

NSW GOVERNMENT Department of Planning

"Catherine Hill Bay & Gwandalan" Residential Development

Concept Plan (06_0330) and Project Application (MP07_0107)



Catherine Hill Bay/Moonee Hamlets

Gwandalan

Proposal by Rose Property Group Pty Ltd (Lakeside Living Pty Ltd and Coastal Hamlets Pty Ltd)

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

August 2008

Table of Contents

Table	e of Co	ontents	i
Glos	sary &	Abbreviations	iv
1	EXEC	CUTIVE SUMMARY	1
2	BACI 2.1	KGROUND Introduction 2.1.1 Local Government Area Boundary Adjustment	5
		 2.1.2 Catherine Hill Bay – Location and Site Description	6 7 8
	2.2	History of Sites	9 9
	2.3	Memorandum of Understanding	10
3	3.1 3.2 3.3 3.4	POSED DEVELOPMENT Background State Significant Site Study Concept Plan Project Application MP07_0107	12 14 14 15
4	3.5 STAT 4.1 4.2 4.3 4.4 4.5 4.6	Amendments to the Concept Plan IUTORY FRAMEWORK Part 3A of the <i>Environmental Planning and Assessment Act 1979</i> Permissibility State Environmental Planning Policy (Major Projects) 2005 Director-General's Requirements Environmental Protection & Biodiversity Conservation Act 1999 Other Relevant Legislation and Environmental Planning Instruments	19 19 21 21 21
5	CON 5.1 5.2 5.3 5.4 5.5 5.6	SULTATION AND ISSUES RAISED Lodgement Test of Adequacy Exhibition Notification Issues raised Preferred Project Report	23 23 23 24 24
6	INDE 6.1 6.2	PENDENT HEARING & ASSESSMENT PANEL IHAP Interim Report Final Report – December 2007	27
7	ASSE 7.1 7.2	ESSMENT Director-General's Report Independent Hearing and Assessment Panel	30 30

		7.2.1	Recommendation 1 – Redesign of Hamlet 1	. 31		
		7.2.2	Recommendation 2 - Public Access	. 35		
		<i>7.2.3</i>	Recommendation 3 – Retail and Commercial Floor Space	. 35		
		7.2.4	Landscaping in Hamlets 2-5	. 36		
		<i>7.2.5</i>	Recommendation 5 - Bin Building	. 36		
		7.2.6	Recommendation 6 – Hamlets 6 and 7	37		
		7.2.7	Recommendation 7 – Project Applications	37		
	7.3	Key Issue	es – Catherine Hill Bay and Gwandalan	. 40		
		7.3.1	Regional Contributions - Social Infrastructure and Access to Emergency Servic			
				. 40		
		7.3.2	Local Contributions – Catherine Hill Bay	. 41		
		7.3.3	Local Contributions- Gwandalan	. 44		
		7. <i>3.4</i>	Interface Issues			
		<i>7.3.5</i>	Traffic – Catherine Hill Bay & Gwandalan	. 46		
		7.3.6	Environmental Offset/ Memorandum of Understanding	. 48		
		<i>7.3.7</i>	Ecologically Sustainable Development	. 49		
		7. <i>3.8</i>	Mining and Exploration	. 50		
	7.4	Key Issue	es - Catherine Hill Bay	.52		
		7.4.1	Community Land vs. Community Title Land	. 52		
		7.4.2	Heritage			
		7.4.3	Contaminated Land	. 54		
		7.4.4	Mine Subsidence and Geotechnical Issues	. 55		
		7.4.5	Aboriginal Cultural Heritage	55		
		7.4.6	Flora and Fauna	56		
		7.4.7	Utilities and Servicing	. 58		
		7.4.8	Stormwater Management (Water Quality and Quantity)	. 59		
		7.4.9	Bushfire Management	62		
		7.4.10	Urban design and built form	. 63		
		7.4.11	Traffic	. 63		
		7.4.12	Climate Change	. 67		
	7.5	Key Issue	es - Gwandalan	.68		
		5	Urban Design	. 68		
		7.5.2	Mine Subsidence and Geotechnical Issues	. 68		
		7.5.3	Open Space			
		7.5.4	Stormwater Management/Acid Sulphate Soils			
		7.5.5	Flora and Fauna			
		7.5.6	Bushfire protection			
		7.5.7	Public foreshore access			
		7.5.8	Climate Change			
		7.5.9	Aboriginal cultural heritage			
		7.5.10	Traffic and Transport			
•						
8	PUBL	IC INTER	EST	. 11		
9	CONC	LUSION		.78		
10	RECO	MMEND	ATION	. 79		
APPE		Α.	TERMS OF APPROVAL	. 80		
APPE	NDIX I	В.	DIRECTOR GENERAL'S ENVIRONMENTAL ASSESSMENT REQUIREMEN 65	15		

APPENDIX C.	STATEMENT OF COMMITMENTS	65
APPENDIX D.	INTERIM INDEPENDENT HEARING AND ASSESSMENT PANEL REPORT	66
APPENDIX E.	FINAL INDEPENDENT HEARING AND ASSESSMENT REPORT	67
APPENDIX F.	PREFERRED PROJECT REPORT	68
APPENDIX G.	SUMMARY OF SUBMISSIONS	69
APPENDIX H.	ENVIRONMENTAL ASSESSMENT	70
APPENDIX I. LEGISLATION	ENVIRONMENTAL PLANNING INSTRUMENTS & OTHER RELEVANT 71	

Glossary & Abbreviations

СМР	Concervation Management Plan		
	Conservation Management Plan		
Wyong LEP	Wyong Local Environmental Plan 1991		
Lake Macquarie LEP	Lake Macquarie Local Environmental Plan 2004		
DCP	Development Control Plan		
DECC	NSW Department of Environment and Climate Change		
DGRs	Director-General's Environmental Assessment Requirements issued pursuant to Section 75F of the Act		
EA	Environmental Assessment		
EPBC Act	Commonwealth Environmental Protection and Biodiversity Act 1999		
EPI	Environmental Planning Instruments as per Part 3 of the Act		
IHAP	Independent Hearing and Assessment Panel, constituted pursuant to Section 75G of the Act		
LEP	Local Environmental Plan		
LGA	Local Government Area		
Major Projects SEPP State Environmental Planning Policy (2005)			
МоТ	NSW Minister of Transport		
PPR	Preferred Project Report		
SEPP	State Environmental Planning Policy		
DPI	NSW Department of Primary Industries		
SSS Study	State Significant Site Study, prepared as per clause 8 of the Major Projects SEPP		
the Act	Environmental Planning and Assessment Act 1979		
the Regulations	Environmental Planning and Assessment Regulation 2000		
WSUD	Water Sensitive Urban Design		
RTA	NSW Roads and Traffic Authority		
APZ	Asset Protection Zone		
Proponent	Rose Group of companies (Lakeside Living Pty Ltd and Coastal Hamlets Pty Ltd)		
Original scheme	the Proponent's development lodged on 16 December 2006 for their land at Gwandalan and Catherine Hill Bay		
Revised scheme	the Proponent's Environmental Assessment lodged on 24 August 2007 for their land at Gwandalan and Catherine Hill Bay.		

1 EXECUTIVE SUMMARY

This is a Report from the Director-General of the Department of Planning to the Minister for Planning in relation to the development of land at Catherine Hill Bay/Moonee (CHB) and Gwandalan for the purposes of determining a **concept plan** (MP 06_0330) pursuant to Section 75O (2) of the *Environmental Planning and Assessment Act 1979* (The Act) and **project application** (MP 07_0107) for a residential subdivision at Gwandalan, pursuant to Section 75J (2) of the Act.

Development of the Catherine Hill Bay/Gwandalan site has a capital investment value in the order of \$390 million and will create up to 2340 construction jobs and the additional population will create approximately 100 permanent employment jobs.

The development at CHB comprises a maximum 600 dwellings in 7 hamlets, remediation of mining land, roadworks, associated community facilities, open space, and associated infrastructure. The development at Gwandalan comprises 188 lots (187 dwellings), roadways, parklands and associated infrastructure.

There are two separate Proponents for these applications: Lakeside Living Pty Ltd for the development of land at Gwandalan (MP 07_0107) and Coastal Hamlets Pty Ltd for the development of land at CHB (MP 06_0330). Both companies are part of the Rose Property Group Pty Ltd (herein referred to as the Proponent). In August 2007, the Proponent sought approval for a Concept Plan under Part 3A of the Act to allow for residential development of land at CHB and Gwandalan, and Lakeside Living Pty Ltd sought approval for a Project Application for subdivision and site preparation works at Gwandalan. These have been subject of a number of changes and consideration by an Independent Hearing and Assessment Panel (IHAP).

In December 2006, the Proponent lodged an Environmental Assessment Report and Concept Plan for Catherine Hill Bay and Gwandalan and it was publicly exhibited between 2 January and 2 March 2007. 2,152 submissions were received from members of the public (13 in support) and 13 agency submissions.

In December 2006, the Minister constituted an independent panel of experts as an Independent Hearing and Assessment Panel (IHAP) pursuant to Section 75G of the Act. The IHAP assessed the merits and impacts of the project. For the purposes of the assessment, the panel heard submissions from interested persons and convened several meetings with the public. In April 2007 the IHAP provided an interim report to the Minister. In response to this report, the Proponent withdrew the concept.

The Proponent addressed the issues of the IHAP's interim report through a revised development scheme, lodged with the Department on 24 August 2007.

Due to the scope of changes, the revised scheme was placed on formal exhibition from 5 September 2007 until 12 October 2007. The Department received a total of 2,747 submissions from members of the public (3 in support) and 16 submissions from Government agencies. Key issues raised from the exhibition process related to: built form, scale, density, character and design; bush fire; coastal planning impacts, including coastal headland walkway; cumulative impacts given the development proposal by Coal & Allied to the north of CHB; developer contributions; development footprint; ecologically sustainable development; flora and fauna; foreshore access; geotechnical; heritage; infrastructure & services; land use zoning; the Memorandum of Understanding; mine subsidence; public access; traffic and transport; visual impacts; and water quality and quantity impacts.

On 18 December 2007, the Independent Panel submitted its final report. On 20 December 2007 the Proponent lodged a Preferred Project Report (PPR) for the Concept Plan and Project Application for the residential subdivision of Gwandalan. On 5 February 2008, the Proponent lodged a further revised Preferred Project Report for the Concept Plan. The PPR related to both the Concept Plan and Project Application, and is the subject of this report (the Proposals).

The following report provides an assessment of the Proponents' EA for the Concept Plan and Project Application in the context of the IHAP's report and recommendations, the relevant requirements of Part 3A of the En*vironmental Planning and Assessment 1979* (the Act) and other relevant legislation.

The assessment identifies that the development of CHB and Gwandalan will generate environmental impacts. The report concludes that the development generally mitigates environmental impacts, with remaining impacts capable of being managed by modifications to the concept plan (pursuant to section 750 of the Act) and

conditions (pursuant to section 75J of the Act). The Department recommends that the **Concept Plan and Project application be approved** subject to a number of modifications and conditions of approval as specified in Appendix A. These include:

- Hamlet 1 modification of building heights to a maximum of 5.0 metres within the area of high visual sensitivity and a maximum of 7.5 metres within the area of low visual sensitivity;
- Hamlets 2 to 5 provision of a publicly assessable perimeter road designed to meeting bushfire guidelines;
- Hamlets 6 and 7 provision of 2 access roads and a perimeter road or perimeter treatment to address bushfire issues and modification of the development footprint to mitigate impact on the a commonwealth listed orchid species (the leafless tongue orchid *Cryptostylis Hunteriana*);
- Public Access- a requirement for future development of the site to provide public access through the development in particular to the coastal walkway, the community facilities, the perimeter and internal roads to ensure public access is provided between Montefiore Parkway and Moonee Beach.
- Interface Management a series of modifications to the concept plan and performance standards have been incorporated to minimise the impact of the development on the adjoining bushland areas.
- **Gwandalan** provision of a perimeter road or pathway between the urban development and Point Wolstoncroft State Conservation Area to address bushfire and interface management issues.

The IHAP made a number of recommendations in regard to Catherine Hill Bay and the design of the coastal walk and its relationship with adjoining development, the design of Hamlet 1, landscaping in Hamlets 2 to 5, interconnection between hamlet 6 and 7 and public access to Moonee Beach. The PPR generally responded to the IHAP recommendations (refer to table below). The coastal walk was realigned and the development setback was increased to address IHAP's concerns. A separate Project Application for Hamlet 1 was withdrawn and design guidelines submitted. The design guidelines differed slightly from IHAP's recommendations in terms of building heights, but the Department has recommended modifications to the Concept Plan to address these issues and to result in an appropriate solution. The other issues regarding Hamlets 2 to 5 and public access to Moonee Beach were generally addressed by the PPR and modifications to the Concept Plan are recommended by the Department to resolve the outstanding issues.

The IHAP was not supportive of the original subdivision layout at Gwandalan and the PPR responded with a complete redesign of the sub-division layout and development footprint. The IHAP was supportive of the final design of the Gwandalan subdivision.

Recommendation	Proponent	Complies	Comment
Recommendation 1 – Red	esign of Hamlet 1		1
Coastal Walk	Coastal walk provided	Yes	The PPR provides for the coastal walk
25m setback from cliff edge	25m setback from cliff edge	Yes	A 25m corridor has been provided.
15m setback for dwellings adjacent coastal walk.	15m setback for dwellings adjacent coastal walk.	Yes	Dwellings adjacent to the Walk are set back a minimum 15m from the coastal walk zone.
Development in Hamlet I is to be single storey	All buildings single storey, allowance for attic in roof in some areas	Yes	PPR complies

Buildings within Hamlet 1 to be max. 5m height	Varying heights within a defined visually sensitive zone (north of ridge), with 5m in the 'visual sensitivity' area adjacent to CHB village and 7.5m in the 'visual sensitivity' area located adjacent to Montefiore Parkway.	Partial	Design change – the Department does not agree with the Proponent's proposed heights within 'visual sensitivity' area – the Department has recommended that buildings should be 5m and single storey only in the 'visual sensitivity' area and 7.5m in the areas south of ridge ('area of low			
Dwellings – 40% site coverage and 50% landscaped area for the entire Hamlet 1.	40% site coverage and 50% landscaped area only in specific zone within the 'visual sensitivity' area. Remainder of Hamlet 1 in line with design principles by Proponent.	Partial	sensitivity') Design change – the Department does not agree with the Proponent and has recommended 40% site coverage and 50% landscaped area required in the 'visual sensitivity' area and 50% site coverage and 40% landscaped area within the 'area of low sensitivity'.			
Recommendation 2 – Pub	lic access to Moonee Bea	ich				
Public access	Perimeter road provided	Yes	PPR complies			
Public parking	Perimeter road provided	Yes - Complies by modification	Design change modification in approval			
Recommendation 3 – Reta	ail/Commercial Floor Space	ce				
maximum of 750m ²	Design guidelines for Hamlet 1 state 750m ² Commercial area	Yes	PPR complies			
Recommendation 4 – Lan	dscaping in Hamlets 2-5					
Adequate deep soil areas for tree planting.	Deep soil planting in verges and greenlinks	Yes - able to comply by condition	Design and performance standards in terms of approval			
Recommendation 5 – Bin Building						
Be stabilized and made safe	Yes	Yes	PPR complies			
The top to be reused as a public lookout	Public terrace area/viewing area and kiosk to be provided.	Yes	PPR complies			

Limits on materials	Lightweight proposed for viewing terrace	Yes	Some allowance for shade structure or small structure to add to public space enhancement. To be verified as structurally safe and limits on materials/light spill
Recommendation 6 – Ham	nlet 6 and 7		
Be redesigned in accordance with Planning for Bush fire Protection 2006 (NSW RFS).	No changes in PPR	Yes - by modifications	Design changes conditions in approval – also to deal with orchid preservation
Recommendation 7 – Proj	ect Applications		
Minister defers consideration of PA - Hamlet 1 until design changes submitted.	PA (MP07-0109) withdrawn.	Yes/NA	Design principles for Hamlet 1, contained in PPR (Feb2008). Project application for Hamlet 1 withdrawn

Table A – IHAP's Recommendations

The PPR (Feb2008) satisfies 13 of the 15 detailed recommendations recommended by IHAP. The remaining recommendations after detailed assessment by the Department were addressed by modifications to the Concept Plan.

On 16 October 2006, a MoU was signed by the Proponent for the dedication of approximately 310ha of land for environmental conservation in exchange for the rezoning of land at Catherine Hill Bay and Gwandalan to permit residential development covering up to 60ha to achieve 600 dwellings at Catherine Hill Bay and over 26ha to achieve 12 dwellings/ha at Gwandalan. At the time of writing this report, the deed of agreement for the delivery of the Memorandum of Understanding had not been finalised. In the interest of orderly and rational development it is important that the deed of agreement be agreed and signed by all parties and endorsed before the determination of the concept plan and rezoning.

The recommendation of this report to the Minister is that **approval be granted** to the Concept Plan (subject to modifications pursuant to section 75O) and Project Application MP07_0110 (subject to conditions).

The proposed development at CHB and Gwandalan will provide significant benefits to the community, including:

- the transfer of 310 hectares of conservation lands from private to public ownership;
- the cliff top walk on the CHB headland;
- the provision of public parking;
- access to Moonee Beach;
- infrastructure upgrades for CHB; and
- up to a \$1.0m contribution for the future upgrade to CHB Surf Lifesaving Club

Gwandalan will also benefit by the provision of:

- regional and local contributions;
- local road upgrades; and
- publicly accessible parkland.

Under section 75O(3) of the Act, the Minister cannot grant approval for the concept plan for a project that is in an area defined as a sensitive coastal location and is prohibited. Consequently, the concept plan proposal cannot be approved by the Minister under Part 3A of the Act without the site being rezoned beforehand.

2 BACKGROUND

2.1 Introduction

The proposed concept plan covers two separate sites located in two local government areas (LGA) as described below and shown in Figure 1:

- (1) The *Catherine Hill Bay*/Moonee (CHB) site, covering approximately 374 hectares and located within the Lake Macquarie LGA. The site is adjacent to the existing township of Catherine Hill Bay.
- (2) The *Gwandalan* site, covering approximately 18 hectares and located within the Wyong LGA. The proposed site is located to the north of the Gwandalan township adjacent to Point Wolstoncroft State Recreation Area.



Figure 1 -Aerial view of the proposed area of the CHB site and the Gwandalan site

2.1.1 Local Government Area Boundary Adjustment

On 28 September 2007, an adjustment to the boundaries of the Lake Macquarie and Wyong Shire Council local government areas was gazetted, which extended the southern boundary of the Lake Macquarie LGA and now incorporates the Moonee Hamlets.



Figure 2 Boundary adjustment between Lake Macquarie City Council and Wyong Shire Council

2.1.2 Catherine Hill Bay – Location and Site Description

The proposed CHB development site comprises of several parcels of land that extend across part of the Wallarah Peninsula on the NSW Coast, from Catherine Hill Bay to Crangan Bay on Lake Macquarie (refer to Figures 1 and 3). The residential development would be limited to land on the southern and eastern edge of the existing village of CHB, which is known as Moonee. The CHB development site is located within the Lake Macquarie LGA, and is situated 100 kilometres north of Sydney and 26 kilometres south of Newcastle.

The registered land owner of the 374 hectare (ha) parcel (Lots 5, 6 and 7 DP 774923 Part Lot 2031 DP841175, Lot 2 DP809795, Lot 201 DP702669, Lots A and B DP 384745, Lot 2 DP 809795, Lots 3 and 4 DP 129431) is Coastal Hamlets Pty Ltd, which is part of Rose Property Group Pty Ltd (the Proponent).

The topography of the proposed site varies either side of the Pacific Highway. To the west of the Pacific Highway, the site generally falls towards Crangan Bay on Lake Macquarie. East of the Pacific Highway, a ridgeline runs in an east-west direction, extending to the headland separating the CHB Village from Deep Cave Bay. A number of perennial watercourses flow within the western part of the site, including Crangan Creek and its tributaries. Watercourses on the eastern part of the site converge into a creek near Middle Camp and drain off-site then into the ocean (refer to Figure 3). The land at CHB is bisected by the Montefiore Parkway (a private road).

The Moonee and Wallarah Collieries are located south of the existing CHB development, which are currently in the process of being closed and rehabilitated. Although much of the proposed site is vegetated, disturbance from recent mining activity is evident, being clearing, excavation and paving activities, or the presence of coal storage areas, the coal preparation plant and the "Bin Building." The privately-owned coal loading rail network that previously existed at the site has been removed from CHB but the significant coal-loading jetty remains.

Coal resources remain at these sites and mining may recommence if economically feasible. Mining and exploration leases remain current over the site, being Consolidated Coal Lease 706 (CCL706) held by Lakecoal

Pty Ltd, the Petroleum Exploration Lease 5 held by Sydney Gas Operations Pty Ltd, and Petroleum Exploration Lease 446 held by Santelle Pty Ltd. The area of existing mining and exploration leases are shown in Figure 3.



Figure 3 - The CHB site analysis

2.1.3 Catherine Hill Bay – Surrounding Land Uses

The portion of the site located to the west of the Pacific Highway is generally undeveloped. Areas to the east of the Pacific Highway include the existing village of Catherine Hill Bay (which includes approximately 90 dwellings and urban facilities) and undeveloped land. The proposed development site lies to the north of the Munmorah State Conservation Area.

Mining activities represent a significant surrounding land use. This is evident in the former mining works of the Wallarah Colliery Holdings and Moonee Colliery Holdings on and adjacent to the proposed development site, the coal loading jetty, the mining lease over part of Munmorah State Conservation Area (ML 1369, which forms part of CCL 719), the mining activities in the nearby Chain Valley Colliery Holdings. The site is also located within the Swansea North Entrance Mine Subsidence District.

Coal and Allied are proposing a 300 dwelling development on 50 hectare site at Middle Camp, located 1.5 km north of CHB. The concept plan and project application for this proposal is currently with the Department for assessment.

2.1.4 Gwandalan – Location and Site Description

The proposed Gwandalan development site is located to the west of Lake Macquarie and generally north of the existing township of Gwandalan (refer to Figure 4). Kanangra Drive runs along the western boundary of the site and Lake Macquarie on the east. The land is located wholly within the Wyong local government area, and is situated approximately 90 kilometres north of Sydney and 30 kilometres south of Newcastle.

The registered land owner of the 18 ha parcel (part Lot 3 DP 588206) is Lakeside Living Pty Ltd, which is part of Rose Property Group Pty Ltd.

The topography of the Gwandalan site generally falls from Kanangra Drive towards Lake Macquarie. Perennial watercourses exist in the middle and southern edges of the site and converge to drain into Lake Macquarie (Figure 3). The majority of the site is covered by native vegetation.

Approximately 3 buildings exist on the site, with a number of other associated structures including a boat house. A solid masonry wall of more than 2 metres in height exists on all boundaries adjacent to Kanangra Drive and Garema Road. Some structures appear to extend beyond the mean high water mark into Lake Macquarie.

The proposed site is located within the Swansea North Entrance Mine Subsidence District and is covered by Consolidated Coal Lease No. 706 and the Chain Valley Coal Holdings of Coal and Allied.



Figure 4 – Aerial Photo of the Gwandalan site showing Lake Macquarie

2.1.5 Gwandalan - Surrounding Land Uses

The Gwandalan site lies south of the Point Wolstoncroft State Recreation Area, which is located on the southwestern shores of Lake Macquarie. Residential areas and the Gwandalan Public School are located to the south of the proposed site.

The Point Wolstoncroft State Recreation Area is land owned and managed by the NSW Department of Arts, Sport and Recreation (DASR). Access to the area is controlled by DASR and is not publically accessible.

Gwandalan Public School, located directly adjacent to the southern edge of the Gwandalan development, is accessible via Kanangra Drive only and generates localised traffic impacts in the morning and mid-afternoon.

