

45 Hearnese Lake Road, Woolgoolga
Proposed Land Subdivision

Preferred Project Report

September 2009



Mersonn Pty Ltd
6/20 Wylde Street
Potts Point NSW 2011

CONTENTS

1.0	INTRODUCTION	
1.1	Background	6
1.2	Outline of Project	7
1.3	Public Exhibition	9
1.4	Submissions Received	10
2.0	RESPONSE TO SUBMISSIONS	11
3.0	PREFERRED PROJECT	
3.1	Introduction	112
3.2	Amendments to the Project	112
3.3	Preferred Project	115
4.0	STATEMENT OF COMMITMENTS	118
5.0	CONCLUSION	147

DRAWING LIST

Map 1	Overall Concept	De Groot and Benson Aug 2009 Rev H
Map 2	Staging Plan	De Groot and Benson August 2009 Rev H
Map 3	Layout Plan/Site Topography	De Groot and Benson August 2009 Rev H
Map 4S	Sewer Concept	De Groot and Benson August 2009 Rev H
Map 4W	Water Concept	De Groot and Benson August 2009 Rev H
Map 6	Bushfire Control	De Groot and Benson August 2009 Rev H
Map 7	Stormwater Management	De Groot and Benson August 2009 Rev H
Map 8	Locality Plan	De Groot and Benson August 2009 Rev H
Map 9	Site Analysis Plan	De Groot and Benson August 2009 Rev H

Map 10 Cross Sections – Sheet 1	De Groot and Benson August 2009 Rev H
Map 11 Road Long Sections – Sheet 1	De Groot and Benson August 2009 Rev H
Map 12 Road Long Sections – Sheet 2	De Groot and Benson August 2009 Rev H
Map 13 Cross Sections – Sheet 1	De Groot and Benson August 2009 Rev H
Map 14 Cross Sections – Sheet 2	De Groot and Benson August 2009 Rev H
Map 15 Cross Sections – Sheet 3	De Groot and Benson August 2009 Rev H
Map 16 Cross Sections – Sheet 4	De Groot and Benson August 2009 Rev H
Map 17 Cross Sections – Sheet 5	De Groot and Benson August 2009 Rev H
Map 18 Cross Sections – Sheet 6	De Groot and Benson August 2009 Rev H
Map 20 PNSW Constraints Plan	De Groot and Benson August 2009 Rev H
Map 21 Existing Zoning CHCC LEP Plan	De Groot and Benson August 2009 Rev H
Map 22 Draft LEP Amendment Plan	De Groot and Benson August 2009 Rev H
Map 23 Existing Site Survey Plan	De Groot and Benson August 2009 Rev H
Map 24 SEPP 26 Littoral Rain Forest Plan	De Groot and Benson August 2009 Rev H
Map 25 Climate Change Hazards Line Plan	De Groot and Benson August 2009 Rev H
Map 26 Flora-Fauna Management Controls Plan	De Groot and Benson August 2009 Rev H
Map 27 Hearnese Lake Road Plan	De Groot and Benson August 2009 Rev H
Map 28 Hearnese Lake Road Plan	De Groot and Benson August 2009 Rev H

Map 29 Hearn's Lake Road Plan	De Groot and Benson August 2009 Rev H
Map 30 Flood Evacuation Plan	De Groot and Benson August 2009 Rev H
99-07-2 Open Space Network	Anne Harrison August 2009

APPENDICES

Appendix 1

Map 24 SEPP 26 Littoral Rain Forest Plan De Groot and Benson August 2009 Rev H

Appendix 2

Map 26 Flora-Fauna Management Controls Plan De Groot and Benson August 2009 Rev H

Appendix 3

Map 30 Flood Evacuation Plan De Groot and Benson August 2009 Rev H

Appendix 4

Map 27 Hearn's Lake Road Plan De Groot and Benson August 2009 Rev H

Map 28 Hearn's Lake Road Plan De Groot and Benson August 2009 Rev H

Map 29 Hearn's Lake Road Plan De Groot and Benson August 2009 Rev H

Appendix 5

Map 20 PNSW Constraints Plan De Groot and Benson August 2009 Rev H

Appendix 6

Sediment and Erosion Management Report de Groot and Benson August 2009

Appendix 7

99-07-2 Open Space Network

Anne Harrison August 2009

Appendix 8

XP-Rafts Raw Data Output

Appendix 9

CHCC Water Quality Monitoring Regime 27 August 2009

Appendix 10

CHCC Developer Contributions Advice 3 September 2009

1.0 INTRODUCTION

1.1 Background

An Environmental Assessment (EA) was prepared by Mersonn Pty Ltd on behalf of BBK Development Corporation Pty Ltd (the proponent) pursuant to Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act), to assess the environmental impacts of the proposed creation of a residential subdivision at 45 Hearnese Lake Road, Woolgoolga.

The EA was prepared in accordance with the Director-General's Environmental Assessment Requirements (DGRs) issued on 24 August 2007 for a Project Application.

The EA was publicly exhibited from 1 June to 30 June 2009.

The purpose of this report is to provide a response to submissions received during the public exhibition period and detail proposed changes to the project resulting from consideration of the issues raised by Government agencies, Coffs Harbour City Council (Council) and the local community.

The format adopted for this report is as follows. Chapter 1 provides background information and states the purpose of the report. Chapter 2 presents a list of all the issues raised and provides a response to each issue. Chapter 3 documents the project in its amended form. Chapter 4 contains the amended statement of commitments and the final chapter draws conclusions based on the information provided in the preceding chapters.

1.2 Outline of Project

The application is for the residential subdivision of the land known as Lot 21 DP714858 Hearnese Lake Road, Woolgoolga. This development will involve a Torrens title residential subdivision comprising 43 allotments (41 residential allotments) and is proposed to be constructed in one stage but released in five stages.

Stage 1 will comprise 10 allotments, 9 being residential allotments varying in size from 537m² to 1,031m² and an allotment containing the stormwater management infrastructure (Lot 10). Lot 10 is proposed to be dedicated to CHCC. Stage 2 will comprise 5 residential allotments varying in size from 711m² to 842m². Stage 3 will comprise 8 residential allotments varying in size from 665m² to 715m². Stage 4 will comprise 11 allotments being 10 residential allotments varying in size from 712m² to 1,093m² and an allotment containing a proposed Environmental Protection 7(a) zoned land and its buffers (Lot 28). Stage 5 will comprise 9 residential allotments varying in size from 695m² to 1,060m².

The application is a project application and the staging is only intended to facilitate the release of the land over time.

Those parts of the site which are environmentally constrained land are proposed to undergo long term environmental rehabilitation to provide a high quality setting for the development and to enhance the environmental and recreational values of the site and its locality. The entire development has been designed to minimise environmental impact with the use of vegetated swales, bio-filters, rain-gardens and bio-retention basins to prevent pollutants from entering Hearnese Lake and to manage the flow of water leaving the site. All areas of environmental significance on the site have been identified and protected in a single lot (lot 28).

Access to the site will be from Hearnese Lake Road and then to the Pacific Highway. However, in the longer term access will be via a collector road from Hearnese Lake Road to Bosworth Road once residential development utilising Hearnese Lake Road has achieved a threshold.

The site is able to be adequately serviced for sewer, town water, power and telecommunications. Gravity sewer is to be extended along Hearnese Lake Road (Road Reserve) to a proposed new pumping station located on north side of the roadway.

A rising main will be constructed from this pump station to the existing gravity sewer system located in Bosworth Road.

Reticulated water will be provided by a new water main laid within the Hearnese Lake Road Reserve and connected to the existing main on the western side of the Pacific Highway.

1.3 Public Exhibition

The EA was placed on public exhibition for a period of 30 days from 1 June to 30 June 2009.

An advertisement detailing the exhibition was placed in the Coffs Harbour Advocate and the Coffs Harbour Independent.

The EA was made available for public viewing at four public locations, namely:

- Department of Planning, Information Centre, 23-33 Bridge Street, Sydney;
- Department of Planning, Grafton Regional Office, 76 Victoria Street, Grafton;
- Coffs Harbour City Council, Administration Building, Cnr Coff and Castle Streets, Coffs Harbour; and
- Nature Conservation Council, Level 2 301 Kent Street, Sydney.

Additionally copies of the EA were provided to Coffs Harbour City Council and eight government agencies:

- Department of Environment and Climate Change;
- Department of Primary Industries;
- Department of Water and Energy;
- Rural Fire Service;
- NSW Marine Parks Authority;
- Northern Rivers Catchment Management Authority;
- Crown Lands NSW; and
- Roads and Traffic Authority.

1.4 Submissions Received

The Department of Planning received submissions from:

- Coffs Harbour City Council;
- NSW Department of Water and Energy;
- NSW Department of Lands;
- NSW Department of Primary Industries;
- Solitary Islands Marine Park Authority;
- Department of Environment and Climate Change;
- NSW Rural Fire Service;
- Northern Rivers Catchment Management Authority;
- Roads and Traffic Authority.

In addition, six submissions were received from community members/adjacent landholders, five being objections and one a letter in support.

In preparing this response to the submissions received, the proponent has undertaken further consultation with Coffs Harbour City Council and the Department of Planning. A meeting was held with officers from Coffs Harbour City Council on 4 August 2009, to discuss the issues they had raised and to put forward measures to address their concerns. The outcomes/agreements reached at these meetings were provided to the officers from the Department of Planning for their comments and have been incorporated into this report.

2.0 RESPONSE TO SUBMISSIONS

Responses to the issues raised by the Department of Planning, Council, statutory authorities and the community are contained within *Table 2.1*. More detailed supporting information is contained within the appendices at the rear of this report.

Table 2.1 Response to Submissions

No.	Authority	Issue Raised	Submission	Response
1.1	NSW Dept. of Planning	<p>1. <u>Environmental buffers and preservation of Austral Toadflax (Thesium)</u></p> <p>The buffer to the SEPP 26 littoral rainforest and freshwater wetlands is insufficient. The subdivision has the potential to have a negative impact on the integrity of the rainforest and wetland communities as a result of edge effects.</p>	<p>Applicant to amend boundaries of proposed Lots 43, 32, and 30 to provide for a minimum 50m buffer to the SEPP 26 littoral rainforest.</p> <p>Proposed Lot 29 is to be deleted and incorporated into Reserve Lot 28.</p> <p>A covenant is proposed to be registered on the title of Proposed Lot 27 restricting building within the buffer zone.</p>	<p>Following further discussions with Coffs Harbour City Council and NSW Department of Planning it is agreed that the proposed lot layout be amended to provide for a 50m buffer to the SEPP 26 littoral rainforest. The buffer provided to the freshwater wetlands is shown as the agreed vegetation line. The agreed vegetation line was determined as the appropriate buffer required by CHCC ecologist Mark Graham and re confirmed by CHCC ecologist Gary Leonard. The agreed vegetation line has also been assessed by applicant's ecologist Peter Richards from Eco Logical Australia and is considered appropriate. WBM Oceanics' site specific study for storm water management also concurs the agreed vegetation line is appropriate.</p>

				<p>Proposed Lot 27 has been reduced from an area of 1093m² which provides for an unencumbered building platform of 460m² (shown as hatched) while respecting the 50m buffer to SEPP 26 by reducing its size and incorporating a covenant to restrict the building footprint.</p> <p>This is reflected in Appendix 1, Map 24 SEPP 26 – Littoral Rainforest.</p>
1.2	NSW Dept. of Planning	<p>1. <u>Environmental buffers and preservation of Austral Toadflax (Thesium)</u></p> <p>The proposed removal of approximately 60% of the population of Austral</p>	<p>Applicant to amend proposed subdivision to provide for Lot 3 as a pocket park accommodating the Austral Toadflax to be dedicated to Coffs Harbour City Council.</p>	<p>Following further discussions with Coffs Harbour City Council and NSW Department of Planning it is agreed that the proposed lot layout be amended to provide for an amendment to the layout of proposed Lot 3 to accommodate the Austral Toadflax community and for lot 3 to be dedicated to Coffs Harbour City Council as a pocket park.</p>

		<p>Toadflax on the site is not supported. The Department considers that the proposed level of management and protection of Austral Toadflax is not satisfactory. The subdivision layout should be amended to retain as many specimens of this species as possible. Protection within areas of Lot 29 and Lot 3 is recommended.</p>	<p>Previous Lot 29 amended to be incorporated into Reserve lot 28 accommodating the Austral Toadflax.</p> <p>Lot 29 has been reduced to allow the area of the lot located in the 50M buffer from RL3.5 to be dedicated to CHCC as part of Lot 28 Reserve.</p>	<p>It is agreed to amend the layout of previous lot 29 to incorporate this area into the Reserve Lot 28 which is to be dedicated to Coffs Harbour City Council.</p> <p>This is reflected in Appendix 2 – Map 26 – Flora – Fauna Management Controls.</p>
1.3	NSW Dept. of Planning	1. <u>Environmental buffers and preservation of Austral Toadflax</u>	<p>Applicant to amend Lot 27 to be outside the 50m buffer from RL 3.5 AHD.</p>	<p>Applicant has amended Lot 27 to be outside the 50m buffer from RL 3.5 AHD.</p> <p>A building platform of 460m² has been applied</p>

		<p><u>(Thesium)</u></p> <p>Lot 27 is partially intersected by a 50 metre buffer to the 3.5m AHD contour, as specified in the Hearne's Lake DCP. This is not supported.</p>	<p>A building platform of 460m² has been applied to Lot 27.</p>	<p>to Lot 27.</p>
1.4	NSW Dept. of Planning	<p>1. <u>Environmental buffers and preservation of Austral Toadflax (Thesium)</u></p> <p>The Department recommends a modification to the subdivision layout to provide further protection</p>	<p>Applicant to amend proposed subdivision layout in accordance with this recommendation and items 1.1 to 1.3 above.</p>	<p>Applicant has amended subdivision layout to further provide protection for Austral toadflax and provision of a 50m buffer to SEPP 26 Littoral Rainforest and the RL 3.5m AHD contour.</p> <p>The new lot layout allows for a 50 m Buffer to SEPP 26 for all lots in the subdivision with the exception of modified Lot 27.</p> <p>Modified lot 27 has a building envelope which</p>

