

NSW GOVERNMENT
Department of Planning

MAJOR PROJECT ASSESSMENT: PACIFIC PINES ESTATE, LOT 234 DP 1104071 LENNOX HEAD Proposed by PETRAC PTY LTD

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

October 2008



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1 EXECUTIVE SUMMARY

This is a report on a concept plan application and a concurrent Stage 1 project application by Petrac Pty Ltd (the proponent) to carry out development for the Pacific Pines Estate at Lennox Head (Lot 234 DP 1104071) ("the proposal").

The subject site was originally rezoned to its current 2(b) Village Area zone under the *Ballina Local Environmental Plan 1987* in 1989. Three development consents exist over parts of the site which cover bulk earthworks, embellishment of a realigned watercourse and construction of the water quality control pond. All consents have been commenced.

On 23 March 2006 a SEPP 71 Master Plan was adopted by the Minister for Pacific Pines. This Master Plan included a slightly different area than that subject to the current application. This proposal does not rely on this Master Plan.

The concept plan seeks approval for:

- Development of a neighbourhood centre;
- Development of an integrated retirement community;
- Residential subdivision into lots ranging from 450m² to >1200m²;
- Medium density housing precincts; and
- Parks, conservation areas and footpaths/cycle ways.

The Stage 1 project application seeks approval for subdivision into:

- 54 residential allotments ranging in size from 632m²-907m²;
- 6 super lots to be developed at a later date for retail, commercial, seniors living and medium density housing development;
- 2 open space lots; and
- A residual lot.

The estimated project cost of the development is \$42.5 million for the concept plan and \$9.5 million for the project application. The proposal is expected to create 5-10 full time equivalent construction jobs and 80-100 full time equivalent operational jobs.

During the exhibition period, the Department received a total of 7 submissions from public authorities and 146 submissions from the public. Of the public submissions, all raised objections to the proposal. Key issues considered in the Department's assessment included:

- Building height;
- Setbacks;
- Flora and fauna;
- Traffic and access;
- Water cycle management;
- Amount of retail and commercial development;
- Subdivision layout;
- Flooding;
- Mosquito management;
- Geotechnical;
- Heritage and archaeology;
- Noise;
- Visual Impact;
- Contamination;
- Bushfire;
- Earthworks;
- Infrastructure Provision; and

• Section 94 and other contributions.

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

The Department also considers that the current proposal is an improvement on the adopted SEPP 71 Master Plan for the site as it delivers an additional 16 ha of open space to the community and protects identified endangered ecological communities or threatened species (or compensates for these where they are removed).

On these grounds, the Department is satisfied that the site is suitable for the proposed development and that the project will provide environmental, social and economic benefits to the region.

The Department recommends that the project be approved, subject to modifications to the concept plan and conditions of approval for the project application.

Key recommended modifications to the concept plan and conditions of approval are:

- Requirement to provide an Environmental Management Plan that will manage the protection, rehabilitation and revegetation of all retained threatened species and endangered ecological communities on the site;
- Requirement to develop a Compensation Plan that provides land at a rate of 2:1 that offsets the loss of endangered ecological communities and threatened flora species as a result of the development;
- Requirement to provide \$90,000 for research into the threatened species Hairy Joint Grass and the Freshwater Wetlands endangered ecological community;
- An increase in the width of the retained green space corridor through the site;
- An increase to the buffers around the retained ecological corridor;
- A reduction in the height of the neighbourhood centre to comply with the height requirements of the Ballina LEP; and
- Modifications to the proposed road hierarchy to comply with relevant guidelines.

It is noted that the proposed development was deemed by the Commonwealth Department of the Environment, Water, Heritage and the Arts, to be a controlled action pursuant to the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) on 29 August 2007. The development was determined to be a controlled action based on the potential for significant impacts on the vulnerable species Hairy Joint Grass (*Arthraxon hispidus*). This application has been assessed in accordance with the Bilateral Agreement that exists between the Commonwealth and NSW. Accordingly, following determination, this report and instrument of determination will be forwarded to the Commonwealth for determination pursuant to the EPBC Act.

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2 BACKGROUND

2.1 THE SITE

2.1.1 Site context and location

The site, at Lennox Head, (Lot 234 in DP 1104071), is located within the local government area of Ballina and is owned by Petrac Pty Ltd (the proponent).

The site is 80.48 hectares and is located approximately 2km west of Lennox Head village (refer to Figures 1 and 2).

The site has frontage to Hutley Drive and Henderson Lane in the north and Montwood Drive, Stoneyhurst Drive and Fox Valley Way in the south. A public road reserve exists within the western part of the site for the future extension to Hutley Drive.

2.1.2 Existing site features

The site is a large amphitheatre. The western part of the site is low lying (0m AHD) and flood prone in part. These areas grade upwards to the west, north and south. The highest part of the site can be found in the northwest at 51m AHD. This area is a prominent ridge in the site running in an east-west direction.

The site is currently largely cleared land used for beef cattle grazing. A number of small areas of remnant vegetation exist throughout the site. These areas of vegetation are largely linear having been protected along fencelines or adjacent to road reserves. Some of the areas of vegetation are classified as endangered ecological communities (EECs) namely littoral rainforest and swamp sclerophyll forest on coastal floodplains.

A number of Moreton Bay Figs are located across the site. While this species is not threatened, these trees are large and prominent on the site.

A large water quality control pond exists in the south west of the site. The development of this pond was approved as part of DA 2002/333 by Ballina Shire Council and has since been constructed. The pond was designed to detain stormwater from all stages of the Pacific Pines Estate.



Figure 1: Site location (Source: Environmental Assessment)



Figure 2: Aerial photo of site (Source: Environmental Assessment)



Figure 3: Looking across the site to the west from North Creek Road. The water quality control pond is visible in the middle ground with the SEPP 14 wetland and Ballina Nature Reserve in the background.



Figure 4: Looking north west across the site from North Creek Road. One of the linear bands of littoral rainforest is visible in the middle right of photo.

2.1.3 Surrounding development

To the south of the site is existing residential subdivision (these areas of subdivision were the first stages of the Pacific Pines Estate). To the north of the site is a residential subdivision known as the Lennox Meadows Estate. Residential development also adjoins the north east of the site. To the south east is vacant land which used to be part of the development parcel but was subdivided off and retained by the previous owners of the site.

To the north west of the site is land referred to as Henderson Farm which is currently subject to a rezoning application with Ballina Shire Council. Also to the north east is land that is also owned by Petrac Pty Ltd and is being developed into playing fields. Approval for the construction of the playing fields has been given by Ballina Shire Council in DA 2004/1113.

To the south west of the site is Ballina Nature Reserve. Within the Ballina Nature Reserve is a wetland identified by *State Environmental Planning Policy No.* 14 – *Coastal Wetlands* as wetland number 88. A small part of the wetland extends into the south western part of the site. Also in the south west of the site is a sewer pump station located on its own small lot.

In addition, an area identified by *State Environmental Planning Policy No.* 26 – *Littoral Rainforests* lies to the north west of the site. The boundary of the site is within 100m of the vegetation.

2.2 SITE HISTORY

The land was rezoned by Ballina Shire Council to its current 2(b) Village zone in 1989.

The land known as 'Pacific Pines Estate' encompasses a larger area than the current subject site. Four stages of the Estate, totalling approximately 220 lots, have been completed to the south of the current site. This existing part of the Estate has a gross density of around 8.6 dwellings per hectare.

A general concept for the Pacific Pines Estate was adopted by Council as a Development Control Plan in 1989 (refer to Figure 5). The overall concept envisaged 870 lots including 330 medium density units with an overall population of approximately 2,306 people.



Figure 5: Development concept adopted by Ballina Shire Council in their Development Control Plan in 1989 (Source: SEPP 71 Master Plan documentation).

There are a number of existing consents that apply to the site as follows:

- **DA 2004/1113** Approved by Ballina Shire Council on 31 March 2005. The consent allowed for the extension of Hutley Drive, construction of playing fields and embellishment of realigned watercourse
- **DA 1999/248** Approved by Ballina Shire Council on 16 August 1999. The consent approved the subdivision of land to create 39 residential lots (south of current site), 1 playground allotment and a playing field complex and to reshape the land in the north-eastern sector of the site by civil earthmoving works to facilitate the subdivisional development of later stages of the estate incorporating the placement of the removed material on the lower central sector of the site Stage 3 Pacific Pines Estate.

The residential lots have been developed and exist to the south of the current subject site. The playground lot and playing field lots have both been dedicated to Council. The approved civil works have not yet been undertaken however, the Ballina Shire Council issued a construction certificate for these works on 30 June 2004. The proponent intends to undertake these earthworks in accordance with this consent.

- **DA 2002/333** Approved by Ballina Shire Council on 24 October 2002. The consent approved the excavation of the Water Quality Control Pond (WQCP) in the western part of the site, with the excavated material used to provide fill for residential development on the subject site and for playing fields on the adjoining site (Lot 216 DP 1017615). This pond has subsequently been constructed.
- SEPP 71 Master Plan Waiver Application for master plan waiver refused on 24 July 2003 for the following reasons:
 - The size of the proposed development (approximately 500 residential lots);
 - The fact that the planning controls governing development on the site pre dated the implementation of SEPP 71;
 - The benefit a master plan would provide in responding to agencies' concerns; and
 - The fact that none of the agencies consulted supported waiving the requirement for a master plan.
- **MP 27-12-2003** SEPP 71 Master Plan adopted by the Minister for Planning on 23 March 2006 (refer to Figure 6). The Master Plan was for the creation of 579 residential lots variously for single dwellings, mews dwellings and medium density development. The Master Plan included the provision of a neighbourhood centre of approximately 1200m² and a community facility of 300m². Overall, the Master Plan envisaged the creation of 600 dwellings, including 177 medium density units and an overall population of approximately 1,590 people. The Master Plan provided for approximately 9ha of open space.

The Master Plan was adopted with a number of variations largely relating to the setbacks required to remnant vegetation on the site.

The Master Plan covered a larger area than the current application (refer to Figure 7). Following adoption of the Master Plan the site was subdivided with the lot the subject of the current application sold to the current owner, Petrac Pty Ltd.

The subject proposal does not seek to rely on the approved Master Plan as a different mix of dwelling types is proposed including seniors living housing. The Master Plan has been considered in the assessment of the current proposal.



Figure 6: SEPP 71 Master Plan (Source: Environmental Assessment)



Figure 7: The boundary of the current subject site compared to the area included in the SEPP 71 Master Plan (Source: base map taken from the Environmental Assessment)

3 THE PROPOSED DEVELOPMENT

3.1 PROJECT DESCRIPTION

This is an application for concept plan approval with concurrent Stage 1 project approval. Descriptions of the concept plan and project application are provided separately below.

3.1.1 Concept Plan

The proponent seeks concept approval for a residential subdivision comprising subdivision for single dwellings, duplexes and medium density, a neighbourhood centre comprising commercial and retail space, a community centre, tavern and retirement village. Further detail regarding each of these elements is provided below.

- The **neighbourhood centre** is proposed to be a local-scale shopping centre comprising retail, small businesses, shop-top housing, a medical centre, a tavern, community centre and childcare centre. The buildings in the neighbourhood centre fronting Hutley Drive and Main Street are proposed to be three storeys in height while the remainder of the neighbourhood centre would be two storeys in height. The three storey buildings propose retail uses at ground level with two storeys of commercial or residential above. The centre would ultimately comprise up to 3,000 m² of retail floor space, 800 m² of commercial floor space and approximately 20-25 'shop-top' dwellings. Approximately 280 parking spaces will be provided on-site.
- The retirement community is proposed to include a variety of retirement housing, including assisted and independent living. It will also include on-site leisure, open space and recreational facilities. The community will include approximately 113 retirement units that will be a mixture of independent and assisted living and approximately 124 retirement lots. The mixed use and assisted living buildings located adjacent to the water quality control pond are proposed to be three storeys in height. The remainder of the retirement community would be limited to a height of two storeys.
- The residential subdivision of the site will comprise approximately 505 lots as follows:
 - 27 large lots on steeper parts of the site (> 1,200 m²);
 - o 119 'traditional' lots of around 800 m²;
 - $_{\odot}$ 224 'traditional' lots with areas between 600 m^2 and 800 $m^2;$
 - \circ 11 duplex lots (900 m²);
 - 17 'small affordable' lots (450 m² to 600 m²);
 - \circ 87 rear lane lots (450 m² to 600 m²); and
 - \circ 20 'park court lots' (450 m² to 600 m²).
- The **medium density housing** is proposed adjacent to the neighbourhood centre. The housing would be developed at a density of approximately 1 dwelling per 250m² providing approximately ten dwellings.
- 25.1 ha of **green space** incorporating areas for conservation, areas for revegetation and rehabilitation of remnant vegetation and areas of passive and active recreation. This includes the following:
 - Open space 2.1 ha;
 - Water quality control pond and associated open space 3.6 ha;
 - Revegetation in buffer around SEPP 26 Littoral Rainforest 0.9 ha;
 - Hairy Joint Grass establishment (brook and south of lake) 3.4 ha;
 - Revegetation around littoral rainforest EEC 6.3 ha; and
 - Rehabilitation works adjacent to Ballina Nature Reserve 5.9 ha.
- A **road network** connected to various existing roads such as Hutley Drive, Montwood Drive and Stoneyhurst Drive.

The overall population of the current proposed development is approximately 1720 people.

The concept plan appears at Figure 8 with detailed plans of the proposal at Tag F.



Figure 8: Proposed development layout (Source: correspondence from GeoLINK dated 18 August 2008)

3.1.2 Project Application

The project application seeks approval for the subdivision of 63 lots including six super lots, 54 residential lots, two open space lots and a residual lot of 57.70ha including associated earthworks on the site.

The size and future intended use of the super lots is set out below. Future applications will be lodged to seek approval for the development of these super lots.

- Super lot 1 (1.43 ha) neighbourhood shopping centre;
- Super lot 2 (5730 m²) tavern;
- Super lot 3 (2050 m²) child care;
- Super lot 4 (1649 m²) community centre / hall;
- Super lot 5 (8.18 ha) retirement community; and
- Super lot 6 (2380 m²) medium density housing.

The proposed residential lots will range in size from 632m²-907m² (averaging approximately 740 m²). The residential lots comprise:

- 2 duplex lots (900-907m²);
- 37 traditional lots between 600-800 m²; and
- 15 traditional lots >800 m².

The proponent seeks approval to carry out earthworks required in relation to the subdivision. The earthworks involve cutting material from the east-west ridgeline in the north of the site to fill the low lying areas in the central portion of the site, around the water quality control pond. Some of the earthworks will be undertaken in accordance with an existing, commenced consent (DA1999/248) issued by Ballina Shire Council on 25 November 1999. Since the development consent was given, Council has issued a construction certificate for these works (on 30 June 2004).

The proponent now seeks additional approval to undertake earthworks outside of the area that the development consent relates to. Specifically, the proponent seeks approval to cut up to 2.85m and fill up to 0.28m in the area to the north and east of the water quality control pond. The total quantity of earthworks the proponent is seeking approval for is approximately 35,000m³. The proponent advises that a cut and fill balance is achievable on the site and that no importation of fill is required.

The works comprising the project application are proposed to be constructed in 3 sub stages as follows:

- Stage 1A Subdivision of the 54 residential lots and 2 open space lots and associated roads and landscaping in the south of the site;
- Stage 1B the creation of the 6 super lots, the extension of Montwood Drive and the construction of Main Street; and
- Stage 1C the construction of Hutley Drive and the western link for the playing fields adjacent to the site.

The proposed earthworks will be undertaken progressively throughout the 3 substages of the project.

Refer to Figure 9 for details of the proposed staging. Plans of the proposed project application are presented at **Tag G**.