Mining activities remains as a significant surrounding land use. Gwandalan is located within the Swansea North Entrance Mine Subsidence District and is covered by both Consolidated Coal Lease No. 706 and the Chain Valley Coal Holdings of Coal and Allied.

Coal and Allied are proposing a 700 dwelling development on a 80 hectare site, located 2 kilometres south of the proposed development. The concept plan and project application for the Coal and Allied proposal is currently with the Department for assessment.

2.2 History of Sites

The Aboriginal people from the Awabakal clan were the original occupants of the Wallarah Peninsula and Lake Macquarie area. Soon after the founding of the Colony of NSW in 1788, coal was discovered in the Hunter (1794) and Illawarra (1797) regions. Entrepreneurial mining activities were soon established in NSW and led to the establishment of collieries in the Hunter and Illawarra Regions, including those in CHB and Gwandalan.

2.2.1 Catherine Hill Bay

In 1865 land grants were made in the Wallarah and CHB. One of the major land grant beneficiaries was Thomas Hale and Jacob Levi Montefiore (10.723 hectares), whom had been involved in mining activities in the Newcastle region or elsewhere in NSW.

In 1873 Hale promoted the development of a company to mine coal at CHB following initial investigations by the New Wallsend Coal Mining Company (the Company), which intended to mine the Wallarah coal seam. This seam was relatively close to the surface (227.4 metres below ground), was of high quality as good steaming coal, and did not contain faults, dykes, or gases that would make extraction difficult.

The Company began mining coal in 1873 and later that year constructed a Jetty to overcome the land based access problems of exporting coal to market in Sydney. The first coal shipment was in December 1873.

In early 1875, the Company subdivided parts of its land into 60 allotments to create the township of Cowper, which was located at the current village of CHB. Only a few of the allotments were sold due to the isolated location, which was not alleviated by the refusal to permit residents to use the Jetty to transport goods or passengers to and from Sydney or Newcastle.

The Company suspending its operations in 1876 and closed in early 1877, due to the loss of the Company's steamship with a full shipment of coal in mid 1875 and problems with the Jetty in loading coal both efficiently and during heavy weather. By 1879, the town of Cowper was abandoned.

In 1888, a new London based company called the Wallarah Coal Company Limited purchased the land at Catherine Hill Bay and centred its operations near Cowper. The company improved the efficiency of coal loading by constructing a private railway and re-building the jetty. Cowper mirrored the success of the Company and, by 1894; it had a population of 440 and provided a range of services. While some miners lived in company houses, many chose to live in tents to avoid paying the Company rent. The Wallarah Coal Company continued to operate until 1955 when it was bought out by J & A Brown Abermain Seaham Collieries Pty Ltd, which modernised mining methods and expanded mining in 1958 to include the Crangan Bay drift. In 1964, J & A Brown Abermain Seaham Collieries Pty Ltd merged with Caledonian Collieries to form Coal and Allied.

Coal and Allied further modernised and expanded the mining operations at the Catherine Hill Bay and Wallarah Collieries by establishing the new preparation plant (including the Bin Building) in the 1960s and by opening the Moonee Mine in 1982 to extract coal from the Wallarah seam, and by selling some houses within the village of Cowper.

By the early 1990s, the collieries were no longer profitable and in 1992 Coal and Allied closed the Moonee Colliery and subsequently sold the Moonee and Wallarah collieries to Coal Operations of Australia Ltd (COAL).

COAL reopened the Moonee Colliery in 1996 and began longwall mining of the Great Northern coal seam, which was much deeper than the Wallarah coal seam. This was estimated to provide coal for power generation purposes until about 2010. COAL ceased its operation in 2000 following ongoing losses associated with the high costs of extracting coal from greater depths. In 2002, COAL sold the mine to Lakecoal, a subsidiary of the international Peabody Coal Company. Lakecoal commenced the formal mining closing process with DPI. In 2002, Rose Group purchased the land from Lakecoal.

2.2.2 Gwandalan

Gwandalan's development mirrored the focus on mining and extractive industries that occurred in CHB. Gwandalan formed part of two land grants in the 1880s to Henry Copeland and Robert Amos for the purposes of mining. The land grants extended from Sandy Beach and Chain Valley Bay in the west to Crangan Bay in the East.

Housing in the area did not occur until the subdivision of Thomas Henderson's original land grant in the 1920s, which now forms part of Summerland Point, north of Government Road. The NSW Government gazetted land for sale to establish a village at Point Wolstoncroft in August 1880. The Government, in 1942, later reclaimed this land to establish Point Wolstoncroft for public recreation and camping.

The existing townships of Gwandalan emerged from the subdivision of the former Amos land grants during the late 1950s. Gwandalan successful growth is apparent in the establishment of both the local bush fire brigade (1959) and Gwandalan Public School (1961). Rose Group Pty Ltd purchased the land at Gwandalan in 2002.

2.3 Memorandum of Understanding

On 16 October 2006, Coastal Hamlets Pty Ltd and Lakeside Living Pty Ltd (collectively known as Rose Property Group Pty Ltd) entered into a Memorandum of Understanding (MOU) with the NSW Government to set out the parties' intentions with respect to the implementation of an Environmental Land Offset Scheme. The MOU concerned the land indicated in Figure 5 and was signed by the Proponent, the Minister for Planning and the Minister for Climate Change and the Environment.

Upon the rezoning of the Future Development Area, Coastal Hamlets Pty Ltd and Lakeside Living Pty Ltd will transfer ownership of the Proposed Dedicated Lands to the Minister for Climate Change and the Environment for dedication as a national park estate or a conservation reserve.

This MOU is unenforceable and non-binding. Nothing in the MOU is intended to constitute a representation, warranty or guarantee on the behalf of the Government, the Minister for Climate Change and the Environment or the Minister for Planning that the proposal can proceed, and does not fetter the discretion of the Minister for Planning in assessing the proposal under Part 3A of the Act.



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3 PROPOSED DEVELOPMENT

3.1 Background

In November 2006, Rose Property Group Pty Ltd (the Proponent) lodged a Preliminary Assessment Report for the Catherine Hill Bay and Gwandalan developments. On 11 December 2006, the Minister formed the opinion that the proposed development was a Major Project pursuant to Clause 6 of *State Environmental Planning Policy (Major Projects) 2005* (Major Projects SEPP) and instructed that the site be investigated as a potential State significant site.

The Director-General's Requirements for a concept plan that covered the Catherine Hill Bay and Gwandalan developments were issued on 11 December 2006 in accordance with Section 75F of the Act. On 15 December 2006, the Proponent lodged a State Significant Site Study (clause 8 of the Major Projects SEPP) and Environmental Assessment for the Concept Plan for CHB and Gwandalan developments.

On 11 December 2006, the Minister constituted an Independent Hearing and Assessment Panel (IHAP) pursuant to Section 75G of the Act. The panel members were Ms. Gabriel Kibble OA (Chair), Mr. Andrew Andersons OA and Mr. Michael Collins.

On 13 April 2007, the Panel provided its interim report on the proposed concept plan to the Minister. While the Panel acknowledged that development potential did exist on the subject lands, the Panel concluded that the Plan in its submitted form was unacceptable. In response to this report, the Proponent undertook to prepare a revised development scheme for CHB and Gwandalan, and withdrew the concept plan.

On 14 June 2007, the Proponent lodged a Preliminary Assessment Report requesting the Minister's authorisation to submit a revised development scheme, comprising of a concept plan and four project applications.

On 25 June 2007, the Minister declared the proposed development to be subject to Part 3A of the Act and authorised the submission of a concept plan. This declaration was published in the Government Gazette on 6 July 2007. At the same time, the Minister reconstituted the IHAP and expanded the terms of reference to include the consideration of the four project applications.

The Director-General's Requirements for the revised concept plan and project applications were issued on 1 August 2007 in accordance with Section 75F of the Act.

On 24 August 2007, the Proponent lodged environmental assessments for the following:

- concept plan for the CHB and Gwandalan sites (reference MP07_0330);
- two project applications for the subdivision and construction of the Village Centre Precinct (Hamlet 1) and subdivision and construction of Hamlet 2 for the CHB development (reference MP07_0109 and MP07_0110 respectively) (*note: MP07_0109 was subsequently withdrawn*);
- a project application for site preparation works across the CHB development, along with subdivision into "super lots" (reference MP07_0108);
- A project application for site preparation works and subdivision of the Gwandalan development (reference MP07_0107).

The environmental assessments prepared for the above were publicly exhibited between 5 September 2007 and 12 October 2007.

On 7 December 2007, the Proponent lodged a preferred project report (PPR) and a revised Statement of Commitments for the concept plan and the project applications for Catherine Hill Bay to the Department in response to the submissions received during the exhibition period.

On 18 December 2007, the IHAP provided its final report to the Minister.

On 20 December 2007, the Proponent lodged a PPR for the Gwandalan project application (MP07_0107) to the Department.

On 27 February 2008, the Proponent withdrew the Project Application for Hamlet 1 at CHB (MP07_0109) and lodged a final PPR for the Concept Plan for Catherine Hill Bay and Gwandalan. The PPR incorporated changes to the designs of the CHB Hamlets and the redesign of the Gwandalan subdivision (refer Table 1). This report is based on this PPR and covers the concept plan and the project application for Gwandalan subdivision only.

A copy of the Preferred Project Report and a revised Statement of Commitments, responding to the issues raised in submissions is provided in **Appendix F** of this report.

A summary of the amendments to the proposed development since the original application in December 2006 is provided below in Table 1.

Summary of Amendments to Proposed Development						
December 2006 August 2007 February 2008						
Catherine Hill Bay						
Concept Plan - Overview	CHB village and Moonee village. Centralised and ordered design.	Relocation of the new Village Centre away from the existing Catherine Hill Bay Village; Hamlet 1 redesigned with lowered building heights and increased separation from existing CHB village. Hamlets redesigned to be organic in form.	Hamlet 1 layout replaced with a series of urban design and built form design principles.			
No. of Dwellings	Hamlet 1 – 150 dwellings. 600 dwellings in total.	Reduction in the dwelling target for Hamlet 1 to 69 dwellings. 600 dwellings in total.	Total not to exceed 600 dwellings in total.			
Commercial Floorspace	1400m ²	1800m ² – no individual commercial space to exceed 200m ²	750m ² . Commercial zone deleted in Moonee villages and tourism beds deleted.			
Road Pattern	Dedication of Montefiore Parkway and Hale Street as a public road.	Dedication of Montefiore Parkway as a public road.	New perimeter road to the south of Hamlets 2 to 5.			
Open Space	Pocket Parks and a central 'village green'.	Reduction of the overall development footprint by pulling back from Moonee Beach and adjoining headland.	Further 15 metre setback to dwellings from the edge of the cliff walkway reserve.			
Cliff Top walk.	No formal walkway or pathways provided.	Provision of coastal and cliff walkways from Catherine Hill Bay Village to Moonee Beach.	Development setback from the cliff edge by 25 metres to provide adequate width for the coastal walk and to provide a cliff stability zone.			
Gwandalan						
Dwelling Numbers	314 dwellings proposed.	214 dwellings proposed.	187 dwellings proposed.			
Urban Form	Development footprint 26 hectares.	Development footprint 18 hectares.	Development footprint 18 hectares.			
Road Pattern	Grid style pattern.	Redesign of the subdivision and road layout.	Complete redesign of subdivision and road layout.			
Stages	2 stages – stage 1 - 225 lots and stage 2 - 89 lots.	Stage 2 deleted.	Stage 1 to be development in 3 stages.			
Community Space	Strip space provided as APZ.	Median landscaped area on the central access road.	19,300m ² to be dedicated as community parkland/open space.			

Table 1 – Summary of Amendments to Proposed Development

3.2 State Significant Site Study

The State Significant Site Study (SSS) seeks to establish new land use zones and development controls across the proposed sites and is being progressed concurrently to the proposed concept plan and project applications.

The SSS recommends that the CHB and Gwandalan sites be listed in Schedule 3 of the *State Environmental Planning Policy (Major Projects) 2005* (Major Projects SEPP) and the land be rezoned to facilitate the development proposed by the concept plan and to facilitate the transfer of dedicated lands. The SSS has been prepared in accordance with clause 8 of the Major Projects SEPP. The proposed rezoning is the subject of a separate report.

3.3 Concept Plan

The proposed concept plan (as described in the PPR) seeks approval for the following:

- (1) the dedication of approximately 310 hectares of land for conservation purposes;
- (2) a residential development at Catherine Hill Bay (refer to Figure 6), comprising of;
 - (a) a staged residential development with a maximum of 600 dwellings over seven distinct hamlets being;
 - o Hamlet 1 a maximum of 69 dwellings;
 - o Hamlet 2 a maximum of 108 dwellings;
 - Hamlet 3 a maximum of 83 dwellings;
 - o Hamlet 4 a maximum of 144 dwellings;
 - o Hamlet 5 a maximum of 77 dwellings;
 - o Hamlet 6 a maximum of 71 dwellings;
 - o Hamlet 7 a maximum of 48 dwellings.
 - (b) dedication of Montefiore Parkway as a public road;
 - (c) a minimum 25 metre wide coastal reserve and public walkway from Middle Camp Beach to the headland;
 - (d) built form design principles for Hamlet 1 (excluding the Bin Building) to establish maximum building heights and soft landscaping controls;
 - (d) retail uses within Hamlet 1, with a maximum GFA of 750m²;
 - (e) provision of community facilities including a village green, Bin Terrace, playing field, tennis courts, community building, swimming pool, village park, coastal walkway and hamlet commons, pedestrian and cycleway network;
 - (f) landscaping; and
 - (g) services and infrastructure.
- (3) a residential development at Gwandalan (refer to Figure 7), comprising of:
 - (a) a subdivision of the 18 ha site into 188 lots in a torrens title scheme to create 187 new lots and a residue lot for the existing foreshore dwelling;
 - (b) two areas of open space with a total area of 19,300 m²;
 - (c) an internal road layout including a bus loop;
 - (d) three access points to Kanangra Drive;
 - (e) landscape concept for the two open space areas, and streets (including the "Green Link"); and

(f) service infrastructure.

3.4 Project Application MP07_0107

The project application (MP 07_0107) relates to the Gwandalan site and seeks approval for the following:

- 1) subdivision of Lot 3 in DP 588206 into 187 residential lots and one residue lot for the existing foreshore dwelling;
- civil works including earthworks and site regrading, major drainage controls and infrastructure provision and construction of roads;
- 3) a public road network with three access roads to Kanangra Drive; and
- 4) public domain improvements, including two new parks, a 'green link' linking the two open space areas and street tree planting.



Figure 6 – Preferred Project Application – Gwandalan (red line depicts the land release stages)

3.5 Amendments to the Concept Plan

The Proponent's concept plan has been amended on three occasions, which have been detailed below.

(1) First Amendment

The first amendment to the development (as originally submitted in December 2006) was in response to the IHAP's interim report (April 2007) and was documented in the revised concept plan lodged with the Department on 24 August 2007, and included:

Catherine Hill Bay

- Creation of seven distinct hamlets (including a new village centre) separated by landscaped buffers;
- Relocation of the new Village Centre away from the existing Catherine Hill Bay Village;
- Reduction in the dwelling target for Hamlet 1 from 150 to 69;
- Increase in the separation of development from the existing Catherine Hill Bay Village by a community park;
- Dedication of Montefiore Parkway as a public road;

- Reduction of the overall development footprint by pulling back from Moonee Beach and adjoining headland; and
- Provision of coastal and cliff walkways from Catherine Hill Bay Village to Moonee Beach.

<u>Gwandalan</u>

- Reduction of approximately 90 dwellings from 312 dwellings to 213 dwellings at Gwandalan;
- Reduction of the development footprint from 26 to 18 hectares due to excision of the existing house and surrounding lands on the foreshore; and,
- Redesign of the subdivision and road layout.

(2) Second Amendment

The second amendment to the proposal was documented in the PPR, submitted to the Department on 20 December 2007, and involved:

Catherine Hill Bay

No changes were made to the proposed development at Catherine Hill Bay.

Gwandalan

- Complete redesign of subdivision and road layout;
- Further reduction of the number of allotments from 214 to 187;
- Reduction in development stages from four to three;
- The retention of significant tree clumps in two newly proposed open space areas with a total area of 19,300m² to be dedicated as community parkland/open space;
- A hierarchy of streets including a bus route and internal streets which are appropriate to their use with the primary through route being designed as a 'green link' connecting the two open space areas, which is to be 22.0m wide to allow for substantial planting/retention of existing trees in the road reserve;
- Reduction in the number of allotments with direct access to Kanangra drive from 6 to 2;
- Provision of native landscape buffers to Kanangra Drive.

(3) Third Amendment

The third amendment to the proposal was documented in the final PPR, submitted to the Department on 27 February 2008, and included:

Catherine Hill Bay

- Replacement of a development layout for Hamlet 1 with a series of urban design and built form design principles that provide maximum building heights and soft landscaping controls;
- Development setback from the cliff edge by 25 metres to provide adequate width for the coastal walk and to
 provide a cliff stability zone;
- Further 15 metre setback to dwellings from the edge of the cliff walkway reserve;
- Reduction of commercial floor space within Hamlet 1 to 750m²;
- New perimeter road extending from Montefiore Parkway to the south of Hamlets 2 to 5;

Gwandalan

No changes were made to the proposed development at Gwandalan.



catherine hill bay concept plan





February 2008

Figure 7 – Concept Plan Proposal – Catherine Hill Bay (Moonee Hamlets) (before and after)



Figure 8 – Concept Plan Proposal – Gwandalan (before and after)

4 STATUTORY FRAMEWORK

4.1 Part 3A of the Environmental Planning and Assessment Act 1979

On 25 June 2007, the Minister for Planning declared by order pursuant to section 75B(1)(b) of the Act that the proposed development is subject to Part 3A of the Act. The Minister's declaration was published in the Government Gazette on 6 July 2007.

The Minister concurrently authorised the submission of a concept plan for the proposed development under section 75M of the Act. The purpose of the concept plan is to provide a broad overview of a proposed development and seeks to establish the framework for more detailed development of the proposal subject to future approvals.

The concept plan process will enable the complex strategic issues and the general parameters of the project to be determined upfront, whilst still retaining the necessary level of flexibility for the more detailed design phase of the project. Retaining some flexibility in the later stages of the redevelopment will be important to ensure future development opportunities on the site remain innovative and responsive to staging over time.

Table 2 below identifies the milestones in Part 3A of the Act that apply to the proposal and the date on which they were met by the Proponent.

Part 3A Milestones	Original Scheme	Revised Scheme
Declaration that Part 3A applies to Project (Section 75B)	17 November 2006	6 July 2007
Application for Part 3A approval of project (Section 75E)	7 November 2006	14 June 2007
Director-General's Environmental Assessment Requirements issued (Section 75F)	11 December 2006	1 August 2007
Independent Panel of Experts constituted (Section 75G)	11 December 2006	27 June 2007
Test of adequacy (Section 75H)	16 December 2006	27 August 2007
Public Exhibition (Section 75H)	3 January 2007 to 2 March 2007	5 September 2007 to 12 October 2007

Table 2 - Part 3A Milestones

4.2 Permissibility

The proposed sites are covered by both *Lake Macquarie Local Environmental Plan 2004* and *Wyong Local Environmental Plan 1991*. The land use zones applicable to each of the sites are depicted in Figure 9 and listed in Table 3 below.

The proposed Catherine Hill Bay site is subject to both the *Lake Macquarie Local Environmental Plan 2004* and the *Wyong Local Environmental Plan 1991*. Under the *Lake Macquarie Local Environmental Plan 2004*, the proposed retail and housing development in Hamlet 1 is zoned 7 (4) Environmental – Coastline and 7(1) Conservation – Primary. The proposed Hamlets 6 and 7 are located on land zoned 7(1) Conservation – Primary. Dwelling houses are permissible with consent. Under the 7(4) Environmental – Coastline, retail and commercial development (other than restaurants and clubs) and residential development is prohibited. The proposed Hamlets 2 to 5 are currently zoned 7(e) Coastal lands acquisition under *Wyong Local Environmental Plan 1991*. Dwelling houses are permissible with consent.

The proposed Gwandalan site is subject to the *Wyong Local Environmental Plan* 1991 and is zoned 7(b) Scenic Protection. The 7(b) zoning allows for residential development, but prohibits development such as shops, housing for older people and child-care centres.



Figure 9 Land Use Zones under Lake Macquarie LEP and Wyong LEP

Component	Wyong LEP	Lake Macquarie LEP	
Catherine Hill Bay	7(e) Coastal Lands Acquisition	7(1) Conservation (Primary)	
		7(4) Environmental (Coastline)	
Conservation lands	7(b) Scenic Protection	7(1) Conservation (Primary)	
		7(4) Environmental (Coastline)	
		9 Natural Resources	
Gwandalan	7(b) Scenic Protection	Not Applicable	
Conservation lands	7(b) Scenic Protection	7(1) Conservation (Primary)	
		7(4) Environmental (Coastline)	

 Table 3- Land use zones under Macquarie LEP and Wyong LEP

Under Section 75O(3) of the Act, the Minister cannot approve development that is located within an environmentally sensitive area of State significance or a sensitive coastal location, and is prohibited by an environmental planning instrument that would not (because of section 75R of the Act) apply to the project if approved.

The proposed development site contains areas that are defined as 'environmentally sensitive area of State significance' as these areas have been identified as containing critical habitat for Black Eyed Susan (*Tetratheca juncea*) under the *Threatened Species Conservation Act 1995* and land to which *State Environmental Planning Policy No 14 – Coastal Wetlands* applies. Consequently, the concept plan proposal cannot be approved by the Minister under Part 3A of the Act without the site being rezoned beforehand.

4.3 State Environmental Planning Policy (Major Projects) 2005

State Environmental Planning Policy (Major Projects) 2005 (Major Projects SEPP) outlines the types of development declared a Major Project for the purposes of Part 3A of the Act. For the purposes of the Major Projects SEPP certain forms of development may be considered to be a Major Project if the Minister (or his delegate) forms the opinion that the development meets criteria within the SEPP.

Clause 8 of the Major Projects SEPP includes provisions that allow the Minister to determine that a site is State significant and to add it to the list of State significant sites that appear in Schedule 3 of the Major Project SEPP. Prior to listing a site, a SSS Study was required to assess the State or regional planning significance of the site and the suitability and implications of any proposed land use. When making a site a State significant site on Schedule 3 of the Major Projects SEPP, the Minister may establish the planning regime for the site, including any zoning changes.

The purpose of listing the CHB and Gwandalan sites in Schedule 3 of the Major Projects SEPP is to enable the Minister to set the planning parameters for future land use and the type and scale of development considered to be consistent with achieving State and regional planning objectives whilst taking into account the local planning context of the site. Future arrangements for development control can also be imposed.

As stated previously in section 3.2 of this report, the amendment to the Major Projects SEPP to make the land a State Significant Site is being progressed and is subject to a separate report. The amendment to Schedule 3 of the Major Projects SEPP will be made prior to the Minister's determination of the Concept Plan.

4.4 Director-General's Requirements

On 1 August 2007, Director-General Requirements (DGRs) were issued pursuant to Section 75F of the Act. A copy of the DGRs is provided at **Appendix B**.

4.5 Environmental Protection & Biodiversity Conservation Act 1999

On 16 May 2007, the then Commonwealth Department of the Environment & Water Resources identified that the development was a "controlled action" under the Section 18 and 18A of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), as it was considered likely that the proposal would significantly impact the Nationally Significant Black Eyed Susan (*Tetratheca juncea*). Following the decision to pursue a revised scheme for the Concept Plan, the Proponent agreed to the proposal being assessed under the bilateral agreement between the Commonwealth and NSW Governments.