		<p>to the Austral Toadflax and provision of a 50 metre buffer to the SEPP 26 littoral rainforest and the 3.5m AHD contour, in accordance with the Hearn's Lake DCP, and to demonstrate consistency with the proposed 7A zoning line in Coffs Harbour Draft LEP Amendment No 29. This is likely to result in the loss of proposed Lot 29 and modification to the lot boundaries of proposed Lots 3, 4, 27, 32 and 43. A pocket park could be created adjacent to the eastern boundary of the modified</p>	<p>excludes any dwelling inside the 50m Buffer. See Appendix 1 Map 24.</p> <p>No residential lot falls within the 50m buffer to RL 3.5m AHD. See Appendix 2 Map 26.</p> <p>Consistency with proposed LEP Amendment 29 is not met. It has been confirmed that the mapping used in the preparation of the LEP Amendment 29 was inaccurate. The buffer lines adopted are based on the Sainty Report which was a desktop report utilising the inaccurate mapping. CHCC have confirmed that the buffers used in this application are a true indication of the SEPP 26, 50m Buffer line and the 50m buffer line from RL 3.5 AHD.</p> <p>Please refer letter dated 23 May 2006 from CHCC Strategic Planning Manager, Mr Clyde Treadwell to Mr B France, BBK Coastal Development Group.</p>
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		Lot 3 to provide protection to the Austral Toadflax and Remnant Red Gum communities in this area.		<p>This letter was post DCP and draft LEP preparation and it is our understanding the final LEP submission would incorporate the Part 3A application agreements in the LEP revision.</p> <p>Following further discussions with Coffs Harbour City Council and NSW Department of Planning it is agreed that the proposed lot layout be amended to provide for an amendment to the layout of proposed Lot 3 to accommodate the Austral Toadflax community and for lot 3 to be dedicated to Coffs Harbour City Council as a pocket park.</p> <p>It is agreed to amend the layout of previous lot 29 to incorporate this area into the Reserve Lot 28 which is to be dedicated to Coffs Harbour City Council.</p>
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				<p>This is reflected in Appendix 2 – Map 26 – Flora – Fauna Management Controls.</p> <p>Lot 4 has been amended to include Lot 3 as pocket park.</p> <p>Lot 32 and 43 have been reduced to allow for 50m buffer to SEPP 26.</p> <p>Lot 27 has been reduced to be outside the 50 m buffer from RL 3.5m AHD.</p> <p>Lot 27 has a building envelope included with consideration of a no build zone within the 50m buffer to SEPP 26.</p> <p>Road 2 has been modified to be outside the 50m buffer to SEPP 26.</p>
1.5	Dept. of Planning	1. <u>Environmental buffers and</u>	Applicant to amend fire trail west of agreed	Applicant agrees that the proposed Eastern lot boundaries of proposed lots 39 (now

		<p><u>preservation of</u> <u>Austral Toadflax</u> <u>(Thesium)</u></p> <p>The lot boundaries of proposed lots 39-42 on the eastern side of the subdivision should also be amended such that the eastern edge of the fire trail follows the natural contour of the land and natural boundaries. Development should avoid steep land.</p>	vegetation line.	<p>proposed lot 38) and 40 (now proposed lot 39) be modified to include the fire trail west of the agreed vegetation line to maintain integrity of vegetation buffer to ephemeral wetland. A revised subdivision layout will include this amendment. See Appendix 5 Map 20.</p> <p>A sharp directional change would not be appropriate for a standard fire fighting vehicle. Sound engineering practice has been included in the fire tail design in that the current design allows for a fire fighting vehicle to easily drive forward or reverse in response to an emergency situation or threat. Curves shall have an inner radius of 6m and outer radius of 12m precludes the design from following the natural contour of the land as suggested.</p>
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				Geotechnical assessment rates the position of the fire trail adjacent to lots 39– 42 (now lots 38 -41 on new layout) to be in a low to moderate risk steep land area – not a high risk area. Engineering solutions based on supporting structural loads on appropriate foundation would apply. The majority of the development proposed for these lots (the dwellings) will be sited on the western portion of the lots to take advantage of the ocean views. Should it be deemed necessary development consent could be conditioned to require a site specific geotechnical assessment for any proposed dwellings on lot 39– 42 (now lots 38 -41 on new layout)
1.6	Dept. of Planning	1. <u>Environmental buffers and preservation of Austral Toadflax</u>	Applicant to amend fire trail west of agreed vegetation line.	Applicant agrees that the proposed Eastern lot boundaries of proposed lots 39 and 40 (now lot 38 and lot 39 on new layout) be modified to include the fire trail west of the agreed vegetation line to maintain integrity of

		<p><u>(Thesium)</u></p> <p>The Department does not support the location of the fire trail within the ecological buffer. Any buffer should be fully vegetated.</p>		vegetation buffer.
1.7	Dept. of Planning	<p>1. <u>Environmental buffers and preservation of Austral Toadflax (Thesium)</u></p> <p>The Austral Toadflax is protected under the commonwealth environmental protection and biodiversity conservation act 1999.</p>	As per 1.2 above.	Following further discussions with Coffs Harbour City Council and NSW Department of Planning it is agreed that the proposed lot layout be amended to provide for an amendment to the layout of proposed Lot 3 to accommodate the Austral Toadflax community and for lot 3 to be dedicated to Coffs Harbour City Council as a pocket park. It is agreed to amend the layout of proposed lot 29 to incorporate this area into the Reserve Lot 28 which is to be dedicated to Coffs Harbour City

		As several hundred specimens of this species are to be removed as part of the proposal, a referral should be made to the Commonwealth Department of Environment, Water, Heritage and the Arts to confirm that it is not a 'controlled action'.		<p>Council.</p> <p>This allows the majority of the Austral Toadflax to remain in situ and no longer requires the removal of several hundred specimens.</p> <p>It is considered that this amendment avoids any concern that the proposal would involve a "controlled action".</p>
1.8	Dept. of Planning	<p>1. <u>Environmental buffers and preservation of Austral Toadflax (Thesium)</u></p> <p>The Vegetation</p>	The VMP to be submitted as a condition of consent to allow time for appropriate compilation of the plan through consultation with interested parties	Ultimately the proposed subdivision seeks to dedicate the proposed reserve area back to CHCC to be incorporated into the Coffs Coast Regional Park and it is recognized that a detailed VMP will be required at a later stage. A VMP will prescribe specific maintenance and

		management Plan is critical to the effectiveness of the proposed ameliorative measures proposed for protection of threatened flora species and ecological communities. A Draft VMP should be provided for the Department's consideration prior to determination.	once the application is determined.	<p>costing for a five year period and will incorporate recommendations as made by Ecological Australia in their flora and fauna report dated July 2007 and recommendations made in the Landscape Concept Plan provided by landscape architect Anne Harrison in September 2007. Through this process, weeds will be removed, sensitive areas will be securely protected, native vegetation strengthened, edge planting to littoral rainforest (as recommended by CHCC) and an active program to encourage the growth of Austral Toadflax. Once the application has been determined, the extent of the VMP required will also be determined.</p> <p>As part of the subdivision detailed design, a VMP can be submitted to CHCC along with civil works design for approval. Consultation with CHCC can be part of the</p>
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				<p>process given that it will be part of the regional park under their management.</p> <p>The applicant seeks the VMP to be submitted as a condition of consent to allow time for appropriate compilation of the plan through consultation with interested parties once the application is determined. A VMP framework and recommendations exists in the current application.</p>
1.9	Dept. of Planning	<p>2. <u>Contamination</u></p> <p>Banana cultivation is not the only use that has the potential for contamination.</p> <p>Agricultural activities, such as cattle grazing are also identifies as</p>	No further action.	<p>The section 149 Certificate from CHCC identified the potential for the land to be contaminated with chemical residues exceeding safe levels. The section 149 certificate included a broad statement about contamination on lands in the Coffs Harbour area to assist prospective property purchasers. The statement did</p>

		being activities that may cause contamination. A preliminary desktop assessment in accordance with SEPP55 should be undertaken to confirm that the site is suitable for the proposed use.		<p>not identify the subject land as being potentially contaminated according to Council records.</p> <p>Holmes & Holmes undertook a contaminated soils assessment of the site as part of the geotechnical study in 2003 Appendix 4 of the Environmental Assessment. The report recommends there was no evidence of contamination on the site. The only known historic agricultural use of the site has been for cattle grazing and there has been no cattle dip or other potentially contaminating activity undertaken on the site.</p> <p>Further investigation has been carried out which shows that there is no information collected by CHCC that would indicate any possibility of contamination on the basis of</p>
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				<p>the known history of the site. Further assessment for potential contamination is not considered to be warranted.</p> <p>It is considered that this matter has been satisfactorily dealt with.</p>
1.10	Dept. of Planning	<p>3. <u>Flooding and Coastal Hazards</u></p> <p>Please provide a flood evacuation plan that illustrates the flood evacuation route during a 1 in 100 and Probably Maximum Flood event, in accordance with the Floodplain Development manual 2005. Access routes do not have to be above the PMF level but be at a level of flood</p>	Applicant to provide a flood evacuation plan as per Appendix 3.	<p>Flood Evacuation Plan (see Appendix 3 Map 30)</p> <p>. The report, by Patterson Britton and Partners Appendix 3 - part 10 – Conclusion of the Environmental Assessment indicates there are no minimum habitable floor requirements for the proposed development from a coastal engineering perspective, given that the coastal inundation hazard is expected to be negligible for the 100 year coastal storm occurring over the next 100 years.</p> <p>A peak design 100 year recurrence flood level of 2.6m AHD can be adopted for Hearne's Lake catchment recent considerations for</p>

		protection that, in combination with effective warning time, development type and flood duration provides adequate time for evacuation and reduces risk to acceptable levels.		<p>current climate change taking the flood level from 2.6 to 2.95m AHD for the 100 year flood recurrence. The Estuary Management Study suggests a flood planning level of 3.5 RL based on High Berm levels. Map 30 shows the evacuation paths possible based on two scenarios</p> <p>1) Current 1-100 year flood event</p> <p>2) Anticipated High Berm level through climate change and coastal dune changes for 1-100 year flood event</p> <p>It is noted that an alternative collector road is proposed in the DCP to service the development and provide an alternative route. CHCC should consider the flood risk data provided in our application when determining the finished AHD of the proposed collector road to with relation to DOP concerns.</p>
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				<p>Coffs Harbour has experienced two significant flood events in 2009. One event exceeded the 1 in 100 level and in parts of the LGA likened to a 1 in 500 event. Record high rainfall coupled with a king tide produced wide spread flooding including major flooding in the city centre. The township of Woolgoolga also recorded record rainfalls.</p> <p>As a resident of the subject site, Mr. France witnessed no flooding occurring on the site. Hearne's Lake road was trafficable by means of a standard motor vehicle at all times. Water lying in a dip of the road was present during this time at a level of approximately 150mm at peak. Water also lies on the road in this dip even on minor rainfall events. During the recent flood events at no stage could Mr. France or his family not exits along Hearne's Lake Road.</p>
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1.11	Dept. of Planning	<p><u>Flooding and Coastal Hazards</u></p> <p>Please confirm that all services assets (such as water and sewer mains, telephone and electricity cables) are landward of the 2108 Hazard Line.</p>	No further action.	The 2108 Hazards Line estimates are reflected on Map 25 – Climate Change. This demonstrates that all service assets (such as water and sewer mains, telephone and electricity cables) are landward of the 2108 Hazard Line.
1.12	Dept. of Planning	<p><u>Flooding and Coastal Hazards</u></p> <p>A Zone of reduced Foundation Capacity extends over part of Lot 27. Please include a building location</p>	A covenant is proposed to be registered on the title of Proposed Lot 27 restricting building to within the building location envelope.	A building location envelope for proposed lot 27 has been included on Map 25 – Climate Change. A building envelope for proposed lot 27 can be nominated to occur as an 88B instrument. The revised subdivision layout incorporates a hatched section on lot 27 indicating the proposed building envelope. This building envelope is landward of the

		envelope (BLE) on the plans for this lot to demonstrate a standard size dwelling can be built on this lot (Following the requested lot boundary amendments requested above) A Section 88B instrument should be placed on this lot restricting development of a dwelling in the affected area.		<p>2018 hazard line.</p> <p>It is agreed that special conditions apply to building envelope of lot 27 for special foundations (such as piling) for residential building development.</p> <p>The risk of future coastline hazards at Lot 27 could be recognized through inclusion of coastline hazard information on a Section 149 certificate associated with the property, without any actual development restrictions at this time.</p> <ul style="list-style-type: none">• Section 149 includes coastline hazard information.• Lot 27 is landward of the 2108 hazard line.• Special conditions to be applied to foundation requirements. Subject to
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				<p>Geotech reports. Should Geotech reports indicate adequate rock foundation no conditions to apply.</p> <ul style="list-style-type: none"> The proposed building envelope will be 460m² which will be sufficient to accommodate a standard size dwelling.
1.13	Dept. of Planning	<p><u>4. Infrastructure</u></p> <p>The application involves a range of works within and adjacent to Hearn's Lake Road, which is a Crown Road.</p> <p>Landowners consent has not been obtained from the Department of Lands. Landowners consent is required prior to the Minister's determination</p>	<p>Applicant amend services proposal in accordance with Appendix 4 Maps 27 – 29.</p> <p>The Applicant seeks Landowners consent from the Department of Lands on this basis.</p> <p>Prior to the release of</p>	<p>Following further discussions with Coffs Harbour City Council and NSW Department of Planning it is agreed that the proposed services layout be amended to provide for ownership of the road be transferred from the Crown to Coffs Harbour City Council.</p> <p>Our understanding is that Council is agreeable to this, provided that:</p> <ul style="list-style-type: none"> The carriageway is upgraded to an acceptable standard for Council. At the meeting, it was agreed that a minimum