Figure 9: Proposed works for the Stage 1 project application including staging (Source: correspondence from GeoLINK dated 18 August 2008)

3.2 PROJECT CHRONOLOGY

- 16 March 2007 Director-General, as delegate for the Minister, formed the opinion that the proposal is a Project and that Part 3A of the Act applies
- 3 May 2007 Preliminary Assessment lodged with the Department
- 3 May 2007 Concept plan authorised by the Minister
- 18 May 2007 Director-General's Environmental Assessment Requirements (DGRs) issued
- 18 February 2008 Environmental Assessment lodged with the Department. Assessment deemed adequate.
- 20 March to 2 May 2008 EA placed on public exhibition
- 20 June 2008 Preferred Project Report submitted
- 19 August 2008 Submission of amended plans and documentation

3.3 PROJECT AMENDMENTS

A preferred project report was submitted on 20 June 2008 incorporating the following amendments:

- A reduction in the area of proposed three storey height of approximately 70%;
- A reduction in height limits proposed by up to 1m;
- Inclusion of additional ecological offset areas west of the site;
- Deletion of car court lots from the retirement village;
- Removal of one lot from the project application.

Amended plans and additional documentation were submitted on 19 August 2008 incorporating the following amendments:

- Enlargement of central corridor area to accommodate areas of Freshwater Wetlands endangered ecological community and the threatened species Hairy Joint Grass and Square Stemmed Spike Rush;
- Other amendments to accommodate this change such as removal of an area previously designated as retirement community, reduction in other green space areas across the site.

4 STATUTORY CONTEXT

4.1 MAJOR PROJECT DECLARATION

The project is a Major Project under *State Environmental Planning Policy (Major Projects)* 2005 being development for subdivision of land in a residential zone into more than 25 lots in the coastal zone (Schedule 2 clause 1(1)(i) of the MP SEPP as in force at the time). The opinion was formed by the Director-General as delegate of the Minister for Planning on 16 March 2007.

4.2 PERMISSIBILITY

Under the *Ballina Local Environmental Plan 1987*, the site is zoned part 2(b) Village Area and part 7(a) Environmental Protection (Wetlands). The only development that is prohibited in the 2(b) zone is brothels. All other development is permissible with consent. The proposal is consistent with the objectives of the 2(b) zone by providing a range of urban development on the site including a range of densities and commercial uses.

A small part of the site in the south western corner is zoned 7(a) Environmental Protection (Wetlands). This area will form part of the compensatory works for the removal of the threatened species Hairy Joint Grass elsewhere on the site. Environmental protection works are permissible with consent in the zone. The proposal is consistent with the objectives of the 7(a) zone by minimising the impact of the development on the zone.

4.3 EXHIBITION AND NOTIFICATION

The Department has exhibited the Environmental Assessment (EA) in accordance with section 75H (3) of the Act. The EA was placed on public exhibition from 20 March to 2 May 2008 and submissions were invited in accordance with section 75H of the Act.

4.4 MINISTER'S POWER TO APPROVE

The purpose of this submission is for the Director-General to provide a report on the project to the Minister for the purposes of deciding whether or not to grant approval to the project pursuant to Section 75O and 75J of the Act.

Section 75I(2) sets out the scope of the Director-General's Environmental Assessment Report to the Minister. Each of the criteria set out therein have been addressed below, as follows:

(a) a copy of the proponent's environmental assessment and any preferred project report; and

The proponent's EA is included at **Tag H** whilst the preferred project report is set out for the Minister's consideration at **Tag I**.

(b) any advice provided by public authorities on the project; and

All advice provided by public authorities is discussed in Section 5.3 below.

(c) a copy of any report of a panel constituted under Section 75G in respect of the project; and

No independent hearing and assessment panel was undertaken in respect of this project.

(d) a copy of or reference to the provisions of any State Environmental Planning Policy (SEPP) that substantially govern the carrying out of the project; and

An assessment of each relevant State Environmental Planning Policies that substantially govern the carrying out of the project is set out at **Tag J**.

(e) except in the case of a critical infrastructure project – a copy of or reference to the provisions of any environmental planning instrument that would (but for this Part) substantially govern the carrying out of the project and that have been taken into consideration in the environmental assessment of the project under this Division; and

An assessment of the development relative to the prevailing EPI's is provided in Tag J.

(f) any environmental assessment undertaken by the Director General or other matter the Director General considers appropriate.

The environmental assessment of the project is this report in its entirety.

(g) a statement relating to compliance with the environmental assessment requirements under this Division with respect to the project.

The Director-General's Environmental Assessment Requirements (DGRs) were issued on 18 May 2007 and are at Tag K.

The EA lodged by the proponent on 18 February 2008 was accepted as adequate.

4.5 ENVIRONMENTAL PLANNING INSTRUMENTS (EPIs)

4.5.1 Application of EPIs to Part 3A of the Act

To satisfy the requirements of section 75I(2)(d) and (e) of the Act, this report includes references to the provisions of the environmental planning instruments that govern the carrying out of the project and have been taken into consideration in the environmental assessment of the project. A summary of compliance with the relevant EPIs is in **Tag J**.

The provisions, including development standards of local environmental plans, and development control plans are not required to be strictly applied in the assessment and determination of major projects under Part 3A of the Act. Notwithstanding, these standards and provisions are relevant considerations as the DGRs require the proponent to address such standards and provisions. Accordingly the objectives of a number of EPIs and the development standards therein and other plans and policies that substantially govern the carrying out of the project are appropriate for consideration in this assessment as follows:

4.5.2 State Environmental Planning Policy (Major Projects) 2005

The MP SEPP applies to the project as discussed in section 3.1 above.

4.5.3 State Environmental Planning Policy No. 71 – Coastal Protection

SEPP 71 applies to land within the coastal zone. It aims to protect and manage the many attributes of this area of the State. In response to the aims and matters for consideration under SEPP 71, the development incorporates:

- The protection of two areas within the site that have been identified as being of Aboriginal cultural significance by the Jali Local Aboriginal Land Council;
- Provision of pedestrian and cyclist linkages through and within the site;
- Rehabilitation of the area within the site that forms a 100m buffer to SEPP 26 Littoral Rainforest No. 39;
- Stormwater management based on water sensitive urban design;
- Provision of a T-shaped corridor through the site that helps maintain the integrity of the identified regional wildlife corridor through the site and provides a linkage to the Ballina Nature Reserve; and
- A conservation area through the middle of the site that incorporates areas of Freshwater Wetlands endangered ecological community, the vulnerable Hairy Joint Grass and the endangered Square Stemmed Spike Rush.

4.5.4 State Environmental Planning Policy No. 14 – Coastal Wetlands

SEPP 14 aims to protect and preserve mapped coastal wetlands. A small portion of SEPP 14 wetland number 88 extends into the south western boundary of the subject site. No development is proposed within this boundary, or within a 50m buffer of this wetland.

4.5.5 State Environmental Planning Policy No. 11 – Traffic Generating Developments

While SEPP 11 has now been repealed, this instrument applied at the time the application was lodged therefore it is relevant to the proposal. The application was referred to the Roads and Traffic Authority (RTA) for consideration of traffic and access matters. The RTA provided comment in relation to the proposed development. These issues are discussed further in Section 6.

4.5.6 State Environmental Planning Policy No. 26 – Littoral Rainforests

SEPP 26 provides a mechanism for considering potential impacts on mapped areas of littoral rainforest. SEPP 26 Littoral Rainforest number 39 is located to the northwest of the site. While the mapped rainforest is wholly outside the site boundary, the 100m buffer extends into the site's boundary. The development recognises the 100m buffer and proposes revegetation works within this area.

4.5.7 State Environmental Planning Policy No. 55 – Remediation of Land

SEPP 55 requires a consent authority to consider the potential for a development site to be contaminated and therefore unsuitable for the use for which development is proposed. Agricultural activities are identified as a use that may potentially contaminate so a Preliminary Site Investigation was prepared for the site and submitted with the application. The investigation found that the site was fit to be used for the proposed development. Contamination is further considered in Section 6.

4.5.8 State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004

The Seniors SEPP aims to increase the provision of well-designed housing for seniors or people with a disability and make efficient use of existing infrastructure and services. The current application does not seek approval to build the seniors living buildings, but seeks approval for the creation of a super lot which will later be developed for this purpose. The site for the super lot has been assessed in relation to the 'Site-Related Requirements' of the SEPP and generally complies with these requirements. More detailed consideration in relation to the design requirements and other provisions of the SEPP will be undertaken in future applications for approval of the built form for the retirement community.

4.5.9 North Coast Regional Environmental Plan

The North Coast Regional Environmental Plan (REP) provides a framework for policy preparation for the North Coast region. The proposal is generally consistent with the REP. A detailed assessment of the compliance of the proposal with the provisions of the North Coast REP is provided at **Tag J**.

4.5.10 Ballina Local Environmental Plan 1987

The subject site is zoned part 2(b) Village Area and part 7(a) Environmental Protection (Wetlands) pursuant to the Ballina LEP 1987. The proposed development meets the objectives of the 2(b) zone in that it proposes a range of urban uses across the site including varying housing densities and areas of commercial development. While a small area in the south west of the site is zoned 7(a) no development is proposed in this area.

The development generally complies with the provisions of the Ballina LEP with the exception of Clause 17 Limitation on Building Height.

Clause 17 sets a height limit of 6.4m across the Ballina LGA. The clause does allow for exceedance of this height limit where the Council is satisfied that the development will not create overshadowing, privacy or visual impacts, obstruct views and will not exceed two storeys. The development proposes three storey buildings in part of the neighbourhood centre and for part of the retirement village. The issue of height is further addressed in Section 6.1.

A detailed assessment of the compliance of the proposal with the provisions of the Ballina LEP is provided at Tag J.

4.6 OTHER PLANS AND POLICIES

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

- Ballina Shire Combined Development Control Plan (DCP);
- NSW Coastal Policy 1997 and NSW Coastal Design Guidelines;
- Far North Coast Regional Strategy;

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- Lennox Head Community Aspirations Strategic Plan; and
- Lennox Head Structure Plan.

The proposed development has been assessed against these controls in Tag J to this report.

4.7 ECOLOGICALLY SUSTAINABLE DEVELOPMENT (ESD) PRINCIPLES

There are five accepted ESD principles:

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

While this report generally represents an assessment of ecologically sustainable development (ESD), it is considered appropriate to consider how the project application addresses the issues of ESD. The principles of ESD have been considered as follows:

4.7.1 Integration

In making its recommendation on the proposed development, the Department has taken into consideration environmental, social and economic matters. The development will have a positive impact on the local economy and society through the creation of a range of new residential accommodation close to Lennox Head, including affordable housing allotments. Further, the neighbourhood centre will provide future employment opportunities for the community.

4.7.2 Precautionary Principle

The EA submitted has identified and assessed the range of environmental impacts of the proposal. The proposal includes the following:

- Retention of the majority of threatened species and endangered ecological communities (EEC) across the site;
- The rehabilitation and ongoing maintenance of the freshwater wetlands EEC;
- Provision of compensatory measures for the loss of some area of threatened species habitat and EEC;
- Revegetation of buffer areas surrounding the remnant littoral rainforest EEC on the site;
- The provision of a corridor linking the site with the Ballina Nature Reserve to the west;
- A stormwater management system that incorporates pollutant traps, swales and detention basins to maintain water quality and quantity leaving the site; and
- An ASS management plan.

The proponent has proposed appropriate measures in their Statement of Commitments and conditions of approval and modifications to the concept plan are recommended that will manage the potential environmental impacts of the development.

4.7.3 Intergenerational Equity

The development provides additional residential development opportunities now and into the future in Lennox Head. In particular the development will provide a variety of housing including a number of affordable lots and seniors housing for future generations. Further, the development will provide a community facility within the neighbourhood centre for use now and in the future.

The project will seek to minimise its ecological footprint, and provide a relative degree of local and regional selfreliance and capacity for future adaptability, through:

appropriate planning and design approaches; and

- protection and rehabilitation of the majority of endangered ecological community and threatened species on the site.

4.7.4 Protecting Biodiversity

The proponent has provided an assessment of the impacts on existing flora and fauna on and adjacent to the site. Mitigation measures and management strategies will be implemented to prevent any potential environmental impacts, such as:

- Protection of the remnant littoral rainforest EECs in the east of the site and revegetation of a buffer around these communities;
- Revegetation of the 100m buffer to the SEPP 26 Littoral Rainforest in the northwest of the site;
- Protection and rehabilitation of the majority of the freshwater wetlands EEC on the site;
- Protection of areas of the threatened species Hairy Joint Grass and Square-stemmed Spike Rush;
- Provision of a corridor throughout the site that links areas of remnant vegetation with the Ballina Nature Reserve to the west of the site.

4.7.5 Improved Valuation

The subdivision has been designed in accordance with the principles of Water Sensitive Urban Design and includes provision for a dual reticulated system. The system is designed to promote an environmentally sustainable outcome through management of the stormwater runoff, potable water and sewerage. These measures will help future development applications for the site to comply with BASIX.

Consequently, the Department is satisfied that the proposal is consistent with the principles of ESD.

4.8 OBJECTS OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

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

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

(a) to encourage:

(i) the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,

- (ii) the promotion and co-ordination of the orderly and economic use and development of land,
- (iii) the protection, provision and co-ordination of communication and utility services,
- (iv) the provision of land for public purposes,
- (v) the provision and co-ordination of community services and facilities, and
- (vi) the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and
- (vii) ecologically sustainable development, and
- (viii) the provision and maintenance of affordable housing, and
- (b) to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and
- (c) to provide increased opportunity for public involvement and participation in environmental planning and assessment.

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

With respect to ESD, the Act adopts the definition in the *Protection of the Environment Administration Act* 1991 including the precautionary principle, the principle of inter-generational equity, the principle of conservation of biological diversity and ecological integrity, and the principle of improved valuation, pricing and incentive mechanisms.

The Department has considered the Objects of the Act, including the encouragement of ESD in the assessment of the application.

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4.9 COMMONWEALTH ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999

The project was deemed by the Commonwealth Department of the Environment, Heritage, Water and the Arts, to be a controlled action pursuant to the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) on 29 August 2007. The development was determined to be a controlled action based on the potential for significant impacts on the vulnerable species Hairy Joint Grass (*Arthraxon hispidus*). This application has been assessed in accordance with the Bilateral Agreement that exists between the Commonwealth and NSW. Accordingly, following determination, this report and instrument of determination will be forwarded to the Commonwealth for determination pursuant to the EPBC Act.

5 CONSULTATION AND ISSUES RAISED

5.1 PUBLIC EXHIBITION DETAILS

The project/concept application and Environmental Assessment were placed on public exhibition from 20 March 2008 to 2 May 2008 and submissions were invited in accordance with section 75H of the Act. Notification of the exhibition was given in advertisements in:

- The Australian on 20 March 2008; and
- The Ballina North Coast Advocate on 20 March 2008.

Exhibition locations were at:

- Department of Planning Head Office, Bridge Street Sydney;
- Ballina Shire Council, cnr Tamar and Cherry Streets, Ballina;
- Lennox Head Library, Machney Lane, Lennox Head; and
- Nature Conservation Council, Level 2, 301 Kent Street, Sydney.

The EA was also provided for download on the Department's website. The Department has exhibited the Environmental Assessment (EA) in accordance with section 75H (3) of the Act.

Letters were sent to adjoining and nearby landowners notifying of the exhibition and inviting a submission.

A Preferred Project Report was lodged on 20 June 2008 and as the changes to the nature of the project were not significant, it was not re-exhibited but was placed on the Department's website for a period of 14 days from 26 June 2008.

A total of 152 submissions were received, comprising 146 submissions from the public (including 1 petition with 45 signatures) and six submissions from public authorities being Ballina Shire Council, Department of Environment and Climate Change, Department of Primary Industries, Department of Education and Training, NSW Rural Fire Service, NSW Roads and Traffic Authority.