The bilateral agreement between the Commonwealth and NSW governments allows the assessment regimes under Part 3A, Part 4 and Part 5 of the Act to be accredited under the EPBC Act. This means that separate assessment processes are not required under both the EPBC Act and the Act for a development that is declared to be a controlled action, and the NSW assessment process is to be followed. However, the administrative requirements have not been formalised and the Department has closely consulted with the Commonwealth Department of Environment, Water, Heritage and the Arts throughout the assessment.

On 1 August 2007, the DGRs were issued and included the matters to be addressed by the Proponent under the EPBC Act. In accordance with the bilateral agreement, the advertisement placed in the Sydney Morning Herald stated that the proposal is a Controlled Action under EPBC Act (EPBC 2007/3411).

The Department of Planning's website also identified that the proposed development is a 'controlled action' (EPBC 2007/3411) and provided a link to the Commonwealths Department of Water, Energy, Heritage and the Arts website.

The Environmental Assessment, Preferred Project Report (December 2007) and revised Statement of Commitments identified the impacts of the development on the Black Eyed Susan (Tetratheca juncea) and the actions that will be taken to mitigate the impacts. The majority of the impacts are avoided by virtue of the extent of the Black Eyed Susan (Tetratheca juncea) present within the conservation lands that are to be dedicated to the State Government under the MOU.

In response to this issue, the Department has also recommended that the concept plan be modified to ensure that adequate separation is provided between development and the habitat of the Leafless Tongue Orchid *(Cryptostylis Hunteriana)* and that a management plan be prepared to ensure the conservation and long term

survival of this threatened species (refer to Section 7 of this report).

Should the Minister for Planning determine to approve the concept plan, the proposal will be referred to the Commonwealth Department of the Environment, Water, Heritage and the Arts for a separate approval under the EPBC Act in accordance with the bilateral agreement.

4.6 Other Relevant Legislation and Environmental Planning Instruments

Section 7 and **Appendix I** set out the approval process, relevant consideration of legislation, Environmental Planning Instruments (EPIs) and planning strategies as required under Part 3A of the Act.

In summary, the relevant EPIs for the EA and SSS Study are as follows:

- State Environmental Planning Policy (Major Projects) 2005;
- State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007;
- State Environmental Planning Policy Building Sustainability Index 2004;
- State Environmental Planning Policy No. 11 (Traffic Generating Developments) (repealed by Infrastructure SEPP, which was gazetted 21 December 2007);
- State Environmental Planning Policy No. 14 Coastal Wetlands;
- State Environmental Planning Policy No. 55 Remediation of Land;
- State Environmental Planning Policy No. 71 Coastal Protection;
- Hunter Regional Environmental Plan 1989;
- Hunter Regional Environmental Plan (Heritage) 1989;
- Lake Macquarie Local Environmental Plan 2004; and
- Wyong Local Environmental Plan 1991

5 CONSULTATION AND ISSUES RAISED

5.1 Lodgement

On 24 August 2007, the Proponent submitted an environmental assessment (EA) for the Concept Plan, a separate SSS Study and four project applications. The lodgement of a separate EA for the concept plan and SSS Study was consistent with the Director-General's requirements.

5.2 Test of Adequacy

Section 75H of the Act specifies that, prior to exhibition, the Department is to conduct a "test of adequacy" to determine if the EA satisfies the Director-General's requirements.

The Department determined that the matters contained in the DGRs were adequately addressed in the Environmental Assessment prior to public exhibition.

5.3 Exhibition

Under section 75H(3) of the Act, the EA must be made publically available for at least 30 days. The SSS and EA for the concept Plan and project applications were exhibited concurrently.

The exhibition for the revised concept plan and project applications and that conducted for the original concept in early 2007 is summarised in Table 4 below.

	Original Scheme	Revised Scheme
Public Exhibition – Start	3 January 2007	5 September 2007
Public Exhibition – End	2 March 2007	12 October 2007
Newspapers and date of	Sydney Morning Herald -	Sydney Morning Herald -
advertisement	3 January 2007	5 September 2007
	Newcastle Herald –	Newcastle Herald –
	3 January 2007	5 September 2007
	Gosford Central Coast Express	Gosford Central Coast Express
	Advocate	Advocate
	3 January 2007	5 September 2007
Location of exhibition	Online -	Online -
	www.planning.nsw.gov.au.	www.planning.nsw.gov.au
	Department of Planning (Head	Department of Planning (Head
	Office)	Office)
	Department of Planning (Central	Department of Planning (Central
	Coast)	Coast)
	Department of Planning (Hunter)	Department of Planning (Hunter)
	Wyong Shire Council	Wyong Shire Council
	Lake Macquarie Council	Lake Macquarie Council
	Gwandalan Bowling Club	Gwandalan Bowling Club
	Catherine Hill Bay Bowling Club	Catherine Hill Bay Bowling Club
Number of letters to owners	1,843	3,880
and occupiers		

Table 4 – Public exhibition details

5.4 Notification

Notification of the exhibition of the EA and SSS Study was conducted in accordance with the requirements of Section 75H(3). The notification process was conducted in a manner generally consistent with Wyong City Council's and Lake Macquarie City Council's notification policies, although the notification area greatly exceeded the requirements of the two Councils.

On 30 August 2007, the Department sent letters to 28 public agencies and 3,880 owners and occupiers of land surrounding CHB and Gwandalan to inform them of the exhibition of the EA and SSS Study. These letters included details on the proposed development and how to make a submission. The notification area for the second exhibition was enlarged to cover the exhibition area for the Coal & Allied proposal at CHB and Gwandalan, so that the land owners and occupiers would be notified of both proposals. An additional 2,037 land owners and occupiers were notified.

The Department placed a notice in the public notices section of the *Sydney Morning Herald*, the *Gosford Central Coast Express Advocate* and the *Newcastle Herald* on 5 September 2007. The advertisement provided details of the proposal, exhibition locations and dates, and how interested parties could make a submission. The EA was placed on the Department's and Proponent's websites during the course of the exhibition periods.

In response to the second exhibition period, the Department received:

- 2747 submissions from the public, of which three generally supported the development with the remainder objecting to the proposed development; and
- 16 submissions from public agencies, namely: Ambulance Service of NSW, Department of Environment and Climate Change (DECC), Department of Planning (DoP), Department of Primary Industries (DPI), Department of Water and Energy (DWE), Heritage Council of NSW, Hunter Regional Development Committee (HRDC), Lake Macquarie City Council, Mine Subsidence Board, Ministry Transport (MoT), Nature Conservation Council of NSW, Northern Sydney Central Coast NSW Health, NSW Police, NSW Roads and Traffic Authority (RTA), NSW Rural Fire Service (RFS) and Wyong Shire Council.

Type of Letters	Gwandalan	Catherine Hill Bay	Catherine Hill Bay and Gwandalan	Total
Form letters objecting	135	2500		2635
Letters of objection (excluding form letters)	51	43	9	103
Letters of support	1	2		3
Total	187	2545	9	2741

Table 5 below provides a breakdown of the types of public submissions received by the Department.

Table 5 – Types of Public Submissions

Refer to **Appendix G** for the summary of the submissions received. Copies of the submissions are held in the Sydney office of the Department.

5.5 Issues raised

Issues raised by Government agencies and the general public during the exhibition period for the previous and the current development schemes are as follows, with the significant issues assessed as part of Section 7 of this report;

- Adequacy of information submitted;
- Built form, scale, density, character and design;
- Bush fire and asset protection zones;
- Coastal planning impacts, including coastal headland walkway;
- Consistency with the IHAP recommendations;

- Construction management;
- Cumulative impacts given proposal by Coal & Allied to the north of Catherine Hill Bay;
- Declaration of Gwandalan as a Major Project;
- Developer contributions;
- Development footprint;
- Ecologically sustainable development,
- Flora and Fauna;
- Foreshore access;
- Geotechnical;
- Heritage conservation;
- Infrastructure & services;
- Land use zoning;
- The Memorandum of Understanding;
- Mine subsidence and former coal mining uses;
- Public access;
- Traffic and transport;
- Visual impacts; and
- Water quality and quantity impacts.

5.6 Preferred Project Report

The Proponent was provided with copies of all agency submissions and a summary of public submissions. In certain cases where the information contained within the submission was too detailed to accurately summarise, the Proponent was provided with a full copy of the submissions. The issues raised in the submissions have been reviewed as part of this report.

The Proponent was requested to respond to submissions in accordance with Section 75H of the Act and invited to submit a PPR. On 7 December 2007, the Proponent submitted a PPR for the Concept Plan (MP06_0330), and the project applications for the Civil and Landscape Works at Catherine Hill Bay (MP07_0108), Hamlet 1 (MP07_0109) and Hamlet 2 (MP07_0110). On 20 December 2007, the Proponent submitted a PPR for Gwandalan (MP07_0107).

The PPR for the Concept Plan (MP06_0330) also included the following additional documentation:

- revised Statement of Commitments;
- *Ecological Assessment Report for Southern Lake Macquarie Lands* prepared by Harper Somers O'Sullivan (December 2007). This document consolidates work conducted by other experts over several years and includes further investigations of EPBC listed species and the location of the SEPP 14 wetland boundary to the south of the Moonee Hamlets site;
- updated *EPBC Act Addendum Report for Proposed Subdivision Lot 3 DP588206 Kanangra Drive Gwandalan* (prepared by Harper Somers O'Sullivan, September 2007);
- *EPBC Draft Public Environment Report: Catherine Hill Bay/Gwandalan* (prepared by Asquith de Witt Pty Ltd, December 2007);
- *Preliminary Environmental Site Assessment Kanangra Drive Gwandalan, NSW* (prepared by HLA-Envirosciences Pty Ltd, 10 September 2007);
- a letter titled State Significance Rezoning Application for Catherine Hill Bay, NSW (the "Site") from HLA Envirosciences Pty Ltd regarding SEPP 55;
- *Stormwater Management Strategy: Residential Subdivision, Catherine Hill Bay* (prepared by Parsons Brinkerhoff, December 2007),
- a letter titled *Proposed Residential Subdivision, Kanangra Drive, Gwandalan* from Masson Wilson Twiney dated 5 December 2007;

- a letter titled *Catherine Hill Bay Gwandalan Concept Plan RFS Bushfire comments Catherine Hill Bay* from Barry Eadie Consulting Pty Ltd dated 5 December 2007;
- a letter titled *Catherine Hill Bay Gwandalan Concept Plan RFS Bushfire comments Gwandalan* from Barry Eadie Consulting Pty Ltd dated 5 December 2007; and
- response to issues raised in agency and public submissions.

Further amendments to the development were undertaken by the Proponent and a revised PPR for the concept plan was submitted to the Department on 27 February 2008. The Proponent also withdrew the project application for Hamlet 1 (MP07_0109). A copy of the preferred project documentation is provided at **Appendix F**.

The Project Application for Gwandalan (MP07_0107) will need to be amended to reflect the PPR dated 19 December 2007 for Gwandalan.

6 INDEPENDENT HEARING & ASSESSMENT PANEL

On 11 December 2006, the Minister declared pursuant to Section 75G of the Act to constitute an Independent Hearing and Assessment Panel (IHAP) for the concept plan. The terms of reference of the IHAP were to:

- (1) Consider and advise on the:
 - (a) following impacts of the project:
 - (i) Heritage conservation;
 - (ii) Built form and urban design;
 - (iii) Visual impact;
 - (iv) Appropriateness of the proposed urban footprints;
 - (v) Access to coastal and recreation areas;
 - (vi) Vehicle and Pedestrian circulation onsite and in the locality
 - (b) relevant issues raised in submissions in regard to these impacts; and
 - (c) adequacy of the proponent's response to the issues raised in submissions, and
- (2) Identify and comment on any other related significant issues raised in submissions or during the panel hearings.

Following the Proponent's submission of the revised concept plan and development applications, the Minister declared on 25 June 2007pursuant to Section 75G of the Act to constitute the IHAP. The terms of reference of the IHAP were updated to include consideration of the four project applications (*note: MP07_0109 was subsequently withdrawn*).

The IHAP comprises of the following three members:

- Ms. Gabrielle Kibble OA (Chair),
- Mr. Andrew Andersons OA and
- Mr. Michael Collins.

On the 30 October 2007, IHAP held a public hearing to allow members of the public to present their submissions in relation to the project. During the 1 day hearing 24 people, representing local council, community groups and the general public presented their submissions to the IHAP.

The IHAP also met with the Stakeholder Reference Group (SRG) on 27 February 2007 and 30 May 2007 to identify and consider the potential impacts of the proposal. This group comprises of 23 members, including officers and Councillors from Wyong City Council and Lake Macquarie City Council, and representatives from the local community.

6.1 IHAP Interim Report

On 13 April 2007, the IHAP released an interim report to inform the Minister on the current status of its assessment of the original concept plan proposal for Gwandalan and CHB, which had been publically exhibited between 2 January 2007 and 2 March 2007. A copy of the IHAP's interim report is available at **Appendix D**.

The Interim Report indicated that the IHAP had a number of concerns regarding the proposal. In particular, the IHAP raised concern about:

- non-compliance with NSW Government's Coastal Policy (1997), the Coastal Design Guidelines (2003) and best practice coastal planning;
- impacts on the scenic, aesthetic and cultural heritage qualities of the existing Catherine Hill Bay;
- lack of clear considered design approach which responds to the environmental attributes of the sites;
- failure to provide development for high quality access for the public to the beach front (Catherine Hill Bay) and lake front (Gwandalan) open space areas, coastal walks, cycle paths, etc.

- Incorporation of significant unsympathetic development on the headland, ridgelines etc;
- Inclusion of significant numbers of tourism beds in a highly visually prominent location on the ridgeline of Catherine Hill Bay; and
 - Limited consideration of adaptive reuse potential for existing structures on site and in the vicinity (Bin Building and Jetty).

Notwithstanding the above concerns, the IHAP considered that development potential did exist on the subject lands and identified 15 Key Planning Principles to be addressed by the Proponent. The IHAP suggested that any revised scheme that addressed the Panel's concerns and planning principles would likely be significantly different from the first proposal as to warrant re-exhibition.

The IHAP met with the Proponent to convey details of the relevant issues in the proposal. The issue formed the basis of the IHAP's Interim Report, which was publicly available. The Proponent then engaged a new architectural team (Conybeare Morrison International + Context Landscape Design) to prepare a revised scheme, a working draft of which was presented to the IHAP and stakeholder reference group on 30 May 2007.

The revised concept plan (which is the subject of this report) was exhibited between 5 September 2007 and 12 October 2007. The notice placed in newspapers as part of the public exhibition of the new concept plan and project applications identified that the IHAP would hold public hearings, and that people or groups wishing to make submissions to the IHAP were required to register. Public hearings were held on 30 October 2007 and verbal submissions were heard, including submissions from individuals, community groups and Council. The issues raised at the public hearings were taken into account by the IHAP in the preparation of the Final Report.

6.2 Final Report – December 2007

On 18 December 2007, the IHAP submitted its final report, following consideration of the Concept Plan and project applications (prepared by Conybeare Morrison International and Context Landscape Design dated December 2007). A copy of the IHAP's final report is available at **Appendix E**.

Catherine Hill Bay

For the proposed development at Catherine Hill Bay, the final report raised specific concern about;

- development on the headland within the visual catchment of the existing Catherine Hill Bay Village;
- public access to the beach at Moonee and along the coastline/headland and more generally throughout the development;
- scale of the proposed commercial development;
- height and intensity of the proposed shoptop housing;
- scale and density of development within the proposed Moonee Hamlets;
- bushfire risk in relation to Hamlets 6 and 7 and impact of Hamlets 5 and 7 on fauna corridors which extend beyond the site within the Wallarah Peninsula; and
- adaptive reuse of the Bin Building.

Recommendations

Section 3.2 of the IHAP's final report makes seven recommendations in relation to the proposed development at Catherine Hill Bay. The seven recommendations include:

 redesign of Hamlet 1 to provide the following : a 25m setback (including proposed allotments) from the cliff edge and a further 15 metre setback to dwellings, building height limits of 1 storey and 5m (above existing ground level or finished ground level whichever is lower), and building footprint and landscape controls to ensure dwellings blend in to the landscape;

- the provision of public access to Moonee Beach through the subject land in the form of a perimeter road, with the provision for on-street parking on at least one side in addition to the provision of a public parking area within the subject development area;
- a maximum floor space of 750m² for commercial/retail development;
- review of the internal planning of Hamlets 2 to 5 to identify deep soil areas to ensure that proposed trees will have adequate space to establish and grow to their full potential height;
- ensure that the Bin Building is stabilised and made safe with the top to be reused a public lookout
 incorporating a low intensity café/kiosk or the like with no adaptive reuse of the Bin Building as part of the
 Concept Plan;
- redesign of Hamlets 6 and 7 in accordance with Planning for *Bushfire Protection 2006* (NSW Rural Fire Service); and
- defer consideration of project applications for Hamlet 1, Hamlet 2 and the Civil works at Catherine Hill Bay until they have been submitted in a form consistent with an amended Concept Plan which addresses the IHAP's recommendations.

The revised PPR (dated February 2008) made further changes to the CHB village in response to the IHAP recommendations and withdrew the Project Application for Hamlet 1. The PPR proposed a set of design guidelines for Hamlet 1, a reduction in commercial floorspace and increased the setbacks for the coastal walkway (see **Section 3.6**). A response to each of the Panel's recommendation is provided in **Section 7.2** of this report.

<u>Gwandalan</u>

A detailed discussion on each of these issues is provided in Section 3.1 of the IHAP's final report at **Appendix E**. Section 3.3 of the IHAP's final report in recommends that the Gwandalan development is *'appropriate for approval subject to other technical matters being addressed'*.

Recommendations

Section 3.3 of the IHAP's final report identified that the exhibited concept plan was inconsistent with the Panel's Planning Principles issued as part of the IHAP's interim report. The IHAP took the view that the inadequacies could be addressed by a redesign.

On 20 December 2007, a PPR (Concept Plan) was submitted to the Department that included amendments to the proposed development of Gwandalan in accordance with the IHAP's recommendations. The revised design specifically includes;

- the retention of significant tree clumps in two newly proposed open space areas to be dedicated as community parkland/open space;
- a revised road layout that follows the topography;
- a hierarchy of streets including a bus route and internal streets which are appropriate to their function with the primary through route being designed as a 'green link' connecting the two open space areas, which is to be 22m wide to allow for substantial planting/retention of existing trees in the road reserve;
- reduction of the number of allotments from 214 to 187;
- reduction in the number of allotments with direct access to Kanangra drive from 6 to 2; and
- provision of native landscape buffers to Kanangra Drive, Gwandalan Public School and Point Wolstoncroft Sport and Recreation Area.

In Section 3.4 of the IHAP report, the Panel recommends that the Minister approve the Concept Plan as amended by the PPR dated December 2007 as it applies to the Gwandalan site and approve a project application that is consistent with that Concept Plan PPR. However, the IHAP recommended that particular attention be paid to ensure that the allotments abutting the northern site boundary which adjoins the Point Wolstoncroft Recreation Area be reviewed to ensure compliance with *Planning for Bushfire Protection 2006* (NSW Rural Fire Service). This matter is discussed in Section 7.5.8.

7 ASSESSMENT

7.1 Director-General's Report

To fulfil the requirements of Section 75I Clause 2(b) of the Act this report includes advice provided by public authorities regarding the issues to be addressed by the Proponent in the EA. These issues formed part of the key issues raised in the DGRs. The Department has reviewed the EA, submissions to the preparation of the EA by public authorities, the submissions received from public authorities during the EA exhibition period and additional information provided by the proponent. Unless noted to the contrary below, the Department is satisfied that the responses provided by the proponent in their EA and the additional response to issues raised in submissions are reasonable.

Table 6 below identifies how this Director-General's Report satisfies the criteria set out in Section 75I(2) of the Act. Consideration of each of the issues as they relate to the concept plan proposal is provided in **Section 7.2**.

Each relevant issue has been identified and duly considered followed by an explanation of how the proponent has sought to address the issue. Each subsection concludes with a statement on whether the issue is resolved or whether amendments are necessary by either modifying the Concept Plan or applying conditions of approval.

Section 75I(2) criteria	Response
Copy of the proponent's environmental assessment and any preferred project report.	The Proponent's EA is included at Appendix H. The Proponent's Preferred Project Report is set out at Appendix F.
	The Statement of Commitments is at Appendix B.
Any advice provided by public authorities on the project.	All advice provided by public authorities on the project for the Minister's consideration is set out at Appendix G.
Copy of any report of a panel constituted under Section 75G in respect of the project.	The Interim Report of the IHAP is provided at Appendix D. The Final Report of the IHAP is provided at Appendix E.
Copy of or reference to the provisions of any State Environmental Planning Policy that substantially govern the carrying out of the project.	Each relevant SEPP that substantially governs the carrying out of the project is identified in Section 4.6 of this report. A brief assessment of the impact of the SEPP on the development proposal is provided in Appendix I.
Except in the case of a critical infrastructure project – 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 environmental planning instrument is provided in Appendix I.
Any environmental assessment undertaken by the Director General or other matter the Director General considers appropriate.	The environmental assessment of the project application is this report in its entirety.
A statement relating to compliance with the environmental assessment requirements under this Division with respect to the project.	This report, and in particular Sections 7, and 9, is a statement relating to compliance with the environmental assessment requirements under Division 2 of Part 3A in respect of the concept plan and the project application. The DGRs have been met.

Table 6 - Section 75I(2) requirements for Director-General's Report
Clause 8B of the *Environmental Planning and Assessment Regulation 2000* sets out the matters for environmental assessment and Ministerial consideration. Clause 8B states:

8B Matters for environmental assessment and Ministerial consideration

The Director-General's report under section 75I of the Act in relation to a project is to include the following matters (to the extent that those matters are not otherwise included in that report in accordance with the requirements of that section):

- (a) an assessment of the environmental impact of the project,
- (b) any aspect of the public interest that the Director-General considers relevant to the project,
- (c) the suitability of the site for the project,
- (d) copies of submissions received by the Director-General in connection with public consultation under section 75H or a summary of the issues raised in those submissions.
 Note. Section 75J (2) of the Act requires the Minister to consider the Director-General's report (and the reports, advice and recommendations contained in it) when deciding whether or not to approve the carrying out of a project.

The matters listed in clause 8B, above are addressed in **Section 7** of this report. The issue of the Public Interest is addressed in **Section 8** of this report and a summary of the public submissions is in **Appendix G** of this report.

Section 7.2 below considers the proposed development in the context of the IHAP's recommendations. Consideration of the issues as they relate to the Concept Plan and the Project Application for Gwandalan is provided in Section 7.5 of this report. Consideration of the issues as they relate to the Concept Plan for CHB is provided in Section 7.6 of this report. Consideration is then given to how the Proponent proposes to address the issues. Each subsection concludes with a statement on whether the issue is resolved or whether amendments are necessary by either modifying the Concept Plan or conditioning the Project Applications.

Unless noted to the contrary, the Department is satisfied that the responses provided by the Proponent in their EA the preferred project report and the revised statement of commitments are reasonable and is satisfied having considered the proposed development in its context that there are no other relevant issues of significance.

7.2 Independent Hearing and Assessment Panel

On 13 April 2007, the IHAP issued an interim report with a set of planning principles. On 18 December 2007, the IHAP submitted its final report, following consideration of the Concept Plan and project applications (prepared by Conybeare Morrison International and Context Landscape Design dated December 2007). The final report provided a set of seven recommendations that primarily relate to the proposed development at Catherine Hill Bay. The following section provides a consideration of the PPR against the recommendations made by the IHAP.

7.2.1 Recommendation 1 – Redesign of Hamlet 1

The IHAP report recommends that:

Prior to the approval of the Concept Plan Hamlet I should be redesigned in accordance with the following principles:

<u>Coastal Walk</u>

All development (including proposed allotments) shall be setback a minimum distance of 25m from the cliff edge (with the exception of development associated with the provision of a public lookout and associated small scale café / kiosk on top of the existing Bin Building). If a greater setback is required for cliff stability reasons then this shall be accommodated in the revised design.