		of this project. Please refer the Department of lands' submission for more detail in relation to this matter.	the Construction Certificate for work on the Crown Road, <ol style="list-style-type: none">1. the road is to be transferred to Council as a Council public road, and2. the applicant meets all prescribed fees involved in the transfer, and3. the applicant lodges with Council a bond to cover the cost of the road upgrading."	6m wide carriageway would be acceptable to Council. <ul style="list-style-type: none">• The developers would need to conduct pavement tests to confirm if any strengthening to the pavement was required to meet Council's normal design standards.• That the water supply mains be located in the road reserve in accordance with Council's normal design standards.• That gravity sewerage and rising mains be located in the road reserve in accordance with Council's normal design standards.• That a footpath (minimum width of 1.2m) and sealed with a minimum of 25mm asphaltic concrete be provided from the development site to the existing bus stop at the western end of the Hearn's Lake Road. It is noted that
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				<p>the preferred location for the sewerage pumping station is in private land to the north of Hearn's Lake Road; these mains will connect to this pumping station.</p> <ul style="list-style-type: none">• The section of gravel track east of the proposed site access be upgraded to meet the requirements for a "Fire Trail" as set out in the "Planning for Bushfires Guidelines".• The initial section of this fire trail is sealed. The extent of the seal is to the existing entrance of the informal car parking area. <p>This is reflected in Maps 27 – 29 contained within Appendix 4.</p> <p>CHCC propose to recommend to the Department of Planning that a condition of any consent for the subdivision will require the following:</p>
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				<p>“Prior to the release of the Construction Certificate for work on the Crown Road,</p> <ol style="list-style-type: none">4. the road is to be transferred to Council as a Council public road, and5. the applicant meets all prescribed fees involved in the transfer, and6. the applicant lodges with Council a bond to cover the cost of the road upgrading.”
1.14	Dept. of Planning	<p><u>4. Infrastructure</u></p> <p>Further consultation is required with the owner of No.13 Hearn's lake Road in relation to the proposed sewage pumping station. It is understood that the owner of this property is willing to enter into</p>	<p>Applicant to amend sewer pumping station location consistent with Map 29.</p>	<p>Following further discussions with Coffs Harbour City Council and the owner of No: 13 Hearn's Lake Road it is agreed that the proposed sewer pumping station be located on that allotment.</p> <p>An amended location plan has been prepared and is shown on Map 29 in Appendix 4.</p>

		discussions on this matter.		
1.15	Dept. of Planning	<p><u>4. Infrastructure</u></p> <p>It is understood that the table drain in Hearn's Lake Road is currently not working satisfactorily. Please review the proposed stormwater management strategy to ensure the proposed management measures adequately address stormwater treatment, detention and discharge arrangements.</p>	Applicant to upgrade existing table drain.	Following further discussions with CHCC it has been agreed that the proponent will upgrade the existing stormwater drain to CHCC standards. We have reviewed the proposed stormwater main strategy and the proposed measures adequately address stormwater treatment, detention and discharge requirements. Refer Section 13.6 for further detail.
1.16	Dept. of Planning	<p><u>5. Geotechnical Engineering</u></p>	No further action.	The geotechnical report indicates that the soils in the South Western corner of the site

		<p>The geotechnical assessment shows the area proposed for the detention basin in the South West corner of the site, being Zone W – wet, soft ground, with a high water table. Interception of the groundwater is likely for construction of the detention basin. If this is the case, a temporary dewatering licence will be required from the Department of Water and Energy under the Water Act 1912. To prevent any</p>	<p>where the bio retention basin is proposed are clayey strands to a depth of 0.8m overlying a 1.7m deep layer of firm stiff plasticity clay, overlaying a wear fractured clay stone. During the geotechnical investigations, no ground water was observed in the profile.</p> <p>The storm water management design engineers, WBM consider that the soil profile observed would be suitable for the purpose of storm water treatment at this location. Both Holmes and Holmes and DWE (para. 5 7 July 2009) agree that it is unlikely that groundwater be encountered.</p> <p>A dewatering permit is only required in the unlikely event that groundwater is encountered.</p> <p>The applicant agrees the base of the proposed retention basin be lined with clay.</p>
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		contamination of the surrounding groundwater, the basin should be clay lined. The proponent is encouraged to consult with DWE regarding the need for a licence. DWE have advised they are unlikely to issue a licence for such excavations.		<p>Bore hole number three of the Geotechnical report Appendix 4 of the Environmental Assessment is located central to the proposed retention basin. The results of the bore indicate a depth of 3m. No groundwater was found during this process. The report would suggest that ground water would not be present at the depth of the expected excavation for the retention basin.</p> <p>Little to no excavation is proposed to create basin – in fact we will be building embankment walls.</p> <p>The applicant considers the application to DWE unnecessary.</p>
1.17	Dept. of Planning	5. <u>Geotechnical Engineering</u>	Require a site specific geotechnical assessment for any proposed dwellings on	Geotechnical assessment rates the position of lots 39 – 42 (now lots 38 - 41 on new layout)

		<p>The geotechnical assessment identifies an area of instability on the eastern part of the site. It is understood that surface gradients are between 20-40% in this area and it has been identified as a zone of low to medium risk steep land with evidence of slumping. Please identify which lots are affected by slope instability as these lots will require a Section 88B instrument restricting the type of construction permissible on these sites to appropriate hillside</p>	<p>lots 38 - 41 on new layout.</p>	<p>to be in a low to moderate risk steep land area – not a high risk area. Engineering solutions based on supporting structural loads on appropriate foundation would apply. The majority of the development proposed for these lots (the dwellings) will be sited on the western portion of the lots to take advantage of the ocean views. Should it be deemed necessary development consent could be conditioned to require a site specific geotechnical assessment for any proposed dwellings on lot 39 – 42 (now lots 38 - 41 on new layout)</p>
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		construction i.e. no slab on ground construction.		
1.18	Dept. of Planning	<p>6. <u>Acid sulphate Soils</u></p> <p>No field assessment to identify potential acid sulphate soils has been undertaken on the site.</p>	No further action.	<p>The DOP is referred to the geotechnical assessment (field assessment) undertaken by Holmes & Holmes Pty Ltd Appendix 4 of the Environmental Assessment. The assessment considered acid sulphate soils, land slip risk and general geotechnical aspects of the site. The site report identified the land as having acid sulphate soil potential but concluded this potential to be contained in the proposed conservation zone - reserve lot 28. The report states:</p> <p style="padding-left: 40px;">‘It is understood that this area (potential acid sulphate soil area) will be retained as a wetland area (ephemeral wetland) and hence, as undeveloped land, the occurrence of acid sulphate soils is irrelevant. No other potential area of acid sulphate</p>

				soils is identified by the mapping’.
1.19	Dept. of Planning	<p>6. Acid sulphate Soils</p> <p>Construction of the detention basin may result in the disturbance of acid sulphate soils (ASS). An Acid Sulphate Soils Management Plan should be provided where there is a potential for the disturbance of ASS. Sampling to confirm the presence of ASS should be undertaken.</p>	No further action.	<p>Refer the conclusion reached from bore hole no 3 conducted as part of the geotechnical assessment. The conduct of the bore hole produced a soil sample exceeding 2m in depth (refer record of findings). No acid sulphate soil was recorded.</p> <p>As a result of the assessment, there is no need to provide an acid sulphate soils management plan.</p> <p>Sampling to confirm the presence of acid sulphate soils at the proposed detention basin has been undertaken at bore hole three.</p>
2.1	13 Hearnese	Sewerage	Action as per 1.14.	Following further discussions with Coffe

	Lake Rd	<p>The proposed 'Strategy B- Alternative Strategy' as outlined in the EA has serious shortcomings. The proposed location close to our driveway and close to existing housing on Hearn's Lake Rd is undesirable. It would also be much more of an eyesore if located on the road reserve. If the pumping station has to be located in that vicinity then a spot slightly to the east and on our property would allow it to be more easily disguised from the road. It may alternatively be</p>	<p>Harbour City Council and the owner of No: 13 Hearn's Lake Road it is agreed that the proposed sewer pumping station be located on that allotment.</p> <p>An amended location plan has been prepared and is shown on Map 29 in Appendix 4.</p>
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		possible to locate the pump station further to the east along Hearnese Lake Rd as we suggested early in discussions. A reason why this was not feasible has never been given.		
2.2	13 Hearnese Lake Rd	Road Network The Hearnese Lake DCP indicates collector roads for the northern region as being Hearnese Lake Rd and a new road running along the northern boundary and then south to connect to Hearnese Lake Rd near the proposed-bus turning bay. Part of	No further action.	Provision is available to provide a collector road connection to the western boundary of the site via proposed road one. This can be determined when subdivision application are proposed for No 13 Hearnese Lake Road. We have amended Maps 8 and 9 to correctly reflect the location of the proposed collector road as shown on CHCC DCP.

		this new road seems to be duplicated by a section of road proposed for 45 Hearnese Lake Rd. (i.e. the section in the south east corner near proposed lot 10.)		
2.3	13 Hearnese Lake Rd	Stormwater The existing table drain in Hearnese Lake Road does not adequately cope with storm water events that occur in the area now, let alone any additional storm water that may result from future development. At the moment, most storm water travels along the road (not the table drain)		<p>The table drain is proposed to be upgraded refer Section 13.6 for details.</p> <p>It is noted that the proposal does not increase the existing volumes of water discharging from the site.</p>

		towards a point about 1/5 of the way west along Hearn's Lake Road on the northern side of the road. I believe that reconstruction of a drain along the road would be necessary.		
2.4	13 Hearn's Lake Rd	Rainforest Setbacks We are also concerned by the lack of recognition of the small but significant littoral rainforest that borders Hearn's Lake (between Hearn's Lake Road and the lake) to the south of the proposed development. There seems to be no setback	No further action.	The vegetation fringing Hearn's Lake is recognised in the requirement for a 50m buffer above the RL3.5m contour. This requires all development to be setback from the Lake and its fringing vegetation. The development satisfies this buffer requirement.

		from this rainforest from Lots 1 and 2 and 24-27. While this is not yet officially recognised as a SEPP 26 rainforest it is, nonetheless, recognised as important rainforest by locals.		
3.1	Coastcare	<p>We believe that the swales and any other runoff control measures should be well-in place and well-vegetated and monitored by an independent body before any other ground works are started.</p> <p>We also ask who will be the responsible body if it is found that the approved runoff controls</p>	Applicant to implement Appendix 6 – Sediment and Erosion Management Report de Groot and Benson August 2009.	<p>Sediment control measures will be undertaken in accordance with CHCC engineering standards which represent best practice in accordance with NSW Department of Housing Book called “Managing Urban Stormwater Soil and Conservation”.</p> <p>See Appendix 6 – Sediment and Erosion Management Report de Groot and Benson August 2009</p>

		are found to be ineffective?		CHCC Engineering Department will be the responsible authority.
4.1	Lot 31	These plans conveniently leave our block of land, lot 31 off vital plans, which allow the developers consultant to draw a collector road on land that has hour home located on it. (Site analysis plan maps 8 and 9) In addition to these the aerial photo on page 42 of the final plan is inaccurate with regards to existing roads, and which dwellings are occupied. These errors I feel are quite divisive in getting the development	No further action.	We have amended Maps 8 & 9 to correctly reflect the location of the proposed collector road as shown on CHCC DCP.

		approved. The consultants de Groot Benson and Mersonn Pty Ltd are responsible for these inadequate plans. Can we get a clear decision on where the new collector road will be in this development?		
4.2	Lot 31	Having read the storm water proposal for the development with regard to the release of untreated stormwater into local waterways I cannot see this strategy coping especially after the recent rainfall we have witnessed. Hearnes	No further action.	The stormwater management plan describes in detail the treatment proposed for all stormwater prior to discharge into the local waterways. It includes standards for quality and quantity which are to be met and mechanisms for achieving those standards. Discharges have been modelled and the modelling provided to the consent authority to demonstrate compliance of the proposal

		Lake Road has flooded in past storm events as well.		with the standards. It is considered that the proposal adequately meets these requirements.
4.3	Lot 31	This subdivision will bring sewer, water and electricity to our area, what are our options for connection to these services. Currently our electricity comes to our home from the rear of our block underground from a power pole 40 metres from our boundary through a 3 metre wide Country Energy easement. Will this be maintained or will we have another point of	No further action.	The sewer and water are proposed to be forward funded by the proponent but remain public assets and publically available for future connection by surrounding residents. Those connections to the base infrastructure will be at individual cost. No change will be made to current electrical supply to Lot 31 by this Subdivision.

		attachment. We are on a septic sewer system at present where will our connection point be to the new sewer, and at whose expense is the new connection.		
4.4	Lot 31	I feel that there will be a significant impact on the areas wildlife. The increased population in the area will put unsustainable strain on the lake and beach areas flora & fauna. In addition during construction there will be huge areas of exposed soil which given local rainfall, will be subject to heavy erosion, which	No further action.	<p>The impacts of the proposal on local fauna and flora have been considered in detail in the accompanying reports. The proposal provides for the dedication of an area of land to the east of the development as a reserve to contain the most sensitive lands.</p> <p>It is considered that these matters have been considered in detail and appropriately resolved.</p>

		ultimately ends up washing soils into local waterways.		
5.1	Hedder Pty Ltd	It appears to be a responsible development with emphasis on protecting sensitive land and regeneration works planned. As a local I believe the development and building construction works will benefit the township of Woolgoolga. Sewer connection to the area will be a major positive for the Lake and hopefully locals will be able to fish the Lake again.	No further action.	
6.1	43A Hearnnes	Concern about runoff water as my house is	No further action.	The proposed development captures all runoff and diverts it to the drainage reserve

	Lake Rd	built on a cut and fill and I already have seepage.		<p>within Lot 10 for treatment and discharge to Hearnese Lake.</p> <p>It is expected that any overland flow previously experienced by this property should be improved by the proposed stormwater strategy.</p>
7.1	41 Hearnese Lake Rd	Whereas development of the proposed density may well be appropriate in an already established urban development where the surrounding environment is not threatened, it can readily be seen that the introduction into this biosphere of several hundred percent more human activity, pets and	No further action.	<p>The subject site has been zoned for the proposed development and the proposal is of a density 12 – 15% lower than that envisaged by the planning controls.</p> <p>The impacts of the proposal upon the surrounding environment have been explored in detail and appropriate measures adopted to minimise impacts.</p>

		domestic "run-off" would be catastrophic.		
7.2	41 Hearnese Lake Rd	Further to this understanding and the information contained in the Coffs Harbour City Council Biodiversity Action Strategy-2002 it would seem that, to prevent further development proposals of this nature threatening this valuable eco-system, it would be wise to protect its future with more appropriate environmental zoning.	No further action.	The draft LEP 29 has recognised where there is value in parts of this land and has proposed a 7A zoning on those parts. It also recognises that much of the land has been grazed for many years and is of low environmental value and suitable for residential use. The proposal recognises that draft zoning and sets that land aside in a reserve to be dedicated to the council.
8.1	Dept. of Primary Industries	Considering these matters DPI Fisheries recommends that the buffer of native endemic	Applicant to amend layout as per Appendix 5 Map 20.	Following further discussions with Coffs Harbour City Council and NSW Department of Planning it is agreed that the proposed lot layout be amended to provide for an

		vegetation between the hind dune wetland and the bushfire trail/pedestrian access route be increased by between 5 - 10 metres to more adequately protect the wetland values.		<p>increased buffer to the freshwater wetlands.</p> <p>It is intended to modify the alignment of lots 29, 30, 32 and 43 to meet this requirement. This is reflected in Appendix 5 Map 20 Planning Constraints.</p> <p>Other proposed amelioration measures are shown on Appendix 2 Map 26.</p>
8.2	Dept. of Primary Industries	Stormwater management features need to be positioned, and of elevations to accommodate without unacceptable compromise, the range of water level heights that can occur within Hearn's Lake under a minimal intervention entrance management	No further action.	All Storm Water management features are significantly higher than RL 3.5 m AHD and their operation will not be interfered with by high water levels in Hearn's Lake.