The 146 submissions from the public all objected to the proposal. Of the letters received 129 were form letters. The overwhelming majority of the submissions received (141 submissions or almost 95%) were from residents of Lennox Head.

Of the public authority submissions, five from Ballina Shire Council, Department of Environment and Climate Change, Department of Primary Industries and the NSW Roads and Traffic Authority raised objections and two from NSW Rural Fire Service and the Department of Education and Training did not raise any objection.

5.2 SUBMISSIONS FROM THE PUBLIC

5.2.1 Summary of issues raised in public submissions

The following issues were raised in the public submissions:

- Traffic and access
 - o the impact of traffic generated on the existing road network;
 - Hutley Drive should be extended north and south;
 - Proposed road widths are not adequate;
 - The increased traffic will create noise problems.
- Strategic Planning;
 - The population of the development should not be more than the SEPP71 master plan.
- Proposed Land Uses;
 - The retirement village is too large;
 - The tavern will create unwanted noise;
 - The proposed community centre should be expanded.
- Urban Design;

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- Opposition to the proposed 3 storey development;
- The density of the development is too high;
- The scale of the development is too big.
- Visual Impacts;
 - The proposal will result in loss of views.
- Stormwater and Flooding;
 - The area around the water quality control pond is subject to flooding, development should not occur here;
 - o The water quality control pond must not be impacted to ensure its ongoing viability.
- Public Access;
 - Public access should be provided around the water quality control pond.
- Infrastructure;
 - The existing infrastructure can not accommodate the development;
 - The proponent should enter into a planning agreement instead of paying section 94 contributions.
- Community Facilities;
 - The approval should condition the provision of the community facilities as soon as possible.
- Ecology;
 - The development would remove 73% of Hairy Joint Grass from the site. This is unacceptable.
- Mosquito Management;
 - The site is adjacent to mosquito breeding grounds and therefore mosquitoes will be a nuisance in summer.
- Construction Impacts
 - The proposal will result in noise and dust pollution from heavy machinery.

Discussion on the key issues from the above is in Section 6 of this report.

A summary of all public submissions received can be found at **Tag L**. The proponent responded to these submissions within their Preferred Project report lodged with the Department on 20 June 2008. The PPR appears at **Tag I**.

5.3 SUBMISSIONS FROM PUBLIC AUTHORITIES

The following submissions were received from public authorities:

5.3.1 Ballina Shire Council

Ballina Shire Council made a number of detailed submissions in relation to the proposal. While they do not have an issue with development on the site generally, they had a number of concerns regarding the development proposed. The key issues addressed in their submission included:

- Building Height Council does not support the proposed three storey development and consider that all future buildings should comply with the height limit in the LEP;
- Setbacks the residential setbacks do not comply with the controls in the Ballina Combined DCP Chapter 16

 Lennox Head; the zero setbacks in the neighbourhood centre will not allow enough room for alfresco dining;
- Flora and fauna unacceptable impacts on the Freshwater Wetlands Endangered Ecological Community (EEC), Hairy Joint Grass and Square-stemmed Spike Rush and the seepage areas that maintain these habitats; inadequate buffering to retained EECs and threatened species, unacceptable impacts from stormwater management infrastructure within the area of Freshwater Wetlands EEC;
- Mosquito management surveying was undertaken at the wrong time of year, mosquito habitat would remain on the site following development, therefore specialist advice is required to prepare a management plan with an ongoing monitoring program;
- Stormwater management the existing water quality control pond is not operating in accordance with its consent, the proposed system is based on modelling results undertaken for the water quality control pond,

but the proposed layout now differs substantially, as a result Council disagree with the sizing of the stormwater quantity management infrastructure;

- Proposed road hierarchy the proposed hierarchy does not comply with the Northern Rivers Design Manual; Council does not support the inclusion of rear lanes;
- Flooding the proponent only considers global flooding and does not consider local flooding;
- Traffic Council do not support the assumptions made in the proponent's traffic assessment;
- Noise as Council does not support the traffic assessment, they do not support the resulting noise assessment;
- Infrastructure provision there is insufficient capacity within the reticulated water and sewer to provide for the proposal; and
- Earthworks request further detail on the scope of earthworks proposed.

Each of these issues are discussed in Section 6.

5.3.2 Department of Environment and Climate Change

The Department of Environment and Climate Change (DECC) raised concerns regarding the impacts of the development on flora and fauna across the site as follows:

- Unacceptable impacts on Hairy Joint Grass;
- Inadequate buffering to the retained Freshwater Wetlands EEC;
- Impact of changes to the hydrological regime on the retained Freshwater Wetlands EEC and threatened species;
- Inadequate buffering to the Littoral Rainforest EECs; and
- Lack of detail on the proposed compensatory measures.

Each of these issues is further discussed in Section 6.

DECC also initially raised some concern with potential impacts to Aboriginal heritage but advised that these concerns had been addressed by the proponent in their Preferred Project Report.

5.3.3 Department of Primary Industries

The Department of Primary Industries (DPI) raised the following concerns:

Cumulative impacts on North Creek from development within its catchment

Following the proponent's response to this issue DPI noted that the proposed development largely avoids impacts on key aquatic habitats. It is noted that the Department considers cumulative impacts in its assessment of the proposal.

Ross Lane link road

A link road constructed to Ross Lane to the north west of the development site was once envisaged by Council. This road would have been constructed between the playing fields to the west of the site and Ballina Nature Reserve to the south. DPI raised concern that should a road be constructed here in the future it has the potential to impact negatively on the adjacent aquatic habitats. The Council is no longer pursuing this link road and it is therefore unlikely that a road would be built in this location in the future.

The issues raised by DPI have been resolved.

5.3.4 NSW Rural Fire Service

The Rural Fire Service advise that the proponent is to prepare a fire management plan and that the provision of access and water and utilities to the development is to comply with *Planning for Bushfire Protection 2006*. Bushfire is further discussed in Section 6.15.

5.3.5 NSW Roads and Traffic Authority

The Roads and Traffic Authority raised concerns regarding the potential traffic impacts of the development on the existing road network. These issues are discussed further in Section 6.4.

5.3.6 Department of Education and Training

The Department of Education and Training (DET) made no specific comment with respect to the proposal, but requested that they be kept informed of the progress of the application as the development will contribute to the need for additional schools within the Ballina LGA. They note, however, that a future school would not be required on the development site.

6 ASSESSMENT OF ENVIRONMENTAL IMPACTS

Key issues considered in the Department's assessment of the Environmental Assessment and the Preferred Project Report and consideration of the proponent's draft Statement of Commitments include the following:

- Building Height;
- Setbacks;
- Flora and fauna;
- Traffic and access;
- Water cycle management;
- Amount of retail and commercial development;
- Subdivision layout;
- Flooding;
- Mosquito management;
- Geotechnical;
- Heritage and archaeology;
- Noise;
- Visual Impact
- Contamination;
- Bushfire;
- Earthworks;
- Infrastructure Provision; and
- Section 94 and other contributions.

6.1 BUILDING HEIGHT

The concept plan proposes a three storey height limit for areas of the neighbourhood centre and retirement community which exceed the height limit identified in the Ballina LEP.

The Ballina LEP identifies the height limit for the site as 6.4m which is measured from the ceiling of the topmost floor of the building to the ground level immediately below that point. The LEP allows for buildings to exceed this height limit where Council can be satisfied that the building will not create overshadowing, privacy or visual impacts, obstruct views and will not exceed two storeys.

The proponent has proposed heights exceeding the LEP control in two distinct areas of the site – the neighbourhood centre and the retirement community (refer to Figure 10). The proposed height limit for the neighbourhood centre is 10.5m (RL 14.5m AHD; an exceedance of the height limit by 4.1m) and for the retirement community is 10m (RL 13m AHD; an exceedance of the height limit by 3.6m). In each instance the actual building height would be up to 3 metres higher than these limits to allow sufficient room for the roof of the building (RL 17.5m AHD for the neighbourhood centre and RL 16m AHD for the retirement community). Refer to Figures 11 and 12 for examples of the built form for the neighbourhood centre and retirement community respectively.

In addition, the proponent has identified 3 places where future 'landmark elements', such as a clock tower, are proposed (refer to Figure 10). These 'landmark elements' would be a further 2m above the topmost point of the building, resulting in a maximum potential exceedance of the LEP height control by 6.1m in the neighbourhood centre and 5.6m in the retirement community (a total height of RL 19.5m AHD for the neighbourhood centre and RL 18m AHD for the retirement community).

Both Council and public submissions objected to the proposed height limits exceeding the LEP control. A number of Council's strategic documents identify a two storey height limit within the Lennox Head locality specifically and the Ballina Shire generally. The *Lennox Head Community Aspirations Strategic Plan* (2002) was formulated following community consultation and states that buildings taller than two storeys will not be permitted, other than those that comply with the height controls contained in the LEP. Further, the Ballina Retail Strategy identifies the

existing Lennox Head village centre as the principal commercial centre in the Lennox Head area and states that the second commercial centre provided at Pacific Pines will be lower in the retail hierarchy than the village centre. The existing Lennox Head village centre is limited to 6.4m (two storeys) in accordance with the Ballina LEP. The Ballina Combined Development Control Plan stipulates an overall height of 9m for the buildings in the Lennox Head village centre. Council considers that in order to maintain the identified retail hierarchy, the maintenance of two storeys at Pacific Pines is essential.

The proponent argues that the increased density that the proposed three storey buildings provide will help to contribute to the Far North Coast Regional Strategy's target of 8400 new dwellings in the Ballina LGA by 2031. The proponent suggests that the Strategy's target is ambitious and that increasing density on this site will take development pressure off other land in the locality that is more highly constrained.

The proponent further argues that by increasing densities on the site it allows the provision of an increased area of green space throughout the development and that it allows a more compact, walkable development where 70% of the population is within a 400m (or 5 minutes walking) distance to the neighbourhood centre.

The Department notes that the Coastal Design Guidelines identify a two storey height limit as appropriate for neighbourhood centres in new settlements but also state that where visual prominence is not apparent three storey buildings may be appropriate. It is noted that the three storey buildings are located on the lowest part of the site and would therefore have a minimal impact for surrounding residents looking down on the area. However, the three storey buildings are also located in close proximity to the existing water quality control pond which is a significant feature in the landscape, and one which the community regards highly (as evidenced in public submissions). There is the potential that the three storey buildings may partially block views toward this feature.

It is further noted that the Far North Coast Regional Strategy states that Councils are to review building height limits within the central business areas, major employment areas and major tourism areas of the Ballina local government area. On consideration however, it is questionable whether the current site would be classed as any of these.

Overall, in regard to the neighbourhood centre, it is considered that, as there is no clear strategic intent to increase height limits in the Lennox Head area generally, the increased height cannot be supported. It is noted that this situation may alter in the future as Council responds to the Far North Coast Regional Strategy's requirement to review height limits across the local government area.

The Department recommends a modification to the concept plan to limit height in the neighbourhood centre to the limits specified in Clause 17 of the Ballina LEP. As the current proposal does not seek approval for these buildings it is unknown what impact this modification will have on the gross floor area of the future buildings. It is noted that the Design Guidelines indicate that the third storey of these buildings would be commercial or residential. Therefore, the reduction in height will not impact on the amount of retail floor space provided by the development.

The proposed height limit for the retirement community is dealt with further below.



Figure 10: Height plan (the dark brown areas are those where three storey development is proposed, the purple asterisks identify potential 'landmark elements'; Source: correspondence from GeoLINK dated 18 August 2008)



Figure 11: Potential built form for neighbourhood centre (Source: correspondence from GeoLINK dated 18 August 2008)



Figure 12: Potential built form for retirement community central facilities (Source: correspondence from GeoLINK dated 18 August 2008).

Retirement Community

With regard to the height exceedance for the western section of the retirement community, it is noted that, while the current proposal does not seek approval for the buildings, the future applications for these buildings will consider *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004* (Seniors SEPP). The Seniors SEPP allows a consent authority to approve a development for seniors housing that has a bonus 0.5 added to the gross floor area (GFA) component of the floor space ratio (FSR) (the Vertical Villages clause).

The FSR allowable in the *Ballina Shire Combined Development Control Plan Chapter 16 - Lennox Head* is 0.5:1. Therefore, the Seniors SEPP would allow an increased FSR of up to 1:1.

The GFA proposed for the 3 storey component of the retirement community is 12,000m². As the lot is also 12,000m², the resultant FSR is 1:1 and would be allowable in accordance with the SEPP. While the current application does not seek approval for the buildings, the Department considers that it is a relevant consideration that the Seniors SEPP would allow the three storey retirement community buildings. Further, it is considered that, as there is a real need for housing for seniors in the state, the exceedance of the LEP's height limit by 3.6m is appropriate in this instance. The Far North Coast Regional Strategy recognises the region's ageing population and notes that this will increase the need for seniors living housing. It is noted that the three storey buildings for the retirement community are proposed at one of the lowest points of the site and will result in a minimal visual impact for surrounding residents.

The Seniors SEPP requires that applications approved in accordance with this clause require the development to deliver on-site support services for its residents (ie. 3 meals a day provided communally or at the residence, personal care, home nursing visits and assistance with housework) and that at least 10% of the dwellings are affordable places. The proponent proposes the provision of on-site support services as part of the retirement community and also advises that they are prepared to provide a minimum of 10% affordable places. A recommended requirement for future applications for the retirement community requires that a minimum of 10% of the dwellings be affordable places and that these dwellings are identified on plans accompanying these application(s).

The requirement for the provision of a minimum of 10% affordable dwellings will contribute to the State Plan's objective E6 for the provision of affordable housing and the actions identified in the Far North Coast Regional Strategy.

As noted above, the proponent has requested a further 2m exceedance of the LEP's height limit to allow for a landmark feature. While additional height for a third storey is considered appropriate for the retirement community, the proponent has not adequately justified the need for a further exceedance of the height limit for a landmark element. It is considered that the buildings on corner blocks in the neighbourhood centre can be made into landmark buildings through other means such as design of the buildings.

The recommended modifications to the concept plan therefore stipulate a maximum height limit for the retirement community of 10m (RL13m AHD) with a maximum FSR of 1:1. This area of increased height is restricted to the part of the retirement community lot to the west of Montwood Drive.

Other Height Issues

The proponent has identified areas of the site that are characterised by steep slopes where it is proposed that future dwellings will likely exceed the height limit in achieving a design that responds to the site constraints. The Design Guidelines submitted with the application address potential design solutions for development in these areas. The Department considers that it is unnecessary for any approval of the development to allow the height limit to be exceeded as this issue can be addressed through the Ballina LEP as it permits buildings to exceed the height limit where Council can be satisfied that the building will not create overshadowing, privacy or visual impacts, obstruct views and will not exceed two storeys. Therefore, the recommended modifications to the concept plan require all buildings (outside of the relevant retirement community buildings) to comply with the height limit in the Ballina LEP.

6.2 SETBACKS

The proponent has provided Design Guidelines for the proposal that define the setbacks relevant for future development on the site. Council has raised concern at the setbacks proposed. Specifically, Council is concerned that the setbacks proposed do not comply with those in the *Ballina Combined Development Control Plan* (DCP) Chapter 16 – Lennox Head.

The Department notes that Chapter 1 of the Ballina Combined DCP identifies the site as P1 – Planned Urban Area and states that no general development standards apply if an overall site analysis and integrated development concept is prepared for consideration. However, it is important that the proposed development complements the existing development in the locality, which is largely consistent with the setbacks in the DCP.

The proposed setbacks for the neighbourhood centre and the residential development are considered separately below.