The intent of this setback is to provide an adequate width for the proposed coastal walk along the cliff top in addition to a cliff stability/recession zone.

For the purpose of identifying the 25m setback requirement the Panel recommends that the "cliff edge" is defined as the line that represents the point where the land at the cliff edge has a slope of I in 4.78 or 20.9% (refer Figure 1 in main body of report).

The PPR has incorporated the above recommendations by providing a 25 m setback from the cliff edge to accommodate a cliff top reserve and walkway and a 15 m setback within the private lots to ensure an adequate visual separation between the public domain and private dwellings.

With regard to the cliff edge, the IHAP's final report identifies a cliff edge based on a 20.9% slope. Figure 3.5.5 of the PPR identifies a deviation to the cliff edge defined by the IHAP due to the variation to the south of the Bin Building. The PPR explains that the deviation is an averaging approach and results in no net loss in the developable area. The proponent's definition of the cliff edge is very close to IHAP's definition and in some areas provides for a greater 'clifftop' area.

The Proponent's Statement of Commitment B12 agrees to design and construct the clifftop reserve and walkway and make it available for public use. However, it makes no commitment to the timeframe for the provision of construction details of the walkway. The Department recommends the Proponent be required to provide detailed design plans for the coastal walkway to the Department of Planning prior to or concurrently with the lodgement of the project application for Hamlet 1.

With regard to the design of the coastal walkway, Lake Macquarie Council raised concern about the potential for the location and design of the coastal walkway to cause erosion and damage to coastal vegetation. Council also identified the need to establish ongoing management and maintenance responsibilities, particularly if the coastal walkway is built in a location with dual management responsibilities such as asset protection zone. The Department recommends that detailed designs for the coastal walkway be provided to the Department that demonstrate that the location and design will minimise erosion and damage to coastal vegetation (including the consideration of raised, elevated steps), be safe for public accessibility. The clifftop reserve (containing the coastal walkway) is to be dedicated to the Government through the Deed.

Resolution

The Department is satisfied that the Proponent has adequately addressed this issue through the PPR and requirements for future project applications for Hamlet 1.

Development in Hamlet 1

The IHAP report recommends that:

Development in Hamlet I shall be:

- Where residential, detached dwellings only of not more than 1 storey in height with a maximum ridge height of 5m above existing ground level or finished ground, level whichever is lower.
- Dwellings shall be low scale and designed to blend into the landscape having a maximum building footprint of 40% of site area and a minimum of 50% soft landscaped area.
- For each proposed residential lot, an appropriate footprint for a dwelling shall be identified that (1) minimises the visibility of the dwelling when viewed from Catherine Hill Bay Village and Middle Camp Beach and (2) retains and preserves existing significant trees (to be identified) on site.
- Dwellings which adjoin the Coastal Walk (as outlined above) shall be setback from the allotment boundary that adjoins the Coastal Walk a minimum distance of 15m to provide adequate visual separation between the public domain and private dwellings. Landscaping and ancillary structures may be located within this setback.
- Where commercial, development shall similarly be not more than 1 storey in height with a maximum ridge height of 5m above existing ground level or finished ground level whichever is lower.

The Department agrees with the IHAP's view that the aesthetic and cultural heritage quality of the existing Catherine Hill Bay Village and its landscape setting are of exceptional significance and should be protected. Development within Hamlet 1 that is proposed within the view catchment of the existing village must therefore be sensitively treated.

The IHAP raised particular concern about the potential visual impact of the proposed development within Hamlet 1 on the visual catchment of the historic CHB Village. The concept plan (Figure 3.3.2) identifies two distinct visual catchments demarcated by the east west running primary ridgeline that is generally defined by the alignment of the existing Montefiore Parkway. The IHAP's view is that any development to the north of this ridgeline must be sensitively treated. As a means to address this issue, the IHAP recommended that any development within Hamlet 1 be single storey to limit the potential impact on the heritage significance of Catherine Hill Bay village, on views of the village and headland from Middle Camp Beach etc. and to optimise the opportunity for the proposed development to appear as development within the landscape. The IHAP further

recommended that the scale of development be controlled to ensure adequate areas within private lots for the establishment of landscaping.

The PPR partially adopts the IHAP's recommendations for development within Hamlet 1. In particular, the development controls for Hamlet 1 contained within Section 3.5 of the PPR:

- Partially address the recommendations by limiting all development within Hamlet 1 to single storey as defined in the Standard Instrument (LEP) Order 2006;
- Partially address the 5.0m height recommendation by providing a maximum building height limit of 5m in the area closest to the village (identified as being the visually sensitive area) and 7.5 m in areas of 'low sensitivity' and provide landscaping (using indigenous coastal species) to screen the hamlet from the locations identified as being visually sensitive (see figure 3.5.10 of the PPR).
- Partially address the landscaped and building area recommendation through the implementation of development controls (min. 50% landscape and 40% site coverage) for a strip of land adjoining the coastal walkway and at the Village end of Hamlet 1 (see figure 3.5.14 of the PPR).
- In order to justify a deviation from the IHAP's recommendations, the PPR provides further analysis of the visual sensitivity of Hamlet 1 from the Catherine Hill Bay Village (see figures below). The visual analysis identifies three visual categories within Hamlet 1 being the "Visual Sensitivity Area from Village," the "Visual Sensitivity Area from the Beach" and an "Area of Low Sensitivity."





Figure 10 Areas if Visual Sensitivity in Hamlet 1 and the Proponents proposed building

The visual analysis prepared for the PPR was is generally appropriate and the Department agrees that the ridgeline will screen the proposed development from the visually sensitive zones. However, the Department disagrees that the area to the north of the ridge should have a higher ridge height. It is considered that there is scope for some minor increase in height beyond the visual ridge and generally in the area of despoiled former mining activity near the Bin Building. Appropriately designed and with the coastal walkway and 15m setback, there is some minor scope for variation to the IHAP report without comprising the heritage significance of the village or the scenic qualities of the area.

The Department recommends that:

- a) All development is to be single storey.
- b) All development within the "Visual Sensitivity Area from Village" (i.e. north of the identified ridgeline) have a maximum ridge height of 5.0 m above existing ground level or finished ground level whichever is lower;
- c) All development within the "Area of low sensitivity" (i.e. south of the identified ridgeline) have a maximum ridge height of 7.5 m above existing ground level or finished ground level whichever is lower. An attic may be permitted within a pitched roof form;
- d) All development in Hamlet 1 is to be designed to blend into the landscape, having a maximum building footprint of 40% of the site area and a minimum of 50% soft landscaped area within the "Visual Sensitivity Area from Village", excluding the commercial area; and
- e) All development in Hamlet 1 is to be designed to blend into the landscape, having a maximum building footprint of 50% of the site area and a minimum of 40% soft landscaped area within the "Area of low sensitivity";
- f) No dwellings are to be located within the cliff top reserve "40.0 metre setback area," which comprise the 25.0 m setback for the coastal walk and a 15.0 m building setback from the coastal walk.

The Department supports the IHAP's position that all development within Hamlet 1 should be low scale and recommends a modification to the concept plan and condition for future project applications for Hamlet 1 that ensures a maximum building footprint of 40% of the site area and a minimum of 50% soft landscaped area is achieved in the 'visual sensitivity area from village' and 50% of the site area and a minimum of 40% soft landscaped area in the 'low visual sensitivity area'. The 7.5 m height limit in the 'low sensitivity' area will not adversely impact or compromise the efforts to minimise the visual impact of the development on the existing Catherine Hill Bay Village.

A modification to the concept plan is recommended that specifies height controls for the different areas of visual sensitivity within Hamlet 1, and landscaping controls to ensure development will be low scale and ensure that dwellings are located outside the 40 metre (25 metres + 15 metres) setback from the cliff edge.

Resolution

The Department is satisfied that the Proponent has adequately addressed this issue by withdrawing the Project Application for Hamlet 1 (MP07_0109) and through the PPR and modifications imposed to the concept plan.

7.2.2 Recommendation 2 - Public Access

The IHAP report recommends that:

Prior to the approval of the Concept Plan as it relates to Catherine Hill Bay provision shall be made for a new access road to Moonee Beach through the subject land which forms a perimeter road to the proposed new Moonee Hamlets with provision for on-street parking on at least one side in addition to the provision of a public parking area within the subject development area to provide public access to Moonee Beach. The location of the proposed road should avoid impact on the SEPP 14 wetland identified in the southern part of the site.

The required new perimeter road and at least one north south running spine road within the development, are to be public roads designed to Council specifications to ensure public access.

The Proponent's concept plan identified public vehicular access to Moonee Beach on land to the south of the development site, within the Munmorah State Conservation Area and crossing a SEPP 14 wetland. The Department supports the IHAP's view that the access and carpark in this location would effectively separate it from the development and would also be located in an environmentally sensitive location. The Proponent has adequately responded to this issue in the PPR by removing the carpark and access road from the land to the south of the urban development.

The Proponent's response in the PPR has been the provision of a Perimeter road (see figure 3.6.19) with a carriageway width of 6 metres. Further discussion about the perimeter road is in **Section 7.6.9**.

With regard to a public parking area, the PPR identifies a car park on the northern side of Montefiore Parkway, at the southern end of the Village Park. This is a benefit to the public for access to the village, CHB and Moonee beach. The carpark will accommodate approximately 57 cars. The Department recommends that carparking be incorporated into a revised perimeter road design (see discussion at Section 7.6.9) specifically parking should be provided on the southern side of the roadway, closest to Moonee beach.

Resolution

The Department is satisfied that the public access issues to Moonee Beach have been addressed through the PPR and the modifications imposed to the concept plan and requirements for future applications.

7.2.3 Recommendation 3 – Retail and Commercial Floor Space

The IHAP report recommends that:

Prior to the approval of the Concept Plan as it relates to Catherine Hill Bay the maximum floor space of the proposed retail and commercial development within the development shall be reduced to a maximum of 750m2 to ensure that it will service the daily convenience needs of the proposed new community only and not act as destination retailing in its own right.

The PPR has responded to the IHAP's recommendation for providing a maximum of 750m² for retail and commercial development to service the daily needs of the proposed new community and not act as a destination

retailing in its own right. The Department agrees with the proponent that small scale retail/commercial development to cater for the everyday needs of the residents is appropriate.

Resolution

The Department agrees with the IHAP recommendation, which has been addressed through the PPR.

7.2.4 Landscaping in Hamlets 2-5

The IHAP report recommends that:

Prior to the approval of the Concept Plan as it relates to Catherine Hill Bay the internal planning within Hamlets 2 - 5 inclusive shall be reviewed to identify adequate deep soil areas to ensure than the proposed trees will have adequate space to establish and grow to their full potential height and thereby create a sense of a development within a bushland setting.

The Department supports the IHAP's objective of providing a development within a bushland setting and therefore supports the IHAP's recommendation for the internal planning within Hamlet 2-5 to be reviewed to identify adequate deep soil areas to ensure that the proposed trees have adequate space to establish and grow to their full potential. The Department recommends that a modification be imposed to ensure future applications provide adequate deep soil areas are provided within Hamlets 2 to 5 to ensure trees will have adequate space to establish and grow to their full potential height to ensure that development is nestled within a bushland setting.

Resolution

The Department agrees with the IHAP recommendation, and is satisfied that this issue has been addressed through the modifications imposed on the Concept Plan.

7.2.5 Recommendation 5 - Bin Building

The IHAP report recommends that:

The Concept Plan as it relates to Catherine Hill Bay be modified to require that the Bin Building be stabilized and made safe with the top to be reused as a public lookout incorporating a low intensity café/kiosk or the like only The Concept Plan approval when issued is to clearly state that no adaptive reuse of the Bin Building is approved as part of the Concept Plan approval and that any such future proposal would require a separate development application.

A further advisory note should be included that states that if adaptive reuse is proposed in the future any such proposal should not include reflective glass, undue lighting or an expansion in the size of the building.

IHAP also recommends in Key Planning Principle 12 that:

Further consideration should be given to the adaptive reuse of the "Bin Building" and in particular opportunities should be explored to interpret the building while at the same time ensuring the safety of the public.

The PPR has responded by identifying that the highest level of the top of the Bin Building will be reserved for a public terrace with a lightweight shelter. The PPR identifies that residential or mixed use spaces will be accommodated in the stepped structure of the building. Page 50 of the PPR identifies adaptive reuse of the Bin Building to provide 4 dwellings, however no further detail has been provided.

The Department recommends that the concept plan be modified to ensure that there is no development within the Bin Building approved as part of this concept plan. However the Department is of the view that adaptive reuse is appropriate and a public viewing platform on the roof would be a public benefit with lightweight shade structures and ancillary structures which enhances the public use of the space.

The IHAP report recommends that:

If adaptive use is proposed in the future any such proposal should not include reflective glass, undue lighting or an expansion in the size of the building. These comments are supported by the Department. It is also important to note that the DPI has raised concern about the proposed reuse of the Bin Building as a rooftop viewing platform and mixed use spaces beneath. In accordance with the DPI's advice, the Department recommends that a specific building assessment must be undertaken for any future applications for the Bin Building and be supported by geotechnical studies, to verify that this entire structure is stable and safe for its intended use.

The Heritage Council of NSW has also requested that the mixed use of the Bin Building be limited to a height and scale no greater than previously existed on the site when used as part of the Colliery. While the bin building should not be enlarged there maybe some scope for minor shading and ancillary structures on the Bin Building viewing platform that enhances the use and enjoyment of that space.

Resolution

The Department is satisfied that this issue has been addressed through requirements for future applications for the Bin Building.

7.2.6 Recommendation 6 – Hamlets 6 and 7

The IHAP report recommends that:

Prior to the approval of the Concept Plan Hamlets 6 and 7 shall be redesigned in accordance with Planning for Bush fire Protection 2006 (NSW Rural Fire Service).

The Department recommends that the concept plan be modified to include a perimeter road or pathway for Hamlets 6 and 7 and two access roads to Montefiore Parkway.

Resolution

The Department is satisfied that this issue has been addressed through modification to the concept plan to ensure Hamlets 6 and 7 comply with the *Planning for Bushfire Guidelines 2006.*

7.2.7 Recommendation 7 – Project Applications

The Panel recommends that the Minister defer consideration of the submitted project application for Hamlet I until such time as it has been resubmitted consistent with the above recommendations and the Panel has provided the Minister with its comments on the revised project application.

The Panel recommends that the Minister defer consideration of the submitted project applications for Hamlets 2 and the Civil and Site Works for Catherine Hill Bay until such time as they have been resubmitted in a form consistent with an amended Concept Plan which addresses the above recommendations. Further the Panel considers that once these project applications have been resubmitted consistent with a revised Concept Plan, consistent with the above recommendations, the Minister should approve these applications.

The Panel recommends that the Minister approve, when submitted, a revised Project Application for Gwandalan where it is consistent with the Preferred Project Report (Concept Plan dated December 2007).

In regards to the project application for Hamlet 1 (MP07_0109) on the 27 February 2008 the Proponent withdrew the Project Application for Hamlet 1 (MP07_0109).

Resolution

Due to the modifications required to be made to the concept plan as a result of the recommendations of the IHAP, the Department recommends that the Project Application for Hamlet 2 and the Civil and Landscape Works at Catherine Hill Bay be deferred until such time as they are lodged in a format consistent with the modified concept plan.

Refer to Table 7 below for a summary of the IHAP's recommendation, the proponent's responses and the Department's resolutions.

Recommendation	Proponent	Complies	Comment
Recommendation 1 – Rede	esign of Hamlet 1		
Coastal Walk	Coastal walk provided	Yes	The PPR provides for the coastal walk
25m setback from cliff edge	25m setback from cliff edge	Yes	A 25m corridor has been provided.
15m setback for dwellings adjacent coastal walk.	15m setback for dwellings adjacent coastal walk.	Yes	Dwellings adjacent to the Walk are set back a minimum 15m from the coastal walk zone.
Development in Hamlet I is to be single storey	All buildings single storey, allowance for attic in roof in some areas	Yes	PPR complies
Buildings within Hamlet 1 to be max. 5m height	Varying heights within a defined visually sensitive zone (north of ridge), with 5m in the 'visual sensitivity' area adjacent to CHB village and 7.5m in the 'visual sensitivity' area located adjacent to Montefiore Parkway.	Partial	Design change – the Department does not agree with the Proponent's proposed heights within 'visual sensitivity' area – the Department has recommended that buildings should be 5m and single storey only in the 'visual sensitivity' area and 7.5m in the areas south of ridge ('area of low sensitivity')
Dwellings – 40% site coverage and 50% landscaped area for the entire Hamlet 1.	40% site coverage and 50% landscaped area only in specific zone within the 'visual sensitivity' area. Remainder of Hamlet 1 in line with design principles by Proponent.	Partial	Design change – the Department does not agree with the Proponent and has recommended 40% site coverage and 50% landscaped area required in the 'visual sensitivity' area and 50% site coverage and 40% landscaped area within the 'area of low sensitivity'.
Recommendation 2 – Publ	lic access to Moonee Bea	ch	1
Public access	Perimeter road provided	Yes	PPR complies
	Perimeter road provided	Yes - Complies by	Design change modification

	1	1		
maximum of 750m ²	Design guidelines for Hamlet 1 state 750m ² Commercial area	Yes	PPR complies	
Recommendation 4 – Lan	dscaping in Hamlets 2-5	1		
Adequate deep soil areas for tree planting.	Deep soil planting in verges and greenlinks	Yes - able to comply by condition	Design and performance standards in terms of approval	
Recommendation 5 – Bin	Building	1		
Be stabilized and made safe	Yes	Yes	PPR complies	
The top to be reused as a public lookout	Public terrace area/viewing area and kiosk to be provided.	Yes	PPR complies	
Limits on materials	Lightweight proposed for viewing terrace	Yes	Some allowance for shade structure or small structure to add to public space enhancement. To be verified as structurally safe and limits on materials/light spill	
Recommendation 6 – Han	nlet 6 and 7			
Be redesigned in accordance with Planning for Bush fire Protection 2006 (NSW RFS).	No changes in PPR	Yes - by modifications	Design changes conditions in approval – also to deal with orchid preservation	
Recommendation 7 – Pro	ect Applications	1		
Minister defers consideration of PA - Hamlet 1 until design changes submitted.	PA (MP07-0109) withdrawn.	Yes/NA	Design principles for Hamlet 1, contained in PPR (Feb2008).	
Granges Submitted.			Project application for Hamlet 1 withdrawn	

Table 7 – IHAP's Recommendations

The PPR (Feb2008) satisfies 13 of the 15 detailed recommendations recommended by IHAP. The remaining recommendations after detailed assessment by the Department were addressed by modifications to the Concept Plan.

7.3 Key Issues – Catherine Hill Bay and Gwandalan

The following section deals with issues which are common to both development sites, Catherine Hill Bay and Gwandalan. Issues relating specifically to Catherine Hill bay are dealt with in **Section 7.4** and those which relate to Gwandalan only are dealt with in **Section 7.5**.

7.3.1 Regional Contributions - Social Infrastructure and Access to Emergency Services

The Proponent has offered through the statement of commitments a contribution rate of \$3,685.00 per dwelling to be paid towards regional infrastructure. This equates up to an amount of \$2.9 million for a total of 787 dwellings (600 dwellings at CHB plus 187 dwellings at Gwandalan), with \$689,095 cash contribution for the Gwandalan development and \$2,211,000 cash contribution for the CHB development. The Proponent Statement of Commitments includes provision for the Pacific Highway road upgrade (this is not supported. The Department believes road upgrades should be in addition to the contributions – see Section 7.3.5)

The Social Sustainability Report prepared by Key Insights Pty was provided by the proponent to supplement the original assessment and found that there were capacity issues in the education, hospital, and public transport facilities in the area but indicated that the proposal would stimulate the local economies, providing that the proponent uses local contractors during the subdivision and construction stages. The proponent has offered in their Statement of Commitments provide developer contributions in order to ameliorate the impact of their development on regional services. Specifically the proponent has offered local contributions in line with the s94 contribution for CHB and Gwandalan (an applying at time of original lodgement) and \$3,685.00 per dwelling in regional contributions and works in kind in the Statement of Commitments.

Under the State Infrastructure Contributions, in accordance with the Department's Circular PS 07-018 State Government agencies can levy for the cost of infrastructure items where the need for that infrastructure arises from the development of land.

The Ambulance Service of NSW, Ministry of Transport, NSW Sydney Central Coast NSW Health, Hunter Regional Development Committee, Department of Planning Regional Office, Nature Conservation Council of NSW, Lake Macquarie Council, Wyong Shire Council, NSW Police Force and a number of public submissions raised concern about access to social infrastructure and emergency services to both the Gwandalan and Catherine Hill Bay sites.

Hospitals/medical facilities

The nearest major referral centre is located 40 km to the north of the site and the nearest acute facility and afterhours GP services are 29 km to the north of the CHB/Gwandalan. While some distance it is comparable to other residential development in the area.

Public Transport

Gwandalan is currently serviced Monday – Saturday by five buses and on Sunday by two buses per-day each way between Charlestown and Lake Haven, however, the long duration of the journey may discourage patronage.

CHB is currently serviced Monday – Saturday by five buses and on Sunday by two buses per-day each way between Charlestown and Lake Haven, however, the long duration of the journey may discourage patronage. The bus route and timetable may need to be reviewed

Emergency Services

In terms of emergency services, the closest emergency services to Gwandalan are:

- Ambulance station 13 km from the site in Toukley;
- NSW Police Force station 19 km from the site at Swansea;
- NSW Rural Fire Brigade station in Gwandalan.

and to Catherine Hill Bay are:

• Ambulance station - 16 km from the site in Belmont;

- NSW Police Force station 9 km from the site at Swansea;
- NSW Rural Fire Brigade station 6 km from the site in Nords Wharf.

The NSW Ambulance and NSW Police Force have indicated that there maybe a need to upgrade their capacity to deal with the requirements imposed by an increased population as a result of the Proposed developments. This could be reasonably accommodated within the proposed regional contributions.

Gwandalan Public School (GPS)

GPS has a current enrolment of 450 students. The Department of Education (DET) has been consulted and responded that the GPS should be upgraded to accommodate the growing population.

The latest census identified that the Lake Macquarie area generates 27 primary school students for every 100 houses. Calculated from the revised lot numbers this would result in an additional 50 students from Gwandalan only. CHB could contribute up to 162 children, depending on the 'permanency' of the population when the 7 Hamlets are developed (GPS is the closest public primary school to CHB). DET have advised that no non-Government PS or other Government PS are within reasonable distance to accommodate the additional primary students. In consultation with DET and Treasury, it is considered that a large portion of the regional contribution of could be attributed to the upgrade of educational facilities.

Roads

The Hunter Regional Development Committee and the RTA have advised that upgrades to the intersections at Pacific Highway and Montefiore Parkway and the Pacific Hwy and Kanangra Drive are required as a direct result of the Proponent's development at Catherine Hill Bay and Gwandalan and Coal and Allied's proposed development at Middle Camp, Nords Wharf and Gwandalan.

The Proponent has identified that the provision of intersection works at the Pacific Highway would cost approximately \$500,000 and specified that the value offered for regional contributions should be used to fund the intersection works.

The Department's view is that the regional contribution should fund the education and emergency services upgrade while the construction of the intersections at the Pacific Highway should be undertaken as part of a requirement of the development of the CHB/Moonee Village site (eg as works in kind).

The Department is satisfied that the regional contributions provided by the Proponent and proposed modifications will allow the State Agencies to ameliorate the impacts on the requirements on services in the area. It should be noted that a regional benefit is being provided to the State by the dedication of 310 hectares of conservation land.

Resolution

The Major Project SEPP amendment will include a 'satisfactory arrangements' clause with conditions and modifications to guide implementation of the Contributions.