		regime. Based on previous investigations into the entrance berm height this level is unlikely to be less than 2 m AHD. DPI Fisheries is not satisfied that the EA adequate demonstrates operation of the detention basin under 10 and 100yr ARI events have considered the consequences of changes in the height of tail water levels, i.e. the varying heights of Hearn's Lake.		
8.3	Dept. of Primary Industries	Sewerage pumping Station DPI Fisheries recommend that the	Provide bunding or appropriate measures to the proposed sewer pumping station.	These measures will be incorporated into the design of the sewer pumping station in consultation with Coffs Harbour City

		provision of this infrastructure also be accompanied by bunding or other appropriate measures to limit overflows entering the Lake.		<p>Council.</p> <p>RL for top of pump station will take into account 1:100 event levels with 350mm freeboard.</p> <p>CHCC will be obtaining an EPA pumping station licence which will condition requirements for minimising overflow.</p>
9.1	Dept. of Lands	Landowners consent was not granted by the Department to use the Crown Public Road in association with the development (please refer to the letter to DOP dated 21 August 2008). Notwithstanding this, the EA does not appear to have considered the full range of potential	As per 1.13 above.	As per 1.13 above.

		vegetation, particularly along Hearnese Lake Road, when a full flora survey of the Road does not appear to have been conducted, at least for those areas encompassed by the works.		
9.2	Dept. of Lands	<p>The installation of a locked gate on Hearnese Lake Road restricting public access to a Crown Public Road is not permitted under the <i>Roads Act 1993</i>.</p> <ul style="list-style-type: none">• The construction of a three-metre wide road easement and vegetated stormwater flow swale on the Road along the	No further action.	<p>No locked gate to proposed fire trail is proposed in this subdivision.</p> <p>CHCC have agreed to accept a transfer from the Department of Lands of the area shown as the fire trail.</p> <p>No stormwater swale is proposed outside the southern boundary of the site and the landscape concept plan drawing number 99-07-2 has been amended to reflect the above.</p>

		<p>southern boundary of the subject site. Such works must be fully contained within the subject site. The Department may consider the upgrading of the bush fire trail and pedestrian access route if the EA were expanded to encompass the route, the route were to follow the current cleared course of the existing unformed track and the Department were consulted regarding its design, extent and long-term management (including the issuance of any licences as appropriate). The</p>		
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		Department would welcome an opportunity to discuss this aspect of the proposal further with the Proponent, since the intended route appears to constitute an important element of the development (in terms of bushfire management and pedestrian access to Hearnese Lake Beach and Hearnese Lake).		
9.3	Dept. of Lands	Additionally, it is stated on Page 65 of the EA temporary truck wash-down facilities will be provided at the exits from the Subject Site. The proposed locations and intended	Applicant to ensure truck wash down facilities are located on the subject site.	Wash down facilities will be located on the subject site.

		operation of these facilities have not been indicated or discussed in the EA.		
9.4	Dept. of Lands	It is considered the EA does not adequately address the likely impacts a future resident population may have on the area through increased visitation and usage. The Department would welcome an opportunity to discuss the implications of the proposal for the on-going management of the public recreational area in more detail with the	CHCC, Marine Parks Authority, DECCW and NPWS hold discussions to identify possible management strategies on lands managed by those agencies in order to avoid or minimise any potential disturbance to the above species and their habitat.	It is proposed that CHCC, Marine Parks Authority, DECCW and NPWS hold discussions to identify possible management strategies on lands managed by those agencies in order to avoid or minimise any potential disturbance to the above species and their habitat. Strategies may include prohibiting or restricting pets in areas utilized by threatened species, interpretive signage informing residents of breeding habitat and seasonal activity of local threatened species, seasonal closures and protection of breeding sites, 4WD beach access etc.”

		Proponent.		Management of the public recreation area will be jointly undertaken by CHCC and NPWS as it is located in the Coffs Coast Regional Park. Upgrades proposed in the Hearnese Lake/Sandy Beach DCP to the public recreation area are detailed in the DCP and have S94 contributions allocated.
9.5	Dept. of Lands	The Site is very close to Hearnese Lake Beach, a four wheel-drive accessible, leash-free area which constitutes a known breeding ground for Green Turtles (<i>Chelonia mydas</i>). Furthermore, the report concludes some coastal avian species are		It is proposed that CHCC, Marine Parks Authority, DECCW and NPWS hold discussions to identify possible management strategies on lands managed by those agencies in order to avoid or minimise any potential disturbance to the above species and their habitat. Strategies may include prohibiting or restricting pets in areas utilized by threatened species, interpretive signage informing residents of breeding

		unlikely to occur on, or utilise, the subject site. This overlooks the fact suitable habitat for these species is found a short distance from the site. The proximity of the development to the Beach and Lake suggest the implications for threatened coastal shorebirds should have been considered in more detail. More people will choose to reside in the Hearn's Lake area as a result of this development. These residents and their activities will have direct and indirect impacts on		habitat and seasonal activity of local threatened species, seasonal closures and protection of breeding sites, 4WD beach access etc."
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		threatened entities across both the subject site and adjoining lands.		
9.6	Dept. of Lands	A number of the plans submitted with the EA ostensibly displaying the same information are inconsistent. It is unclear which plans the Proponent will be working to. For example, there are discrepancies between 'Map 10' on Page 64 of the EA and 'Map 10' in the accompanying 'Part 3A Application Drawing Set'. The former identifies cut areas, while the latter identifies the same areas as fill areas. 'Map 10' in	Applicant to amend plan set and provide consistent set.	The amended plan set will provide a uniform plan set for all aspects of the development.

		<p>the 'Part 3A Application Drawing Set' shows a greater area of fill in some areas compared to 'Map 10' on Page 64, and it does not indicate any earthworks on the Crown Public Road. Similarly, the gravel bush fire trail and pedestrian access routes depicted in the 'Landscape Concept Plan & Visual Assessment Drawing No. 99-07-2' (copied on Page 69 of the EA) is five metres wide, whereas the subdivision plans on pages 72 and 133 of the EA show a "4m wide</p>		
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		<i>fire trail within 6m reserve" and an easement of 6.3 metres. It is recommended the Proponent adopt and utilise a uniform set of plans for all aspects of the development.</i>		
9.7	Dept. of Lands	It is stated on Page 74 of the EA: <i>"The reserve will be dedicated to CHCC as part of the Coffs Coast Regional Park.</i> The Department considers it appropriate to dedicate the reserve as an addition to Crown Reserve 74543, given the area to the east of the Subject Site constitutes	Applicant to dedicate land to CHCC on completion of subdivision.	Applicant proposes to dedicate land to CHCC on completion of subdivision. Determination by CHCC for dedicated land transfer.

		Crown Reserve 74543 and not Coffs Coast Regional Park. A letter from the Coffs Coast Reserve Trust to the proponent and the Department inviting such a transfer would facilitate the transfer.		
9.8	Dept. of Lands	The proposed perimeter fire trail to the east of lots 29, 32, and 39 to 43, as well as some road works, appear to encroach upon the <i>"Agreed line for 7A conservation zone and revegetation area"</i> (Map 20). This is considered inconsistent with the stated objective	Applicant to amend fire trail location to be consistent with the agreed line for 7A.	Following further discussions with Coffs Harbour City Council and NSW Department of Planning it is agreed that the proposed lot layout be amended to provide for the fire trail to follow the agreed line for 7A conservation. This is reflected in Map 20 Appendix 5.

		of retaining the area for conservation and revegetation.		
9.9	Dept. of Lands	A vehicle passing bay as described in the 'Bushfire Protection Assessments' may be required in the vicinity of lots 29, 32, and 39 to 43. This bay may also encroach upon the wetland reserve, but the location of a bay has not been indicated on any plans.	No action	Vehicle passing bay not required as the length does not exceed 200m. RFS consider layout adequate.
9.10	Dept. of Lands	EcoLogical Australia suggested expanding the reserve: "... to incorporate an area of slashed Kangaroo Grass grassland vegetation	This is to be addressed as per 1.2	This has been addressed as per 1.2. Additional land has been dedicated in new lot layout for this purpose

		<p><i>community in the southern extremity of the proposed reserve"; and maintaining this area: "... as high quality grassland habitat into which Austral Toadflax (Thesium australe) may recruit.</i></p> <p>Some plans (for example, 'Landscape Concept Plan & Visual Assessment Drawing No. 99-07-2' as reproduced on Page 182 of EA) show this area as being fenced out and encompassed by a "Category 4" road easement. Given existing areas of Austral Toadflax outside the proposed wetland</p>		<p>Proposed modifications to the existing layout as detailed in section 1.2 of this PPR significantly increased the extent and number of Austral Toadflax protected on the subject site. This protection is proposed notwithstanding that the Principal author of the Eco Logical Flora and Fauna Report considers it highly likely that Austral Toadflax would not have occurred on the subject site prior to human settlement (or perhaps in very low numbers), that the species has colonized the subject site as a direct result of the removal of the original native vegetation and has persisted due to subsequent management of the site as slashed grassland.</p>
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		reserve are slated for significant disturbance, it is considered appropriate to reserve as large an area into which Austral Toadflax can recruit as possible.		
9.11	Dept. of Lands	Consideration needs to be given to extending the dog mesh fence along the northern, south-eastern and southern boundaries of the subject site. The fence may not be very effective at keeping domestic pets out of the reserve if it only extends along the western boundary of the reserve and terminates at the northern and	Applicant to provide northern and southern boundary fences as part of the subdivision and will be dog proof in design.	Northern and southern boundary fences will be provided as part of the subdivision and will be dog proof in design.

		eastern boundaries of the Subject Site.		
9.12	Dept. of Lands	<p>Vegetation Management Plan</p> <p>It is understood (Page 73 of the EA): "<i>A detailed vegetation management plan will be developed in consultation with CHCC with a 5 year maintenance and management plan for weed removal, species protection and native vegetation strengthening</i>". The following comments are offered in relation to the proposed vegetation management plan (VMP):</p>	<p>The Department of Lands to be consulted in developing the VMP.</p> <p>Applicant to amend Statement of Commitments to note proponent as responsible for developing VMP.</p> <p>VMP to encompass the entire site.</p> <p>VMP to clearly delineate responsibilities.</p> <p>VMP to outline monitoring program.</p>	<p>As per statement of comments – Ecological</p> <p>Suggestions for consultation, scope and content of VMP are agreed. It should be noted that Eco Logical's proposed retention/restoration of native vegetation within the subject site (Hearnes Lake buffer outside the proposed reserve) would, where relevant need to comply with RFS requirements for APZ vegetation. It is also noted that any proposed collection of Austral Toadflax seed and / or translocation of Austral Toadflax plants and works within EEC, may impact upon a threatened species or community, and may require a licence to undertake such activities. As such advice would be sought from DECCW regarding the need to licence such activities under Section 91 of the TSC Act or Section 120 or</p>

		<ul style="list-style-type: none">• The Department would welcome an opportunity to provide input into the VMP given the proximity of the Subject Site to Crown Reserve R74543.• It is unclear who will be responsible for developing the VMP, as this has not been articulated in the 'Draft Statement of Commitments'.• It is stated on Page 72 of the EA: <i>"It is proposed to contain the ephemeral wetland and all of the sensitive environmental land within a single lot of 8890m2 and dedicate</i>	<p>Section 132C of the National Parks and Wildlife Act 1974 NPW Act. It is a defence to a prosecution if the action was</p> <ul style="list-style-type: none">• Authorised in accordance with a Section 120 licence or a Section 132C licence under the NPW Act or a licence granted under Section 91 of the TSC Act (Flora and Ecological Communities)• Authorised in accordance with a Development Consent under the Environmental Planning and Assessment Act 1979, or• Authorised by or under the Rural Fires Act 1997, or the State Emergency and Rescue Management Act 1989
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		<p><i>this land to CHCC following its rehabilitation". It is understood the Proponent and "Housing Developer" will both be responsible for rehabilitation. The division of responsibilities between the Proponent and "Housing Developer" in relation to rehabilitation should be clearly articulated in the VMP to ensure works commence as soon as possible after fencing.</i></p> <ul style="list-style-type: none">• It is unclear whether the VMP will encompass the wetland reserve or		
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		the entirety of the subject site. A number of recommendations are made in relation to the management of vegetation outside the reserve. For example, EcoLogical Australia recommends retaining and maintaining Austral Toadflax and grassland habitat within the development footprint, and assisting the regeneration of 'Sub-tropical Coastal Floodplain Forest of the NSW North Coast Bioregion' within protected areas bounded		
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		<p>by a 50 metre buffer on Hearn's Lake. It is therefore suggested the VMP encompass the entirety of the Subject Site, and include those recommendations put forward by EcoLogical Australia in relation to the management of the wetland, Wallum Froglet habitat, endangered ecological communities (EECs), and Austral Toadflax.</p> <ul style="list-style-type: none">• It is suggested the <i>"Housing Developer"</i> should also assume responsibility for a number of the actions pertaining to 'ecology'		
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		<p>(vegetation management) on Page 231 of the 'Draft Statement of Commitments'.</p> <ul style="list-style-type: none">• It is unclear who will be responsible for collecting and storing seed (from EECs and Austral Toadflax) for use in rehabilitation and restoration works. Responsibilities should be clearly outlined in the VMP.• The VMP should include scoped and appropriate performance requirements for rehabilitation (for example, in relation to the diversity and density		
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		<p>of plantings, seedling survival and growth rates, cumulative crown coverages, and the abundance and diversity of weed species) referenced to appropriate benchmarks (such as comparable, undisturbed vegetation communities).</p> <ul style="list-style-type: none">• The VMP should outline a monitoring program, and encompass such elements as:<ol style="list-style-type: none">1. program rationale and design;2. frequency of monitoring3. methods of data collection and analysis;and		
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		4. reporting mechanisms and timeframes.		
9.13	Dept. of Lands	The results of modelling detailed in the 'Revised Stormwater Management Strategy' indicate the proposed development would achieve accepted total suspended solids, total phosphorus and total nitrogen reduction targets (that is, as per the 'modified source and conveyance control treatment strategy'), but not runoff and gross pollutant targets. Although the implications of not achieving the runoff reduction target	No action	<p>Since lodgement of application CHCC have released LGA Water Sensitive Urban Design Policy.</p> <p>This policy proposes the following targets:</p> <ul style="list-style-type: none">• Total suspended solids - 85% reduction• Total phosphorus - 65% reduction• Total nitrogen - 45% reduction• Gross pollutants - 90% reduction <p>Table 4.8 of the applicant's stormwater management plan shows that the development will exceed all of the above targets in the CHCC Water Sensitive Urban Design Policy.</p>

		have been discussed in the Strategy and EA, the implications of not achieving the GP reduction target have not.		
9.14	Dept. of Lands	The stormwater modelling as detailed in the 'Revised Stormwater Management Strategy' incorporates a number of measures collectively responsible for achieving the abovementioned reduction targets. The extent and location of some of these measures (and in particular the rain gardens) appear	Revised Stormwater Management Strategy to be included in plan set and conditioned as part of the development consent. Applicant to implement amended Landscape Plan as per Appendix 7.	Applicant has amended Drawing 99-07-2 of landscape concept plan to reflect the amended lot layout which will delete the swale shown outside the southern boundary. Applicant's revised stormwater management strategy to remain unchanged as it does not show a swale outside the southern boundary.