Neighbourhood Centre

Zero setbacks to the street are proposed in the neighbourhood centre with awnings provided over the footpath. These zero setbacks are restricted to sections of Main Street and Hutley Drive. Council has raised concerns that this setback may not provide enough space for future alfresco dining proposals. The Ballina Combined DCP Policy Statement 13 – Alfresco Dining requires a minimum unobstructed footpath area of 2m where alfresco dining is allowed. The road cross sections for both Main Street and Hutley Drive indicate a 5m verge area adjacent to the areas of zero setback. The Department considers that the proposed 5m verge area will allow sufficient room for alfresco dining (up to 3m) while still allowing a 2m unobstructed footpath.

The development proposes a zero setback to the outermost projection of buildings adjacent to the water quality control pond in the neighbourhood centre. The buildings proposed in this area are the tavern, community centre (both proposed at two storeys) and the retirement community (proposed at three storey buildings).

The lot boundaries for the tavern and community centre are proposed to extend right to the edge of the water quality control pond. It is considered that a zero setback for these lots is inappropriate as it will appear to privatise the (albeit man-made) foreshore of this water quality control pond (which will eventually be dedicated to Council) or crowd the pond such that the water level cannot rise and fall as required for effective stormwater management. As a result the Department recommends a modification to the concept plan that increases the setbacks for these lots to 2m to the outer most projection.

The lot for the retirement community is separated from the water quality control pond by approximately 15m (although this varies between 10m and 17.5m). While the Department recognises that the main function of the pond is for stormwater management, it is clear from issues raised in public submissions that the public value the pond for its scenic amenity. It is important for the community that public access around this feature is maintained in the development. This open space corridor will also provide pedestrian access to the neighbourhood centre for residents from the south. As the future buildings within the retirement community are proposed to be three storeys they have the capacity to dominate this area. It is important that this area is big enough to be easily perceived as public space (as the land will eventually be dedicated to Council). Therefore, the Department considers that this corridor should be a minimum of 15m wide. A recommended modification to the concept plan requires a minimum distance of 15m between the water quality control pond and the retirement community lot. A recommended condition of approval for the Stage 1 project application requires that the subdivision plan be amended accordingly.

Residential Development

The Design Guidelines prepared by the proponent for the development provide a range of setbacks across the site for the range of residential development proposed. Council raised concern regarding the proposed front setbacks which differ from Council's standard front setback of 6m for Lennox Head. The Design Guidelines propose front setbacks ranging from 2m to 6m.

Generally speaking, the development proposes 6m setbacks to the outer most projection of buildings on the larger, traditional lots. This is consistent with the setbacks in the DCP. As these lots are located around the edges of the site, the requirement for this setback on these lots will mean that the development integrates with existing development surrounding the site.

Front setbacks proposed decrease closer to the neighbourhood centre. Traditional single dwelling lots closer to the neighbourhood centre will be characterised by 3m front setbacks with the smallest residential setback being 2m to the outer most projection and 3m to wall for the medium density and rear lane lots. These smaller setbacks closer to the neighbourhood centre provide a transition between the zero setbacks of the centre and the larger setbacks of the traditional lots. It is noted that the proponent's Design Guidelines require for single dwelling lots that garages be set back behind the main building line by between 2m and 4m.

Overall, the front setbacks proposed across the site respond to the variety of housing types proposed. Smaller setbacks, resulting in buildings closer to the street will help to activate the street and the additional setbacks for garages will ensure that they do not dominate the streetscape.

Council were further concerned that the setbacks proposed did not require the 'stepping back' of the upper floors of buildings as required by the building envelope control in the Chapter 16 – Lennox Head of Ballina's Combined DCP. Council's DCP requires minimum setbacks to each boundary and further requires that any building be below a plane measured from these setbacks at a 45 degree angle from a point 1.8m above the ground. This control ensures that higher parts of the building are further away from the boundary and therefore have less chance of impacting on the privacy and amenity of adjacent buildings.

All setbacks proposed for the development are based on the orientation of the lot so that larger setbacks are required from the northern boundary of lots than the southern boundary. Also, while the Design Guidelines set out minimum setbacks for each lot type, they also require average setbacks. For example, where a minimum side setback of 1m is required an average side setback of 2m is required. By expressing setbacks in this way, articulation of the side elevations of buildings is encouraged.

While the setbacks proposed may be different from those within Council's DCP, the difference in the future building form resulting from these controls will not be great. Buildings with a second storey will not be required to be setback as far from the boundary as with the building envelope control in the DCP but the proposed setbacks based on lot orientation will ensure that solar access and amenity are maintained for adjacent buildings.

Overall, the Department considers that the setbacks proposed in the Design Guidelines for the future development of the site are appropriate.

6.3 FLORA AND FAUNA

6.3.1 Hairy Joint Grass (*Arthraxon hispidus*)

Hairy Joint Grass (*Arthraxon hispidus*), a vulnerable species pursuant to the NSW *Threatened Species Conservation Act 1995* (TSC Act), is present on the site. This species is also listed as a vulnerable species pursuant to the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).

There are three main areas of Hairy Joint Grass habitat on the site, a small area in the north west of the site, an area to the east of the water quality control pond, a larger area in the central southern part of the site (refer to Figure 13). The proponent estimates the overall area of Hairy Joint Grass habitat on the site at 7.6ha.

There are two Ballina Shire Council development consents (DA 1999/248 and DA 2002/333) that approve earthworks on the site. Both consents have been commenced and have valid construction certificates. These consents allow earthworks to be undertaken over 3.8ha of the area identified as Hairy Joint Grass habitat. The proponent has advised that they intend to undertake earthworks in accordance with these consents and that no further approval is sought for earthworks in these areas as part of the current application. The area of Hairy Joint Grass habitat on the site that is not subject to an approved development consent is 3.8ha.

Council has undertaken a study into the distribution of Hairy Joint Grass in the wider Lennox Head area. One of the areas surveyed for this study was the current subject site. The survey, undertaken by Landmark Ecological Services (LES), confined their search to the central portion of the site (as seen in Figure 14). Within this search area LES found 3.47ha of Hairy Joint Grass habitat. LES' final report notes that the distribution of Hairy Joint Grass identified in their survey was largely similar to that mapped by the proponent. However, LES did find some small patches of Hairy Joint Grass outside of the area identified by the proponent.

It should be noted that the areas of Hairy Joint Grass found by the proponent and LES are largely similar although the areas of suitable habitat identified differs quite markedly (7.6ha by the proponent compared with 3.47ha by LES). The differences cannot be attributed solely to the variation in study area. As the proponent's estimate is the larger of the two estimates, this is the area that is used in this report. However, the Department has also considered those small areas of Hairy Joint Grass mapped by LES, but not identified by the proponent.

Of the 3.8ha of Hairy Joint Grass habitat on the subject site (outside the area of approved fill), 3.6ha (or approximately 95%) is proposed to be retained. This area is located within the main ecological corridor to the east and south of the retirement community super lot. Therefore the development will result in the removal of 0.2ha of Hairy Joint Grass habitat.

The 0.2ha area of Hairy Joint Grass to be lost comprises (refer also to Figure 13):

- An area in the northwest of the site which is outside the area of earthworks subject to Council's development consents; and
- A small area of Hairy Joint Grass habitat in the east of the proposed retirement community super lot.

In relation to the area in the northwest of the Department notes that a former drainage line that ran through this area of Hairy Joint Grass has been relocated adjacent to the proposed Hutley Drive alignment following a development consent issued by Council. It is therefore likely that this area will not continue to be viable habitat for this species into the future.

In addition to the areas mapped by the proponent, Council's consultants mapped three small additional areas which would be removed to allow residential development – two areas in the south that would be removed as a result of the Stage 1 project application and an area in the northeast which is part of Stage 7 of the development (refer to Figure 14).

The proponent has committed to the preparation and implementation of an Environmental Management Plan that includes the annual mapping of the location and extent of Hairy Joint Grass, the manner in which the retained population will be enhanced, ongoing management for the population, provision of interpretive signage about the species and details of controlled public access. This commitment has been formalised as a condition of approval for the concept plan.

The proponent has also proposed translocating Hairy Joint Grass plants that are to be removed to an area south of the water quality control pond. The suitability of this area as Hairy Joint Grass habitat is questionable, as the species has not been identified here already. Further, this area is subject to the water quality control pond maintenance regime such as mowing to ensure the efficient movement of localised floodwaters off the site. This management regime may be incompatible with the establishment of Hairy Joint Grass. The Environmental Management Plan is required to include details of the translocation of Hairy Joint Grass within the area around the water quality control pond and the means of managing the translocated plants in accordance with the management requirements for the water quality control pond.

DECC and Council are concerned at the loss of Hairy Joint Grass on the site. In particular they are concerned at the loss of the area of Hairy Joint Grass immediately east of the water quality control pond which is of a higher density than some other areas of Hairy Joint Grass on the site. While the proponent argues that these areas are subject to commenced development consents and need not be considered as part of the current proposal, the Department considers that as these areas still exist on the site, are of a high density and that the assessment of the approved consents did not consider Hairy Joint Grass (as it was not identified on the site at the time), that the loss of any area of Hairy Joint Grass on the site should be compensated.

The proponent committed to the provision of \$90,000 for the funding of a three year (\$30,000 per year) research project into Hairy Joint Grass and Freshwater Wetlands EEC (discussed below). However, the Department considered that this level of compensation was not adequate and has required, as a recommended condition of approval, the development of a Compensation Plan (in consultation with the Department of Environment and Climate Change) that provides land at a rate of 2: 1, that offsets for the loss of Hairy Joint Grass on site.

Ideally any compensation package should be finalised prior to determination of a proposal. In this instance however, as the proponent has commenced development consents allowing filling of areas of Hairy Joint Grass, it is considered that the detail of this compensation can be determined prior to future stages of the proposal ie. stages subsequent to Stage 1.

The Department considers that the impacts on Hairy Joint Grass are acceptable as:

- The area of Hairy Joint Grass being retained is within a consolidated corridor that links with the water quality control pond and Ballina Nature Reserve to the west, providing this species with the greatest chance for ongoing viability into the future;
- The proponent has committed to actively managing and rehabilitating the retained habitat to ensure its ongoing viability (which is formalised in a recommended condition of approval);
- A recommended condition of approval requires the development of a Compensation Plan that provides land at a rate of 2:1 that offsets the loss of Hairy Joint Grass on the site;
- The proponent has committed to the provision of monetary compensation for the area of Hairy Joint Grass being removed as a result of the development. This compensation will result in a three year research project into Hairy Joint Grass and its habitat, furthering knowledge of this species; and
- The current concept plan will result in an improved outcome over and above the adopted SEPP 71 Master Plan, the development of which would result in the loss of all Hairy Joint Grass on the site.



Figure 13: The distribution of Hairy Joint Grass on the site as mapped by the proponent (Source: proponent's Environmental Assessment).


Figure 14: Distribution of Hairy Joint Grass habitat mapped by Landmark Ecological Services in a study commissioned by Ballina Shire Council (Source of base map: Landmark Ecological Services, 2008)

6.3.2 Square-Stemmed Spike Rush (*Eleocharis tetraquetra*)

Square-Stemmed Spike Rush (*Eleocharis tetraquetra*), an endangered species pursuant to the TSC Act, is present on the site. The presence of this species on the site was not identified until the proponent was undertaking additional vegetation surveys in responding to the issues raised in submissions. Square-Stemmed Spike Rush (SSSR) was identified at low densities within three of seven quadrats surveyed.

The proponent estimates that approximately 1.4ha of SSSR habitat is present on the subject site. Of this approximately 0.8ha of habitat is located within the retained ecological corridor and will be protected and managed as part of the development. The remaining 0.6ha of habitat is located within the footprint of the earthworks approved by Council.

The proponent has committed to the preparation of an Environmental Management Plan in consultation with the Department of Environment and Climate Change and Council, which includes annual mapping of the location and extent of SSSR, documentation of the manner in which SSSR habitat is to be enhanced, methods for weed removal and the provision of interpretive signage on SSSR. This commitment has been formalised as a recommended condition of approval that requires the Environmental Management Plan to be approved by the Department prior to the issue of a construction certificate for the first stage of development.

The former National Parks and Wildlife Service prepared a Recovery Plan for SSSR in 1999. The Recovery Plan notes that SSSR was thought to be extinct in NSW until 1997. It is now known from four other areas within the state – Boambee, Fortis Creek, Copmanhurst and Murwillumbah. Therefore, the identification of this species on the subject site is the fifth population within NSW and the only recorded occurrence with the Ballina LGA. It is noted that it is not recognised as threatened by the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999*.

One of the actions identified within the Recovery Plan is the need for research. The actions proposed by the proponent such as mapping of the location and extent of the species and findings from the ongoing management

of the population will help achieve the aims of the Recovery Plan. Another action is making the community aware of the status of the species. The proposed interpretive signage within the retained ecological corridor will help achieve this.

The proponent argues that the 0.6ha of SSSR habitat subject to the approved consents need not be considered in the assessment of the current proposal. However, the Department does not agree as this species currently exists on the site, it is the only record of this species in the Ballina LGA and the assessment of the approved consents did not consider SSSR (as it was not identified on the site at the time). As a result the Department requires that the loss of any SSSR should be compensated for. A recommended condition of approval requires the preparation of a Compensation Plan that identifies land at a rate of 2:1 that offsets the loss of SSSR habitat on the site.

The Department notes that the SSSR plants retained by the current proposal will be actively managed within the retained ecological corridor to ensure their ongoing viability and that by managing the retained areas of habitat, the proponent will be meeting the objectives of the Recovery Plan for this species.

6.3.3 Freshwater Wetlands on Coastal Floodplains Endangered Ecological Community (Freshwater Wetlands EEC)

The vegetation community originally identified as sedgeland/rushland by the proponent in the Environmental Assessment was later characterised as the TSC Act listed endangered ecological community (EEC) Freshwater Wetlands on Coastal Floodplains of the NSW North Coast, Sydney Basin and South East Corner bioregions. The community was identified as an EEC during additional surveys responding to the issues raised in submissions.

Approximately 4.1 ha of this community was identified on the site by the proponent. The main areas of this EEC occur in the central part of the site. The area can be split into two distinct areas – one area of approximately 1.3 hectares to the east of the water quality control pond and a second, elongated area of 2.8 hectares in the central southern portion of the site. This area stretches from the identified spring in the east of the site to the water quality control pond in the west (refer to Figure 15).

The 1.3ha area to the east of the water quality control pond is part of an area that is subject to an existing, commenced development consent for filling. The consent was issued by Ballina Shire Council in 1999 and a construction certificate was subsequently issued in 2004. The proponent has advised that they intend to fill the site in accordance with this consent and therefore, that this 1.3ha area need not be considered in the assessment of the current proposal.

Of the remaining 2.8ha of Freshwater Wetland EEC (that is not subject to a valid development consent), 2.65ha is to be retained within the main ecological corridor on the site. An area of 0.15ha would be lost as a result of the current development proposal.

The proponent proposes to compensate for the loss of this area of EEC (and also for the loss of the Hairy Joint Grass) by a monetary contribution toward research on the EEC (and Hairy Joint Grass). The contribution would be \$30,000 per year for three years. The aim is that the research would contribute to the development of a Recovery Plan for the EEC and Hairy Joint Grass. The brief for the research would be developed in consultation with Council and DECC.

In addition, the proponent has committed to the preparation of an Environmental Management Plan (EMP) in consultation with Council and DECC that includes measures to be undertaken to rehabilitate the Freshwater Wetlands EEC such as weed management and revegetation. The EMP will also include measures for controlled access within the retained EEC and the provision of interpretive signage to educate the community about the status of this vegetation community. The Environmental Management Plan commitment has been modified and included as a condition of approval for the concept plan.