7.3.2 Local Contributions – Catherine Hill Bay

Lake Macquarie Council has a section 94 Plan in place for Catherine Hill Bay. The proposed development is estimated to generate an increase in population from 153 residents to approximately 1653 residents for Catherine Hill Bay, and the subsequent need for additional community facilities, such as parks, multi-courts and sports fields to meet the local recreation needs of a new development. The nature of the population is not known, though it is anticipated that a proportion of these will be 'holiday houses' and therefore a portion of the population may be transitory.

The Proponent's Statement of Commitments and PPR (Feb2008) has proposed the following facilities for Catherine Hill Bay:

- 1. Clifftop reserve and walkway which will be dedicated to the public;
- 2. Moonee Beach access and carpark to be constructed if appropriate approval given by the future owners of the land approximately 57 cars.
- 3. Existing Park to be landscaped and dedicated to the public.
- 4. \$ 1.0m contribution (works in-kind) to upgrade the Catherine Hill Bay Surf Life Saving Club

- 5. Community facilities:
 - a) Village Park approximately 5.2ha
 - b) Hamlet 2 Village Green approximately 2.15ha, including
 - o Community centre
 - o An informal playing field
 - o Tennis Courts 2 courts
 - o Swimming Pool approximately 50 metres long
 - Bin Terrace Rooftop viewing platform and ancillary facilities
 - d) Hamlet Commons, including playgrounds 6 playgrounds in total
 - e) Managed Green Corridors
 - f) Bush Walks

C)

6. s94 Management Contribution of \$90,000 which equates to \$150.00 per dwelling

Contribution	Lake Macquarie Council s94 (per lot)	Rose Group Commitment Value (per lot)		Comment
Open Space and Re	creation			
	\$8,732	Village Park (52,000m ²)	\$6,067	
Open Space Acquisition	(equates to	Village Green (29,000m ²)	\$3,383	Land costs only
Acquisition	68,400m ²)	Coastal Walkway (land)	\$5,000	
		6 Playgrounds (const.)*	\$400	
		2 Tennis Courts (const.)*	\$267	
Recreational	*-------------	Swimming Pool (const.)*	\$220	
Facilities	\$5,538	Coastal Walkway (const.)*	\$667	Embellishment only
		Village Park (const.)*	\$2,250	
		Pocket Parks (const)*	\$1,201	
subtotal	\$14,270	subtotal	\$19,454	
Community Facilitie				
		Community Hall	\$1,153	Embellishment costs only
	\$2,191	Community Facilities Fund	\$1,600	
Capital		CHB Surf Life Saving Club	\$1,667	Statement of Commitment to provide \$1M works-in-kind
		Sewer and Water Service	\$4,333	
Land	\$611	nil	\$0	Community Hall Land already included in Open Space Acquisition
subtotal	\$2,802	subtotal	\$8,754	
Roadwork and Traff	ic Management			
		Upgrade of Montefiore Parkway	\$2,500	
		Hale Street	\$1,000	Embellishment costs
	no contribution required	Clarke Street	\$0	only
	required	Car Park adj to Hamlet 1	\$400	
		Perimeter Road	\$500	
		subtotal	\$4,400	
S94 Management	\$166		\$150	
Conservation	no contribution required	310 hectares		Land to be dedicated to National Parks
Total per dwelling	\$17,238		\$32,758	
Total for Concept (600 lots)	\$10,342,800		\$19,654,860	

* - land costs already factored into Village Green Land Costs. Land costs based on s94 plan

Table 8 – Comparison of s94 Contributions

Rose Group has provided for upgraded roads and community facilities beyond the requirements of Lake Macquarie Council and this is reflected in the different values between Council's s94 plan contribution of \$17,238.00/dwelling (total \$10,342,800) and Rosegroup's commitment of \$32,758/dwelling (total \$19,654,860).

The facilities proposed in the Statement of Commitments are reasonable in terms of s94 contributions as the items can be characterised as roads and traffic management, open space and recreational faculties, community facilities and infrastructure items, which are entirely consistent with the philosophy of s94 contributions. The proposed works can be considered works in kind or the monetary value of the facilities can be paid as a cash contribution to Council.

The management of facilities and open space provided will be managed and dedicated to Council, the Community Titles scheme or to DECC. The facilities and open areas to be dedicated to Council were resolved by negotiations between Lake Macquarie Council and Rosegroup. The details of the dedication and future management are as shown in table 9 below.

Facility	Dedicated to Council	Dedicated to Community Title	Others
Wallarah House precinct			Remain in Rosegroup ownership
Village Park	Yes, embellishment to Council's requirements		
Car park next to village park		Yes, with public access	
Coastal Walk			Dedicated to relevant public authority
Village Green (open space)	Yes		
Community Facilities (Tennis Court, Swimming Pool, Community Hall, play grounds)		Yes, with public access for the community	
Hamlet 2 Common		Yes	
Managed Bush Corridors, between hamlets.		Yes	
Asset Protection Zones		Yes	
External roads - Montefiore Parkway, Hale Street , Clarke Street (areas currently in private ownership) and the Hamlets 2 – 5 perimeter road	Yes		

Middle Camp Beach – (areas south of club in private ownership) –			Yes dedicate to DECC
Internal roads		Yes ,with public access	
Perimeter road to Hamlets 2 - 5	Yes - designed to agreed specifications between Council and Proponent		

Table 9 – Facilit	v and Open .	Space Dedication	And Management

Many of the suggested recreation facilities proposed in the Concept Plan are not supported by Council as some facility provision is considered excessive for this population and other facility provision has not been included. Council has indicated that it is unwilling to accept the dedication of the facilities, including:

- 1. The numerous pocket Parks
- 2. Village Green, as it is less than 5000m²
- 3. Children's playgrounds are proposed to be located within the:
 - a. Village Green children's playground (1), proposed to be managed by LMCC;
 - b. Village Centre Common and Bin Terrace play sculpture (1);
 - c. Village Park— interpretive playground (1), proposed to be managed by LMCC; and
 - d. Hamlet commons up to 7 informal play structures, proposed to be managed under community title.
- 4. Swimming Pool
- 5. Playing Field
- 6. Tennis Courts

The Department recommends that the Proponent dedicate the lands and the community facilities located within these lands to the Community Title Scheme (if the council will not accept them). If Council does not accept the dedication then the Community Title Scheme shall ensure that the facilities and lands are publicly accessible. The Proponent is also to contribute \$1,600.00 per lot into a Community Infrastructure Fund and the funds shall be managed by a 'Community Management Group (CMG)'. The CMG group which consists of equal representation between each of the Community Association, the proponent and local Council shall nominate funding for community projects and infrastructure within the Catherine Hill Bay and Middle Camp areas. It is noted that the Department is aware of Council's preliminary investigations into providing a recreational facility within the Middle Camp area and that the above Community Infrastructure Fund could be used for this purpose.

The facilities proposed will improve the services and enjoyment of future residents and go beyond the facilities provided in a standard residential subdivision. The facilities listed as they benefit the community should be considered as credits against the s94 contributions payable.

Resolution

The Department is satisfied that the issue is resolved by modifications imposed on the Concept Plan and the revised Statement of Commitment.

7.3.3 Local Contributions- Gwandalan

The local contributions proposed by the proponent were based on Wyong Councils s94 Plan (CP12) which was the applicable s94 Plan at the time of lodgement. On 1 February 2008, after the Proponent had lodged the proposal, Council made the Northern Districts Contribution Plan (NDCP) and retrospectively applied the plan to all development not yet determined. The Gwandalan site is identified as Catchment Area E, for which a levy of \$12,392.00 per dwelling unit is stipulated for Roads and Traffic Management, Open Space and Recreational Facilities, Community Facilities and s94 Administration.

Council's Shire Wide Contributions Plan, which came into effect on 20 July 2007, stipulates a contribution rate of \$ 1111.98 per lot, which is in addition to the rates contained in NDCP.

The table below provides a comparison of Council's contribution rates per lot and the Proponent's proposed contributions.

	Wyong s CP12 s94 Plan (Current at Time of Lodgement)	94 Plans Northern Districts Contribution Plan (current)	Rose Group Commitment			
Contribution	per lot	per lot	Commitment	per lot	Comment	
Roads and Traffic Mana	agement					
Kanangra Drive Upgrade	\$2,668.00	\$4,875.00	Monetary Contribution	\$2,668.00		
Open Space and Recrea	ational Facilities					
			4,400m ² park	\$1,647.06	Land cost only	
	\$3,036.00	\$3,828.00	park embellishment	\$363.63		
	<i>43,030.00</i>	\$3,020.00	Informal park 14,900m ²	\$1,991.98	Land cost only	
			subtotal	\$4,002.67		
Community Facilities	\$2,512.00	\$3,238.00		\$2,512.00		
Infrastructure and Community wide services	\$1,111.98	Nil	Monetary Contribution	\$1,111.98		
s94 Administration		\$ 451.00		nil		
Total per dwelling	\$9,327.98	\$12,392.00		\$10,294.65		
Total per concept (187 lots)	\$1,744,332.26	\$2,317,304.00		\$1,925,099.07		
* Land costs based on re	* Land costs based on representative s94 land costs					

Table 10 Comparison of Section 94 contribution rates (Gwandalan)

Rose Group has provided for open space beyond the requirements of Wyong Council and this is reflected in the different values between Council's s94 plan contribution of \$9,327.98/dwelling (total \$1,744,332.26) and Rosegroup's commitment of \$10,294.65/dwelling (total \$1,925,099.07).

The Department recommends that the Proponent pay the local Contribution rates in line with the Contribution Plan in force at the time of submission of the development proposal. The Contribution for roads and traffic management is fair and reasonable as a contribution to upgrading Kanangra Drive. The costs of footpaths/cycleways and traffic control and management devices as part of the development will be provided directly by the proponent. The contribution for Community facilities is considered fair and reasonable as the PPR (Feb2008) reduced the number of dwellings from 312 to 187 and therefore reduced the impact on existing Community facilities. The proposed contribution of \$6,331.98 cash contribution plus, 14,000m² in open/recreational land, a 4400m² hectare park, including \$66,800 embellishment is considered to be a fair and reasonable contribution for the additional community services and facilities required due to the additional population.

Resolution

The Department is satisfied that this issue has been addressed by the conditions of the Project Approval.

7.3.4 Interface Issues

The CHB and Gwandalan development sites adjoin sensitive bushland environments, namely, Point Wolstoncroft State Recreation Area to the north of Gwandalan, Munmorah State Conservation Area to the south of the

Moonee Hamlets and the proposed dedication lands surrounding Hamlets 6 and 7 and to the west of Hamlet 5. Management of the development and conservation land interface is critical to ensure that no direct impacts occur in the short and long term on the adjoining areas at Gwandalan and Catherine Hill Bay. A number of direct and indirect impacts are considered likely to occur from stormwater runoff, dumping of rubbish, weed encroachment, creation of trails and increased human access/visitation.

As such, appropriate management plans that provide mitigation measures to reduce the impact of development should be prepared and implemented for the CHB and Gwandalan development lands.

The Department recommends that management plans be prepared in consultation with the adjacent land managers to ensure consistency of management strategies with the adjacent offset lands, Munmorah State Conservation Area and with the managers of Point Wolstoncroft State Recreation Area that address management of the development and conservation land interface adjacent to the CHB and Gwandalan development lands.

In particular, the Department recommends that a weed management and monitoring plan be prepared and implemented to minimise the potential for the invasion of aquatic and terrestrial weed species into the SEPP 14 wetland and buffer zones.

It is also recommended that a water quality and quantity monitoring plan be prepared and implemented that of addresses stormwater runoff from both the CHB and Gwandalan development lands and that this plan minimises potential impacts on Endangered Ecological Communities, the SEPP 14 wetland, Lake Macquarie and known Wallum Froglet habitat. These plans are to be prepared in consultation with the relevant authorities and land managers and all stormwater infrastructure is to be located within the development site.

The concept plan identifies that a number of walking trails will be provided in areas adjoining the development footprint, providing access to the Headland and Moonee Beach. Due to the potential environmental impacts of providing new pedestrian access in these areas, the Department recommends the final position of the access trails and the pedestrian access arrangements be determined in consultation with the DECC and that arrangements be put in place in regards to the maintenance of the trails and walkways. The proponent shall allow public access rights.

Resolution

The Department is satisfied that interface management issues can be adequately addressed through modifications to the concept plan that ensure adequate mitigation and management measures are established to minimise impacts of the urban development.

7.3.5 Traffic – Catherine Hill Bay & Gwandalan

Raised by:

Hunter Regional Advisory Committee, NSW Roads & Traffic Authority, Lake Macquarie City Council, Wyong Shire Council, and the Department

The proposal was referred to the Hunter Regional Development Committee (HRDC) as it is a development described by SEPP 11 – Traffic Generating Developments (Repealed by Infrastructure SEPP gazetted 21 December 2007). The issues raised by the HRDC, were also generally raised by the NSW Roads & Traffic Authority, Lake Macquarie City Council, and Wyong Shire Council and related to:

1) Regional Traffic Issues:

The Developments at Catherine Hill Bay and Gwandalan will impact on the Pacific Highway, which is part of State Road Network and an RTA controlled road. The main impact of the Catherine Hill Bay development will be the increased traffic using the intersection of the Montefiore Parkway and the Pacific Highway. The Montefiore Parkway is currently a privately owned roadway and is an important link in providing access to the proposed development. The Gwandalan development will impact on the intersection of Kanangra Drive and the Pacific Highway. The requirement to upgrade the Pacific Highway intersections has also taken into consideration the proposed development proposals by Coal & Allied at Catherine Hill Bay, Gwandalan, and Nords Wharf and the approportion of the upgrade costs that should be borne by the Proponent.

While the traffic report prepared Masson Wilson Twiney (MWT) on behalf of the Proponent does not take into consideration the cumulative impact of the proposed developments by Coal & Allied at Gwandalan and Catherine Hill Bay in estimating the impacts on the Pacific Highway, the cumulative impacts were taken into consideration by the Department, notwithstanding that the Coal and Allied proposal has not been determined. The MWT report estimates that the peak hour vehicle movements along the Montefiore Parkway will increase from 33 – 53 vehicle trips/hr to 234 – 236 vehicle trips/hr when the seven Hamlets have been completed. As identified in the MWT report the Montefiore Parkway will be the main route taken for access to the Pacific Highway from Catherine Hill Bay. The increase in the traffic flows at peak times alters the classification of Montefiore Parkway from a 'local road' to a 'collector road' as the vehicle trips exceed 200 vehicle trips/hr.

At Gwandalan the MWT Report states that the current peak hour traffic flow along Kanangra Drive can reach 600 vehicle trips/hr and that the Gwandalan development will contribute an additional 183 vehicle trips/hr to the peak traffic flow. The cumulative impact from both the Rose Group and Coal and Allied proposal would require the reclassification of Kanangra Drive as a sub-arterial road as the peak vehicle trips/hr would exceed 1000 vehicle trips/hr, but the reclassification would only be required between the Coal & Allied development and the Pacific Highway intersection. Kanangra Drive is the sole exit point for Gwandalan and Summerland Point onto the Pacific Highway.

The RTA has informed the Department of the preferred upgrades required along the Pacific Highway and apportioned the cost according to the impact caused by the proposed development. The actual costs of the upgrades are currently being assessed by the RTA. The RTA assessment was based on the cumulative impacts caused by the both the Rose Group and Coal & Allied developments.

Developable Land	Rose Group			Coal & Allied		
Intersection	Gwandalan	Catherine Hill	Gwandalan	Catherine Hill	Nords Wharf	
Flowers Drive	0%	54.5%	0%	45.5%	0%	
Awabakal opt I	0%	0%	0%	0%	100%	
Awabakal opt 2	0%	50.4%	0%	42.1%	7.6%	
Montefiore Rd	0%	54.5%	0%	45.5%	0%	
Kanangra Dr	18.4%	0%	81.6%	0%	0%	

Note: Awabakal Opt 2 refers to the comment outlined below.

Table 11- RTA Apportionment of Intersection Upgrades Works

The Department disagrees with the breakdown and recommends that the intersection upgrade costs be apportioned according to the main access routes of the proposed development. Although the change is minor it will lead to practical improvements if implemented. The upgrade of the Montefiore Parkway and Pacific Highway should be borne entirely by Rose Group as this is the main access route to the Pacific Highway. The Gwandalan apportionment of the cost between Coal & Allied and Rosegroup of the intersection upgrade (Kanangra Drive/Pacific Highway) should be in accordance with the developments approved.

The final detail designs will need to be resolved by further consultation between the RTA and the proponent (with the Department acting as arbitrator, if required). The proposed upgrade work will need to form part of a legally binding agreement to ensure the payment of the upgrade works or contribution in kind.

Resolution

The Department recommends that the Pacific Highway upgrades and apportionment of costs forms part of a legally binding agreement. The cost of upgrading the Pacific Highway intersections is in addition to the \$3,685.00 per lot Regional contribution to be paid.

2) Public Transport

The submissions by the HRDC, Lake Macquarie City Council, and Wyong Shire Council raise concerns regarding the provision of bus services and bus stops. The Department is of the opinion that issues raised in submissions regarding bus services can be addressed by discussions with the Ministry of Transport for the provision of bus services.

Resolution

The Department is of the opinion that the issue of Public Transport has been satisfactorily addressed.

7.3.6 Environmental Offset/ Memorandum of Understanding

In order to support and complement the Lower Hunter Regional Strategy the NSW Government intends to implement an Environmental Land Offset Scheme and the Lower Hunter regional Conservation Plan.

The aims of the Environmental Land Offset Scheme are:

- i). Increase public ownership of certain land in the Lower Hunter region for dedication as conservation reserve; and
- ii). Recognise the development potential of certain other land in the Lower Hunter region

The Rose Property Group lands are part of the Environmental Land Offset Scheme for the Lower hunter Region and on that basis a Memorandum of Understanding (MoU) with the NSW Government was signed on the 16 October 2006 between the then NSW Minister for the Environment, the NSW Minister for Planning, Coastal Hamlets Pty Ltd and Lakeside Living Pty Ltd. The MoU outlines the intention to implement an Environmental Lands Offset Scheme. The proposal includes the development of up to 60ha of land at CHB and up to 26ha of land at Gwandalan and the provision of 310ha of land to conservation (transferred to DECC estate).

The Biodiversity values of the Catherine Hill Bay Holdings include:

- 310ha of conservation lands, including up to 16ha of degraded / contaminated lands from former mining activities.
- Four endangered ecological communities (EECs): Swamp Sclerophyll Forest, Swamp Oak Floodplain Forest, Coastal Saltmarsh, and Freshwater Wetlands on Coastal Floodplains.
- Two threatened flora species: Cryptostylis hunteriana and Tetratheca juncea.
- Fifteen (15) threatened fauna recorded or likely to occur, including Wallum Froglet, Glossy Black-Cockatoo, Regent Honeyeater, Swift Parrot, Powerful Owl, Masked Owl, Eastern Pygmy Possum, Grey-headed Flyingfox, Little Bent-wing Bat, Eastern Bent-wing Bat, Eastern Free-tail Bat, Yellow-bellied Sheath-tailed Bat, Eastern False Pipistrelle, Large-footed Myotis and Greater Broad-nosed Bat.
- Within the Wallarah Peninsula, the Rosegroup and Coal & Allied landholdings provide the key connections of
 relatively intact remnant native vegetation between Munmorah State Conservation Area (SCA), Lake
 Macquarie SCA and Wallarah National Park. Collectively, these private landholdings are considered to be
 some of the key parcels within the peninsula that are likely to ensure the conservation of area's biodiversity
 and the long-term viability and functioning of the wildlife corridor.
- The proposed conservation areas are of sufficient size, contain a diversity of habitats, and are continuous
 with existing reserves, enabling them to sustain viable populations of a large number of flora and fauna
 species.

The Rosegroup lands within the Wallarah Peninsula have a very high biodiversity significance and provide connectivity between existing conservation reserves. Due to the restricted and localised nature of many of the vegetation communities and habitats within the site there are limited opportunities elsewhere to ensure their adequate protection and management into the future.

DECC in their submission stated that 'the majority of the lands identified for conservation offsets are eminently suitable for addition to the reserve system. There are, however, some small portions of the lands proposed for transfer, which are unsuitable for addition to the reserve system'.

Given the above the Department is of the view that the substantial dedications of lands containing threatened species forms an appropriate offset to the relatively small impacts on the largely disturbed sites at both Catherine Hill Bay and Gwandalan. However where localised impacts have been seen as not being appropriate or needing monitoring the Department has recommended modifications or conditions.

7.3.7 Ecologically Sustainable Development

Whilst this report generally represents an assessment of ecologically sustainable development (ESD), it is considered appropriate to specifically consider the Concept Plan and Project Application in light of the DGRs that required the EA to:

'demonstrate how the development will commit to ESD principles in design, construction and ongoing operation.

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).

The Department has considered the redevelopment in relation to the ESD principles and has made the following conclusions:

- Integration Principle the social and economic benefits of the proposal are well documented. The
 environmental impacts are and will be addressed through the Proponent's Statement of Commitments
 and conditions of approval to minmise environmental impact. Additionally the environmental impacts will
 be assessed as future applications are submitted. The Department's assessment has duly considered all
 issues raised by the community and public authorities. The proposal as recommended for approval does
 not compromise a particular stakeholder or hinder the opportunities of others.
- **Precautionary Principle** Following an assessment of the proponent's EA it is considered with certainty that there is no threat of serious or irreversible environmental damage as a result of the proposal. The CHB site is mainly degraded mining lands that have been extensively degraded for some time and the site has therefore a low level of environmental sensitivity. The development lands at CHB have been primarily restricted to degraded ex-mining lands. The Gwandalan site is 70% remnant open forest and the rest of the site and the forest undergrowth was cleared for grazing purposes. The proposed dedication of 310ha of conservations lands is a significant offset in relation to any environmental impact of the proposed development.
- Inter-Generational Principle It is considered that the proposed CHB development represents a
 sustainable use of a site which has had a long association with the surrounding community as a working
 mine. The redevelopment of this site will rehabilitate degraded disused mining land. The Gwandalan
 development is an extension of existing residential development and the extra population will result in
 additional infrastructure and services which will benefit the entire local community. The residential
 nature of the proposal will also indirectly reduce the rate of development demand as well as enabling the
 orderly and timely redevelopment of land no longer required for its original purpose. It is considered that
 the redevelopment of this site will have positive social, economic and environmental impacts and as a
 result will maintain the environment for the benefit of future generations.
- Biodiversity Principle Following an assessment of the proponent's EA it is recommended that the concept plan be modified to remove development from an area containing individuals of leafless tongue orchid (*cryptostylis hunteriana*) and its habitat as this population is significant at a local, regional state and Commonwealth level. It is considered on balance that the remaining development creates no threat of serious or irreversible environmental damage. As stated earlier, the CHB site has been extensively degraded for some time and therefore the site has a low level of environmental sensitivity. The Gwandalan site has been cleared of undergrowth and the remnant forest is in mainly poor condition, but

copses of good specimens have been retained in the proposed development. Therefore the proposal will not impact upon the conservation of biological diversity or ecological integrity.

• 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.

In addition to the above, the Proponent has committed to ESD principles through incorporating the following sustainable development initiatives:

- Providing a street pattern to maximise solar access;
- Providing pedestrian and cycle permeability and provision for bus routes;
- Locating major destinations (such as the Village Centre and Village Green) within easy access to bus route;
- Using deciduous trees to the north of internal and external living spaces to maximise solar access and light availability in winter;
- Maximising the opportunities for natural ventilation through street pattern and orientation of houses;
- Built form controls and a lot layout design at Gwandalan that maximises solar efficiency;
- A high landscape to building ratio to increase filtration and reduce stormwater runoff;
- Revegetating an extensive portion of existing spoiled area with native species; and
- Applying WSUD principles to stormwater management.