		<p>inconsistent with what is detailed in the main body of the EA (for example, in the 'Landscape Concept Plan & Visual Assessment Drawing No. 99-07-2' as reproduced on Page 69, and in the diagram</p> <p>Page 5 of7 'Stormwater Management' on Page 202). It is recommended the plan in the 'Revised Stormwater Management Strategy' be adopted and conditioned as part of any development consent because this plan excludes the proposed vegetated swale on Hearnese Lake Road.</p>		
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9.15	Dept. of Lands	<p>The 'Revised Stormwater Management Strategy' states: <i>"Additional detailed design would be required for this (bioretention) basin to confirm the size and location of inlets and outlet structures"</i>.</p> <p>Consideration of the ability of the basin to discharge into Hearnese Lake under a peak 100 year recurrence interval (RI) flood (accounting for climate change) is required, given 2.95 metres AHD has been adopted as the Year 2100 100 year RI flood level estimate for</p>	No further action.	<p>The likely top water level of the bio retention basin will be approximately RL5.0m AHD. The discharge characteristics will not be affected by any water level condition in Hearnese Lake - which may reach up to RL 3.5 m AHD.</p> <p>A 1.5 m difference between the two above RL will provide adequate hydraulic capacity.</p>
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		Hearnes Lake, and the unexcavated elevation of the land in the vicinity of the basin lies between three and five metres AHD (as per 'Figure 3: Elevations (m AHD) over and near subject property (1m contour interval)' in '45 Hearnes Lake Road Woolgoolga Coastline Hazard Definition and Lake Entrance Processes').		
9.16	Dept. of Lands	According to Ecological Australia (on Page 9 of 'A Review of the Sainty and Associates (2006) report 'Environmental	No further action.	The existing track provides access to leasehold cottages located on Crown Land South East corner of site Track is proposed to be upgraded to serve

		<p>Constraints Analysis Lot 21 DP714858, 45 Hearn's Lake Road Woolgoolga'): "WBM Oceanics, having undertaken both a comprehensive estuary processes study on behalf of CHCC, as well as a detailed stormwater managements study on the subject site, recommends a 50m buffer of the 3.5m AHD contour around Hearn's Lake ..." As the WBM Oceanics (2006) study is not included in the DA; it is difficult to ascertain the specific management</p>		<p>also as a fire trail. CHCC agree to the track/trail being located as shown on Map 6.</p> <p>The WBM Oceanics, Hearn's Lake Estuary Processes Study on behalf of CHCC, as well as the detailed stormwater study on the subject site, reports that it is considered that the listed encroachments within the 50m buffer to the RL 3.5m AHD contour would not operate to diminish the intended function of the buffer. Specifically, it is considered that the vegetated swale and Asset Protection Zone, being essentially vegetated, would have no impact on buffer function.</p> <p>No residential lot is located within the 50m RL 3.5m AHD contour in the revised lot</p>
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		requirements of this buffer. However, it is noted sections of the upgraded bush fire trail, vegetated swale and asset protection zone along the southern boundary of the Subject Site, as well as parts of the bioretention basin and property access in the south west corner of the Subject Site, occur within the agreed 50 metre buffer on RL 3.5 metre contour.		layout. See Map 1 Revision H
9.17	Dept. of Lands	It is considered the last two draft commitments in relation to 'Aboriginal heritage' on Page 230 should also be made the	Applicant to amend Statement of Commitments to make last two dot point responsibility of	

		responsibility of the Proponent.	Proponent and Housing Developer.	
10.1	Marine Parks Authority	The EA does not use current predictions for climate change.	No further action.	The EA does adopt current climate change predictions of 910mm by 2100 as reflected in Appendix 3A and 3C of the Environmental Assessment.
10.2	Marine Parks Authority	The stormwater management plan does not include sediment and erosion control measures for the construction phase.	Applicant to implement Appendix 6 – Sediment and Erosion Management Report de Groot and Benson August 2009.	
10.3	Marine Parks Authority	The proposed lot yield is still too high to ensure the protection of the surrounding sensitive ecosystems.	No further action.	<p>The subject site has been zoned for the proposed development and the proposal is of a density 12 – 15% lower than that envisaged by the planning controls.</p> <p>The impacts of the proposal upon the surrounding environment have been explored in detail and appropriate measures</p>

				adopted to minimise impacts.
11.1	Dept. of Environment and Climate Change	DECC notes that of the approximately 700 Austral Toadflax plants counted on the property, approximately 450 are proposed to be removed for the subdivision. DECC believes that greater protection could be provided in the vicinity of the proposed residential lots 3 and 29.	This matter is addressed as per amendments in 1.1 – 1.4 above	<p>This matter is addressed as per amendments in 1.1 – 1.4 above.</p> <p>Lot 27 has been amended so no lots are within the 50m buffer of RL 3.5m AHD.</p>
11.2	Dept. of Environment and Climate Change	The EA indicates that a 50 metre buffer will be provided to the contour 3.5 metres above the high water level of Hearn's Lake, in order to protect the values of	This matter is addressed as per amendments in 1.3 above	This matter is addressed as per amendments in 1.3 above.

		<p>the lake and fringing vegetation.</p> <p>DECC supports this buffer distance and we note that some of the proposed development in the south-east corner of the property will intrude into the buffer.</p>		
11.3	Dept. of Environment and Climate Change	<p>Add a new statement of commitment within the "Ecology" section, as follows:</p> <p>Provide protection for the local sub-population of Austral Toadflax through' the implementation of the six actions proposed in Section 5.5 of the Environmental</p>	Applicant to amend Statement of Commitments.	

		Assessment.		
11.4	Dept. of Environment and Climate Change	The Statement of Commitments is considered satisfactory subject to the inclusion of clauses relating to: 1. The education and induction of construction workers in relation to cultural heritage. 2. The transfer of Lot 28 into the Coffs Coast Regional Park administered by the Coffs Harbour Council. 3. Seeking an agreement with Council relating to the ongoing joint management of the above lands.	Applicant to amend Statement of Commitments.	

12.1	Dept. of Water and Energy	Due to the unlikely encounter of groundwater from the proposed development DWE does not require any further information with respect to this. However, if groundwater is encountered during the installation of any works requiring dewatering (such as the sewer pump station), a temporary dewatering licence will be required from this Department under Part 5 of the Water Act 1912.	This matter is addressed as per amendments in 1.16 above	This matter is addressed as per amendments in 1.16 above.
12.2	Dept. of Water and	The EA outlines areas within the site identified	This matter is addressed as per	This matter is addressed as per

	Energy	as having potential acid sulfate soils (ASS). The identification of these areas appears to be from mapping undertaken by the then Soil Conservation Service with no field work undertaken on the site. The lower area of Lot 32 is considered an area of potential ASS. This area is considered unsuitable for development due to poor drainage and the low lying nature of the ground. A pump station and sewer mains is proposed to be constructed in this area.	amendments in 1.18 above	amendments in 1.18 above.
12.3	Dept. of	DWE recommends the	Applicant to amend	Retention basin will be constructed in

	Water and Energy	detention basin is appropriately constructed and lined in accordance with industry guidelines to ensure groundwater contamination is not an issue. It is also recommended a monitoring and maintenance program is developed and baseline water quality data is obtained for the ephemeral wetland and Hearn's Lake, prior to construction of the development.	CHCC currently administers water quality monitoring program.	accordance with industry guidelines and CHCC requirements. Ongoing monitoring and maintenance forms part of Hearn's Lake Estuary Management Plan which is administered by the relevant authority. CHCC has an ongoing monitoring program for Hearn's Lake as outlined in the letter contained in Appendix 9.
13.1	CHCC	To address the loss of the SCFF EEC the development could be modified to incorporate	No further action.	We have modified subdivision layout to increase Lot 28 to South/East corner of site. On removal of existing permitted tenancies

		space for a 30 metre wide vegetated corridor to extend from the proposed habitat protection area (proposed Lot 28) down to the south-eastern corner of the subject site. This approach would extend this vegetated corridor into the proposed habitat protection area, which is to be dedicated to Council. This corridor could then serve a dual purpose of providing sufficient room for replanting of SCFF EEC and enhancing and protecting the regional		corridor may be increased.
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		north - south wildlife corridor function against predicted future coastal hazard encroachment. This space will also serve to further offset the loss of threatened Austral Toadflax habitat. The fire trail and Road No. 2 should not encroach upon this vegetated corridor.		
13.2	CHCC	The potential impacts of the development proposal on the little tern breeding colony have not been considered in the flora and fauna assessment prepared by Eco Logical (2007). Consequently, no	As per 9.11 above.	Dog proof fencing to northern and southern, boundary lots and east of proposed fire trail are proposed as part of the subdivisional construction works.

		<p>mitigation measures have been formulated as part of the development proposal to offset or minimise the potential impacts on the little tern breeding colony.</p> <ul style="list-style-type: none">• Measures should be formulated to restrict access by dogs, cats and humans into ecologically sensitive areas east of the proposed development footprint. A recommended approach would be to install a human and dog-proof fence around the eastern and southern boundaries of the development footprint.		
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		<ul style="list-style-type: none">• Ensure future beach access from the development site is restricted to the existing entry on the southern side of the subject site, along the 4WD access point.		Future beach access will be determined by the appropriate management authorities of the Coffs Coast Regional Park.
13.3A	CHCC	Hearnes Lake Road has a low spot west of the proposed development where the road level is approximately 2.4m AHD. The applicant needs to consider flood access along Hearnes Lake Road for the medium to long term and possible elevation of the low spot.	This matter is addressed as per amendments in 1.10 above.	This matter is addressed as per amendments in 1.10 above.
13.3B	CHCC	The coastline hazards impact on the	This matter is addressed as per	This matter is addressed as per

		development for a 100-year planning period are minimal and it is recommended that a restriction be placed that prohibits structures east of the 2108 Coastal Hazard Line and a notation be placed on lots within the 2108 Zone of Reduced Foundation Capacity requiring foundations to be designed requiring detailed geotechnical assessment of the lot and design to incorporate possible reduced foundation capacity due to long term coastal processes.	amendments in 1.12 above.	amendments in 1.12 above.
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13.4	CHCC	Council policy is that Crown Roads are only accepted as Council public roads when they are upgraded to Council's standards. The applicant will need to: Identify the proposed "public road" / "Crown road" parts of Hearnese lake Road (note the "public road" should extend from the Highway intersection to the beach access point). Agree to undertake the upgrading works. Obtain approval from the Department of lands for the transfer of the relevant section of	This matter is addressed as per amendments in 1.13 above	<p>This matter is addressed as per amendments in 1.13 above.</p> <p>The letter from CHCC advising of the preferred process for recouping forward funding is contained within Appendix 10.</p>
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		Hearnes Lake Road to Council as public road.		
13.5	CHCC	The bus bay does not require construction as part of this proposal. The applicant should detail proposed safe pedestrian access arrangements along Hearnes Lake Road to connect with the existing bus bay at the western end of this road.	This matter is addressed as per amendments in 1.13 above	This matter is addressed as per amendments in 1.13 above.
13.6	CHCC	The existing table drain on the northern side of Hearnes Lake Road is poorly defined and is not working satisfactorily. This table drain cannot carry the concentrated discharge from two thirds	Applicant to upgrade existing table drain to carry flows for 1- 5 year storm events as per CHCC guidelines.	Existing table drain will be upgraded to carry flows for 1- 5 year storm events as per CHCC guidelines. The table drain will be extended from the proposed piped headwall to the existing lagoon approximately 50m west of the proposed headwall. Flows in excess of the

		of the development area (1 in 100 year flow of over 1 cubic metre / second). A review of the stormwater drainage design is required to satisfactorily address stormwater treatment, detention capacity, outlet flow, stormwater path and final stormwater discharge arrangements.		drains capacity will surcharge into the existing low lying area to the north of Hearn's Lake Road as it currently occurs. See Map 28 for detail.
13.7	CHCC	The design grade of the road on the western side of the development where the bioretention swale is to be placed is 10% for about half of its length. The report states that the grade is approximately 7% and	Applicant to provide footpath on the eastern side of the Road One.	Footpath is located on the eastern side of Road One. The proposed swale is located on the western side of Road One. The footpath function will not be impacted by the proposed swale.