The Department does not agree that the area of Freshwater Wetlands EEC subject to the development consents should be discounted from the current assessment as the Freshwater Wetlands EEC still exists on the site and it was not considered in the assessment of the development consents (as it had not been listed on the TSC Act at

the time). Therefore, the Department requires that the loss of this EEC be compensated for. A recommended condition of approval requires the preparation of a Compensation Plan that identifies land, at a rate of 2:1, that offsets the loss of Freshwater Wetlands EEC on the site



Figure 15: The distribution of Freshwater Wetlands EEC on the site (Source: correspondence from GeoLINK dated 18 August 2008).

The proposed development layout provides roads around the majority of the retained area of Freshwater Wetlands EEC. These roads will provide a buffer of approximately 15m between the residential lots and the retained EEC. However, the indicative layout for the retirement community suggests that the distance between the retirement lots and the retained area of EEC could be as little as 6m.

While the proponent is retaining the majority of the EEC on the site, minimal buffers around the EEC are proposed, particularly for the future development of the retirement community lot. Both DECC and Council are dissatisfied with the minimal buffers provided to this EEC. Ecological advice obtained by the Department on other projects states that there is no regulation in NSW for buffer widths and that while the general acceptance is 50m, lesser buffer widths can be applied to low growing vegetation or where the area being protected has insufficient size to warrant the full buffer width. In response to this advice, the Department considers that the retained ecological corridor on the subject site is characterised by low growing vegetation and that, as the full width of the corridor is 50m the requirement for 50m buffers on either side of this is excessive. The Department therefore recommends a modification to the concept plan that requires a minimum distance of 20m be maintained between the boundary of all residential lots and the area of Freshwater Wetlands EEC to be retained.

The maintenance of the existing hydrological regime is considered essential for the ongoing viability of the Freshwater Wetlands EEC. The hydrological regime for the EEC is characterised by seepage areas at the base of slopes in the east and south of the site. The proponent has advised that the proposed development will not impact on these seepage areas, but Council and the Department remain concerned that the development does not account for the seepage areas.

Further, the proponent proposes the construction of a weir through the retained Freshwater Wetlands EEC for stormwater management purposes. A second weir further downstream (underneath the alignment of Montwood Drive) would also be built (but would not directly impact on the retained area of EEC). These weirs are proposed to have a low flow culvert to maintain flows to the EEC at all times. However, there is the potential that the flows being conveyed through the low flow culvert will be of a different nature (ie. more concentrated) than the existing diffuse flow conditions within the EEC. This may, in the long term, compromise the viability of the EEC. The maintenance of the hydrological regime for the EEC (and the associated threatened species) is considered essential to ensure that the EEC is maintained in perpetuity. To address both the existing hydrological regime issue and the weir impacts, a recommended condition of approval requires the inclusion of a water management plan within the Environmental Management Plan for the site. The water management plan will address the following:

- Mapping of the extent of the seepage areas and measures to ensure their protection; and
- Details of the design of the weirs to ensure that the existing hydrological regime is maintained.

The Environmental Management Plan is required to be approved by the Department prior to the issue of a construction certificate for the first stage of development.

Overall, the Department considers that the impact on the Freshwater Wetlands EEC is acceptable as:

- The area of EEC retained provides a corridor from the spring in the east of the site to the green space surrounding the water quality control pond, maintaining a link to the Ballina Nature Reserve to the west of the site;
- The proposal provides for the removal of cattle from the EEC and the ongoing management and rehabilitation of the community through the Environmental Management Plan;
- The proponent has committed to the provision of monetary compensation for the area of EEC being removed as a result of the development. This compensation will result in a three year research project into the EEC (and Hairy Joint Grass as discussed above), furthering knowledge of this community;
- A recommended condition of approval requires the development of a Compensation Plan that provides land at a rate of 2:1 that offsets the loss of Hairy Joint Grass on the site; and
- The current concept plan will result in an improved outcome over and above the adopted SEPP 71 Master Plan, the development of which would result in the loss of all Hairy Joint Grass on the site.

6.3.4 Other Threatened Species and EECs

A number of other threatened species and endangered ecological communities occur across the site. Apart from the Hairy Joint Grass and Square-Stemmed Spike Rush addressed above, all threatened flora species will be

retained on the site. White Laceflower (*Archidendron hendersonii*) and Red Lilly Pilly (*Syzygium hodgkinsoniae*) will both be retained within the vegetation to be incorporated into the green space on site. While some specimens of Rough-shelled Bush Nut (*Macadamia tetraphylla*) will be protected within the green space of the development, some trees are proposed to be located within residential lots and protected by covenants on the title of the relevant lots. One identified Arrowhead Vine (*Tinospora tinosporoides*) will also be located within future residential lots and will be protected via a covenant on the title of the land.

Apart from the Freshwater Wetlands EEC discussed above, three other EECs are located on the site. Three areas of Littoral Rainforest of the NSW North Coast, Sydney Basin and Southeast Corner Bioregion (Littoral Rainforest EEC) area located on the site, an area of Swamp Oak Floodplain Forest of the NSW North Coast, Sydney Basin and Southeast Corner Bioregion (Swamp Oak Floodplain Forest EEC) and a small area of Swamp Sclerophyll Forest on Coastal Floodplains of the NSW North Coast, Sydney Basin and Southeast Corner Bioregion (Swamp Oak Floodplain Forest EEC) and a small area of Swamp Sclerophyll Forest on Coastal Floodplains of the NSW North Coast, Sydney Basin and Southeast Corner Bioregion (Swamp Sclerophyll Forest EEC).

All areas of Littoral Rainforest EEC are to be retained. The two largest areas will be retained within the northsouth green space corridor in the eastern part of the site. The proponent proposes the rehabilitation of the areas of EEC and revegetation in the areas around them. A recommended condition of approval for the concept plan requires the details of the rehabilitation and revegetation to be included within the Environmental Management Plan for the site. These areas would remain open to the public for recreation purposes and would be dedicated to Council.

It is noted that in the final amended plans for the development, the areas provided around the retained Littoral Rainforest EEC in the north-south green space corridor have been reduced with residential development encroaching within 10m of these areas of EEC. It is considered that a minimum of 20m should be provided around the areas of Littoral Rainforest EEC to provide adequate room for revegetation while still allowing space for public recreation. A recommended modification to the concept plan requires a minimum area of 20m between the retained Littoral Rainforest EEC within the north-south corridor and the residential development.

The smallest area of Littoral Rainforest EEC is proposed to be incorporated into future residential lots with the vegetation protected via covenants on the future titles of the land. This proposal has been formalised as a recommended condition of future approvals for these lots.

The Swamp Oak Floodplain Forest EEC is proposed to be retained within the ecological corridor in the central part of the site. This vegetation is adjacent to the retained Freshwater Wetlands EEC.

The small 0.1ha area of Swamp Sclerophyll Forest EEC, located to the east of the water quality control pond and within the retirement community lot will be removed as part of the proposed development. This area is also within the area subject to the valid development consents for filling.

The following threatened fauna species were recorded on the site.

- Australasian Bittern (Botaurus poiciloptilus) V NSW
- Grey-headed Flying Fox (*Pteropus poliocephalus*) V NSW and Comm
- Greater Broad-nosed Bat (Scoteanax rueppellii) V NSW

The site provides small amounts of foraging habitat for each of these species. In addition, the site has marginal potential to be roosting habitat for the Australasian Bittern and Greater Broad-nosed Bat (although no record of these species roosting on the site was found). The main habitat features for these species ie. the water quality control pond and areas of vegetation are to be retained in the development (with the exception of 0.1ha of swamp sclerophyll forest). Therefore, the proposed development will not impact on these species.

Overall, the proposed development retains the majority of threatened species and EECs across the site. While the proposal would result in residential development being closer to this flora and fauna, the proposed rehabilitation and revegetation measures will ensure the ongoing management of these areas and their continuing viability.

6.3.5 Impact on Regional Wildlife Corridor

The site has been identified by the Department of Environment and Climate Change as part of the Lennox Regional Fauna Corridor. The proposed development provides a green space corridor through the site that accommodates north-south and east-west movement. The corridor incorporates the water quality control pond in the west of the site and connects with the Ballina Nature Reserve adjacent to the site.

While development of the site will reduce the open space available for fauna movement it is considered that the proposed green space corridor does provide key linkages through and within the site. Most areas of green space within the corridor have a minimum width of 50m providing an adequate width for fauna movement while not being too close to residential development. In one area in the north of the site, the corridor was proposed to be reduced to 25m for a length of more than 100m. The Department was not satisfied with this as reducing the area to 25m would be a limiting factor for fauna movement. Consequently it is recommended that a modification to the concept plan be made which requires a minimum width of 40m in this area.

6.3.6 Impact on SEPP 14 Wetland

The boundary of SEPP 14 wetland number 88 extends into the south western corner of the site (refer to Figure 8). No development is proposed within the boundary or within a 50m buffer of the boundary. The proponent proposes to translocate Hairy Joint Grass specimens into this area from other areas of the site where it is being removed. It is noted that the area identified as SEPP 14 wetland is occupied in part by the water quality control pond and its infrastructure and is subject to a management regime of mowing to ensure the efficient movement of localised floodwaters. The Department considers that the integrity of any SEPP 14 wetlands that was on the site has been compromised by the construction of the water quality control pond and the ongoing maintenance required for this infrastructure. The proposed development is unlikely to further negatively impact on the area of SEPP14 wetland identified within the site. In fact, the proposed ecological works within this boundary have the potential to increase the ecological value of this area.

6.3.7 Impact on SEPP 26 Littoral Rainforest

SEPP 26 – Littoral Rainforests number 39 lies to the northwest of the development site. While the vegetation does not extend into the site, the 100m buffer from the vegetation does (refer to Figure 8). This area (approximately 0.9ha) has been identified by the proponent as being part of the 'conservation zone' and would be revegetated by the proponent. A recommended modification to the concept plan requires the details of the revegetation works to be included in the Environmental Management Plan for the site.

6.4 TRAFFIC AND ACCESS

6.4.1 Traffic Generation and Impacts on Existing Road Network

The proposed development will generate traffic that will impact on the existing road network. Three existing roads will provide access to the development – Hutley Drive in the north, Stoneyhurst Drive in the northeast and Montwood Drive in the south. The main impacts of traffic from the development would be experienced on these three roads as well as Silkwood Drive and Henderson Lane. Traffic from the development will eventually travel onto North Creek Road via one of two intersections – Montwood Drive or Henderson Lane (refer to Figure 16).

Council's long term traffic planning for this area of Lennox Head identifies the need for Hutley Drive to be extended to both the north and south of its existing section in the future. The road reserve for Hutley Drive within the subject site has already been dedicated to Council. The proponent proposes to construct Hutley Drive to Council's specifications within this road reserve as part of the stage 1 project application. The timing for the remaining construction of both the southern and northern extensions to Hutley Drive are unknown at this stage, although Council's latest traffic report for Lennox Head, *Lennox Head Paramics Model* (Cardno Eppell Olsen, April 2008) suggests that the northern extension should be constructed by 2011 and the southern extension by 2016. The Department notes that the construction of the northern extension to Hutley Drive is currently being pursued by Council in conjunction with a rezoning application (the Department has also had preliminary discussions for a Part 3A application for residential subdivision of this land) for a site northeast of the current subject site. The planning for the southern extension is currently being carried out by Council. The Department has recently issued Director-General's Requirements for the section of the extension that passes through SEPP 14 wetland to Council as the proponent.



Figure 16: The road network surrounding the site (Source of base map: Environmental Assessment)

Public submissions on the proposal raised concern that the proponent should extend Hutley Drive both north and south as part of the existing proposal. The proponent's traffic assessment concludes that the proposed development can be adequately served by the existing roads with final traffic loads being less than their environmental capacity and within the appropriate level of service. However, the assessment assumes that the northern extension to Hutley Drive was constructed within Council's planned timeframe of 'by 2011'. As there is no guarantee that this will be built, any traffic assessment for the proposed development should also consider the worst case scenario for traffic impacts ie. if neither Hutley Drive north nor south were constructed. In response, the proponent provided additional information that advises that, should Hutley Drive not be extended north or south the traffic generated by the development would be within the capacity of the existing road network with two exceptions:

- the section of Henderson Lane between Stoneyhurst Drive and North Creek Road would require upgrading (including its intersection with North Creek Road); and
- the capacity of Silkwood Road would be exceeded for the final (11th) stage of the development.

It is noted that while the proponent advises that the proposed development does not, by itself create the need for Hutley Drive to be extended either north or south, it will contribute to the need for this road. In this respect the proponent is required to pay the relevant section 94 contributions in accordance with Council's *Ballina Road Contribution Plan* (that includes funding for the construction of the extensions to Hutley Drive).

Council raised concern that the proponent's traffic assessment underestimated the number of vehicles that would travel to and from the site via Stoneyhurst Drive. Council state that this route is likely to become a rat-run until the northern extension of Hutley Drive is constructed. It is noted that the development is not proposed to be linked to Stoneyhurst Drive until Stage 3 of the development. It is very difficult to determine whether this route will become a rat-run and to what extent. As this route will not be connected until Stage 3 of the development, a recommended requirement for the future application for Stage 3 requires the submission of an updated traffic assessment that takes into consideration the traffic situation at that time and includes consideration of the Stoneyhurst Drive link becoming a rat-run for all future stages of the development.

Due to the uncertainty of the delivery of Council's strategic plan for the road network in Lennox Head it is difficult to determine the specific impacts of the proposed development at various stages. The existing road network (without the extension of Hutley Drive north or south) has the capacity to accommodate the traffic generated from the proposal, but would require various road and intersection upgrades. Due to the complexity of the future planning of the road network it remains unclear which road and/or intersection upgrades will be required and at what stage in the proposal they may be necessary. On this basis, the RTA has recommended the preparation of a matrix showing all potential scenarios for the future road network and the potential impacts of the concept plan under all those scenarios. This matrix will determine the necessary road upgrades required as a result of the submission of an updated traffic assessment including the matrix dealing with all potential future scenarios. This is to cover all stages of the proposal and be approved with the application for a construction certificate for Stage 1B of the project application.

Council raised further concern that the proponent's traffic assessment did not consider the traffic generated by the sports fields located to the west of the site. While the proponent provided a brief analysis of potential traffic generation from this land use, they noted that that sports fields were not subject to the current application and that peak traffic generation for this land use would occur on the weekends, outside of peak times for other traffic (ie. 8.30-9.30am and 4.30-5.30pm Monday-Friday) and would result in minimal impacts on the road network.

Council has questioned the proponent's traffic assessment as the proponent used traffic figures from a superseded report to Council. The Department is aware of this issue, however notes that the figures were the best available at the time the Environmental Assessment was placed on public exhibition. Notwithstanding, future modelling for the updated traffic assessment will be required to be undertaken by the proponent using Council's latest traffic report (Cardno Eppell Olsen, April 2008).

Stage 1 Project Application

The Stage 1 project application proposes development in three substages. Stages 1A and 1B will initially only be connected to Montwood Drive. The second connection to the external road network, to Hutley Drive in the north, will only occur as part of Stage 1C. The greatest traffic impacts resulting from the Stage 1 project application are therefore likely to occur on Montwood Drive and its intersection with North Creek Road.

Stage 1A will generate approximately 504 vehicle movements per day. All these vehicles will travel onto Montwood Drive.

It is noted that while the Stage 1B project application seeks approval for the subdivision of super lots within the neighbourhood centre, the future development of these super lots will be pursued in future applications. Therefore the current application will not result in traffic generation from these lots. Further traffic assessments will need to be submitted with the applications for the development of each of the super lots. A recommended condition for the future applications for these lots is included to this effect.

Stage 1C does not have any traffic generation potential as it is limited to the construction of Hutley Drive and another minor road providing access to the playing fields to the west of the site. While no further traffic would be generated as a result of Stage 1C, the proposed works would link the residential and super lots to Hutley Drive in the north and would provide an alternative exit from the subdivision thereby reducing any pressure on Montwood Drive.