Furthermore, the development of dwellings will be required to comply with all requirements of BASIX during future applications for the site.

The proposed developments are not located on flood prone areas and will not interfere with any natural watercourses and give rise to flooding issues. The proposed developments will also allow for natural drainage of the development sites, thereby not creating any flooding risks.

The development at Catherine Hill Bay will not be adversely affected by changes to the sea level as a result of climate change due to the floor levels of the proposed dwellings. In regards to the impact of Climate change at Gwandalan refer to **Section 7.5.8**.

Consequently, the Department is satisfied that the proposal is consistent with ESD principles. Further assessment of ESD principles will be undertaken during subsequent project application stages of the proposal.

7.3.8 Mining and Exploration

The DPI has raised concern about the potential of the proposed development and associated conservation offsets to restrict access for exploration for petroleum, coal and other resources and future mining of coal (particularly below the Gwandalan site); and to adversely affect or delay the progress of the Mine Closure Plan for Consolidated Coal Lease (CCL) 706. The DPI is of the view that resource potential remains in the area and that rehabilitation liabilities remain at the CHB site which constrain the proposed development and the dedication of land to the NSW Government for conservation.

At the time of DPIs submission the following licences existed for the proposed development areas for coal and petroleum production:

- The Gwandalan site is partly covered by Consolidated Coal Lease (CCL) 707 held by Lakecoal (now Peabody).
- The Catherine Hill Bay area is covered by a current Petroleum Exploration Licence (PEL) 446.
- The Gwandalan site is covered by PEL (5) western half and PEL 446 (eastern half).

Statement of Commitment B5 agrees to negotiation with the holders of Petroleum Exploration Licence Nos 5 and 446 to allow exploration prior to construction works. The Draft SEPP amendment includes a provision that permits access for petroleum exploration and possible future gas and coal recovery within the subject land. This provision ensures that the subject land does not sterilise future gas and coal exploration and recovery. However any future proposal will need to address environmental impacts.

Mine Closure Plan

The DPI has specific concerns regarding Lakecoal's mine closure and rehabilitation plans and the proposed adaptive reuse of certain buildings and facilities and the need for on-going after care maintenance by the Proponent to fulfil mine closure requirements under the *Mining Act 1992*.

Lakecoal is the holder of current Consolidated Coal Lease (CCL) 706. CCL 706 land is owned by the Proponent. Lakecoal's mine closure and completion on the Proponent's land must be carried out to the satisfaction of DPI. The DPI has identified particular constraints that need to be addressed prior to or as conditions of consent or as part of the arrangements made in relation to the transfer of land to the NSW Government:

- a) Dedication of Montefiore Parkway as a public road;
- b) Wallarah Colliery Pit Top site (west of the Pacific Highway) requires removal or adaptive reuse of the paved access road and various standard fencing;
- c) Confirmation of the sustainable establishment of native revegetation of the Possum Gully Emplacement (located to the west of the CHB Village and west of the Moonee Village proposal);
- Specific building assessment, supported by geotechnical studies to confirm that the Bin Building structure is stable and safe to satisfy residential use requirements;
- e) The proposed residential development areas and land dedication areas do not adequately identify where materials are to be removed and remediated to conclude mine closure responsibilities;
- f) The removal and/or remediation of a 3,000t underground bunker and feeder tunnel constructed of reinforced concrete in an area proposed for residential development.

In response to item a), the Proponent's Statement of Commitments identify that "the majority of Montefiore Parkway will be dedicated as a public road." The Department recommends that the Proponent be required to provide public access for the remainder of Montefiore Parkway (from Clarke Street through Hamlet 1 to Hale Street).

In relation to the rehabilitation requirements for Wallarah Colliery Pit Top site (item b) above), Possum Gully Emplacement (item c above), and any remediation to be undertaken in the lands proposed to be dedicated are to be determined through the deed of agreement for the future management arrangements for the dedication lands.

With regards to item d) the Department has recommended previously, in response to the IHAP's recommendations that no approval be provided for the adaptive reuse of the Bin Building at this stage and any future use of the Bin Building will require a separate application. It is further recommended that a modification be applied that requires a building assessment, supported by geotechnical studies be provided to verify that the structure is stable and safe for intended use.

With regards to item f) above, the DPI has specifically requested that the removal and/or remediation of this structure be addressed in consent conditions. In response, the Department recommends that the Proponent provide detailed information about any outstanding mine closure activities required to be undertaken within the residential development area (to be finalised prior to residential development of the land) in consultation with the DPI.

Resolution

The Department is satisfied that mine closure management issues raised by the DPI can be adequately addressed through a Modification to the concept plan and the statutory processes available to the DPI. Future access to potential resources is a matter for the Draft SEPP and the rehabilitation of lands outside the development footprint is a matter to be negotiated through the transfer arrangements in the deed of agreement.

7.4 Key Issues - Catherine Hill Bay

The following section deals with issues which relate specifically to Catherine Hill Bay. Issues common to both development sites, Catherine Hill Bay and Gwandalan have been discussed in **Section 7.3**. Issues which relate to Gwandalan only are dealt with in **Section 7.5**.

7.4.1 Community Land vs. Community Title Land

The PPR includes two open space areas within the proposed development area of CHB and a series of bushland corridors between each hamlet (see figure 11 below). The land between the existing Catherine Hill Bay Village and the Wallarah House Precinct is proposed to be upgraded to a **Village Park**, enhanced as a public park with riparian planting, pathways, seats and an interpretive playground. The **Village Green/ Community Park** located at the north of Hamlet 3 and to the south of Montefiore Parkway is proposed to contain a village green for community activities, a swimming pool and tennis courts, to be built by the proponent.



Figure 11- The Moonee Hamlets – Open Area and Community Areas Structure Plan

Concern has been raised by Lake Macquarie Council about the provision of public facilities and has indicated that many of the suggested recreation facilities proposed in the concept plan are considered excessive for this population and other facility provision has not been included. Council has also indicated that it will not accept management responsibility for the Village Park, Childrens Playgrounds, Swimming Pool and the bush corridors. A lack of detail has been provided regarding the proposed future management of the public open space areas.

In response the Department recommends that the Proponent be required to prepare a Plan of Management that outlines the details for the establishment, management, and ongoing maintenance responsibilities for open space areas and community facilities. The Plan of Management must demonstrate that the land will be free of weeds, hazards, abandoned structures, materials, and contamination and be rehabilitated and enhanced with appropriate landscaping and facilities. The Plan of Management will need to be administered by a community management.

Resolution

If Council do not agree to the dedication of the open space then the lands are to be Community Title. All parks should be open to the public. These community facilities shall be available to all residents of Catherine Hill Bay, although this could be further considered at project Application Stage.

7.4.2 Heritage

There are a number of items within the concept plan area that are listed as items of local heritage significance in Lake Macquarie Councils LEP, namely Wallarah House, Catherine Hill Bay Colliery Railway and adjoining the concept plan site, namely the Coal Loading Jetty.

In 2005 the Catherine Hill Bay Progress Association nominated the Catherine Hill Heritage Conservation Area for listing on the State Heritage Register. The NSW Heritage Office has not determined the State Heritage Register.

The Catherine Hill Bay Village and surrounding area are recognised for its heritage significance and as such are identified as a Heritage Conservation Area in the Lake Macquarie Council DCP and recently declared as the Catherine Hill Bay Heritage Conservation Area in a recent amendment to the Lake Macquarie LEP (20 March 2008).

The PPR has generally responded to recommendations made by the IHAP and issues raised in submissions through the incorporation of a number of measures to protect the heritage significance of the Catherine Hill Bay Village, including a Village Park to provide a setback between the Catherine Hill Bay Village and proposed development, building controls to limit development within the visual catchment of the Catherine Hill Bay Village, the creation of the Wallarah House Heritage Precinct, the exclusion of any development between Wallarah House and the Jetty Masters Cottage, residential development located below the ridgeline of Montefiore Parkway and the provision of vegetated buffers along Montefiore Parkway to protect the scenic approach to Catherine Hill Bay.

In response to these matters the Department recommends the concept plan be modified to require following:

- 1. A landscaped area between the development of Hamlet 1 and Wallarah House be provided that adequately screens development within the Wallarah House curtilage;
- 2. Landscaping of the carpark located on the corner of Clarke Street and Montefiore Parkway to reduce the its visual prominence;
- 3. The preparation of an interpretation strategy in consultation with the NSW Heritage Office for the area and include the former Moonee Colliery site, Wallarah House, Jetty Masters House, the Bin Building, Colliery Railway, the coal loader jetty and other relevant heritage items to be retained;
- 4. A requirement for future development of Hamlets 2 to 5 is the establishment of a vegetation buffer along Montefiore Parkway to ensure the vista as you approach Catherine Hill Bay along Montefiore Parkway is maintained.
- 5. The preparation of a conservation management plan for Wallarah House, including the requirement that any ancillary structures within the curtilage of Wallarah House do not exceed 1.8m in height.

Coal Loading Jetty

The Coal Loading Jetty that adjoins the Catherine Hill Bay site was constructed during the early Twentieth Century in order to transport coal from the operation of the Moonee and Wallarah Collieries to Sydney via oceangoing vessels in light of the poor / limited road access to Sydney from Catherine Hill Bay. The current jetty was reconstructed in the 1970s after severe storms damaged the 1910s Jetty.

The Jetty is identified as a heritage item of local Significance Lake Macquarie Local Environment Plan and is included in the boundary of the Heritage Conservation Area identified in the recent amendments to the Lake Macquarie LEP.

The Heritage Office has indicated that the Jetty is currently part of a broader application to the Heritage Council to consider listing Catherine Hill Bay on the State Heritage Register.

The IHAP's interim report recommended that the adaptive reuse of the jetty for commercial uses be explored. Although the jetty is within the vicinity of the proposed development, the jetty falls outside the boundary of the concept plan. The Departments view is while the re-use of the coal loading jetty is desirable it does not form part of Rose Property Group's development proposal and therefore no further consideration is required.

Resolution

The Department is satisfied that issues relating to the heritage significance of Catherine Hill Bay have been adequately addressed through the PPR and modification to the concept plan.

7.4.3 Contaminated Land

The EA and SSS Study found that various areas of the CHB site may be affected by contamination arising from past land uses.

Lakecoal completed site contamination studies (Stage 1 Assessment and Stage 2 remediation) as part of the Mine closure plan, provided with the EA documentation. Concern has been raised about the relevance of the contamination reports prepared by HLA as the assessment criteria for the investigations undertaken by HLA were for recreational and public open space land consistent with the requirements established for closure of the mine closure.

The EA identified that contamination is isolated, consisting of asbestos containing materials (ACM), mineral fibre, lead paint and some heavy metal and hydrocarbon hotspot contamination. In particular, the contamination report prepared by HLA Envirosciences (August 2004) identified areas with poly aromatic hydrocarbons (PAH) at levels up to 1.4 times the site assessment criterion and total petroleum hydrocarbons (TPH) at levels up to 7.9 times the site assessment criterion. HLA Envirosciences attributed these high levels to the presence of coal fines. Additionally, a report by HLA Envirosciences (October 2004) identified exceedences of the phytotoxicity assessment criteria in the sediments for the site sedimentation ponds.

The DPI has also indicated that there is a likely risk of hydrocarbon contamination beneath concrete slabs and footings remaining at the Moonee Colliery site and recommended that removal of these slabs would require further site contamination studies, using SIL1 and SIL2 investigation criteria.

In response to this issue the Proponent was requested to confirm that remediation of contaminated land could be undertaken to a level to support residential use. The Proponent provided in the PPR a letter dated 23 November 2007 from HLA Envirosciences, which concluded that the potential for significant contamination to exist at the Catherine Hill Bay site is low and remediation is possible. The letter also stated that the residential end land use could be achieved subject to Category 2 remediation.

The Proponents Statement of Commitments for the Concept Plan regarding land contamination investigation are:

"to ensure the site is suitable for residential purposes additional assessment will be carried out as necessary. Site audits will be carried out as necessary to certify the suitability of the site for the proposed uses and according to SEPP 55 Guidelines."

The Department recommends that a Remedial Action Plan (RAP) for Category 2 remediation be prepared and lodged with any future project applications for the site. An asbestos management plan is also required to be developed and incorporated into the future management of the site to address the possibility of uncovering hidden or undetected asbestos during future site earthworks.

The Department is of the opinion based on the information and report received that the site is suitable for the proposed use. Prior to the issue of construction certificates for any future applications, an independent government accredited site auditor is to be appointed by the Proponent to oversee the remediation of the contaminated land and a site audit statement be required to ensure that the land is suitable for the intended use.

Resolution

The Department is satisfied that contaminated land management issues have been addressed through a modification to the concept plan.

7.4.4 Mine Subsidence and Geotechnical Issues

The Mine Subsidence Board (MSB), Department of Primary Industries and Wyong Shire Council have raised concerns about the geotechnical stability of the site.

Due to the previous mining use of the CHB site and the extensive amount of cut and fill that is proposed for the future development of this site, it is vital that the stability and load bearing capacity of the ground, particularly since the proponent proposes to place fill on the existing uncontrolled fill is adequately addressed prior to the commencement of construction. This is further compounded due to the location of the site in a mine subsidence district.

The Department was aware that the Project Application MP 06_0108 included a request for the on site placement of fill and that uncompacted fill was already present on the site. The site re-contouring will involve the movement of 750,000 m³ of fill, however, it is anticipated that no fill will need to be removed or imported. Concern has been raised about the stability of the site and the load bearing capacity of fill placed on uncontrolled fill, an issue that could be compounded by mine subsidence (particularly during compaction). MSB provided comment on the geotechnical report, stating that further information on the geotechnical capacity of the land was required, including details on the existing and proposed impacts of filling.

Due to the future development of the site requiring substantial earthworks (in the order of 750,000 m³ of cut to fill) the construction to identify and quantify the full extent of the earthworks, particularly in regard to deep consolidation of existing unconsolidated material, the demolition of existing concrete structures, the management of groundwater, slope stability, pavement design and the presence and strength of rock. The MSB stipulates the risk of mine subsidence must be removed by a suitable means, such as grouting. Alternatively, the Proponent must satisfy the MSB by confirming through geotechnical investigations that the workings are long-term, stable, and with no risk of mine subsidence.

The geotechnical investigation must be prepared to the satisfaction of the MSB and submitted to the Department prior to the commencement of earthworks.

Future applications must be accompanied be certified by a qualified structural engineer, to the effect that any construction that meets the specifications of the final geotechnical and building design will be safe, serviceable and repairable, taking into account the geotechnical conditions at the site.

The Department recommends that future project applications be required to demonstrate that they are capable of meeting the requirements of the MSB and that stability, subsidence potential, and load bearing capacity of the site have been addressed.

Resolution

The Department is satisfied that geotechnical management issues have been addressed through a modification to the concept plan.

7.4.5 Aboriginal Cultural Heritage

An Aboriginal Cultural Heritage Assessment Report, prepared by Environmental Resources Management Australia May 2007 (the ERM Report) was submitted with the EA. This report presents the results of an archaeological survey and Aboriginal consultation conducted from November 2006 to May 2007. Nine representatives from the local aboriginal community, including representatives from the Awabakal Traditional Owners Aboriginal Corporation, the Awabakal Descendents Traditional Owners Aboriginal Corporation, the Guringai Tribal Link Aboriginal Corporation and the Bahtahbah Aboriginal Land Council, participated in the fieldwork which was carried out between 20 and 21 December 2006.

The ERM report concludes that the development footprint is not considered to be archaeologically sensitive as no new Aboriginal sites were found and is therefore suitable for development. The conclusion was not supported by the Awabakal Descendents Traditional Owners Aboriginal Corporation and the Awabakal Traditional Owners Aboriginal Corporation.

The ERM Report identifies the existing Aboriginal Site (AHIMS no: 45-7-0216), which is described as including scatters of stone artefacts, as well as a midden shell, throughout the dune behind Moonee Beach, from the tidal

creek in the north to Flat Island in the south. The ERM Report found that the closest exposure of the artefacts associated with 45-7-0216 to the development footprint is 40 metres.

Concern has been raised by Council and the report prepared by Shane Frost on behalf of the Awabakal Descendents Traditional Owners Aboriginal Corporation about the potential impacts the development may have on this midden and artefact site due to its proximity to the development site.

The Department recognises that the increased population of the development and access to the adjoining bushland may increase the likely impact on aboriginal archaeological sites. The Department therefore recommends that the location and design of pedestrian access tracks to the south of the site consider the proximity and ease of access to sites containing known aboriginal archaeology and identify necessary mitigation measures required to protect these sites.

The Burra Charter defines the Cultural Significance as *…aesthetic, historic, scientific, social or spiritual value for the past, present or future generations.*' The comments from the Awabakal Descendents Traditional Owners Aboriginal Corporation and the Awabakal Traditional Owners Aboriginal Corporation argue that the social or spiritual value of the proposed development sites has not been addressed.

The conclusions of the ERM report while addressing the scientific archaeological values of the sites does not thoroughly address the issue of Cultural Significance as defined by the Burra Charter. The Proponent has not addressed this issue in the Statement for Commitments and therefore the Department recommends that a Management Plan be prepared that reasonably addresses the recommendations made by the Awabakal Traditional Owners Aboriginal Corporation.

Resolution

The Department is satisfied that this issue can be addressed by the conditions of approval to the concept plan and by future applications.

7.4.6 Flora and Fauna

Concern has been raised in a number of the agency submissions, namely Lake Macquarie Council, Wyong Shire Council, Nature Conservation Council of NSW, Department of Environment and Climate Change, NSW Health (Northern Sydney Central Coast) and a number of public submissions about the extent of flora and fauna surveying that has been undertaken and the impacts of the development of the CHB/Moonee Hamlets on threatened species and endangered ecological communities, such as the eastern pygmy possum habitat; *Tetratheca juncea*, native vegetation of the headland, endangered ecological community (littoral rainforest); and the boundary of the wetland and wet heath vegetation communities.

DECC in their submission stated that *'the majority of the lands identified for conservation offsets are eminently suitable for addition to the reserve system.'* The conservation lands to be dedicated will contribute to the protection of endangered ecological communities and contribute to the creation of a coastal corridor linking Wallarah National Park and Munmorah State Conservation area and a green buffer between Newcastle and the Central Coast. It will also create a green a corridor between Lake Macquarie and the ocean. The dedication of the lands to the Crown means that the lands will be in public ownership and part of the State's national parks and reserves system.

Flora and fauna surveys have been undertaken over a number of years and have targeted various areas of the development footprint and offset lands, as shown in the figure 12 below:



Figure 12 - Development Footprint and Offset Lands

In response to these concerns the Department requested that the Proponent undertake a review of previous work, an assessment of any gaps in the studies and confirmation of the values of the offset lands.

Harper Somers O'Sullivan December 2007 (the HSO Report) confirm the like-for-like nature of the offset lands and comment that given that measures have been taken to avoid ecological impacts where possible, it is considered unlikely that any significant impacts would occur upon threatened species, communities or populations.

The HSO Report provides a series of recommendations in relation to the CHB development, specifically relating to the preservation of the leafless tongue orchid (*Cryptostylis hunteriana*) which is discussed below and the SEPP 14 wetland to the south of the CHB development (see Section 7.6.8 for further discussion). The HSO Report concludes that provided the recommended mitigation measures are adopted, the proposal should not significantly impact upon threatened or regionally significant flora and fauna, ecological communities or populations. Recent estimates by Rosegroup state that 5147 clumps of Tetratheca juncea are in the Rosegroup offset lands and onsite surveys should show the actual number to be higher than estimated.

The EPBC Addendum report prepared by Harper Somers O'Sullivan (September 2007) states that: 'The habitat for the threatened flora species which have been recorded within the site or have potential habitat within the Gwandalan site have potential habitat within proposed conservation offset lands which is far greater in area (at least 5 fold) than that which is proposed to be removed for the development. In addition, Tetratheca

juncea has been recorded throughout the offset areas and it is not considered that this species will be adversely impacted upon by the proposal such that the local population would be threatened with extinction'.

The recommendations of the HSO Report as they relate to the CHB development relate to undertaking further mapping of the Littoral Rainforest to determine the exact extent of the community; protection and minimisation of disturbance to the white bellied sea eagle nest occurring in the offset lands in consultation with DECC; minimising the amount of clearing in areas defined as native vegetation communities, especially areas containing vegetation consistent with EECs; the preparation of a *tetratheca juncea* management plan to ensure the long term conservation and survival; retention of mature or hollow bearing trees wherever possible; species selection for future landscape works and seed stock for revegetation to be limited to locally occurring native species; preparation of appropriate vegetation, habitat and bushfire management and environmental plans; protection of drainage lines during construction and nutrient and sediment control management.

The Proponent commits to the recommendations as set out in the HSO Report, with the exception of the recommendations as they relate to the protection of the leafless tongue orchid (*Cryptostylis hunteriana*). The Proponent has not made any commitment about the implementation arrangements, including timing. In response to the issue, the Department recommends that the leafless tongue orchid (*Cryptostylis hunteriana*) is protected and the Proponent be required to provide an Environmental Management Plan that provides details about the implementation of the recommendations made by Harper Somers O'Sullivan.

Cryptostylis Hunteriana - Leafless Tongue Orchid

The HSO Report recorded individuals of the leafless tongue orchid (*Cryptostylis hunteriana*) within Hamlet 6 of the CHB development lands. Cryptostylis Hunteriana is listed as vulnerable under the Threatened Species Conservation Act and is listed as a threatened species under the *Environmental Planning and Biodiversity Conservation Act.* Five patches containing 13 aboveground stems were recorded. The HSO Report identifies this population as "small but significant" due to the low numbers of this species which have been located within the locality.

HSO highly recommend that the *Cryptostylis hunteriana* individuals that have been identified and the surrounding Narrabeen Doyalson Coastal Woodland that is habitat for this species be retained. HSO further recommend that a buffer of at least 50m be implemented to protect this sensitive orchid from any proposed development areas. A management plan should be prepared to ensure the conservation and long term survival of this threatened species.

The Proponent has committed to protect and conserve the species within the CHB development lands, as recommended, for at least three years and to not commence construction within or in close proximity to the species and the habitat to which it was recorded. During this period the Proponent proposes to investigate the extent and occurrence within the offset lands to allow the significance of this population to be reassessed. The Proponent also suggests investigating alternative strategies with DECC such as translocation.

This Department's view is that translocation is not likely a viable option for this species, given that it is associated with a host plant, a symbiotic mycorrhizal fungus and a wasp pollinator.

In response to this issue the Department recommends that the concept plan be modified to ensure that the Leafless Tongue Orchid *(Cryptostylis Hunteriana)* is protected and that adequate separation is provided between development and the habitat of the Leafless Tongue Orchid *(Cryptostylis Hunteriana)* and that a management plan be prepared to ensure the conservation and long term survival of this threatened species.

Resolution

The Department is satisfied that this issue has been addressed through the Proponents Statement of Commitments and modification to the concept plan.

7.4.7 Utilities and Servicing

Concern has been raised about the lack of infrastructure servicing the CHB site.

The site is not currently serviced by sewer so a new sewer main would be required from the site to the existing mains and three pumping stations would be required to allow the flow of sewage along the pipe to the mains. The civil design report (PB, August 2007) stated that a sewer pumping station would be installed at the lowest

point on the southern side of the proposed development area. However, an assessment of the capacity of the waste water treatment plants to accommodate the additional load from the development, also considering the potential cumulative demands on the treatment plants of the proposal with the Coal-and-Allied proposals has not been undertaken.

The electrical infrastructure is currently near capacity (PB, August 2007). Development at Catherine Hill Bay will require the extension of the existing electricity network and the installation of a new zone substation. The report did not assess the capacity of the power plants in the area to accommodate the additional demand for electricity from the development, also considering the potential cumulative demand of the proposal with the Coal-and-Allied proposals.