		"check dams" are proposed to obtain suitable hydraulic gradients and "suitable erosion control measures" (possibly rock) to deal with the higher velocities. Those swales form part of the footpath and the proposed measures may impact on footpath function.		
13.8	CHCC	The detention basin peak flows in Table 5.1 shows the critical durations to be 90 and 120 minutes with flows for developed conditions to be greater than the existing for storm durations of 30	No further action.	WBM Oceanics have provided hydrographs in Appendix 8 to satisfy the query. The attached raw output files from XP-RAFTS which summarise the modelling results for the 90 and 120min duration design storms for the existing and developed (with detention) scenarios. The peak flows presented in our report (Table 5-1) are for node (link

		and 60 minutes. The catchment is not large and would have a time of concentration of less than 60 minutes. A "critical duration" of 90 to 120 minutes is not considered plausible.		label) titled "H.LakeRd" in the attached data files. As can be noted, whilst the storm burst duration may be 90 or 120 minutes, the time to peak is in the order of 30 to 40 minutes. The timing of the peak flow is primarily related to the rainfall temporal pattern (i.e. rainfall distribution during the event) which was adopted from Australian Rainfall & Runoff, rather than the physical characteristics of the site which effect the time of concentration. We would expect that the time of concentration for this site would be around 10-20 minutes (shorter range for developed conditions, longer range for existing conditions).
13.9	CHCC	The Hearnese Lake Sandy Beach DCP provides for a minimum permanent pond storage volume (northern precinct is 585m ³). This is proposed to be made up from water tanks on each lot,	No action	Table 5.2 of revised Stormwater Management Strategy suggests a capacity of 1050 m ³ at spillway level for the detention basin. This is almost twice the requirement of the CHCC Hearnese Lake/Sandy Beach DCP. As such rainwater tanks are not necessarily required for stormwater detention. The proposed

		<p>with 100% of roof areas to drain to the tanks. Some tanks are proposed @ 40k litres, others a minimum of 15k litres. Having regard to tank volumes they should be installed as part of the subdivision works. Further consideration should be given to more storage outside of the individual lots with a reduction in the rainwater tank capacities.</p>		<p>provision of 40kL and 15kL tanks will be conditioned in the proposed 88B. The location of the tanks to be determined at DA application stage for dwellings. Applicant will not be required to install water tanks in subdivision construction phase.</p>
13.10	CHCC	<p>In Section 7 of the Stormwater Report filter strips will be provided behind the kerb and gutter of each road</p>	<p>No further action.</p>	<p>Applicant considers issue to be part of detailed design for submission to CHCC as part of CC.</p> <p>Filter strip location will have to be</p>

		where vegetated swales are unable to be provided (that is, almost throughout the entire subdivision). Proposed roads in the subdivision are local roads with rollover kerbs to allow vehicles to park off road. The applicant should demonstrate compatibility of parking on filter strips in the road reserve areas.		considered on a lot by lot basis to maximise performance, this may include: <ul style="list-style-type: none">• For lots sloping away from road, filter strips located on rear boundary• For lots sloping parallel to road, filter strips located on lower side boundary
13.11	CHCC	Peter Davey has advised Council that he has no problem with the SPS being on his property, perhaps at a different location to the DSP location. The applicant	This matter is addressed as per amendments in 1.14 above	This matter is addressed as per amendments in 1.14 above.

		should liaise further with Mr Davey concerning this infrastructure.		
13.12	CHCC	There is the potential for Acid Sulfate Soil disturbance in the construction of the bioretention/detention basin and for services in Hearn's Lake Road. A preliminary assessment for Acid Sulfate Soils should be prepared to address this environmental hazard.	This matter is addressed as per amendments in 1.16 above	This matter is addressed as per amendments in 1.16 above.
13.13	CHCC	Future developments on lots proposed in the area of Zone M "Moderate Risk Steep Land" detailed in the Holmes and Holmes Pty Ltd	This matter is addressed as per amendments in 1.17 above	This matter is addressed as per amendments in 1.17 above.

		report should have controls that address the risk of slope instability.		
13.14	CHCC	The applicant should detail proposed boundary fencing treatments to the southern and eastern boundaries of the site, to address visual amenity, access, biodiversity and further relevant considerations for this structure. Boundary fencing should be carried out as part of the subdivision works.	<p>Applicant proposes the following fencing as conditions of subdivision:</p> <ul style="list-style-type: none"> • Dog proof fence eastern side of fire trail adjacent to Lots 27 - 38 • Boundary fence up to 2.2 m high along site boundaries of Lots 12-19, 36-38, 1 & 2, 24-27 	<p>Applicant proposes the following fencing as conditions of subdivision:</p> <ul style="list-style-type: none"> • Dog proof fence eastern side of fire trail adjacent to Lots 27 - 38 • Boundary fence up to 2.2 m high along site boundaries of Lots 12-19, 36-38, 1 & 2, 24-27 • 88B instrument for remaining Lot fences • Details of fences to be determined at CC stage

			<ul style="list-style-type: none">• 88B instrument for remaining Lot fences <p>Details of fences to be determined at CC stage</p>	
13.15	CHCC	Council notes that the stormwater quality treatment area and the habitat protection area will be dedicated at no cost. The applicant should nominate the timing of the dedication (i.e. to be dedicated to Council at no cost at what stage of registration of subdivision certificate).	<p>Applicant to dedicate land at no cost as follows:</p> <ul style="list-style-type: none">• Lot 10 (Detention Basin) Stage 1 Construction phase• All other works to be dedicated to CHCC will be in conjunction with the adjacent residential stage	<p>Land to be dedicated at no cost as follows:</p> <ul style="list-style-type: none">• Lot 10 (Detention Basin) Stage 1 Construction phase• All other works to be dedicated to CHCC will be in conjunction with the adjacent residential stage subdivision certificate issue.

			subdivision certificate issue.	
14.1	NRCMA	As stated in section 4.1.2.3 that the site is excluded from the <i>Native Vegetation Act</i> (2003) due to being zoned as Residential 2(E). Though, it is suggested that measures to minimise the impact of the development on the native vegetation would be beneficial to both the native fauna and flora and prospective residents.	No further action.	The measures taken to minimise the impact of the development on native vegetation are outlined in Appendices 5, 7, 8 and 13 of the Environmental Assessment report.
14.2	NRCMA	The subject area is adjacent to open coastline and therefore It is suggested you take	No further action.	The measures taken to minimise the impact of rising sea levels and maintaining the dunal system are outlined in Appendices 3, 3A, 3B and 3C of the Environmental

		into account potential rising sea levels and the maintenance of a vegetated dunal system behind the beach. This will create a buffer between the development and the ocean which will maintain the diversity of endangered ecological and threatened species communities and reduce the risk of loss of sand dunes and mitigate against potential rising sea levels.		Assessment report.
14.3	NRCMA	The subject site is near the Hearn's Lake precinct which contains some near shore and estuarine habitats within	No further action.	The measures taken to maintain the native vegetation buffer strip along the lake are outlined in Appendices 5, 7, 8 and 13 of the Environmental Assessment report.

		the Solitary Islands Marine Park. The maintenance of native vegetation buffer strip along the lake is critical to maintain the integrity of these ecosystems and their processes...		
14.4	NRCMA	The subject area may be prone to the risk of acid sulfate soils. The subject site has been mapped for acid sulfate soil risk map at 1:25,000 sheet.	No further action.	This matter has been considered in 1.18 and 1.19 above.
14.5	NRCMA	It is suggested the proponent assess the potential impact of vegetation loss and, or altered hydrology in relation to stormwater and diffuse pollutants	No further action.	The measures taken to minimise the potential impact of stormwater and diffuse pollutants is outlined in Appendix 2, of the Environmental Assessment report.

		runoff, particularly in relation to the Solitary Islands Marine Park's adjacent inter tidal zone and coastal lakes		
14.6	NRCMA	The NRCMA recommends that compliance and ongoing regulation of Coffs Harbour City Councils Tree Preservation Order for the site is maintained to ensure native vegetation on the dunal systems is not removed for views or access. Additionally a domestic animals policy which minimises the direct and indirect impact of pets on the native fauna would be	No further action.	The eastern portion of the site is proposed to be included in a reserve area and dedicated to the Council. It is proposed that this area be fenced with dog proof fencing to minimise the impacts on native fauna.

		beneficial.		
14.7	NRCMA	In relation to potential land use conflict occurring between urban development and high conservation value habitat areas. The NRCMA suggests that you refer to North Coast guide for avoiding and reducing land use conflict and interface issues	No further action.	The guide has been consulted in preparing the management strategies for the site.
15.1	RTA	Raises no objection to the proposal.	No further action.	
16.1	RFS	At the issue of the subdivision certificate all residential lots shall be managed as an inner protection area (IPA) as	Applicant to include in Statement of Commitments.	

		outlined within section 4.1.3 and Appendix 5 of 'Planning for Bush Fire Protection 2006' and the NSW Rural Fire Service's document 'Standards for asset protection zones'		
16.2	RFS	Water, electricity and gas are to comply with section 4.1.3 of 'Planning for Bush Fire Protection 2006'.	Applicant to include in Statement of Commitments.	
16.3	RFS	Public road access shall comply with section 4.1.3 (1) of 'Planning for Bush Fire Protection 2006'.	Applicant to include in Statement of Commitments.	
16.4	RFS	Fire trails shall comply with section 4.1.3 (3) of 'Planning for Bush Fire Protection 2006'.	Applicant to include in Statement of Commitments.	

3.0 PREFERRED PROJECT

3.1 Introduction

This chapter details the changes to the project that have resulted from consideration of the issues raised by Government agencies, Council and the local community and describes the Preferred Project.

Following consideration of the issues raised by Government agencies, Council and the local community, a number of amendments have been made to the project to further minimise any potential negative environmental impacts and enhance the creation of sustainable urban outcomes. These amendments are discussed in detail in the following section.

Accordingly, the proposed development as described in the exhibited Environmental Assessment report (dated April 2009), together with the changes outlined in this report and summarised below, comprise the Preferred Project.

3.2 Amendments to the Project

The proposal has been amended as follows:

- Reduction from 41 residential allotments to 39 residential allotments by the incorporation of previous lot 29 into the lot 28 reserve area and the dedication of lot 3 as a pocket park;
- The increase in area of reserve lot 28 from 8,890m² to 12,100m²;
- The proposed subdivision layout has been amended to coincide with the proposed 7A zoning in the draft CHCC LEP Amendment 29;

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- The lot layout has been amended to provide for a 50m buffer to the SEPP 26 littoral rainforest;
 - Lot 3 has been designated as a pocket park and proposed to be dedicated to CHCC to accommodate the Austral Toadflax community and remnant red gum community;
 - The reduction in size of lot 27 from 1,093m² to 865m² with the remainder forming part of reserve lot 28;
 - The reduction in depth of previous lots 32, 43, 39 and 40 to allow the proposed fire trail to move west of the agreed vegetation line;
 - The proposal has been amended to require a covenant on lot 27 restricting building to within a designated envelope of 460m² landward of the 2018 hazard line;
 - The amendment of the services proposal in line with the agreement with CHCC and providing for
 - a minimum 6m carriage width; strengthening pavement where required,
 - locating the water mains in the road reserve,
 - locating gravity sewerage and rising mains in the road reserve,
 - providing a 1.2m wide sealed footpath between the site and the bus stop at the western end of Hearn's Lake Road,
 - locating the sewer pumping station on private land north of Hearn's Lake Road,
 - upgrading the gravel track east of the site entrance to meet the requirements for a fire trail,
 - seal this fire trail to the existing entrance of the informal car park;
 - Enter into an agreement to:
 - Transfer the Crown Road to CHCC as a Council Road;
 - Applicant to meet all fees associated with the transfer,

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- Applicant to lodge a bond for the agreed upgrading works;
 - Agree to upgrade the existing table drain in Hearn's Lake Road;
 - Implement the submitted Sediment and Erosion Management Plan;
 - Amend the proposal to provide truck wash down facilities within the site boundaries during construction;

3.3 Preferred Project

Project approval is now sought for the following:

- Construction of a residential subdivision to create 42 allotments (39 residential allotments) and is proposed to be constructed in one stage but released in five stages;
- Construction of an internal network of roads, pedestrian paths and fire trails providing access to all residential lots and community/recreation areas and including access from Hearn's Lake Road;
- Provision of 3 allotments for public purpose to be dedicated to Coffs Harbour City Council, Lot 28 (12,100m²) as an environmental reserve; Lot 10 (1,270m²) as a drainage reserve and Lot 3 (590m²) as a pocket park;
- Associated bulk earthworks (cut and fill);
- Construction of associated infrastructure including water supply mains, sewerage mains, stormwater drainage structures, water quality and detention structures;
- Construction of associated asset protection zones and fire trails;
- Connection to sewer pumping station. Pumping station provided by CHCC;
- Provision of fencing to the parts of southern, northern and western boundaries of the site and dog proof fencing to the reserve lot 28;

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- Associated landscaping, street planting and rehabilitation of native vegetation area to be retained;
 - Stage 1 will comprise 10 allotments, 8 being residential allotments varying in size from 555m² to 1,025m² and an allotment containing the stormwater management infrastructure (Lot 10) and a pocket park (Lot 3). Lots 10 and 3 are proposed to be dedicated to CHCC.
 - Stage 2 will comprise 5 residential allotments varying in size from 711m² to 842m².
 - Stage 3 will comprise 8 residential allotments varying in size from 665m² to 715m².
 - Stage 4 will comprise 10 allotments being 9 residential allotments varying in size from 706m² to 912m² and an allotment containing a proposed Environmental Protection 7(a) zoned land and its buffers (Lot 28).
 - Stage 5 will comprise 9 residential allotments varying in size from 695m² to 1,866m².

The application is a project application and the staging is only intended to facilitate the release of the land over time.

