve low levels of nitrogen and phosphorus proposed. Due to the large number of pump stations proposed for system, consideration needs to be given to primary and back-up power source.</p> <p>iii) Strategy recommends 40m setback to Crookhaven River and irrigation field appears to be less than 10m from mounding designed to divert stormwater flows, with an overflow point which discharges above the SEPP14 wetlands. Sufficient vegetation buffers therefore need to be created to ensure compliance with <i>ANZECC Guideline for Fresh & Marine Waters</i>. DCP 78 Onsite Sewage Management recommends a distance of 100m to any permanent watercourse and 40m to intermittent drain for domestic systems. The EA states reduced setbacks are sufficient due to high level of treatment proposed. However, considering the oyster leases and SEPP 14 wetlands located in Crookhaven River, reduced setbacks may be inappropriate.</p> <p>iv) A thorough risk assessment of system should be completed in accordance with the <i>Interim NSW Guidelines for Management of Private Recycled Water Schemes</i>. This is essential due to high risk source of effluent and proposed high risk end uses of toilet flushing and irrigating within 40m of a river containing oyster leases.</p> <p>v) A reserve irrigation area has not been identified for any future expansion or contingencies. The nominated irrigation area of < 6617 m², however, was calculated based on no reclaimed water being used for toilet flushing.</p> <p>vi) Section 68 approval under the <i>Local Government Act 1993</i>, including detailed hydraulics plans prepared by a properly qualified practising hydraulics engineer, are to be submitted to Council for assessment and approval.</p>	<p>Calculations should be reviewed prior to approval to ensure adequate area on site is provided for effluent disposal and there is sufficient area for a 'reserve' irrigation area is noted on the site plan. An amended plan should be submitted to demonstrate that there is sufficient area on the site for a reserve irrigation area more than 100m from wetlands and waterways.</p> <p>Recommended consent conditions are:</p> <ul style="list-style-type: none"> • Final detailed designs and location on a site plan of the sewage collection and reticulation systems, including on-site RWP and SPS, reclaimed water reservoir, reclaimed water header tank, transfer mains and irrigation fields must be submitted prior to issue of a Construction Certificate. • The wastewater system including sewage collection and reticulation systems, including on-site RWP and SPS, reclaimed water reservoir, reclaimed water header tank, transfer mains and irrigation fields should be located more than 100m from wetlands, Crookhaven River and Curleys Bay. • Prior to issue of a Construction Certificate a Hazard Identification, Risk Assessment and Risk Management and Critical Control Points should be provided for approval. The Hazard Identification and Risk Assessment and Risk Management and Critical Control Points should be completed in accordance with the <i>Interim NSW Guidelines for Management of Private Recycled Water Schemes</i>. • Until Validation (if necessary) and Verification of the system has occurred, all recycled water must be applied to the irrigation field. • Construction of the Water Irrigation Field is to be completed in accordance with section 4.10 (Reclaimed Water Irrigation Field Detail) of the Concept Water Cycle Management Strategy, Prepared by Martens Consulting Engineers, Dated April 2008. • A Water Cycle Management Plan is to be submitted in 	Yes*

	vii) Recommended conditions of approval provided (also with PPR response).	<p>accordance with section 4.11 (Water Cycle Management Plan) of the Concept Water Cycle Management, Prepared by Martens Consulting Engineers, Dated April 2008 prior to issue of a Construction Certificate.</p> <ul style="list-style-type: none"> Section 68 approval must be obtained from Council. In this regard approval to operate may not be issued until this has been obtained. Prior to consideration being given to the application to carry out water, sewerage and stormwater drainage works pursuant to Section 68 of the Local Government Act 1993, detailed hydraulics plans prepared by a properly qualified practising hydraulics engineer are to be submitted to Council for assessment and approval. 	
Flora and Fauna	<ul style="list-style-type: none"> The EA states there will be no significant impacts on threatened species, populations or EECs notwithstanding that the proposal will result in the loss of hollow-bearing trees and native vegetation classified as an EEC (Bangalay Sand Forest) which is a Key Threatening Processes (KTP) under the <i>Threatened Species Conservation Act 1995</i>. The EA has not adequately assessed the clearing of native vegetation and the removal/loss of hollow-bearing trees on the Bangalay Sand Forest EEC and has not adequately explained how the proposal meets the "maintain or improve test". The assessment provided has identified the main impacts of the proposal as the loss of approximately 65 trees, including large hollow-bearing trees and an additional 44 trees that may be affected due to their close proximity to proposed construction areas. It is considered that given the large amounts of excavation required for the development and infrastructure additional vegetation/trees may be impacted upon. It is assumed, based on the provided vegetation mapping, that the trees to be removed are part of the Bangalay Sand Forest EEC. 	<ul style="list-style-type: none"> Development footprint still overlaps with Bangalay Sand Forest EEC with an unspecified, but substantial (40 to 50) number of trees proposed to be removed (Tree removal plan in section 15 of the PPR). It is not specified if any of trees to be removed are hollow-bearing. Landscaping of proposal includes non-native species (exotic vine Star Jasmine <i>Trachelospermum jasminoides</i> proposed to be planted on GNI). Exotic vines and scramblers are listed as a Key Threatening Process (NSW TSC Act) and remnant vegetation on island is classified as an EEC - exotic plant species on island should be prohibited. The applicant's provided Habitat Vegetation Management Plan (HVMP) outline doesn't contain enough detail for Council to make an assessment of its adequacy. Previous comments and issues in relation to fauna survey effort and biodiversity assessment (maintain or improve test) haven't been addressed. 	No*
Section Contributions	94 Any approval issued for the proposal should require the payment of Section 94 Contributions.	Relevant conditions to be imposed.	Yes
Sewer/water	There is sufficient capacity in the existing sewer and water reticulated systems to service the mainland sites. GNI, however, is currently not planned to be serviced by the reticulated services (see Shoalhaven Water's comments).	The provision of water and wastewater to Goodnight Island if required would have significant impact on Council's existing water and sewer infrastructure. The lot is not currently paying sewer or water availability charges and would need to comply with Council's 'Wastewater Non-Urban Availability Policy' and Council's 'Rural Water Supply Policy'. The applicant is advised to undertake full	Yes