The RTA has raised concern that while the proponent's traffic assessment indicates that the road network has the capacity to cope with traffic from the development, it does not properly consider the safety implications at the intersection of Montwood Drive and North Creek Road. Therefore, a recommended condition of approval requires that the proponent undertake a safety analysis of this intersection and provide an intersection upgrade in accordance with AUSTROADS Part 5 – Intersections at Grade.

6.4.2 Road Hierarchy

The development proposes a road hierarchy consisting of nine different types of streets. The road hierarchy proposed is as follows:

Road Type	Carriageway Width (m)	Road Reserve Width (m)	Designation under NRDM ¹
A – Main Street	11.2	20	Collector
B – Hutley Drive	11.2	25	Collector
C – Local Connector	7	18.2	Local
D – Local Connector	9.7	18	Local
E – Ridgeline Connector	13.4	14.2	Local
F – Residential Street	7	15	Local
G – Park Edge Residential Street	7	12.5	Local
H – Hillside Residential Street	6	14	Access
I – Small Park Edge Residential	6	11.5	Access
J – Rear Lane	5	7	No comparable designation

¹ NRDM is the *Northern Rivers Local Government Development Design and Construction Manuals* which is the Manual that Council base their road requirements on.

In assessing the proposed road hierarchy, the roads have been compared with the hierarchy within the *Northern Rivers Local Government Development Design and Construction Manuals* (NRDM) as this is what Council typically requires. Council have raised concern in regard to a number of the proposed road types. Specifically, Council would prefer that proposed road types H and I comply with the requirements for local streets (they are currently based on the requirements for access streets). Council consider that these roads should comply with the requirements for 'local streets' as the roads service too many lots (and therefore carry too much traffic) for access streets.

The NRDM identifies that access streets are applicable in situations where no more than 100 vehicles per day are expected (based on 10 vehicle movements per day for single dwelling allotments). Therefore, access streets should only be proposed for streets servicing up to 10 lots. On consideration of the proposed road network across the site, the Department considers that, in general, where road type H is proposed, these roads service too many lots to expect that maximum traffic volumes would be 100 vehicles per day. Therefore, a proposed modification to the concept plan requires that these roads comply with the requirements for 'local streets' in the NRDM. The one exception to this requirement is the proposed cul-de-sac in the southeast of the site. The section of this road south of the final intersection with road type G can comply with the requirements for 'access streets' in the NRDM because it only serves a small number of lots.

In regard to road type I, the only three instances of this road are proposed across the site where open space occurs on one side of the street. In all instances these streets service a small number of lots (up to seven lots)

and it is reasonable to assume that maximum traffic volumes on these roads would be no more than 100 vehicles per day. While the carriageway width proposed meets the requirements of the NRDM, the proponent proposes to reduce the road reserve width on the side of the street where the park is and incorporate it into the open space. As the streets are proposed to be dedicated to Council as local roads and Council will be the long term manager of these roads the Department considers it appropriate that road type I comply with the requirements for 'access streets' in the NRDM. A recommended modification to the concept plan requires road type I to comply with the NRDM requirements.

Council raised concern at the inclusion of Road Type J (rear lanes) within the proposed neighbourhood centre and stated that if they were to be included in the proposed development they should be modified as follows:

- The lanes to be fully sealed from boundary to boundary;
- The provision of concrete vee drains at surface level (in accordance with AS2890.1 Parking Facilities Off Street Parking for driveway access);
- The provision of signage to discourage any vehicles other than resident vehicles from using the lanes; and
- The prohibition of on-street parking.

The Department agrees with Council's position and recommends a modification to the concept plan to require that the design of the rear lanes is modified in accordance with Council's requirements.

In addition, Council requested further information on how service vehicles are to service the neighbourhood centre. The Department considers that the operation of the neighbourhood centre is an issue that can be dealt with in the future application for the development of the super lot. A recommended condition for the future neighbourhood centre application requires the submission of an operational management plan that addresses, amongst other things, the required servicing arrangements.

6.4.3 Parking

The proponent advises that approximately 280 parking spaces will be provided in the neighbourhood centre super lot but does not address parking for the other neighbourhood centre uses or the retirement community. Council raised concern that parking for these uses was not addressed. However, while the proponent seeks project approval for the subdivision of the super lots, future applications will need to be lodged for the development of these lots. Parking for these land uses can be addressed in these future applications, but it is considered that the super lots are large enough to accommodate the required parking for the future uses.

The Department notes that the proponent's Design Guidelines identify that future built form in the neighbourhood centre and retirement community may propose basements to provide car parking. As the lower parts of the site have a high watertable and potential acid sulfate soils, the Department has recommended requirements that future applications for basement carparking include specialist assessments of these issues.

6.4.4 Pedestrian Access

The proposed development incorporates a pedestrian and cyclist network for future residents. All roads within the proposed road hierarchy include a footpath of minimum 1.5m width. The proposed Main Street and other proposed local connector roads within the neighbourhood centre have footpaths proposed on both sides of the road. Outside of the road network, pedestrian linkages are proposed through the green space areas of the site. The pedestrian network within the site connects to existing parks and pedestrian linkages adjacent to the site.

The movement network proposes six pedestrian linkages through the retained east-west ecological corridor in the centre of the site. The Department considers that this number of linkages has too much potential to impact adversely on the ecological values of this area. However, it is recognised that there will be a desire for residents to readily access the neighbourhood centre and water quality control pond. Pedestrian footpaths will be available along Montwood Drive to the west of this ecological corridor and along the proposed road to the north. A proposed modification to the concept plan requires that only two pedestrian linkages be provided through the ecological corridor to protect the sensitive vegetation. One of these will be provided across the proposed weir and a second will be provided from the Stage 1 project application residential subdivision in the south to the retirement community in the north. The modification further requires that details of the design of the pedestrian

linkages are included within the Environmental Management Plan to ensure that any potential impacts are mitigated.

The Council raised concerns that the retained ecological corridor was proposed to be private open space ie. part of the future retirement community, and that there were public linkages located in this area. The proponent now commits to dedicating this area to Council so that it will be in public ownership. This has been formalised as a recommended condition of approval for the concept plan.

Council were further concerned that the pedestrian network would not provide access to the sporting fields adjacent to the west of the site. As discussed above, the proposed road hierarchy incorporates a pedestrian pathway along every road within the development, therefore pedestrian access will be available to the sporting fields once they are in operation.

The Department considers that, in general, the proposed pedestrian network across the site is adequate. The footpaths provided along the proposed roads are generally in accordance with the *Planning Guidelines for Walking and Cycling* (2003) in that, close to the neighbourhood centre footpaths are wider and provided on both sides of the road and in other areas, footpaths are provided on one side of the road only and are a minimum of 1.5m wide. Pedestrian access between residential areas and the neighbourhood centre and water quality control pond is accommodated and the proposed network connects with the existing pedestrian network. A recommended condition of approval requires a detailed landscaping plan to be prepared and submitted to Council. This landscape plan is to include the detailed design of the pedestrian footpaths for the Stage 1 project application.

6.4.5 Public Transport

The proposed development incorporates future options for public transport by providing a through link capable of accommodating buses. The development nominates an area within the neighbourhood centre for the provision of a bus stop (one for north travelling services and one for south travelling services) with additional bus stops to be nominated as required in applications for future stages of the development.

6.5 WATER CYCLE MANAGEMENT

The proposed development will result in an increase in impervious areas on the site and therefore, without management, the stormwater runoff following development would increase from the existing situation. The proposed development also has the potential to impact on the quality of stormwater runoff through such means as litter, oils and greases from roads, residue from fertilisers and pesticides used in domestic gardens etc.

The proposed stormwater management system for the development is centred around the existing water quality control pond in the west of the site. This pond was approved by Ballina Shire Council (DA2002/333) and was designed to manage the stormwater generated by the whole of the Pacific Pines Estate (including the areas in existence to the south of the current subject site). The stormwater management system also proposes the implementation of such measures as swales and dry detention systems upstream of the water quality control pond.

The proponent proposes to route most of the stormwater runoff from the development toward the water quality control pond. The areas that will not utilise this resource are those areas in the north of the site (that will first run outside the site to a detention basin in the established Lennox Meadows subdivision and then return to the site via the drainage line adjacent to Hutley Drive) and the area in the northwest of the site that will run directly south to the SEPP14 wetland within Ballina Nature Reserve.

For the remainder of the site the stormwater runoff will flow to the retained green space corridor through the centre of the site where the stormwater will be detained prior to draining to the water quality control pond. Two weirs will be constructed within this corridor to form detention basins for the stormwater.

Council is concerned that the water quality control pond is not currently operating in accordance with the development consent. Council are pursuing this compliance issue separately to this application. However, it is

important that the water quality control pond be operating as designed prior to the current proposed development routing further runoff to it. Therefore, the Department recommends a condition of approval for the concept plan that states that no development is to occur unless the water quality control pond is operating in accordance with the development consent. Further, a recommended condition of approval for the Stage 1 project application requires the proponent to submit the works-as-executed drawings for the water quality control pond to Council's satisfaction prior to the issue of a construction certificate for Stage 1A.

Council has raised a number of issues with the proposed stormwater management system and the modelling completed by the proponent. These issues are addressed below.

a. The proponent is relying on the modelling from the original consent for the water quality control pond, but has varied the catchment and the development to the extent that the outcomes are not applicable anymore.

The Department considers that the current development reduces the amount of impermeable surfaces from the layout used to design the water quality control pond therefore it is unlikely that the current layout will increase flows above what was modelled for the development application for the water quality control pond.

b. The areas of upstream detention provided by the current proposal are not sufficient;

The modelling completed for the water quality control pond application required upstream detention of 19100m³. The current application provides 39000m³. The proponent advises that the detention volumes can be varied so that the inflow and outflow of the water quality control pond can exactly match that modelled in the development application for the pond.

c. The stormwater from the north and west of the site that drains directly to the SEPP14 wetland within Ballina Nature Reserve (and not to the water quality control pond) is not proposed to receive tertiary treatment.

The proponent has proposed primary and secondary treatment for these catchments in the north and west of the site. Treatments proposed include gross pollutant traps, nutrient stripping via swales, permeable pavements and the brook (adjacent to Hutley Drive previously approved by Ballina Council). The proponent's water quality modelling of these catchments shows that, in each instance the water quality of post development flows exceeds that of the existing pre-development flows. Further, the proponent has committed to water quality monitoring of the stormwater management measures for two years following the completion of construction.

d. The proposed relocation of the sediment pond from within the tavern super lot would result in it being located within the high water boundary of the water quality control pond and it would therefore reduce the pond's capacity.

The relocation of the sediment pond would not be undertaken until the future tavern was constructed. Therefore the proponent advises that additional detail will be provided in the future application for the tavern. It is noted that the water quality control pond has a large amount of reserve capacity that could potentially accommodate additional stormwater should this be required. A recommended requirement for the future application of the tavern super lot requires the submission of a detailed stormwater management plan that addresses the relocation of the sediment basin and how this will integrate with the existing water quality control pond while still meeting the relevant targets of no net increase in water quality or quantity.

In amending its plans on the proposed development, the proponent has expanded the retirement community super lot and it now encroaches on a small basin to the south of the water quality control pond. This has the potential to impact on the functioning of this basin, but may also reduce the potential for public linkages through this area. As a result a recommended modification to the concept plan requires the movement of this lot boundary to the north of the basin to rectify this issue.

The Department considers that the stormwater concept plan for the site is generally sound. While the proponent has utilised some modelling results from the original application for the water quality control pond, as the area of impermeable surfaces proposed in the current development has decreased since that time, it is unlikely that the proposal would result in increased flows to the water quality control pond. The proponent advises that detailed

modelling will be undertaken for subsequent applications. The Department considers that it is necessary to have an integrated approach to stormwater management on the site. As a result, a recommended condition requires that a stormwater plan addressing the whole site be submitted to Council prior to issue of the construction certificate for Stage 1. The stormwater plan will provide the results of the detailed modelling for the site for both water quality and quantity, including all catchments and demonstrate that there is no net increase in quality or quantity above pre-development conditions.

Erosion and Sediment Control

The plan for erosion and sediment control measures for the Stage 1 project application shows control measures (such as sediment fencing) within the ecological corridor to be retained. In addition, the ecological corridor is identified as containing a diversion route consisting of a temporary earthen drain that diverts water away from the disturbed areas to natural drainage depressions. The placement of these controls within the retained area of endangered ecological community and threatened species habitat could result in unacceptable impacts on this flora. As a result, a recommended condition of approval for the project application requires that the erosion and sediment control plan be updated to remove any control measures or diversion drains from the ecological corridor.

6.6 AMOUNT OF RETAIL AND COMMERCIAL DEVELOPMENT

The concept plan proposes retail and commercial uses in a neighbourhood centre development. The development proposes up to 3000m² of retail (1200m² initially, with a possible future expansion to 3000m²) and up to 800m² of commercial floor space. The retail space would include a small supermarket.

Ballina Council has long envisaged a small neighbourhood centre in this area. Ballina's Retail Strategy (August, 2003) states that 'A second commercial area will be provided in Pacific Pines Estate to complement those facilities found in the [Lennox Head] Village Centre. This facility shall be lower in the retail hierarchy than the Village Centre and provide facilities of a neighbourhood scale to service the residents located in this area and enhance walkability'. Council's Retail Strategy report states that there is approximately 4200m² of retail space in the Lennox Head village centre (as at the time of the report). Therefore, in order to maintain Council's adopted retail hierarchy, the proposed neighbourhood centre at Pacific Pines should be smaller than Lennox Head. The proposed areas of retail and commercial space indicate that the proposed neighbourhood centre will be smaller than Lennox Head.

With regard to the need for the amount of retail space proposed, the proponent has advised that the initial application for the neighbourhood centre will seek a maximum of $1200m^2$ of retail space. A future expansion to $3000m^2$ will only occur once there is relevant road infrastructure to support the traffic it would generate (ie. that the proposed northern and southern extensions to Hutley Drive are constructed; refer to Section 6.4 for further discussion on this issue).

The proponent's assessment of the potential impacts of the proposed retail floor space concluded that the economic impact of this additional area of retail would be minimal and that the provision of this area in the development would have a number of positive impacts such as the employment of approximately 50 people and increased convenience for residents in the local area.

The Department considers that the proposed quantum of retail space is acceptable as:

- Council's Retail Strategy report states that there is a shortfall of supermarket floor space of approximately 2000m² gross leasable area in the Lennox Head area. The small supermarket proposed as part of the development would help to meet this shortfall;
- Council's Retail Strategy report notes that in 2006 there is a need for 5,198m² net selling area in the Lennox Head area, which equates to approximately 6900m² gross leasable area (GLA). This increases to 7888m² NSA in 2011 (approximately 10500m² GLA); and
- The area of retail proposed is less than that in the Lennox Head village centre and would therefore maintain Council's desired retail hierarchy.

While the Department is satisfied with the quantum of retail space proposed, it is recommended that a modification to the concept plan be applied that allows a maximum of 1200m² of retail space to be developed and makes it clear that this can not be increased until both the northern and southern extensions to Hutley Drive are constructed.

With regard to the proposed 800m² of commercial floor space, the Department considers that this amount of commercial space is warranted as Council's Retail Strategy report identifies a need for 3500m² GLA of commercial floor space. While the Lennox Head Strategic Plan incorporates detailed investigations for a low key, light industrial/arts/crafts type facility which would satisfy some of this space, further commercial floor space is required and can be satisfied by the proposed development.

6.7 SUBDIVISION LAYOUT

The subdivision layout for the entire site is indicative for the concept plan application (refer to Figure 17). However, the layout provides for a range of lot sizes from small rear lane lots and park court lots to larger lots over 1200m². Lots respond to the topography of the site with the larger lots being provided in the steeper, eastern section of the site.