Allotment	Release	Size	Width	Depth	Use
1	1	754 m ²	19.9m	35.9m	Res
2	1	718 m ²	20m	35.8m	Res
3	1	590 m ²	25m	25m	Open Space
4	1	1,025 m ²	48.7m	25m	Res
5	1	854 m ²	14m	45.7m	Res
6	1	765 m ²	16.8m	45.7m	Res
7	1	555 m ²	31.9m	24.9m	Res

8	1	800 m ²	38.5m	47.7m	Res
9	1	995m ²	23.6m	62.9m	Res
10	1	1,270 m ²	-	-	Stormw.
11	2	842 m ²	45.5m	20.9m	Res
12	2	711 m ²	36.6m	33m	Res
13	2	837 m ²	9.4m	33.3m	Res
14	2	825 m ²	10.8m	45.9m	Res
15	2	715 m ²	18m	39.7m	Res
16	3	715 m ²	18m	39.7m	Res
17	3	715 m ²	18m	39.7m	Res
18	3	715 m ²	18m	39.7m	Res
19	3	695 m ²	17.5m	39.7m	Res
20	3	665 m ²	19m	35m	Res
21	3	665 m ²	19m	35m	Res
22	3	665 m ²	19m	35m	Res
23	3	665 m ²	19m	35m	Res
24	4	716 m ²	20m	35.7m	Res
25	4	714 m ²	20m	35.7m	Res
26	4	706 m ²	20m	33.2m	Res
27	4	865 m ²	29.1m	33.2m	Res
28	4	12,100 m ²	-	-	Enviro
29	4	829 m ²	23.7m	35m	Res
30	4	722 m ²	23.1m	35m	Res
31	4	894 m ²	23.8m	44.7m	Res
32	4	912 m ²	20m	45.6m	Res
33	4	889 m ²	20.4m	45.6m	Res
34	4	866 m ²	20.6m	42.3m	Res
35	5	770 m ²	25m	41.4m	Res
36	5	695 m ²	17.5m	39.7m	Res
37	5	812 m ²	28.9m	39.7m	Res
38	5	1,866 m ²	29.0m	66.2m	Res
39	5	974 m ²	21.0m	43.0m	Res
40	5	900 m ²	19.0m	45.3m	Res
41	5	921 m ²	20.6m	47.5m	Res
42	5	937 m ²	20.6m	47.5m	Res

4.0 STATEMENT OF COMMITMENTS

Item No:	Item	Commitment	Responsibility	Timing
1	General	<p>The development will be carried out in accordance with the Environmental Assessment Report (EAR), prepared by Mersonn Pty Ltd, January 2008, supporting reports and the Preferred Project Report prepared by Mersonn Pty Ltd dated August 2009 and the amended drawings:</p> <p>Map 1 Overall Concept De Groot and Benson Aug 2009 Rev H</p> <p>Map 2 Staging Plan De Groot and Benson August 2009 Rev H</p> <p>Map 3 Layout Plan/Site Topography De Groot and Benson August 2009 Rev H</p> <p>Map 4S Sewer Concept De Groot and Benson August 2009 Rev H</p> <p>Map 4W Water Concept De Groot and Benson August 2009 Rev H</p>	Proponent	Ongoing

		<p>Map 6 Bushfire Control De Groot and Benson August 2009 Rev H</p> <p>Map 7 Stormwater Management De Groot and Benson August 2009 Rev H</p> <p>Map 8 Locality Plan De Groot and Benson August 2009 Rev H</p> <p>Map 9 Site Analysis Plan De Groot and Benson August 2009 Rev H</p> <p>Map 10 Cross Sections – Sheet 1 De Groot and Benson August 2009 Rev H</p> <p>Map 11 Road Long Sections – Sheet 1 De Groot and Benson August 2009 Rev H</p> <p>Map 12 Road Long Sections – Sheet 2 De Groot and Benson August 2009 Rev H</p> <p>Map 13 Cross Sections – Sheet 1 De Groot and Benson August 2009 Rev H</p> <p>Map 14 Cross Sections – Sheet 2 De Groot and Benson August 2009 Rev H</p> <p>Map 15 Cross Sections – Sheet 3 De Groot and Benson August 2009 Rev H</p> <p>Map 16 Cross Sections – Sheet 4 De Groot and</p>		
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		<p>Benson August 2009 Rev H</p> <p>Map 17 Cross Sections – Sheet 5 De Groot and Benson August 2009 Rev H</p> <p>Map 18 Cross Sections – Sheet 6 De Groot and Benson August 2009 Rev H</p> <p>Map 20 PNSW Constraints Plan De Groot and Benson August 2009 Rev H</p> <p>Map 21 Existing Zoning CHCC LEP Plan De Groot and Benson August 2009 Rev H</p> <p>Map 22 Draft LEP Amendment Plan De Groot and Benson August 2009 Rev H</p> <p>Map 23 Existing Site Survey Plan De Groot and Benson August 2009 Rev H</p> <p>Map 24 SEPP 26 Littoral Rain Forest Plan De Groot and Benson August 2009 Rev H</p> <p>Map 25 Climate Change Hazards Line Plan De Groot and Benson August 2009 Rev H</p> <p>Map 26 Flora-Fauna Management Controls Plan De Groot and Benson August 2009 Rev H</p> <p>Map 27 Hearnese Lake Road Plan De Groot and Benson August 2009 Rev H</p>		
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		Map 28 Hearnese Lake Road Plan Benson August 2009 Rev H Map 29 Hearnese Lake Road Plan Benson August 2009 Rev H Map 30 Flood Evacuation Plan Benson August 2009 Rev H 99-07-2 Open Space Network August 2009	De Groot and De Groot and De Groot and Anne Harrison		
2	Statutory Requirements	All necessary licences, permits and approvals will be obtained once project approval is granted and maintained for the development, including: <ul style="list-style-type: none">• Construction Certificates for engineering works (including earthworks, soil and water management, road works, drainage, landscaping) for each stage of the subdivision;• Subdivision Certificates for each stage of the subdivision;• Section 138 Consent for road works (Roads Act 1993);	Proponent	For the duration of the construction of the subdivision	

		<ul style="list-style-type: none">• Electricity Compliance certificate from Country Energy;• Telstra Compliance Certificate; and• Water Compliance Certificate from Coffs Harbour City Council.		
3	Subdivision Design and Layout	The proponent will establish and construct all public domain facilities identified in the Landscape Concept Plan and Open Space Management Plan. Ultimately the Reserve lot 28, drainage reserve lot 10 and pocket park lot 3 will become public facilities once the development stages of the project are complete. All areas of open space and any recreation facilities will be maintained by the proponent for a period of two years after the dedication of the land to Council, after which time all maintenance will be Council's responsibility. The staged dedication of open space areas will take place upon registration of the subdivision plan for each stage of the estate.	Proponent	Maintenance responsibility will transfer to Council two years after dedication of open space areas to Council.
4	Construction	Prior to the commencement of works on the site, the proponent will submit to Council a Construction	Proponent	Prior to commencement

		<p>Environmental Management Plan (CEMP) for approval.</p> <p>The CEMP will address the following:</p> <ul style="list-style-type: none">• a description of the work program outlining relevant timeframes for activities;• traffic management, including measures to be taken restricting access to the fire trail;• a description of the roles and responsibilities for all relevant employees involved in the construction phase;• the minimisation of rubbish and debris at the site from development activities during the construction phase;• erosion and sediment control during construction;• details of environmental management procedures, monitoring and reporting requirements during construction and operation phase;• details of statutory and other obligations that must be met during construction and operation,		of works.
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		including all approvals and agreements required from authorities and other stakeholders; and <ul style="list-style-type: none">• an education strategy of construction contractors.		
5	Construction Hours	Construction work will be confined to 7.00 am to 6.00 pm Monday to Fridays and 7.00 am to 4.00 pm on Saturdays, with no construction taking place on Sundays or public holidays, unless prior approval is obtained from the relevant authority.	Proponent and contractors	For the duration of the construction of the subdivision
6	Flora and Fauna	The following mitigation and management measures will be implemented to minimise impacts on flora, fauna and threatened species: <ul style="list-style-type: none">• clearing activities will be restricted to only those areas nominated on construction plans;• vehicle movements within uncleared areas will be restricted;• vegetation removed during construction is to be mulched for use on site;• weed control will be undertaken during construction as required to ensure there is no	Proponent and contractors	For the duration of the construction of the subdivision

		<p>spread of weeds on or off site;</p> <ul style="list-style-type: none">• mature remnant red gums will be retained where possible within the development area, particularly within the lot 3 pocket park and landscaping areas. These trees are to be clearly identified and flagged prior to commencement of works;• mature habitat trees are to be retained where possible;• any injured wildlife will be reported to WIRES or similar organisation immediately for rescue;• areas of known environmental weed species occurrence should be avoided during construction activities where possible;• Secure environmental protection zoning on part of the site to protect known occurrences of, and potential habitat for, threatened flora and fauna and EECs.• Consolidation and enhancement of native vegetation within the above environmental		
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		<p>protection zone to ensure the persistence of a local, coastal vegetated corridor which links areas to the north and south of the site.</p> <ul style="list-style-type: none">• Active, sympathetic management within environmental protection areas and suitable parts of the development footprint to assist in the regeneration of EECs and other native vegetation, and to maintain quality habitat for threatened flora.• Possible use of local threatened plant seed for use in a population enhancement program within suitably managed parts of environmental protection zone.• The maintenance of the Kangaroo Grass grassland habitat on designated parts of the site and in particular to the south-east of Lot 29.• Provide protection for the local sub-population of Austral Toadflax through' the implementation of the six actions proposed in Section 5.5 of the Environmental Assessment. .		
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		<ul style="list-style-type: none">• Provision of environmental buffers to protect areas of conservation value from edge effects.• Stormwater management designed to maintain groundwater conditions and local patterns of freshwater flow, and to ensure the quality of runoff water into high conservation value areas within and adjacent to the site.• Exploring opportunities for neighbouring properties to adopt similar sympathetic management of areas to enhance EEC regeneration and also to provide extended habitat for threatened flora.• A covenant to be registered on title of proposed lot 27 restricting building within the 50m buffer zone.• The education and induction of construction workers in relation to cultural heritage.• The transfer of Lot 28 into the Coffs Coast Regional Park administered by the Coffs Harbour Council.		
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7	Proposed Reserve Areas	<p>The Landscape Concept Plan and Open Space Management Plan sets out a plan for all open space areas within the development, including proposed reserve Lot 28.</p> <ul style="list-style-type: none">• A detailed Vegetation Management Plan for the whole of the site which should prescribe a specific maintenance, monitoring and costing for a five year period will be prepared in consultation with CHCC and interested parties and submitted with the civil works design for approval to CHCC.• Landscape works will be undertaken in stages to coincide with the staged release of residential lots, as shown on the staging plan. Stage 1 will involve the development and management of drainage reserve Lot 10 and the pocket park lot 3; Stage 4 will involve the development and management of lot 28 reserve natural areas.• These areas will undergo bush regeneration and weed suppression activities.	Proponent and Contractors	<p>Prior to approval of civil works design.</p> <p>Prior to release of the Subdivision Certificates for the respective</p>
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		<ul style="list-style-type: none"> • Management actions will include the following: <ul style="list-style-type: none"> ○ installation of permanent fencing as shown on the Open Space Network Plan on northern, western and southern side; ○ installation of gates and bollards where restricted access is desired; ○ installation of temporary fencing to minimise disturbance to these areas during construction; ○ plant rehabilitation and weed suppression to begin as soon as fencing is in place; ○ removal of any unnecessary existing fencing that may hinder plant rehabilitation or future pedestrian movement through the site; 		stages of the subdivision.
8	Water cycle management impact on Hearn's Lake and the	<p>The following stormwater treatment measures will be implemented in accordance with the SWMP to ensure that pollutants leaving the site are minimised:</p> <ul style="list-style-type: none"> • runoff from all catchments will be directed 	Proponent	Prior to the release of the Subdivision Certificates for the respective

	ephemeral water body.	<p>through bioretention swales that have been designed to treat flows up to and including those with a three month Average Recurrence Interval (ARI). These swales will be designed to overflow along their full length; and</p> <ul style="list-style-type: none">• flows up to and greater than three months ARI will overtop the bioretention swales and pass through vegetated filter zones prior to being released into natural drainage lines.• rainwater tanks shall be provided for all residential lots and have minimum capacity of 15kL with Lots 27, 32, 33, 40-43, being provided with rainwater tanks with a minimum capacity of 40kL as part of 88B instrument.• Rainwater tanks shall only capture roof water and a minimum of 50% of the roof area shall drain to the tank;• The proposed width of vegetated swales within the development shall be 3m;• A 1m wide vegetated filter strip shall be	Housing Developer	<p>stages of the subdivision</p> <p>On construction of housing.</p>
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		<p>provided where vegetated swales are unable to be provided.</p> <ul style="list-style-type: none">• The minimum surface area of the bioretention swales/basin shall be 340m²;• The minimum pond volume of 700m³ shall be provided in rainwater tanks		
9	Erosion and Sediment Control	<p>The proponent implement the detailed erosion and sediment control plan (ESCP) prepared by de Groot and Benson dated August 2009. The ESCP addresses:</p> <ul style="list-style-type: none">• site layout, including access, soil stockpile locations and building material stockpiles;• proposed disturbed and undisturbed areas throughout construction;• erosion and sediment control measures proposed, which may include clean water diversion, sediment fences, straw bales, sand bags, sediment traps, erosion mats and blankets, check dams, surface mulching, vegetation plantings, turf filter strips and	Proponent	Prior to release of the Construction Certificates for the respective stages of the subdivision.

		surface roughening; and <ul style="list-style-type: none">proposed maintenance and monitoring program to be implemented to ensure erosion and sediment controls are appropriately implemented for the duration required.		
10	Bushfire Risk Management	Asset Protection Zones as indicated in the EA report and on the relevant drawings will be instated. Aside from the instatement of asset protection zones, the following mitigation measures will be implemented: <ul style="list-style-type: none">That the minimum construction to the future dwellings shall be Level 1 in accordance with the specifications of Australian Standard A.S 3959 -1999 "Construction of Buildings in Bushfire Prone Areas.The subdivision will have a reticulated water supply connected to the Coffs Harbour Council mains.<ul style="list-style-type: none">The dwellings will be connected to this reticulated water supply.The reticulated water supply in the	Proponent and Housing Developer	Prior to release of the Subdivision Certificates for the respective stages of the subdivision