The site is serviced by optical fibre as part of Telstra's telecommunications network. The proponent identified that Telstra would need to upgrade their system to cater for the proposal (PB, August 2007). The Social Sustainability Report (Key Insights, 2006) identified the potential and perhaps the need for residents in the area to telecommute and to be involved with distance learning. Any upgrade of the telecommunications network must consider the demand for telecommuting and distance learning in its capacity building.

Water infrastructure, including pipes, pumping stations and reservoirs would be required with the proposal. The proposal did not assess the capacity of the water treatment plants and the water supplies to accommodate the additional demand from the proposed development. The cumulative demand of the Rosecorp and the Coal-and-Allied proposed developments on the water supply and the treatment plants were not considered with the proposed development.

Council has also raised concern about the impacts from the proposed from the installation of services to Catherine Hill Bay, such as water, sewer, telecommunications and electricity as there is potential for long linear disturbances to native vegetation.

The provision of a new sewer will also benefit the existing CHB community and the sewer upgrade will also provide a benefit the surrounding communities. The Department will require that the services are to be provided as part of future applications.

Resolution

The Department is satisfied that this issue can be adequately addressed by future applications. Provision of the sewer has the potential benefit to the existing CHB village and future developments.

7.4.8 Stormwater Management (Water Quality and Quantity)

Hamlets 1 to 5 of the CHB development lands are located to the north and upslope of a mapped SEPP 14 wetland, an Intermittently Closing and Opening Lake and Lagoon system (ICOLL) and such have the potential to influence the sensitive receiving environment of the wetland. The NSW Coastal Design Guidelines highlight the importance ensuring impacts on water quality in downstream wetlands, estuaries, coastal lakes, creeks and beaches are reduced through implementing sustainable water and waste water systems.

In response to submissions made about the potential impacts of the development on the sensitive downstream environment Harper Somers O'Sullivan (December 2007) (the HSO Report) explain that the development may have detrimental impacts on the wetland, such as;

- The alteration in the amount and type of flow entering the wetland and potential subsequent impacts on wetland and heath vegetation;
- Addition of pollutants to the wetland from construction machinery, residential vehicle traffic and stormwater;
- Erosion and sedimentation within the wetland resulting from construction in upslope areas;
- Removal of wetland vegetation; and
- Invasion of weeds through vegetation clearance and residential land use.

Strict measures are therefore need to be implemented to minimise the potential impacts of the development (during and post construction) on the wetland.

Lake Macquarie Council advised that the boundary of the wetland/wet heath vegetation community in the drainage line to the south of the proposed development has not been defined and accurately mapped. In response to Council's concerns the Proponent was requested to undertake further survey work (ground truthing) of the northern boundary of the SEPP 14 wetland. The survey results are demonstrated below.



Concern has been raised about the preservation of the wetland and creek, both their hydrological functions and biodiversity functions and biodiversity values with the location of the development being in such close proximity. Council requested that buffer areas be increased in locations where the APZ is shown to be closer than 50 metres to the wetland dependent vegetation.

The HSO Report recommends that a primary riparian buffer (consisting predominantly of existing fringing vegetation) of 50 metres be provided from the edge of the mapped wetland vegetation. No land uses should be permitted in his area if they have the potential to significantly detract from the potential of the buffer to achieve the goal of wetland protection. The PPR has removed the access road and carpark from this area. The Department is satisfied that the development footprint (including Hamlets 2, 3 and 5), including the Asset Protection Zones are primarily located outside the 50m buffer zone.

Concern has been raised about the location of the development footprint and associated APZ to the south of Hamlet 4 as area identified for an APZ falls within 50 metres of the edge of the wetland vegetation, with a pinch of approximately 35metres. Concern has also been raised about the proximity of the proposed development (Hamlet 2) to the ICOLL behind Moonee Beach. The Department recommends that additional control measures be investigated in consultation with experienced wetland hydrologists and engineers to ensure that potential impacts on the SEPP 14 wetland are minimised and the following controls are implemented to address the management of the interface between the development and the sensitive receiving waters downstream. These include:

1. The provision of a perimeter road.

- 2. Development of stormwater management measures that ensure water quality and quantity impacts are minimised.
- 3. Preparation of a management and monitoring plans to address interface management issues such as water quality and quantity control

In terms of stormwater management, the Stormwater Management Strategy prepared by Parsons Brinkerhoff (December 2007) is comprised of two elements:

- 1. A swale system is proposed to convey runoff originating from the roads, pervious (vegetated areas) and subsurface hardstand areas. The plans show the swales discharging from several spreaders to the south of the site; and
- 2. A centralised roof area stormwater harvesting system which conveys harvested rainwater to treatment reservoirs filled with a sand medium, with a pump system used to reticulate it back through the respective development.

Council raised concern about the design of the stormwater system, which shows swales discharging directly into the riparian area of the wetland and creek. Council requested that the design of the stormwater system be reviewed to include a more dispersed discharge points and recommend that the capacity for additional sediment and nutrient capture at times of high flows be addressed through vegetated detention and infiltration basins along the contour with small discharge points. The Department recommends that future applications be required to provide a stormwater management system that is designed to reduce potential damaging impacts on the water quality and quantity of the sensitive downstream environment.

The Stormwater Management Strategy (prepared by Parsons Brinkerhoff, December 2007) for the event of overflow from the stormwater detention system includes an "existing pond structure" to the south of Hamlets 3 and 4 stated that it would "allow for significant attenuation of flows" and would capture sediment laden runoff from the development during construction. The stormwater attenuation structure is located in very sensitive environmental location and the Department recommends that the Concept Plan be modified to ensure that the stormwater structure is removed from this area and all stormwater infrastructure is contained within the urban development.

The stormwater management strategy also includes a water capture and reuse scheme that captures all roof water in a series of six water large sand filled reservoirs to be distributed around the perimeter of the development. Each reservoir is proposed to have a pressure actuated pump system to return the water on demand to a throughout the lots using separate systems to pressurise mains and deliver water for gardens and other suitable non-potable purposes. While a capture and reuse system is supported, the potable water savings will be increased significantly if the recycle water is connected for household uses such as toilet flushing and/ or laundry. Constant use will mean that the water in the reservoirs are drawn down even during wet periods so that the reservoirs have capacity. Council also recommends that consideration be given to a system that would decrease the pumping, such as collection tanks for each car court. The Department of Water and Energy requests that the storage reservoir structures be lined to ensure that infiltration to the groundwater does not occur. Due to the concerns raised, the Department recommends that future applications provide further details for the water capture and reuse system to reduce demand on potable water supply. Applications should also demonstrate ongoing management and maintenance arrangements and include measures to ensure that downstream hydrological functions and biodiversity values including groundwater and groundwater dependent ecosystems are protected.

Water Quality and Quantity Monitoring

The existing condition of the wetland needs to be established in order to monitor during construction and post development impacts. In order to establish that the sensitive downstream environment will be adequately protected, the Department recommends that a water quality and quantity monitoring program be established to determine pre-development conditions and provide a data set to assess that adequate measures are in place to minimise water quality and quantity impacts on the SEPP 14 wetland, the ICOLL and creek.

Groundwater Dependent Ecosystem

The proponent stated that there are no groundwater dependant ecosystems that would be impacted by the proposed works. However, the Department of Water and Energy indicates that the SEPP 14 wetland and riparian vegetation in the vicinity of the proposed works at CHB are likely to be dependant on groundwater and therefore water quantity and quality impacts must be addressed. The Department recommends that a long term groundwater monitoring program be established to ensure the SEPP 14 wetland and its buffer are protected. The Department recommends that the water monitoring program discussed above include the monitoring of groundwater quality.

Resolution

The Department is satisfied that the wetland, ICOLL and creek downstream of the site can be adequately protected through a number of management measures to be implemented with future development applications for development.

7.4.9 Bushfire Management

The NSW Rural Fire Service (RFS) has provided specific requirements for Asset Protection Zones (APZs). Supplementary information was provided with the PPR that indicates that the access roads fulfil the width and curvature requirements outlined in *Planning for Bushfire Protection (2006)* (PBP). However, if on-street parking were to be permitted on the private roads, the clear carriageway width of the road would be reduced so as not to be compliant with the required span.

The Department recommends that a detailed Bushfire Assessment Report be submitted with future project applications for each Hamlet that demonstrates compliance of the proposed development with *Planning for Bushfire Protection (2006)* and details arrangements for the following:

- The road network, lot layout, or road density are appropriate for evacuation purposes.
- Ensure that property access roads (other than Montefiore Parkway) allow for the safe access, egress and defendable space for emergency services.
- Establish the composition of the APZs, including the inner and outer protection zones, especially in relation to the proposed building footprints.
- Detail the responsibility of ongoing landscaping within the APZ to ensure compliance with required standards (for example the canopy spacing requirements).
- Ensure that all APZs are not located within the development footprint and outside the land zoned E1 National Parks and Nature Reserves.

Hamlets 2 to 5 - Perimeter Road

The PPR identifies a perimeter road extending from Montefiore Parkway to Hamlet 2 along the southern boundary of Moonee Hamlets 1 to 5 for the purpose of providing public access and parking. Section 3.7 of the PPR identifies that the perimeter road will:

a) have a carriageway width of 6.0 m with kerb and guttering;

- b) serve as the fire trail for emergency purposes; and
- c) provide up to 30 informal parking spaces, grouped in landscape embayments;

The design of the perimeter road does not comply with the requirements for perimeter roads prescribed by the *Planning for Bushfire Guidelines 2006*, which specifies that urban perimeter roads are to be two-way with at least two traffic lane widths (carriageway width of 8 metres minimum (kerb to kerb), allowing traffic to pass in opposite directions. The carriageway width does not comply due to the width of the carriageway and the proposed location of parking within the carriageway.

Due to the location of the wetland to the south of the development lands, the Department recommends that the southern edge of the perimeter road at its closest proximity to the wetland vegetation must not be encroach any closer than 50 metres from the edge of the wetland vegetation mapped by Harper Somers O'Sullivan. Therefore,

any design amendments required to be made to the perimeter road must not encroach closer than 50 metres to the edge of the wetland vegetation and the intermittent coastal opening lake and lagoon system (ICOLL).

The Department recommends that the details about the staging of development demonstrate that the perimeter road will be provided with two access points to Montefiore Parkway and adequate carparking to service public use of Moonee Beach for all stages of development.

The EA provides no details about the establishment and ongoing maintenance of the APZs. The Department recommends that a Bushfire Management Plan be prepared to the satisfaction of the Director General, that encompasses the requirements of *Planning for Bushfire Protection Guidelines (2006)* and addresses the ongoing issue of maintenance of the Asset Protection Zones on both privately owned or Community Title land.

The Department recommends that future applications be accompanied by a bushfire management plan that demonstrates that the subject development complies with the *Planning for Bushfire Guidelines 2006* and identify arrangements for the establishment and maintenance of the APZs.

Resolution

The Department is satisfied that this issue can be adequately addressed through a series of modifications to the concept plan and requirements for future applications.

7.4.10 Urban design and built form

Concern was raised by Lake Macquarie Council, and Wyong Shire Council concerning various aspects of the proposed urban design, and built form in regards the relationship to the dominant built typology of the existing village. NSW Sydney Central Coast, NSW Health raised concerns on Crime Prevention through Environmental Design (CPTED) issues relating to the built form.

The character and appearance of the existing village is predominantly single storey (a number of dwellings have 2 storey additions at the rear), modest timber residential dwellings with pitched roofs and front verandas, with buildings located to the front of the allotment with very little set back from the street frontage. The village area has very few boundary fences, with dwellings separated by grass strips. Development within the village is controlled by Lake Macquarie Council's DCP 1.

The vision statement in the PPR for CHB is to create a *'cohesive small scale building context in a natural setting visually dominated by the landscape'* and also to *'acknowledge and enhance the existing structure of CHB Village and its relationship with the coast and surrounding bushland'*. The PPR then goes on to propose controls/guidelines for the designs and material selection of the proposed dwellings which are to achieve the design aims stated in the PPR.

The PPR (Feb 2008 p.51) lists cumulative Maximum Residential Floor Area in each of the 7 Hamlets. The urban design guidelines which contain building envelope controls do not reference or justify the maximum residential floor area proposed. The Department is not satisfied that there is a justified correlation between the building envelopes proposed in the PPR (Feb 2008) and the maximum floor areas proposed or that the floor areas can be achieved within the building envelopes proposed. The Concept Plan Approval will be modified to remove any the maximum residential floor areas.

Hamlet 1

The objectives stated in the PPR appear appropriate but as no detail is given, no assessment can be made in terms of any detailed assessments. This is not an issue as it is a Concept Plan. The relationship between Hamlet 1 and the CHB Village will be determined by the interaction of the built form and massing proposed by Hamlet 1 and its relationship to CHB Village. This issue has been addressed by the IHAP recommendations (refer Section 7.2.1)

Resolution

This issue has been addressed by the IHAP Report and its recommendations (refer Section 7.2)

7.4.11 Traffic

The submissions by the HRDC, Lake Macquarie City Council, and Wyong Shire Council considered the cumulative impacts of both the Rose Group and the Coal & Allied proposals in formulating their issues. The

issues raised include a number of issues in regards to local road design, road widths, car parking, service/emergency vehicle access and amenity issues. The Department is generally satisfied with the general layout of the road network. There are a number of detail issues which need to be addressed and the Department recommends changes need to be made to the Concept Plan and by conditions of Consent to resolve some of the issues of safety and amenity listed below.

Issue 1. Montefiore Parkway

Councils and HRDC have raised concerns that the Montefiore Parkway bitumen road surface is 'sub-standard' and suggested that the roadway be upgraded to provide two 3.5 metre wide travelling lanes with 2.0 metre wide sealed shoulders/cycle ways, in both directions and an 80km/h speed limit before being transferred to public ownership.

The Statement of Commitment states that the Montefiore Parkway from Clarke Street back to the Pacific Highway will be dedicated as a 'public roadway'. The Department disagrees with the reduction in the speed limit to 70km/h recommended by the proponent's traffic consultant and suggests that the existing 80km/h limit between the Pacific Hwy and Hamlet 7 be retained. The Montefiore Parkway should be upgraded to meet Austroads Standards for the expected level of traffic and the existing 80km/h limit retained between the Pacific Highway and Hamlet 7. The roadway should consist of two 3.5 metre wide travelling lanes with 2.0 metre wide sealed shoulders/cycle ways, in both directions between the Pacific Highway and Hale Street.

Resolution:

The Department recommends that the issue be addressed by the upgrading of the Montefiore Parkway and the requirements for future applications.

Issue 2. Flowers Drive Upgrade

Councils and HRDC recommended that Flowers Drive should be upgraded to Council requirements in terms of traffic management devices for safety reasons.

The main access route to the Pacific Hwy from CHB is via the Montefiore Parkway and the Department considers the upgrading of the Montefiore Parkway to be the responsibility of the proponent. Flowers Drive may become more heavily used if the Coal & Allied development proposal at Middle Camp is approved and therefore any Flowers Drive upgrade should be the responsibility of Coal and Allied (if approved).

Resolution:

The Department believes that the issue should not be related to the Rose Group development proposal.

Issue 3. Montefiore Parkway/Clarke Street/Hale Street Precinct

The HRDC and the Councils recommended round-abouts and traffic calming measures at the intersections at Montefiore Parkway /Clarke Street, Montefiore Parkway/Hale Street, Lindsley Street/Hale Street/Flowers Drive, and the intersection of Flowers Drive/Surf Life Saving Club for safety reasons.

The Proponent's response is that the traffic modelling shows that roundabouts are not required as the intersections comply with all relevant standards.

The proposed development directs through traffic along Clarke Street, which adversely impacts on the amenity of the Catherine Hill Bay Village. Through traffic should be re-directed along Hale Street and then Hale Street can be re-aligned to provide the connection to Flowers Drive. The proponent is proposing the closure of the access road to the jetty and the upgrading of the SLSC. This provides the opportunity to redesign access to and from the car-parking area and the Flowers Drive/Lindsley Street intersection. The re-design of Hale Street could then resolve the issues of access to the Wallarah House precinct and allow for the provision of cycleways.



Figure 13 – Aerial view Hale Street / Flowers Drive / Lindsley Street

Resolution:

The Department recommends that the revised design be submitted as part of the Project Application for Hamlet 1 and shall take into account the conditions of Approval.

Issue 4. The "Public Road" required to serve Moonee Beach:

The HRDC and the Councils made specific recommendations regarding public road access to Moonee beach. The access road to Moonee beach was deleted in the PPR (Feb. 2008) and therefore the specific issue is no longer relevant. The issue of public access to Moonee beach was addressed by the provision of the perimeter road around hamlets 2 - 5 and which allows for public access to the national park. Further discussion about the perimeter road is at **7.2.2** and **7.5.9**

Resolution:

The Public Road has been deleted in the PPR (Feb2008) and the Department considers that the issue has been reasonably resolved by the modifications imposed on the Concept Plan.

Issue 5. Trees in Roadway

The location of trees in the road verges was a concern for the HRDC and the Councils from a safety aspect.

The respondent's traffic consultant's response was that 'Planting trees in street verges is common practice in low speed urban environments. A road safety audit will be carried out to ensure trees are placed appropriately.'

The Department agrees with the respondent's traffic consultant's response and that if the correct species of trees and gutter is selected and appropriately located that the issue is resolved.

The placement of trees in verges should be co-ordinated with traffic engineers and located so as to comply with the relevant Australian Standards, in terms of sight distances and collision risk. The tree species shall be selected by a qualified Landscape Architect in consultation with the Traffic Engineer as being fit for purpose.

Resolution:

The Department is satisfied that the issue has been addressed by the Concept Plan and by the requirements for Future Applications.

Issue 6. Connecting Road Hamlets 6 & 7

The HRDC and Council recommended that there should be an internal road connecting Hamlets 6 and 7.

The Proponent's traffic consultant's view is that the environmental constraints make such a connection undesirable. This could be reviewed or separate road access provided to each Hamlet to the Montefiore Parkway.

The access to Hamlets 6 & 7 will need to be altered in order to satisfy the requirements of the 'Planning for Bush Fire Protection' in response to the issue raised by the NSW Rural Fire Service.

Resolution:

The Department agrees that the issue can be adequately addressed in any future Project Application.

Issue 7. Car Parking

The HRDC and Local Council recommend that the number of car parking and disabled car parking should be to AS 2890 and Council's DCP requirements.

The Proponent's Response is that they would accept this a condition of consent.

Resolution:

The Department believes that the amount of carparking is sufficient.

Issue 8. Car Parking at Moonee Beach.

The HRDC and Council recommended that a formal public Car park be provided at Moonee Beach.

The Proponent's Traffic expert considers the matter is not be traffic related, but the issue has been resolved by the Department's requirement that a perimeter road is to be provided in Hamlets 2 – 5. The perimeter road is designed to accommodate a 'parking lane'. A car parking area is also to be provided adjacent to Hamlet 1. The demand for car-parking would be mainly on weekends and during holiday periods as is typical of beachside holiday towns.

Resolution:

The Department is satisfied that the issue has been resolved by changes required to the Concept Plan. Further discussion about the perimeter road is at 7.2.2 and 7.5.9

Issue 9. Subdivision Road Design

The HRDC and Local Councils raised specific concerns regarding the design of the internal subdivision road system, in regards to:

- Dead-end roads safety and amenity
- The Car-Courts safety and amenity
- Montefiore Parkway and Hamlets 1 7 Intersections inappropriate design
- The requirement for Heavy Rigid Vehicle (HRV) & Emergency Service Access
• Community Titled roads need to be appropriately designed.

In response, the respondent's traffic consultant's has stated that all the roads have been designed to AMCORD, Australian Standards and that there is no amenity concerns with the car courts as designed. The respondents' traffic consultant also replied that certification of the road design would be provided prior to the release of the Construction Certificate.

The subdivision pattern, including the road pattern was reviewed as part of the IHAP report (see **Appendix E**) and was considered acceptable at Concept Plan level. Further detailed design resolution is required to ensure compliance with the relevant Australian and Austroads standards, especially in relation to service vehicle access.

Resolution:

The roadway design should be finalised before the Approval of any Project Applications in Catherine Hill Bay.

7.4.12 Climate Change

The Department notes that the EA does not include a specific assessment of the impacts of climate change on the feasibility of the proposal. However, the issue of sustainability is addressed by the proponent and ESD and Climate Change is addressed by this report. The stormwater and flood assessments have not been based on the predicted future storm frequency curves (McLuckie et al, 2005), and the flood assessment does not consider the cumulative impact of sea-level rise on the flood-levels (which are provided in DECC, 2007). Therefore it is likely that the EA under-predicts the possible impact of storms and flooding on the development.

The Intergovernmental Panel on Climate Change (IPCC) has produced several projections as to likely permanent sea level rises due to global warming. The low projection indicates a sea level rise of 13 cm, and the high projection suggests that global sea levels could rise by as much as 94 cm by 2100. The middle projection would see ocean levels rise by approximately 50 cm within the present century. Increases to 2050 are predicted to range between 10 cm and 40 cm, with a middle projection of 20 cm.

The finished ground levels of the proposed development vary between 5.0m AHD to 40.0m AHD. The eastern perimeter of the development adjacent to the cliff top is approximately 35.00m AHD. The CHB area is not within a known flood zone and taking into consideration proposed finished levels. It is considered that the proposal is acceptable in the context of climate change and flooding.

Resolution

The Department is satisfied that sea level rise as a result of climate change has been adequately addressed.

7.5 Key Issues - Gwandalan

The following section deals with issues which relate specifically to Gwandalan. Issues common to both development sites, Catherine Hill Bay and Gwandalan have been discussed in **Section 7.3**. Issues which relate to Catherine Hill Bay only are dealt with in **Section 7.4**.

7.5.1 Urban Design

Concern was raised by Wyong Council that the previous layout of the subdivision design ignores the natural contours of the land. The IHAP were also considered that the previous subdivision design did not respond to the sites attributes such as the topography and drainage lines. The revised design submitted in the PPR was supported by IHAP in their report, subject to any other technical issues being addressed.

The PPR responded to IHAP's original concerns by the provision of a revised subdivision design, specifically;

- The retention of significant tree clumps in two newly proposed open space areas to be dedicated as community parkland/open space;
- A revised road layout that follows the topography;
- A hierarchy of streets including a bus route and internal streets which are appropriate to their use with the primary through route being designed as a 'green link' connecting the two open space areas, which is to be 22m wide to allow for substantial planting/retention of existing trees in the road reserve;
- Reduction of the number of allotments from 214 to 187;
- Reduction in the number of allotments with direct access to Kanangra drive from 6 to 2;
 - Provision of native landscape buffers to Kanangra Drive, Gwandalan Public School and Point Wollstonecraft Sport and Recreation Area.

With regards to the urban design and built form of the proposal the proponent relies on Wyong Council's Development Control Plan (DCP 2005), chapters 66 & 67 for subdivision controls and chapter 100 for building controls (built form) except for minimum lot size.

The Proponent's design aim was a density of 12 dwellings/hectare, which is within the range of density envisaged by Wyong Councils DCP2005. Council's DCP depending on the slope of the site allows for 8 – 15 dwellings/hectare in their single dwelling zone (2A residential). The Wyong Residential Development Strategy (2002) anticipated a density of 12 dwellings/hectare.

Resolution

The Department is satisfied that the issue is resolved as the Wyong Council's DCP has adequate regards to acceptable standards of urban design.

7.5.2 Mine Subsidence and Geotechnical Issues

The Subject Site is located within the Swansea/North Entrance Mine Subsidence District. The Mine Subsidence Board has granted conditional approval for the residential subdivision at Gwandalan. The Mine Subsidence Board has indicated that it would grant approval under section 15 of the *Mine Subsidence Compensation Act* if future development of the subject site is subject to adequate measures being undertaken to limit the impact from mine subsidence and comply with Australian Building Standard AS 2870. The Proponents statement of commitment B6 confirms that a geotechnical report confirming that soils classification and house footings will comply with AS2870 but does not address the need to refer future development proposals to the Mine Subsidence Board for approval.