The density of the subdivision decreases further away from the neighbourhood centre. Smaller 'rear lane lots' are provided in close proximity to the neighbourhood centre, while the traditional lots are further away from the centre. A large proportion of the future population of the development is located within a 400m radius (or walkable distance) of the neighbourhood centre.

The development addresses the need for affordable housing with the provision of approximately 17 smaller and more affordable lots throughout the site. The development also envisages the provision of about 11 duplex sites. Two of these duplex sites will be developed as part of the Stage 1 project application.

The development proposes approximately 20 'park court' lots in three areas across the site (refer to Figure 18). Council has raised concerns with these lots as the shared driveway creates multiple conflict points and the garages are not accessible. Further, Council advise that this configuration is problematic if people park in the shared driveway. The Department considers that these lots help to provide a variety of housing across the site. These lots, being 450m²-600m² are smaller lots that may provide affordable housing options for potential residents in the future. It is recognised however that if these lots are not well designed, conflicts could occur. In particular, the proponent's Design Guidelines propose garages directly opposite each other across the shared driveway. A recommended modification to the Design Guidelines requires that garages within the car court lots are not designed directly opposite one another to resolve this issue.

Overall, it is considered that the development provides a good mix of lot types across the site. The indicative layout responds to the site's physical characteristics. The Design Guidelines provided with the application identify building controls for future building form on each lot type across the site.

The proposed road network for the development promotes connectivity and permeability. The road layout generally responds to the topography of the site and provides five connections with the existing, external road network. Council raised concern that the proposed subdivision in the north west of the site was only afforded one access point which may be an issue in times of emergency. As this area is the subject of concept approval, the proponent is not currently seeking approval of this subdivision layout, it is indicative only. This issue can be further addressed in the future application for Stage 10 of the development.

The subdivision balances the provision of allotments with green space. Overall, the concept plan provides 25.1ha of green space. Over half of this space will be dedicated to conservation of the significant ecological values of the site. Just over two hectares is provided as open space and a further 6.3ha will be for both revegetation and recreation purposes. All green space will be dedicated to Council. The Department notes that the proponent is currently constructing playing fields directly adjacent to the site. This will provide active open space for the use of future residents of the development.

While there is a large amount of green space provided in the proposal only a limited area of this is will be usable open space for future residents. The Department considers that it is important that sufficient usable open space is available within the development. The Department therefore requires that the Environmental Management Plan includes consideration of how the 6.3ha of dual revegetation and recreation green space will meet both ecological and recreation objectives of this land.

In general, the Department considers that the indicative layout for the future subdivision of the site is acceptable as it provides a range of lot sizes and types, good connectivity, services within a walkable distance of most of the population and a balance between built form and green space.



Figure 17: Indicative subdivision layout (Source: correspondence from GeoLINK dated 18 August 2008).



Figure 18: Proposed design of the park court lots (Source: correspondence from GeoLINK dated 18 August 2008)

Stage 1 Project Application

The Stage 1 project application seeks approval for a 63 lot subdivision comprising of 54 residential lots, 6 super lots, 2 open space lots and a residual lot (refer to Figure 9).

With regard to the residential lots, the development proposes a variety of lot sizes ranging in size from 632m² to 907m². The average lot size is 740m². Specifically the development proposes 37 traditional lots of between 600 and 800m², 15 lots greater than 800m² and two lots for duplex development.

The subdivision will provide open space for the future residents of the subdivision with the inclusion of two open space lots – one of 641m² and one of 797m². Additional open space for residents will be provided in the future with the landscaping of the neighbourhood centre and the area around the water quality control pond.

The road layout proposed for these residential lots is largely an extension of the existing road network. Both Fox Valley Way and Lakeside Way will be extended to the east with 2 additional minor roads proposed. Road widths are sufficient for the likely traffic generated by the proposal.

The project application proposes the subdivision of 6 super lots that will provide for future development of the neighbourhood centre and retirement community. Future applications will be lodged for the development of each of these lots. The lots are arranged around the northern and eastern sides of the water quality control pond which provides a focus for the neighbourhood centre.

6.8 FLOODING

Flooding of the site is dictated by local processes up to the 1 in 100 year Annual Recurrence Interval (ARI) event. Modelling of local flooding found that the 1 in 100 year ARI event for the site is 2.15m AHD.

With regard to global flooding, the 100 year ARI event level for the site is 1.9m AHD. This level is derived from a catchment wide study finalised by Ballina Shire Council at the end of 2007. Council's study considered the

impacts of climate change and incorporated a 200mm sea level rise at the mouth of the Richmond River into its modelling. The Department of Environment and Climate Change was involved in the development and review of the study and are satisfied that Council has adequately considered climate change.

It is the western section of the site around the water quality control pond that is liable to both localised and global flooding. These are the areas of the proposed neighbourhood centre and retirement community. In order to accommodate these uses, filling of this section of the site is required.

Ballina Shire Council issued development consent in 1999 for bulk earthworks on the site (DA1999/248). The works involved cutting up to 4m of material from the east-west ridgeline in the north of the site to deposit material in the central low lying area (the areas proposed to be the neighbourhood centre and retirement community). A subsequent construction certificate was issued for these works in 2004 and the consent has been commenced. This consent approves the filling of the site to a minimum of 2.3m AHD. The proponent has advised that they intend to fill the site in accordance with this consent.

A recommended condition of approval requires that the land be filled in accordance with DA1999/248 and that the works-as-executed drawings are submitted to Council prior to the issue of the subdivision certificate for Stage 1B of the project application. A further recommended condition of approval requires that the finished floor level of the buildings on the site be RL 2.65m AHD or 500mm above the local 1 in 100 year ARI event for the site.

The Department considers that the filling of the site and the construction of the future buildings at a minimum level of RL 2.65m AHD will provide the development with sufficient immunity against both local and global flood events. In the result of a Probable Maximum Flood event (PMF; RL 3.2m AHD) egress from the site would be available via Montwood Drive, Stoneyhurst Drive and Hutley Drive which all rise away from the site. While some of the sections of Hutley Drive and Main Street would flood in the event of a PMF, alternate egress from the site is available via Montwood Drive and Stoneyhurst Drive.

6.9 MOSQUITO MANAGEMENT

Ballina Shire Council's Development Control Plan identifies a known breeding area for mosquitoes within Ballina Nature Reserve, immediately to the west of the development site. A mosquito impact assessment submitted with the Environmental Assessment identified a number of species present on site, or with potential habitat on site that may impact on the future development.

The known breeding area identified in Council's DCP is a brackish habitat that was found to suit breeding of *Verrallina funerea* and potentially *Aedes multiplex*. The mosquito impact assessment identified the freshwater wetlands on site as being potential habitat for mosquitoes, in particular *Culex annulirostris* which is an arbovirus vector.

Aedes vigilax, a high risk species for both biting and disease transmission, was represented by large numbers in the survey. However, the assessment did not locate breeding habitat within or near the site and it was concluded that, as this species has a wide distribution and is able to disperse over many kilometres, this represented a background level for the site.

The assessment indicated that mosquito management would be ensured through the 200m buffer between the known breeding area and the proposed residential development. This buffer is provided by the water quality control pond and the playing fields adjacent to the site. These areas will remain clear of dense vegetation that may harbour mosquito movement into the residential areas of the site. In order to further control mosquitoes for the future residents of the development, the proponent proposes fitting street lighting with shields or yellow filters to minimise attraction of mosquitoes.

Despite the management measures proposed by the proponent, a number of issues were raised with the assessment. Council raised concern that the survey was brief and was undertaken in winter. While it was not ideal that the survey was undertaken during the months of May and June as mosquito numbers are generally lower in winter, the Department considers that the survey would have provided reasonable data on the different

mosquito species present on the site. It is noted that the assessment did not rely solely on the results of the survey, but searched both within and adjacent to the site for habitat that may harbour species not found during the survey.

Parts of the neighbourhood centre, including the tavern will be located within 200m of the known breeding area. As these areas are not residential in nature and people will only spend limited amounts of time in these areas, any potential impact from mosquitoes is expected to be low. Should the future development of the tavern super lot include an area of alfresco dining or a beer garden, particular management measures will be required to ensure mosquitoes do not become a nuisance. This forms a recommended requirement for the future application for development of the tavern super lot.

An open drain in the northern part of the site was identified as having the potential to provide habitat for mosquitoes. This open drain is the subject of a development consent from Council (DA 2004/1113) which approves its embellishment. Once the works have been undertaken in accordance with this consent, the waterway will consist of deep pools and shallow areas of moving water that are not preferred habitat for mosquitoes.

The proponent's mosquito impact assessment identified the freshwater wetlands on site as potential habitat for mosquitoes. While the development initially proposed the removal of this area of habitat, following the identification of this vegetation community as an endangered ecological community, an expanded corridor through this area is proposed to retain this vegetation. As a result, this area has the potential to provide habitat for mosquitoes in the future (although it is noted that the survey did not find any mosquitoes within this area). The proponent advises that in revegetating and rehabilitating the freshwater wetlands vegetation community it will make this area less attractive for mosquito habitat. There are also biological control options for mosquito management if necessary.

In order to address the potential for the retained freshwater wetlands vegetation community to provide mosquito habitat, the Environmental Management Plan that the proponent has committed to has been modified to include a comprehensive mosquito management plan that proposes an ongoing monitoring program and addresses breeding patterns, sources of control, sources of mitigation and complaint management.

6.10 GEOTECHNICAL

Parts of the development site are characterised by steep slopes with slopes in some areas, particularly the east of the site, being greater than 20%. Ballina Shire Council's mapping identifies areas in the east and north west of the site as having a high and medium risk for slope instability. Council has further advised that it is their practice to limit building platforms to slopes of 12 degrees (21%) and that areas of slope between the 12 and 15 degree boundaries should be nominated as geotechnical slope stability buffers.

The proponent provided a map indicating the areas of the site that have slopes greater than 12 degrees (see Figure 19). These areas are confined to the eastern part of the site and, in all instances these steeper slopes only cover part of the indicative lots and therefore, areas of lesser slope will be available to be used for building platforms. The lots proposed in this eastern area of the site are mostly large residential lots (lots >1200m²) to ensure that these lots provide an area of lower slope that can accommodate a building envelope.

In the north west of the site part of the area identified as having the potential for slope stability is proposed to be revegetated and kept as a conservation area as it is within the 100m buffer of the SEPP 26 littoral rainforest (adjacent to the northwestern boundary of the site). The remainder of the area is proposed for residential lots. None of the slopes in this area exceed 12 degrees.

The slopes for the lots proposed as part of the Stage 1 project application do not exceed 20%.



Figure 19: Areas of the site with slopes greater than 12 degrees (Source: correspondence from GeoLINK dated 18 August 2008).

A recommended condition of approval for future applications for the development require that buildings are not built on slopes greater than 12 degrees.

A recommended condition for future applications requires the submission of a geotechnical assessment addressing the potential for slope instability on the proposed lots. Furthermore, the geotechnical assessment will detail the necessary footings required for future buildings in accordance with AS 2870 - 1996 Residential Slabs and Footings – Construction.

Despite the fact that some areas of the site have steep slopes, the Department considers that this constraint has been addressed through the design of the proposal. Recommended conditions for future applications require additional information to be provided to ensure that slope stability is maintained across the site.

6.11 HERITAGE AND ARCHAEOLOGY

The Environmental Assessment included a Cultural Heritage Assessment that documented consultation undertaken with the relevant Aboriginal community. DECC have confirmed that they are satisfied with the level of consultation undertaken for the proposal.

Survey of the site did not find any sites of archaeological significance. The relevant Local Aboriginal Land Council (LALC), Jali LALC identified two sites of cultural significance on the site:

- The strip of Littoral Rainforest running north-south in the north east of the site; and
- The natural spring that occurs in the eastern part of the site.

The Department notes that the relevant area of littoral rainforest is proposed to be incorporated into the open space network of the development, with revegetation and rehabilitation works undertaken around it. The natural spring has also been incorporated into the 'conservation zone' and will be protected. Therefore, the development will not impact on areas identified as being culturally significant on the site.

In its PPR, the proponent has stated that the identified sites of cultural significance will not be modified without the consent of the traditional owners and that the areas will be fenced and signed during construction to prevent any damage. These actions have been included in the proponent's Statement of Commitments.

In addition, the Jali LALC identified some areas of the site which they consider may contain archaeological artefacts. These areas were identified in the Cultural Heritage Assessment and the proponent has committed to engaging representatives from the Jali LALC to monitor initial excavations in these areas.

Further, the Department has included a recommended condition of approval that state that should any artefacts be found all work will cease in the area and the Jali LALC and DECC will be contacted prior to works continuing.

The Department considers that the commitments made by the proponent in relation to Aboriginal heritage and the recommended conditions of approval applied to the instrument of approval will result in the satisfactory management of Aboriginal heritage on the site.

6.12 NOISE

6.12.1 Road Traffic Noise

The proposed development will lead to an increase in traffic on the existing road network and has the potential to increase road traffic noise impacts both for existing residents and future residents of the proposed development.

The proponent's noise assessment found that the road traffic noise impacts would increase at the future lots as a result of the development. In all instances traffic from the development would result in noise levels exceeding the relevant noise criteria. For Montwood Drive, Hutley Drive and Stoneyhurst Drive these exceedances are 1dB(A) only.

For Henderson Lane the noise levels without the development already exceed the relevant noise criteria. In this instance the *Environmental Criteria for Road Traffic Noise* (ECRTN) states that development traffic should not lead to an increase in existing noise levels of more than 2dB. As the development would result in a 1dB increase for both the daytime and night time periods, the impact is acceptable in accordance with the ECRTN.

Where noise levels exceed criteria, it can be reduced to acceptable levels with the implementation of a number of mitigation measures as follows:

- Buildings are to be designed so that non-habitable rooms front the road or glazing is to be reduced along this façade;
- Where habitable rooms are proposed fronting the road, mechanical ventilation is to be provided; and
- For all lots fronting Montwood Drive, Hutley Drive and Stoneyhurst Drive, private open space is to be located on the side of the building opposite to the road.

For the Stage 1 project application, 2 lots (Lots 53 and 54) will front Montwood Drive. The recommended conditions of approval require that a restrictive covenant be placed on these lots requiring future dwellings on these lots to be designed to ensure maximum indoor sound levels accord with the requirements of *AS/NZS* 2107:2000 'Acoustics – Recommended Design Sound Level and Reverberation Times for Building Interiors.

The noise assessment concludes that standard building construction will be sufficient to meet indoor noise levels as set out in *AS/NZS 2107:2000*.

The Department considers that the potential road traffic noise impacts of the proposal can be adequately managed through future dwelling construction. In order to ensure that this issue is considered in future applications for the site, the Department recommends that future applications require an updated noise impact assessment for the stages of the development (Stages 2, 3 and 4) that have lots fronting Montwood Drive, Hutley Drive and Stoneyhurst Drive (no lots are proposed to front Henderson Lane). The noise assessment will be required to identify the proposed lots that require restrictive covenants to ensure an acceptable noise level is achieved on the site. The relevant restrictive covenants will then be required to be conditioned on any future approvals.

6.12.2 Commercial Activity Noise

The proposed neighbourhood centre has the potential to create noise impacts for both existing and future surrounding residents. Some of the anticipated noise impacts are alfresco dining at restaurants, cafes or the tavern, car doors being closed, unloading of trucks servicing businesses, music from the tavern or community centre. While many of these impacts would be localised and restricted to business hours, a tavern is proposed to the west of the water quality control pond which would be open outside of business hours.

The proponent's noise assessment suggested that, in taking a worst case scenario (e.g. assuming that alfresco dining areas were on the exposed side of the commercial buildings to the dwellings), relevant noise criteria identified by the NSW Industrial Noise Policy would be exceeded. The noisiest activities for dwellings were found to be patrons using alfresco dining areas, car door closures in the neighbourhood centre car park and manual unloading of a truck within the neighbourhood centre.