		<p>subdivision shall include the provision of a ring main with Hydrants installed in accordance with the specifications of Australian Standard A.S 2419.2 and have a minimum flow rate of 10 litres /second.</p> <ul style="list-style-type: none">○ Fire hydrants shall be accessible and located such that a tanker can park within a maximum distance of 20 metres from the hydrant and the habitable building must be located such that a fire at the furthest extremity can be attacked by fire-fighters using two 30 metre hose lines and a 10 metre water jet.○ A clear unobstructed path between the hydrant and the most distant point of the building cannot exceed 90 metres.○ Hydrant locations shall be delineated by blue markers placed on the hydrant side of the centreline of the road pavement.● The new lots which will have vehicular access directly off perimeter and internal roads which		
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		<p>will be constructed to the deemed-to-satisfy specifications for Public Roads as defined by Chapter 4 of Planning for Bushfire Protection 2006. The new roads shall have a minimum 8.0 metre seal width to Road 1 & 2 and 6.5 metre seal width to the eastern end of Road 2.</p> <ul style="list-style-type: none">• The construction of a perimeter fire trail to the eastern aspect of Lots 29, 31, 38 – 42, extending north from the eastern end Road 2, turning to run along the northern boundary to link with the Road 1 between Lots 37 and 38. This trail forms the eastern edge of the Asset Protection Zone to these lots and provides access to the bushfire hazard interface.• A further fire trail is to be constructed extending to the south off the Eastern End of Road 2 and linking to the existing access track that extends along the southern boundary of the site, within the eastern unmade section of Hearn's Lake Road. This trail provides access to the bushfire hazard interface along the southern aspect of		
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		<p>the subdivision.</p> <ul style="list-style-type: none">• The specifications for the proposed fire trails within a development are:<ul style="list-style-type: none">○ A minimum carriageway width of 4.0 metres with an additional 1.0 metre clearance provided to each side which is kept clear of grasses and shrubs;○ The carrying capacity of the fire trail surface shall be 15 tonnes for reticulated areas;○ Curves shall have an inner radius of 6 metres and an outer radius of 12 metres;○ Maximum grades shall be 15 degrees (10 degrees preferred);○ A minimum vertical distance of 4.0 metres shall be provided clear of overhanging branches, trees and shrubs.• Careful attention shall be given to species selection of landscaping within the lots, their location relative to their flammability, avoidance of continuity of vegetation [separation		
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		<p>horizontally and vertically] and ongoing maintenance to remove flammable fuels. Methods of bushfire hazard management include mowing of lawns and manual removal of combustible material, particularly within the landscaped areas.</p> <ul style="list-style-type: none">• A Section 88B Instrument, under the provisions of the Conveyancing Act of 1919, shall be created on the title of the lots within the development to ensure ongoing management of the nominated Asset Protection Zone and the combustible fuels within the landscaped gardens.• At the issue of the subdivision certificate all residential lots shall be managed as an inner protection area (IPA) as outlined within section 4.1.3 and Appendix 5 of 'Planning for Bush Fire Protection 2006' and the NSW Rural Fire Service's document 'Standards for asset protection zones'		
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		<ul style="list-style-type: none">• Water, electricity and gas are to comply with section 4.1.3 of 'Planning for Bush Fire Protection 2006'.• Public road access shall comply with section 4.1.3 (1) of 'Planning for Bush Fire Protection 2006'.• Fire trails shall comply with section 4.1.3 (3) of 'Planning for Bush Fire Protection 2006'.		
11	Traffic Management and Access	<p>The proponent will provide vehicle access to the site by way of a new intersection with Hearn's Lake Road. The intersection will be constructed to the satisfaction of CHCC.</p> <ul style="list-style-type: none">• All internal roads will be designed and constructed in accordance with the 'Road Design and Access Control' measures outlined in the Coffs Harbour City Council Subdivision	Proponent	Prior to release of the Subdivision Certificate for Stage 1 of the development.

		<p>Development Control Plan.</p> <ul style="list-style-type: none">• Provide footpath on the eastern side of the Road One.• Access to the permissive tenancies will be maintained via the existing unmade section of Hearn's Lake Road and upgraded in accordance with the proposed fire trail requirements.• Access to the beach parking area will be maintained and sealed between the site entry and the parking area.		
12	Infrastructure Provision	<p>The following infrastructure will be provided:</p> <ul style="list-style-type: none">• underground electricity reticulation to each residential lot to the satisfaction of Country Energy;• reticulated potable water supply to each residential lot to Council's satisfaction;<ul style="list-style-type: none">◦ provide forward funding for a 150mm water main link from the existing 225mm main located on the western side of the	Proponent	Prior to release of the Subdivision Certificates for the respective stages of the subdivision.

		<p>Pacific Highway. It will be necessary to under bore the highway to prevent disruption to traffic on the highway. Costs to be offset against Section 94 and Section 27 Contributions as per DCP. Forward funding agreement for infrastructure works external to Site to be entered into with CHCC.</p> <ul style="list-style-type: none">○ The 150mm main is to be extended along the road reserve of Hearn's Lake Road to the subject site.○ All internal pipe work to be generally 100mm upvc.• a reticulated sewer system to each residential lot to Council's satisfaction;<ul style="list-style-type: none">○ The applicant proposes to forward fund that portion of the works connecting the site via Hearn's Lake Road and the Pacific Highway to the gravity sewer in Bosworth Road. Costs to be offset against Section 92 and Section 27 Contributions		
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		<p>as per DCP. Forward funding agreement for infrastructure works external to Site to be entered into with CHCC;</p> <ul style="list-style-type: none">○ provide a permanent pumping station on private land (13 Hearnese Lake road) as shown on Map 29. Costs to be offset against Section 94 and Section 27 Contributions as per DCP. Forward funding agreement for infrastructure works external to site to be entered into with CHCC.○ Construct a 150mm gravity sewerage main from the site to the pumping station. The gravity main would be located in Hearnese Lake Road Reserve. Costs to connect sewer from the site to the pumping station to be provided by proponent.○ Internal sewage would be in accord with CHCC Subdivision guidelines. <ul style="list-style-type: none">• Satisfactory arrangements will be made with Telstra Australia for the provision of fibre optic		
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		<p>cable to each residential lot.</p> <ul style="list-style-type: none">○ Amplification of the existing power and telecommunications services to provide for the proposed subdivision.• Upgrade existing table drain consistent with CHCC standards.		
13	Aboriginal Cultural Heritage	<p>The following management strategies will be implemented to address conservation of Aboriginal heritage values identified on the site:</p> <ul style="list-style-type: none">• Lot 28 shall be spared any development-related disturbance, east of proposed fire trail and protected and rehabilitated as proposed.• Lot 28 shall be fenced and signposted to minimise access and associated degradation by adjoining residents.• To preserve the Aboriginal cultural/social values of Hearn's Lake, best-practice methods of containing sediment and other pollutant run-off shall be implemented during the construction stage and maintained over the long term.	Proponent and Housing Developer	For the duration of the construction of the subdivision

		<ul style="list-style-type: none">In the event that any Aboriginal cultural materials are discovered or exposed during any stage of the proposed development works, all works shall immediately cease in the vicinity of the find. The DECC Northern Aboriginal Heritage Unit (Coffs Harbour) and the Aboriginal Stakeholder groups shall then be contacted for management advice and clearance given by these organisations before work resumes in the subject locality. In the unlikely event that possible or identified Aboriginal skeletal remains are discovered or exposed, the NSW Police Department shall also be contacted in addition to the above organisations.		
14	Geotechnical	If necessary, further detailed geotechnical investigations, including ASS assessment, will be carried out to confirm site stability and suitability prior to the commencement of construction of future stages of the development.	Proponent	Prior to release of the Construction Certificates for Stages of the

		<ul style="list-style-type: none">provide a site specific geotechnical assessment for any proposed dwellings on lots 38 -41.		development.
15	Section 94 Contributions	<p>Section 94 developer contributions will be paid to Council, at the rate current at the time of payment, towards the provision of the following public services or facilities less any amounts offset through forward funding of infrastructure beyond the site:</p> <p>Note 1 – The contributions are to be paid prior to release of any Subdivision Certificate unless other arrangements acceptable to Council are made.</p> <p>Note 2 – The rates will be adjusted in accordance with the procedures set out in Council’s Section 94 Contributions Plans. The applicant is advised to confirm the contribution rate applicable at the time of payment as rates are revised quarterly.</p> <p>Note 3 – If the development is to be staged, contributions are to be paid on a pro rata basis in respect of each stage.</p> <p>The Section 94 contribution is currently \$20,000 per lot for the 39 lots proposed in the subdivision this would be</p>	Proponent	Prior to the release of the Subdivision Certificate for the respective stages of the subdivision.

		\$780,000.		
16	Section 64 Contributions (Sewer and Water)	<p>Section 64 developer contributions will be paid to Council, at the rate current at the time of payment, towards the provision of the following public services or facilities less any amounts offset through forward funding of infrastructure beyond the site:</p> <p>Note 1 – The contributions are to be paid prior to release of any Subdivision Certificate unless other arrangements acceptable to Council are made.</p> <p>Note 2 – The rates will be adjusted in accordance with the procedures set out in Council's Section 64 Contributions Plans. The applicant is advised to confirm the contribution rate applicable at the time of payment as rates are revised quarterly.</p> <p>Note 3 – If the development is to be staged, contributions are to be paid on a pro rata basis in respect of each stage.</p> <p>The Section 64 contribution is currently \$11,507 per lot</p>	Proponent	Prior to the release of the Subdivision Certificate for the respective stages of the subdivision.

		for the 39 lots proposed in the subdivision this would be \$448,773.		
17	Surf Rescue Equipment Developer Contributions Plan 2006	The contribution is currently \$86.83 per lot for the 39 lots proposed in the subdivision this would be \$3,386.37.	Proponent	Prior to the release of the Subdivision Certificate for the respective stages of the subdivision.
18	Earthworks	<p>The following measures will be employed to minimise potential environmental impacts associated with the proposed earthworks:</p> <ul style="list-style-type: none">• proposed earthworks will be carried out strictly in accordance with the Bulk Earth Works Plan, the CEMP and the Stormwater Management Plan;• all management measures outlined in the ESCP will be implemented and maintained prior to and during construction activities;• earthworks will be carried out under the control	Proponent	For the duration of the construction of the subdivision

		<p>of a suitably qualified geotechnical engineer and certified to Level 1 construction monitoring and testing as defined in “AS 3798-1996 Guidelines for Earthworks for Commercial and Residential Developments”;</p> <ul style="list-style-type: none">• all bulk earthworks will be undertaken during the first stage of the development, minimising the need for stockpiling on-site and the potential impact on future residents of the estate; and• all disturbed areas will be stabilised upon completion of earthworks.		
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5.0 CONCLUSION

Following discussions with officers from CHCC and the Department of Planning the proposal has been amended as follows:

- Reduction from 41 residential allotments to 39 residential allotments by the incorporation of previous lot 29 into the lot 28 reserve area and the dedication of lot 3 as a pocket park;
- The increase in area of reserve lot 28 from 8,890m² to 12,100m²;
- The proposed subdivision layout has been amended to coincide with the proposed 7A zoning in the draft CHCC LEP Amendment 29;
- The lot layout has been amended to provide for a 50m buffer to the SEPP 26 littoral rainforest and freshwater wetland;
- Lot 3 has been designated as a pocket park and proposed to be dedicated to CHCC to accommodate the Austral Toadflax community and remnant red gum community;
- The reduction in size of lot 27 from 1,093m² to 865m² with the remainder forming part of reserve lot 28;
- The reduction in depth of previous lots 32, 43, 39 and 40 to allow the proposed fire trail to move west of the agreed vegetation line;
- The proposal has been amended to require a covenant on lot 27 restricting building to within a designated envelope of 460m² landward of the 2018 hazard line;
- The amendment of the services proposal in line with the agreement with CHCC and providing for

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- a minimum 6m carriage width; strengthening pavement where required,
 - locating the water mains in the road reserve,
 - locating gravity sewerage and rising mains in the road reserve,
 - proving a 1.2m wide sealed footpath between the site and the bus stop at the western end of Hearn's Lake Road,
 - locating the sewer pumping station on private land north of Hearn's Lake Road,
 - upgrading the gravel track east of the site entrance to meet the requirements for a fire trail,
 - seal this fire trail to the existing entrance of the informal car park;
 - Enter into an agreement to:
 - Transfer the Crown Road to CHCC as a Council Road;
 - Applicant to meet all fees associated with the transfer,
 - Applicant to lodge a bond for the agreed upgrading works;
 - Agree to upgrade the existing table drain in Hearn's Lake Road;
 - Implement the submitted Sediment and Erosion Management Plan;
 - Amend the proposal to provide truck wash down facilities within the site boundaries during construction;

These changes have resulted from consideration of the issues raised by various Government agencies, Coffs Harbour City Council and the local community. The proposed amendments will assist in mitigating any adverse environmental impacts associated with the proposed development and enhance the achievement of sustainable urban outcomes on the site.

Project approval is now sought for the following:

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- Construction of a residential subdivision to create 42 allotments (39 residential allotments) and is proposed to be constructed in one stage but released in five stages;
 - Construction of an internal network of roads, pedestrian paths and fire trails providing access to all residential lots and community/recreation areas and including access from Hearn's Lake Road;
 - Provision of 3 allotments for public purpose to be dedicated to Coffs Harbour City Council, Lot 28 (12,100m²) as an environmental reserve; Lot 10 (1,270m²) as a drainage reserve and Lot 3 (590m²) as a pocket park;
 - Associated bulk earthworks (cut and fill);
 - Construction of associated infrastructure including water supply mains, sewerage mains, stormwater drainage structures, water quality and detention structures;
 - Construction of associated asset protection zones and fire trails;
 - Connection to sewer pumping station. Pumping station provided by CHCC;
 - Provision of fencing to the parts of southern, northern and western boundaries of the site and dog proof fencing to the reserve lot 28;
 - Associated landscaping, street planting and rehabilitation of native vegetation area to be retained;
 - Stage 1 will comprise 10 allotments, 8 being residential allotments varying in size from 555m² to 1,025m² and an allotment containing the stormwater management

infrastructure (Lot 10) and a pocket park (Lot 3). Lots 10 and 3 are proposed to be dedicated to CHCC.

- Stage 2 will comprise 5 residential allotments varying in size from 711m² to 842m².
- Stage 3 will comprise 8 residential allotments varying in size from 665m² to 715m².
- Stage 4 will comprise 10 allotments being 9 residential allotments varying in size from 706m² to 912m² and an allotment containing a proposed Environmental Protection 7(a) zoned land and its buffers (Lot 28).
- Stage 5 will comprise 9 residential allotments varying in size from 695m² to 1,866m².

The application is a project application and the staging is only intended to facilitate the release of the land over time.

With appropriate mitigation and management measures, including water quality controls, restrictions on built form to achieve a high level of residential amenity and implementation of bushfire risk management measures, the proposed development will not result in any significant environmental impacts.

The justification provided in the EA and this Preferred Project report presents a strong case for 45 Hearn's Lake Road to be developed in the manner proposed, provided all the environmental enhancement and mitigation measures set out in the revised Statement of Commitments are implemented in a timely fashion.