		consultation with Shoalhaven Water if provision of these services is proposed.	
Trade Waste & Backflow	The proposed development will be subject to the requirements of Council's Trade waste Policy and Backflow Prevention Policy. A trade waste agreement will need to be entered into with Shoalhaven Water.	as per EA.	Yes
Noise	<p>i) Helipad - numerous residents will be affected along flight path to varying degrees (which is also unsure at this stage, other than the "expected" paths mentioned). As such any approval for helicopters should restrict in terms of hours for arrivals and departures and number of events/movements per day.</p> <p>ii) Amphitheatre – minimal comment has been provided on amphitheatre proposed on GNI. Given its location on the site and it's potential to adversely impact properties at Greenwell Point and Orient Point the use of this facility should be restricted in terms of hours that it can be used, events that it can hold and acceptable noise limits.</p> <p>Recommended conditions of approval have been provided.</p>	The EA Comments still apply, including those related to noise from helicopters arriving and departing from GNI.	Yes*
Food Premises Construction	Limited details on proposed food preparation facilities to be provided to service development on GNI and No.76 Relevant conditions of approval have been recommended to address this.	The previous EA comments apply in respect of Food Premises requirements. A drinking water management plan for the non-reticulated drinking water supply shall be prepared in accordance with the Australian Drinking Water Guidelines prior to Construction Certificate.	Yes
Post Development Stormwater Treatment and Control	<p>The EA does not adequately identify measures to be implemented in relation to stormwater control and contains no assessment of the suitability of measures having regard for the pollutants that will be generated. It also appears that the Environmental Risk Assessment Study only looks at the GNI component of the development. Additional details are therefore required. The following recommendations have been requested by the Council:-</p> <ul style="list-style-type: none"> • Permanent stormwater quality devices to collect pollutants that will be generated post development for all three development sites should be provided. • Water sampling at strategic points in river (these needing to be identified prior to any approval being issued) should be carried out on an on-going basis. • Sustainable water management practices such as stormwater harvesting and re-use should be implemented. • Stormwater run off from the development site shall be provided such that the discharge from the site for all design storm events up to and including the 100 year average recurrence interval does not have adverse impacts on surrounding environment. 	The previous EA comments still apply and conditions may be applied.	Yes*