A number of measures are available to mitigate the impacts of the future neighbourhood centre on the surrounding dwellings such as screening of alfresco dining areas or limitation to the hours of use, limitation to hours of service deliveries and design of future tavern and community centre to include sound locks to contain sound within the building.

The determination includes a requirement to submit a noise assessment with all future applications for development within the neighbourhood centre. The assessment must incorporate relevant mitigation measures to ensure that any future potential noise impacts are minimised for surrounding residents.

6.13 VISUAL IMPACT

The proposed development will result in visual impacts for existing residents in the area as it will result in a change to the existing agricultural character of the area to urban development. The public were particularly concerned that the proposed three storey development would result in a loss of views of the water quality control pond.

Residential development exists to both the north and south of the current subject site and the development of this site would result in a large tract of developed land with little visual relief. The submission of amended plans for the development expanding the green corridor through the centre of the site responded to these concerns. The 50m wide corridor serves to create a visual break between areas of development and mitigates the visual impact of the development.

The three storey development proposed does have the capacity to impact on views from existing residential areas toward the water quality control pond. It is noted however that the residential area with the best views of the pond are situated to the south of the site. The proposed development does not propose any three storey development to the south of the pond, therefore these views will not be impacted. As discussed in Section 6.1 above, a modification to the concept plan reduces the height of the neighbourhood centre buildings to two storeys therefore minimising any impact to existing views. The only remaining three storey buildings are those for the retirement community to the east of the pond. It is considered that as the development to the east of the pond is at elevations above the pond, view loss for existing residents is unlikely.

A number of existing residents were concerned that development would result in sun being reflected off the roofs of future buildings. The current application does not approve the construction of any buildings. The materials proposed for future buildings will be assessed in future applications for the site. However, a recommended condition for future applications requires that the roofs of future buildings be constructed out of non reflective materials.

Overall, it is unlikely that the proposed development would have unacceptable visual impacts or result in substantial view loss for existing residents.

6.14 CONTAMINATION (including acid sulfate soils)

6.14.1 Contamination

The site is currently used for agricultural purposes and there is therefore the potential for contamination to be present on the site. A Preliminary Site Investigation was undertaken as part of the studies for the previous SEPP 71 Master Plan application. As the conditions on the site have not changed markedly since the time of that study, further reporting has not been undertaken for the current application. The Department considers that this approach is valid.

The Preliminary Site Investigation found that the site was unlikely to contain areas of contamination as no horticultural activities had been undertaken for at least 35 years. While a cattle dip site was located just outside the boundary of the subject site, its topographical location means that it would be highly unlikely to impact on the subject site.

The Preliminary Site Investigation also sampled a number of stockpiles of soil on the site. Some elevated levels of contaminants were recorded. All fill material was classified as inert waste according to EPA guidelines. In general, while the material was not deemed suitable for residential use, it was appropriate for commercial/industrial, open space and recreational uses. This material was subsequently used for the construction of the Water Quality Control Pond and the playing fields to the west of the subject site. No stockpiles of fill remain on the subject site.

The Department considers that the likelihood of contamination has been adequately assessed and that the site is suitable for the proposed uses.

6.14.2 Acid Sulfate Soils

Ballina Shire Council maps identify the low-lying western portion of the site as having the potential to contain acid sulfate soils. Previous soil investigations undertaken for the construction of the Water Quality Control Pond showed that potential acid sulfate soils (PASS) occurred in soils between 0.75m below the surface to 3.0m below the surface. The current development proposes to fill these areas by approximately 1m, reducing the potential of disturbing these soils. Should deep excavations be required, there is the potential for disturbing these soils. The Engineering Report accompanying the Environmental Assessment states that these deeper excavations may be required for laying sewerage infrastructure. In addition it is noted that the Design Guidelines submitted with the application envisage that basement carparking may be constructed for buildings in the neighbourhood centre. A recommended requirement for future applications requires the submission of an Acid Sulfate Soils Management Plan to be prepared in accordance with the *Acid Sulfate Soil Assessment Guidelines* (Acid Sulfate Soil Management Advisory Committee, 1998).

The only works likely to disturb PASS for the project application works is the laying of sewerage infrastructure. The Environmental Assessment includes an Environmental Management Plan which deals with the management of PASS. In addition, the proponent's Statement of Commitments includes a commitment to sample and analyse soils below the 10m AHD contour to determine management requirements. The Department considers that this is an appropriate way to manage the potential of PASS disturbance during the works for the Stage 1 project application, but recommends a condition of approval that requires the completion of an ASS management plan in accordance with The Acid Sulfate Soil Management Advisory Committee guidelines.

6.15 BUSHFIRE

Part of the site is identified as bush fire prone in accordance with Ballina Shire Council's mapping. Specifically, the south western corner of the site is mapped as a 100m buffer the vegetation category 1 and the north western corner is partly mapped as vegetation category 2 and a 30m buffer to this vegetation.

A number of asset protection zones (APZs) are required for the development. These APZs can be wholly accommodated within the development site. The future proposed lots in the south east of the site will require an approximate 10m APZ in the back of these lots. The APZ required will be determined in future applications for the site. As such, the determination requires that future applications for Stages 8 and 9 include an updated bushfire assessment that determines the necessary mitigation measures to manage bushfire risk.

An APZ (of 15m) is required for residential development in the northwest of the site. This APZ will be provided within the green space proposed. It is noted that this area is also largely a 100m buffer to the SEPP 26 littoral rainforest to the north west of the site. The proponent proposes revegetation of this area. A recommended requirement for the future application for Stage 10 requires the submission of an updated bushfire assessment that determines the necessary mitigation measures for bushfire risk. In addition, the Environmental Management Plan (that the proponent has committed to preparing) that includes the revegetation works to be undertaken in the SEPP 26 buffer is required to include consideration of the maintenance of any APZs required.

The Rural Fire Service (RFS) requires public road access to the development to comply with *Planning for Bushfire Protection 2006* (PBP). Both Hutley Drive and Main Street will comply either with the acceptable solutions or the deemed to comply provisions of PBP. The remaining streets within the subdivision are all two wheel drive, all weather roads, as required by the RFS.

The RFS has also requested the preparation of a Fire Management Plan of the site that describes the works across the site and sets out the continued maintenance of the proposed open space areas, public reserves, proposed super lots and proposed residual lots in perpetuity or until development occurs within the relevant lot. A condition of approval for the concept plan requires the submission of this plan prior to the issue of a construction certificate for stage 1B.

Stage 1 Project Application

The Stage 1 residential subdivision requires the provision of a 10m APZ to the north. The road along the northern boundary of this subdivision has a road reserve width of 15m and will therefore accommodate the required APZ.

Both the retirement community and child care centre are defined as special fire protection purposes and require 10m APZs to the north and east. In addition the retirement community super lot will require a 30m APZ to the littoral rainforest to the south west. It should be noted that the 10m APZs will only be required until the surrounding land is developed in later stages of the concept plan. The fire management plan required as a condition of approval for the concept plan will address these issues.

The area to the south east of the retirement community lot, where a 30m APZ is required, is to be protected within the green space of the development. The area around the existing vegetation is to be revegetated. A recommended modification to the concept plan requires the consideration of the ongoing management of this area within the Environmental Management Plan for the site, to ensure it is managed as an APZ.

As all required APZs can be accommodated throughout the site and the public access roads will comply with relevant requirements, the Department is satisfied that the bushfire risk on the site can be adequately managed. Future applications for buildings throughout the site will need to assess potential bushfire risk and determine the need to construct buildings to standards specified by PBP.

6.16 EARTHWORKS

The development requires the completion of earthworks to raise the height of the land above the 1 in 100 year flood level. Two valid development consents and construction certificates (issued by Ballina Shire Council) exist for the filling of the lowest parts of the site. The proponent advises that they will execute the works in accordance with this consent. However, as a result of the current development design, some additional earthworks are required. These earthworks are located across the super lots for the neighbourhood centre, retirement community and residential development. The approximate volume of earthworks that approval is currently being sought for is 35,000m³. All earthworks will be undertaken between approximately 3m and 15m AHD. Much of the earthwork will require cutting. A maximum depth of cut of 2.85m is proposed. Small amounts of fill are also proposed (up to 0.28m). The additional material won through the cutting process will be used to fill the areas of fill approved under Council's consent. The proponent advises that a cut/fill balance can be achieved on the site and that no fill is required to be imported.

The earthworks will change the topography of the site in the areas affected. Specifically, the final slope of the area subject to earthworks will be steeper than the existing slopes. It is noted however, that the finished slopes would not be as steep as those areas in the east of the site where slopes exceed 12 degrees.

Overall, it is considered that the changes in topography as a result of the proposed earthworks are minor in the context of the site. The current topography of the site ranges between 0m and 50m AHD and the earthworks will not alter this range of topography across the site. The earthworks will not change the site to such an extent that it will create significant visual impacts. As a cut/fill balance can be achieved, there will be no impacts from haulage of material to the site.

6.17 INFRASTRUCTURE PROVISION

6.17.1 Water

Council advise that stage 1 of the proposed development can be serviced by connection to the existing adjoining water supply.

Ballina Shire Council - Water Supply Infrastructure – Development Servicing Plans covers the cost of the construction of a water reservoir for Pacific Pines. The proponent will be required to pay contributions in accordance with this plan. Council however require the land for the water reservoir to be dedicated to Council for the construction of the reservoir prior to the construction of Stage 1B. A recommended condition for the concept plan requires the nomination of the water reservoir site and the details regarding the mechanism for transferring the land to Council to be provided to Council prior to the issue of a construction certificate for stage 1B.

6.17.2 Sewer

Council advise that the existing sewerage system has the capacity to accommodate Stages 1 and 2 of the development. The following stages will need to ensure that provisions have been made for servicing the area. It is noted that *Ballina Shire Council - Sewerage Infrastructure - Development Servicing Plans* includes the subject site and includes the costs required for upgrade of the existing pump station on the site. A recommended condition of approval requires the proponent to pay contributions in accordance with Council's plan.

The proponent proposed to construct a pumping station to service stage 1 of the project. Council did not support this approach as it would result in Council having too many assets to maintain. A condition requiring stage 1 to be serviced by a gravity fed system has been recommended.

While the Stage 1 development can be serviced from the existing infrastructure, the recommended requirements for future applications for the site require the submission of infrastructure servicing plans that identify how the proposed development is to be serviced.

6.18 SECTION 94 AND OTHER CONTRIBUTIONS

Prior to the endorsement of a Subdivision Certificate for stages of 1A and 1B of the project application (Stage 1C does not create any additional lots), the proponent must pay, in proportion to the additional lots created by that stage, the following contributions to Council pursuant to Section 94 of the *Environmental Planning and Assessment Act (1979).*

The relevant plans are:

- Ballina Shire Contributions Plan 2008; and
- Ballina Roads Contributions Plan.

TOTAL CONTRIBUTIONS PAYABLE	
Stage 1A (56 lots ¹)	
Community Facilities	\$62,160
Roads	\$174,552
Total (Stage 1A)	\$236,712
Stage 1B (6 lots)	
Community Facilities	\$6,660
Roads	\$18,702
Total (Stage 1B)	\$25,362
TOTAL	\$262,074

¹ Stage 1A comprises the development of 54 lots, however the 2 lots designated for duplexes as considered as 2 lots each.

The contributions payable are for roads and community facilities. Contributions for open space have been waived by Council as the proponent is constructing playing fields adjacent to the western boundary of the site. The recommended conditions of approval require that the construction of these playing fields be completed prior to issue of a subdivision certificate for Stage 1C.

A Development Servicing Plan (DSP) enables Council, under Section 64 of the *Local Government Act 1993*, to levy contributions where the anticipated development will or is likely to increase the demand for water supply services. Contributions plans relevant include:

- Sewerage Infrastructure Development Servicing Plans; and
- Water Supply Infrastructure Development Servicing Plans.

Prior to the endorsement of a subdivision certificate for stages of 1A and 1B of the project application (Stage 1C does not create any additional lots), the Proponent must pay, in proportion to the additional lots created by that stage, the following contributions to Council pursuant to Section 64 of the *Local Government Act* 1993.

STAGES	Water Supply Services	Sewerage Services	
Stage 1A	\$372,512	\$232,232	
Stage 1B	\$39,912	\$24,882	
TOTALS	\$412,424	\$257,114	

6.19 COMPARISON WITH SEPP 71 MASTER PLAN

While the proponent does not seek to rely on the SEPP 71 Master Plan for this proposal, the Department has considered the adopted Master Plan in its assessment. It is considered that the current proposal is an improvement on the adopted SEPP 71 Master Plan as it delivers an additional 16ha of open space to the community and provides for the protection of endangered ecological communities and threatened flora species identified on site (or compensation where these communities or species are lost).

The following table compares the parameters approved in the SEPP 71 Master Plan and those in the current proposal.

	SEPP 71 Master Plan	Current Proposal
Site area (ha)	91.96	80.48
Lots	579	505
Dwellings	654	785
Lot sizes (m ²)	370-9220	450->1200
Approximate population	1590	1745
Area of neighbourhood centre (ha)	3.7	3
Open Space (ha)	8.99	25.1
Size of community centre (m ²)	300	300
Area of retail and commercial (m ²)	2000	3800
Area of Hairy Joint Grass retained ¹	0	47% ²
Area of Freshwater Wetlands EEC retained ¹	0	68% ²
Area of Square-stemmed Spike Rush retained ¹	0	57% ²

¹ These threatened species and the endangered ecological community had either not been identified on the site or had not been listed on the schedules of the TSC Act at the time the Master Plan was adopted

² The areas not retained in the current proposal area required to be compensated at a rate of 2:1. This is required by a recommended condition of approval

7 CONCLUSION

The Department has assessed the EA and considered the submissions in response to the proposal.

The Department has considered the key issues raised and has recommended modifications to the concept plan, requirements for future applications and conditions of approval to ensure the satisfactory addressing of these issues and minimal impacts as a result of the proposal. Key modifications and conditions of approval include:

- Requirement to provide an Environmental Management Plan that will manage the protection, rehabilitation and revegetation of all retained threatened species and endangered ecological communities on the site;
- Requirement to develop a Compensation Plan that provides land at a rate of 2:1 that offsets the loss of endangered ecological communities and threatened flora species as a result of the development;
- Requirement to provide \$90,000 for research into the threatened species Hairy Joint Grass and the Freshwater Wetlands endangered ecological community;
- An increase in the width of the retained green space corridor through the site;
- An increase to the buffers around the retained ecological corridor;
- A reduction in the height of the neighbourhood centre to comply with the height requirements of the Ballina LEP; and
- Modifications to the proposed road hierarchy to comply with relevant guidelines.

The proposed development will provide a number of benefits including:

- Contribution toward housing targets for the Ballina Shire as identified by the Far North Coast Regional Strategy;
- Provision of a variety of additional housing in Lennox Head including low and medium density and smaller, affordable lots;
- Provision of housing for seniors including the provision of affordable options;
- Provision of a new neighbourhood centre including a community centre;
- Provision of 25 ha of green space that will be dedicated to Council as public land;
- Protection and ongoing management of the retained endangered ecological communities and threatened species on the site; and
- Generation of employment in both the construction and operational phases.

Furthermore, the current proposal is an improvement on the SEPP 71 Master Plan adopted by the Minster in 2006. The current proposal delivers an additional 16ha of open space to the community and provides for the protection of endangered ecological communities and threatened flora species identified on site (or compensation where these communities or species are lost).

The concept plan (including Stage 1 project application) has largely demonstrated compliance with the existing environmental planning instruments.

On these grounds, the Department considers the site to be suitable for the proposed development and that the project is in the public interest. Consequently, the Department recommends that the project be approved, subject to the modifications to the concept plan, requirements for future applications and conditions of approval.