The Department recommends that a modification of the concept plan be applied that requires future applications demonstrate that they are capable of meeting the requirements of the Mine Subsidence Board and demonstrate

that stability, subsidence potential, and load bearing capacity of the site have been addressed prior to the issue of a construction certificate and a condition of the project to mine subsidence board requirements to be addressed.

Resolution

The Department is satisfied that this issue has been addressed through the Proponents Statement of Commitments, a modification to the concept plan and a project condition.

7.5.3 Open Space

The Concept Plan (August 2007, see Figure 14) proposal contained a "North-South Green Link" and specified that this area would have a passive recreation focus for the community, will contain a series of smaller informal parks, will retain existing trees where possible to create a contiguous linear parkland experience and wildlife corridor. This area would contain pathways, two playgrounds (one on each half of the subdivision) and a variety of informal seating areas. An East West parkway and an entry park incorporating entry signage, seating, possible artwork and informal play area was also proposed.

Wyong Council, NSW Health and a number of public submissions raised concern about the lack of public open space provided within the development footprint and the impracticality of the North-South Green Link, being used for recreational purposes as well as retaining biodiversity values. Council specifies that the land used for this strip has minor value for active open space and should not be a substitute for the provision of a centrally located and appropriately sized and shaped small park to serve the local open space needs of the residents due to the distance from existing playgrounds. Concern was also raised about the lack of retention of any of the drainage lines within the development footprint.



Figure 14 – August 2007 Gwandalan Concept Plan

In response to this issue, the Proponent in the revised subdivision design included two open space areas (see Figure 15 below). The available Census data indicates that there will be an occupancy rate of 2.4 people per dwelling, which equates to approximately 450 residents. Wyong Council's Open Space principles require 3 hectares of open space per 1000 people, which equates to an open space area of 1.35 hectares.

The PPR identifies the North-West Open Space area, with an area of 0.44 hectares and the South East Open Space, with an area of 1.49 hectares. The Proponent proposes that the North-West Open Space area will have a passive recreation focus for the community, and the existing trees will be retained and reinforced with similar species. The area will be turfed and enhanced with seating and play areas. The provision of the open spaces in the revised subdivision design was supported by the IHAP report.

The South East Open Space area incorporates a stand of trees and a watercourse and will be enhanced with new tree planting and seating and play areas. The Department recommends that a Vegetation Management Plan be prepared in accordance with the Department of Water and Energy's "*Guidelines for Controlled Activities – Vegetation Management Plans*" for the watercourse and associated riparian vegetation (see Condition B11).



Figure 15 – Gwandalan Plan – PPR (Feb. 2008).

The Department recommends that a Plan of Management be prepared for public open space areas that detail the establishment, management and ongoing maintenance responsibilities for open space areas.

Resolution

The Department is satisfied that this issue has been addressed through the revised development scheme to incorporate two open space areas, retention of the southern watercourse adjoining Gwandalan public school and through conditions of approval requiring the preparation of a Vegetation Management Plan for the watercourse

and associated riparian vegetation located in the south east open space area and plan of management to outline the establishment and management arrangements.

7.5.4 Stormwater Management/Acid Sulphate Soils

Due to the location of the proposed development in proximity to the Lake Macquarie, it is important that stormwater is adequately treated before leaving the site. A stormwater report was prepared by Asquith & deWitt Pty Ltd (August, 2007). The proposal includes a treatment train including a swale, gross pollutant trap and constructed wetland. The Report provides concept sketches for the water treatment ponds and specify that detailed design of the constructed wetland for the configuration of the shallow water and deep water zones will undertaken for the construction certificate.

The Department recommends that design plans of the stormwater drainage systems be prepared in accordance with the requirements of Wyong Shire Council prior to issue of a Construction Certificate (see **Condition B7**).

The Geotechnical Investigation Report for Gwandalan prepared by RCA Australia (August, 2003) identified the presence of acid sulphate soil (ASS) material within estuarine sediments across the lower flat area adjacent to Lake Macquarie, and very strong acidic soil conditions in other areas on the site. The proposed drainage works are in an area of Acid Sulphate Soil. The capability of such soil to accommodate the proposed drainage works was not assessed. Without proper management, disturbing ASS through earthworks may have serious environmental, economic, engineering, and health impacts. Due to the close proximity of the site to Lake Macquarie, it is important that acid sulphate soils are appropriately managed.

The Department recommends that more detailed investigation be undertaken to determine the extent of the ASS area and acidic soils and an Acid Sulphate Soil Management Plan (ASSMP) be prepared in accordance with the *Acid Sulphate Soil Assessment Guidelines* (Acid Sulphate Soil Management Advisory Committee, 1998) for any works in the vicinity of the area that may cause negative impact (see **Condition B16**).

Resolution

The Department is satisfied that this issue has been addressed through conditions of approval.

7.5.5 Flora and Fauna

The DECC, Wyong Shire Council, Department of Water and Energy, Nature Conservation Council of NSW and a number of public submissions have raised concern about the possible impact of the proposed development on flora and fauna.

Particular concern has been raised in submissions about the impact of the proposed development on the *Tetratheca juncea* (Black-eyed Susan), which is listed as vulnerable under the NSW Threatened Species Conservation Act 1997 and the Federal *Environmental Protection Biodiversity Conservation Act*.

A total of 369 *Tetratheca juncea* clumps are proposed to be removed as part of the overall proposal (189 recorded within the CHB development lands and 180 recorded by Wildthing (2003b) within the Gwandalan development lands. The Harper Somers O'Sullivan 2007 Report (HSO) has estimated that 49,000 individuals occur within the Wallarah Peninsula and local area. Of these, 30,000 are to be reserved within existing and proposed conservation reserves. If all of the plants identified within the Gwandalan and CHB development lands were removed, this would represent 0.3% of the population within the local area. In this context it is considered that the loss of 269 plants to be of minor significance.

HSO Report indicated that only 214 plants had been recorded within the offset lands and issue was raised about the adequacy of the proposed offset. The Proponent has provided additional advice that estimates 5,147 plant clumps in the lands to be dedicated to offset the development and on this basis provided a revised Statement of Commitment relating to the management of the offset lands.

DECC in their submission stated that *'the majority of the lands identified for conservation offsets are eminently suitable for addition to the reserve system.'* The conservation lands to be dedicated will contribute to the protection of endangered ecological communities and contribute to the creation of a coastal corridor linking Wallarah National Park and Munmorah State Conservation area and a green buffer between Newcastle and the Central Coast. It will also create a green a corridor between Lake Macquarie and the ocean. The dedication of the

lands to the Crown means that the lands will be in public ownership and part of the State's national parks and reserves system.

Based on the flora studies carried out to date and the Proponent's revised Statement of Commitments, the Department is satisfied that this issue has been addressed.

Fauna

The HSO Report found that a total of 16 threatened fauna species were recorded or considered likely to occur within the Gwandalan development lands and had a moderate chance of potential impact. The HSO Report recommends a number of mitigation measures be adopted to help mitigate the impacts on fauna, including construction measures that protect the breeding cycle of the Glossy Black Cockatoo and the Masked Owl, protection of mature hollow bearing trees where possible, sediment and erosion control measures to protect the drainage lines and landscaping the sediment retention ponds to create habitat.

The Proponent commits to the recommendations as set out in the HSO Report (see Commitment B6). However the Statement of Commitments does not specify implementation details such as timing. The Department therefore recommends that the Proponent be required to provide an Environmental Management Plan that provides details about the implementation of the recommendations made in the HSO.

With regards to concerns raised by Council about the presence of Masked Owl in the Gwandalan development lands, the HSO Report found that potential breeding habitat exists within the Gwandalan lands for the Masked Owl, as well as the Glossy Black Cockatoo. Potential habitat hollows were identified across the site and it is likely that some hollows would be removed with the proposed development.

The HSO Report determined that the removal of potential breeding habitat could potentially reduce the breeding success and subsequently the long-term viability of the local Masked Owl and the Glossy Black Cockatoo populations. To avoid a high impact on these species the nesting status of within the development site needs to be determined prior to clearing and measures put in place to minimise impacts on the breeding cycle. The Department recommends conditions of approval be included to ensure that management measures are in place to minimise impacts on local Masked Owl and the Glossy Black Cockatoo.

DECC raised issues regarding the quality of a small portion of the lands to be dedicated as conservation lands and the lack of information in the HSO report. DECC also raised concerns about the possible impact of the infrastructure services on the Conservation lands. These are detailed issues that can be resolved as part of the Deed. Notwithstanding the issues raised DECC considered that '*compensatory offsets for any potential impacts on flora and fauna have already been identified and secured in principle through the MoU'*. At the time of writing this report, the deed of agreement for the delivery of the Memorandum of Understanding had not been finalised. In the interest of orderly and rational development it is important that the deed of agreement be agreed and signed by all parties and endorsed before the determination of the concept plan and rezoning in order to ensure legal certainty of the conservation lands being dedicated to the State.

Resolution

The Department is satisfied that this issue has been adequately resolved through the Proponent's Statement of Commitments and conditions to project application and modifications to the concept.

7.5.6 Bushfire protection

The Bushfire Hazard Assessment (BHA) prepared by Barry Eadie Consulting Pty Ltd (July 2007) identifies a bushfire hazard to the west and to the north of the site and specifies that an APZ with a minimum width of 20 m being required along the northern boundary and an APZ with a minimum width of 25m along the western boundary.

The NSW Rural Fire Service (RFS) and Wyong Council raised concern about the APZ requirement along the northern boundary, indicating that it should be 25m based on the vegetation classification as forest rather than tall heath and a downslope of 5 degrees, and that the dwelling entitlements for lots 1 to 9 may make several of the lots unviable for development. The IHAP specifically recommended that particular attention be paid to ensure that the allotments abutting the northern site boundary to Point Wolstoncroft State Recreation Area be reviewed to ensure compliance with the *Planning for Bushfire Protection Guidelines 2006*

The PPR amended the width of lots 97 to 106 (previously Lots 1 to 9 in the August 2007 Concept Plan) to a depth of 50 metres to allow for the provision of a 25m wide APZ within the private lots located on the northern boundary of the site. The Department referred to PPR to the NSW RFS to review the revised development scheme. On the 14 February, the RFS provided further advice on the PPR that requires the width of the APZs for Lots 104 and 105 to be a minimum of 30 m and noted that the depth of the lots and the building alignment/setback, these lots may be unviable for development. Council has raised concern about the large APZ requirement within these lots and recommended that the lots on the northern perimeter road be removed.

The Department recommends that the concept plan be modified to create a perimeter road or pathway along the northern boundary of the urban development to provide a 30.0m APZ along the northern boundary of the site.

The EA does not address the establishment and ongoing maintenance requirements for APZs. In response to this issue, the Department recommends that a bushfire management plan be prepared that outlines the arrangements for the establishment and ongoing maintenance and management responsibilities of all APZs within the proposed development site, including the Kanangra Drive Road reserve and the area along the northern boundary (to the north of road 2).

Resolution

The Department is satisfied that bushfire management issues have been adequately addressed through a modification to the concept plan and condition to the project approval.

7.5.7 *Public foreshore access*

Concern was raised by Wyong Council and a number of public submissions about the lack of public access to and along the Lake Macquarie foreshore. The opportunity for access along the foreshore in this location is currently restricted due to the location of a private residence. The Proponent argues this section of the foreshore is not significant given the substantial public foreshore areas in the locality and there is no practical means of foreshore public access given the position of the existing dwelling. The proposed environmental offsets include approximately 1.8 km of foreshore which will be transferred to public ownership on the eastern side of Crangan Bay.

The subdivision pattern results in a single lot being created between the proposed residential development and the foreshore. Future redevelopment of the lot, if it occurs can allow for public access to the foreshore from the proposed residential development. As the proposed development does not directly adjoin the foreshore, no direct access is available. Further subdivision of this land should be a matter for Council.

Resolution

The Department is satisfied that this issue has been addressed.

7.5.8 Climate Change

The Department notes that the EA does not include a specific assessment of the impacts of climate change on the feasibility of the proposal. However, the issue of sustainability is addressed by the proponent and ESD and Climate Change is addressed by this report. The stormwater and flood assessments have not been based on the predicted future storm frequency curves (McLuckie et al, 2005), and the flood assessment does not consider the cumulative impact of sea-level rise on the flood-levels (which are provided in DECC, 2007). Therefore it is likely that the EA under-predicts the possible impact of storms and flooding on the development.

The lowest level within the proposed development is a small area of land in a creek channel, which is between 3.0 m and 4.0 m AHD (encircled in red in Figure 15 below). This area constitutes approximately a quarter of Lot 157 and the proposal indicates this site would be filled to 4.0 m AHD with the intention being to produce a flat building surface.



Figure 15. Location of lowest point in proposed development.

Based on historical storm-frequency curves, the 1in 100 year flood level was calculated to be 1.38mAHD. The increase in the level of Lake Macquarie would be approximately equal to the increase in sea-level, which, under the latest IPCC global and CSIRO regional projections, could be as high as 0.91 m AHD by 2100 (*Floodplain Risk Management Guideline Practical consideration of Climate Change*, prepared by DECC, October 2007).

Therefore the cumulative water level, given sea-level rise plus a 1 in 100 year flood would, if sea level rises to the above heights, be:

Sea-level rise + 1 in 100 year flood level = Cumulative water level during 1 in 100 year flood

0.91 mASL +1.38 mASL = 2.29 mASL

This means that there is a 1 percent chance that land at elevations below 2.29mAHD would be inundated in a given year.

The difference between the elevation of the development and the likely 1 in 100 year flood level would be approximately:

Elevation - Cumulative water level = Elevation of development above cumulative water level

4 mASL - 2.29 mASL = 1.71m

The Department notes that the EA did not consider the possibility of increased wave action with climate change, which could open the entrance to Lake Macquarie from the sea, thereby increasing the efficiency of the propagation of sea-level, tides, storm surges and wave action into the Lake. Additionally, the (possibly simultaneous) impact of increased storm frequency on flood-levels was not considered in the EA. Nevertheless, in light of the above calculations, the Department considers that the proposed development, being 1.71m above the cumulative 1 in 100 year flood water level, would provide a factor of safety that should be sufficient to

accommodate further increases in lake level due to altered entrance configuration, and the increased frequency of storm events.

The level of Lot 157 must be filled to 4mAHD as currently proposed and adequate provisions must be made to convey drainage through that site.

The Department recommends that a condition of approval that requires the minimum habitable floor level for any dwelling to be at least 4.00 metres above Australian Height Datum (AHD).

Resolution

The Department is satisfied that sea level rise as a result of climate change has been adequately addressed through a condition to the project approval.

7.5.9 Aboriginal cultural heritage

An Aboriginal Cultural Heritage Assessment Report, prepared by Environmental Resources Management Australia May 2007 (the ERM Report) was submitted with the EA. This report presents the results of an archaeological survey and Aboriginal consultation conducted from November 2006 to May 2007. Nine representatives from the local aboriginal community, including representatives from the Awabakal Traditional Owners Aboriginal Corporation, the Awabakal Descendents Traditional Owners Aboriginal Corporation, the Guringai Tribal Link Aboriginal Corporation and the Bahtahbah Aboriginal Land Council, participated in the fieldwork which was carried out between 20 and 21 December 2006.

The ERM report concludes that the development footprint is not considered to be archaeologically sensitive as no new Aboriginal sites were found and is therefore suitable for development. However, the conclusion was not supported by the Awabakal Descendents Traditional Owners Aboriginal Corporation and the Awabakal Traditional Owners Aboriginal Corporation.

The ERM report found evidence of disturbed midden material and one stone artefact along the Lake Macquarie foreshore and conclude that this material is part of a larger midden recorded adjacent to the study area and currently registered as site 45-7-0183 on the AHIMS database.

Due to the proximity of the development footprint to the midden, a recommended condition of approval requires the Proponent to notify the Local Aboriginal Land Council at the commencement of works and for works to cease should Aboriginal objects be located and the Department of Environment and Climate Change be contacted.

Resolution

The Department is satisfied that this issue has been addressed through condition of approval to the project application.

7.5.10 Traffic and Transport

The submissions by the HRDC, Lake Macquarie City Council and Wyong Shire Council raised a number of issues in regards to local road design, road widths, car parking, service/emergency vehicle access and amenity issues. The issues were generally addressed by the revised subdivision layout submitted with PPR (Feb 2008) and the Department recommends that the outstanding issues can be addressed by the conditions of Consent.

The issues raised were:

Issue 1. – Access onto Kanangra Drive

The submissions raised specific issues regarding access from the subdivision onto Kanangra Drive which have been superseded by the revised Gwandalan subdivision submitted in the PPR (Feb 2008)

The proponent's traffic consultant's response was that the issues were addressed by the revised subdivision design, which included substantial changes to the internal road network. The Department agrees that the issue have generally been resolved, but there are minor traffic management works that need to be carried out for safety, access, and amenity reasons. The works required are the provision of median islands at the all the intersections between Roadway no.1 and Kanangra Drive provided that bus access is maintained. However the cost of any additional traffic management works should be credited towards the traffic management charges in the s94 contributions.

Resolution

The Department believes that the issues has been addressed by the condition imposed on the Project Application.

Issue 2. – Roadway Design

The submissions by the HRDC and Councils raised specific issues regarding the road design near Gwandalan Public School and the internal roadways in general which have been superseded by the revised Gwandalan subdivision submitted in the PPR (Feb 2008)

The proponent's traffic consultant's response was that the issues were addressed by the revised subdivision design. The Department agrees that the issues of the internal road design have generally been resolved by the revised subdivision layout, but minor changes are required to Roadway No.1 adjacent to Gwandalan Public school for safety, access, and amenity reasons. The works required are:

- (i). The widening of the Road no.1 carriageway to 13 metres for the length of Gwandalan Public School and the provision of a bus lay-over located at the drop-off and pick-up point for students.
- (ii). In consultation with Council, traffic management devices are to be installed, including speed humps, pedestrian crossings and parking restrictions if required to ensure the safety of students.

Resolution

The Department believes that the issues have been addressed by the condition imposed on the Project Application.

Issue 3. - Pedestrian /Cycleways and Public Transport

The submissions by the HRDC and Council raised specific issues regarding the provision of cycleways and bus services which have been superseded by the revised Gwandalan subdivision submitted in the PPR (Feb 2008)

The proposed development provides for adequate pedestrian/cycleway through the development with regard to roads 2 – 6. The lack of a pedestrian/cycleway along Kanangra Drive is considered unacceptable from an amenity/sustainability point of view. The provision of this cycleway also contributes to a linkage to the commercial development at the corner of Orana Rd and Winbin crescent. This route also provides the greatest continuity of sealed footpaths. The alternative access route suggested along Billbabourie Road has no footpaths and is considered unacceptable in terms of accessibility. The Department is of the opinion that the issue can be resolved by the provision of a pedestrian cycleway 2.5m wide along the eastern side of Kanangra Drive for the length of the development. However the cost of any additional traffic management works should be part of the traffic management charges in the s94 contributions.

The bus route and location of the bus stops has been identified in the PPR (Feb2008) and should be constructed in stage 1 of the development. The Department believes that the issue of Public Transport has been addressed and is subject to final agreement by the Ministry of Transport and the Proponent

Resolution

The Department believes that the issue has been addressed by the condition imposed on the Project Application.

8 PUBLIC INTEREST

The proposed development at CHB and Gwandalan will provide significant benefits to the community, including

- Significant environmental benefits in transferring 310 hectares of conservation lands from private to public ownership.
- Provision of the cliff top walk on the CHB headland.
- Preservation and re-use of Bin Building, incorporating a public viewing terrace/platform with kiosk facilities.
- Provision of public access to Moonee Beach.
- Provision of public carparking for Moonee Beach.
- Provision of public carpark adjoining Hamlet 1 for approximately 57 cars.
- Provision of Regional Contributions \$3,685.00 per dwelling.
- Provision of Local contributions in cash and in-kind to both Lake Macquarie and Wyong Councils.
- Provision of Infrastructure, including sewer upgrades which benefits the existing CHB community.
- Provision of up to \$1.0m for the future upgrade to CHB Surf Lifesaving Club.
- Provision of Local road upgrades.
- Public Access to Catherine Hill Bay dedication and upgrade of the Montefiore Parkway.
- Public Access to Catherine Hill Bay upgrade of the Montefiore Parkway/Pacific Highway intersection.
- Catherine Hill Bay Community Facilities Management Committee contribution of \$1600.00 per lot.
- Protection of heritage items.
- Provision of Community facilities/open space:
 - o Catherine Hill Bay -
 - Village Park.
 - Village Green approximately 2.15ha, including.
 - Community centre.
 - An informal playing field.
 - Tennis Courts 2 courts.
 - Swimming Pool approximately 50 metres long.
 - Playgrounds.
 - o Gwandalan -
 - 4400m² park, including embellishments.
 - 14000m² open area.
- Provision of visual buffers between the development and the existing CHB township, ensuring that the heritage significance of the CHB Conservation Area is retained and interpreted sympathetically.

The proposal has also given detailed consideration to building form and urban design to ensure that the development will not have any adverse impacts upon the amenity currently enjoyed by the local community.

Accordingly, the proposal is considered in the public interest for the above reasons.

9 CONCLUSION

- 9.1 The Department has reviewed the environmental assessment and the preferred project report and duly considered advice from public authorities as well as issues raised in general submissions in accordance with Section 75I(2) of the Act. All the relevant environmental and legislative issues associated with the proposal have been extensively assessed.
- 9.2 The final IHAP report was supportive of the proposed development subject to the design changes recommended in their report. The PPR submitted in February 2008 reflected the recommendations of the IHAP with minor variations as justified in this report.
- 9.3 In balancing the State significant planning outcomes with the issues raised in the body of this report, the Department is of the view that the proponent has satisfactorily mitigated the environmental impacts arising from the subdivision of the Catherine Hill Bay and Gwandalan site for residential uses. In assessing the proposal, the Department has resolved any outstanding environmental issues through recommended modifications and conditions of approval.
- 9.4 The Proponent has committed (through Statements of Commitment) to a number of measures to ensure the development proceeds smoothly and does not adversely impact on local amenity and landscapes adjacent on the site. The Department is recommending further modifications to the concept plan and conditions of approval to the project application to augment commitments made by the Proponent.
- 9.5 Recommended modifications to the Concept Plan and conditions to the Major Project are provided at Appendix A ("Tag 1" and "Tag 2" respectively). The reasons for the imposition of modifications and conditions of approval are to encourage good urban design, maintain the amenity of the local area and adequately mitigate the environmental impact of the development.

10 RECOMMENDATION

It is recommended that the Minister for Planning:

- (A) consider the assessment findings and recommendations of this report.
- (B) grant approval for the Concept Plan under section 750 of the *Environmental Planning and Assessment Act, 1979*, subject to modifications of the concept plan, by signing the Instrument of Approval at Appendix A, Tag "A" after signing of the legally binding Deed, between the proponent and the State Government.
- (C) determine under sections 75P(1)(a) and 75P(2)(c) that future development be subject to the requirements set out in Part B of Schedule 2 to the Instrument of Approval., and determine under section 75P(1)(c) that no further environmental assessment is required for the Gwandalan project application and the subdivision of land to enable the transfer of lands to a public authority or Minister of the Crown;
- (D) grant approval for the carrying out of the project, under Section 75P(1)(c) of the Environmental Planning and Assessment Act 1979, subdivision of Lot 3 in DP 588206 into 188 residential lots (one residue lot for the existing foreshore dwelling) subject to conditions and sign the determination of the Major Project (Appendix A, "Tag B");
- (E) note that the proposed listing of the site within Schedule 3 of the Major Projects SEPP must be determined prior to the Minister granting approval to the Concept Plan and project application.