Sediment and Erosion Control	An erosion and sediment control plan must be prepared and submitted for comment with the required works to be implemented prior to the commencement of any site works.	The previous EA comments still apply and conditions may be applied.	Yes*
Acid Sulphate Soils	The ASS investigation undertaken only related to GNI with no assessment/sampling being undertaken at either No.76 or 84 notwithstanding that the ASS maps indicate both are affected by ASS at a depth of <1m. Therefore insufficient investigation has been undertaken to confirm the presence of acid sulfate soils.	The following condition of consent is recommended: "An Acid Sulfate Soil Management Plan be prepared by a suitably qualified consultant in accordance with DECCW Guidelines for all three sites and be submitted for assessment prior to issue of a Construction Certificate."	Yes
General Utility and Servicing	The proposed method of power supply to GNI requires new infrastructure within Orama Crescent and Lot 338 DP 8789 Orama Cres, Orient Point (Council owned and zoned part 6(d) and 7(a)). Approval under the <i>Roads Act 1993</i> and owners consent from Council is required, neither of which have been obtained. Confirmation must also be obtained that infrastructure proposed within Council land is authorised under the community land provision of the <i>Local Government Act 1993</i> .	The EA Comments still apply. It is noted that the applicant has had discussions with Council on achieving approvals. <u>It is recommended that</u> 1. Prior to undertaking works within the road reserve, the developer/contractor must obtain the approval of Council under Section 138 of the <i>Roads Act, 1993</i> . 2. Discussions should be had with Council prior to the applications determination in relation to works proposed within Lot 338 DP 8789 Orama Cres, Orient Point. 3. Confirmation be obtained that the infrastructure proposed within Lot 338 DP 8789 Orama Cres, Orient Point is authorised under the community land provision of the <i>Local Government Act 1993</i> . Council satisfied with condition.	Yes
Waste	A waste minimisation and management plan for each mainland site and GNI should be prepared in accordance with requirements of <i>Development Control Plan No.93 – Controls for Waste Minimisation and Management</i> . This plan needs to consider site preparation/construction waste, ongoing use waste generated and storage as well as waste reduction and resource recovery. The above information should be referred back to Shoalhaven City Council for review/comment prior to the applications determination.	The EA Comments still apply and a Waste Management Report is required to be submitted as a condition of consent.	Yes
Urban Design	i) The designs of the development (i.e. No.76 and 84 Greenwell Point) in terms of its bulk/scale should be amended so as to provided a better relationship with the existing topography of the site (i.e. stepping of the development down the site) and provide greater modulation to the eastern and western facades of the building (specifically No.76 Greenwell Point Road). ii) The managers residence proposed at No.84 Greenwell Point Road should be reduced in scale (i.e. retained as a single storey dwelling with minimal or no increase in floor area) if it is to be redeveloped.	The amendments described in the PPR are acceptable in reducing the impact of the building forms on the three sites and there are no further comments.	Yes

	iii) All new development on Goodnight Island should be constrained to the existing cleared areas within the 1(d) zone, as recommended by the environmental consultant.		
Building Code of Australia	Insufficient information/detail has been provided with the current application to allow for any assessment against the Building Code of Australia (BCA).	The EA comments still apply. <u>It is recommended</u> that 1. All building work must be carried out in accordance with the requirements of the Building Code of Australia. 2. Access for disabled persons shall be provided to the development and its buildings in conformity with Part D 3.2 of the Building Code of Australia and AS1428.1 "design for access and mobility - General requirements for access in buildings".	Yes
Contamination	The Stage 1 - Contamination Assessment that has been undertaken has identified that given the sites previous land uses there is the potential for general and 'hotspot' contamination. As such, a Stage 2 - Detailed Site Investigation should be undertaken in accordance with the requirements of the <i>NSW EPA Guidelines for Consultants Reporting on Contaminated Sites</i> . If as a result of this it is confirmed that contamination exist on site a Stage 3 Site Remediation Plan and Stage 4 – Validation and site monitoring reports should be prepared.	A stage 2 assessment should be carried out prior to determination of the 3A application. If the DoP determine that it is appropriate to require the stage 2 assessment as a condition of development consent then the condition should require that a Stage 2 assessment be completed prior to issue of a Construction Certificate and any remediation and validation works also be completed prior to issue of a Construction Certificate.	Yes
Bushfire	GNI is not mapped as Bushfire Prone Land on Shoalhaven City Council's Bushfire Prone Land Map (2005) therefore there is no formal requirement for the development to comply with <i>Planning for Bushfire Protection 2006</i> . However, it is recommended that this proposal be referred to the NSW Rural Fire Service for comment given the special circumstances of the location and the inability of standard fire fighting appliances to respond to fire on the property.	The applicant proposes to locate a vehicle on GNI to enable fire fighting to be dealt with prior to any RFS or other support is available and that there will always be a trained person on the island. The PPR in clause 3.4 Table 1 (Note 5) suggests there are to be 11 staff on the Island, however the accommodation for staff is considerably less. The capacity for staff to undertake the proposed fire-fighting management on a 24hr basis is questioned. It is noted that with the deleting of the Caretakers cottage, the staff quarters consist of basic male and female rooms and it appears more likely the staff will be limited or not stationed on the islands in any continuing basis. It is questioned how the proposal will be met in practice given the training necessary for staff to attend to fire fighting tasks. It is recommended the applicant be required to demonstrate how the commitment will be achieved in practice.	Yes*
Signage	No details have been submitted with the current application on signage that will be provided as part of the development.	The EA comments still apply. No details have been submitted on signage that will be provided. It is recommended: 1. Any signage provided shall comply with the requirements of <i>Development Control Plan No.82 – A Signage Strategy</i> . In this	Yes

		<p>regard no signage other than what is considered to be exempt from requiring development consent under DCP 82 shall be erected without consent.</p> <p>2. Signage for future occupants of the building is to be integrated into the design of the building. Multiple signs in various locations will not be permitted.</p>	
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* = further discussed in Section 5 of this Report.