



**Ballina Shire Combined  
Development Control Plan**

**Chapter 15 - Wollongbar Urban  
Expansion Area**



**Schedule 1 - Amendments to Chapter 15 of the Ballina Shire Development Control Plan**

<b>Amend. No.</b>	<b>Subject Estate</b>	<b>Main Purpose of DCP Amendment</b>	<b>Area/s Subject to DCP Amendment</b>	<b>Council's Decision</b>	<b>Date of Council's Resolution</b>	<b>Effective From</b>
PRINCIPLE PLAN	Ballina Local Government Area	Combined Council's former DCPs (other than the Exempt and Complying Development DCP) into a single document. Also introduced new planning controls for the Ballina Town Centre. Prepared in response to NSW Legislative Reforms concerning DCPs.	Ballina Local Government Area	Adopted	24/08/06	
Amend 6	Wollongbar Urban Expansion Area (WUEA)	Clarifies infrastructure standards, parties responsible for infrastructure provision and requirements for undevelopable/bushfire/environmental buffer lands.	WUEA	Adopted	26/06/2008	10/7/2008
-	WUEA	Appendix 2 added to Chapter 15 WUEA. This provides the endorsed "Built Form Design Principles and Requirements for Avalon Estate (DA No. 2007/878)".  <i><b>Background</b> - Section 4.20 of Chapter 15 requires detailed residential design controls to be provided with the development application for urban subdivision. These controls are to be publicly exhibited with the development application and upon approval by Council be appended to, and become an addendum to the DCP. DA 2007/878 approved 28/02/08 with condition of consent 3.9 requiring submission of "Built Form Guidelines" to Council. Condition of Consent complied with 4 March 2010.</i>	WUEA	-	-	01/02/11

## Table of Contents

<b>1.0</b>	<b>INTRODUCTION .....</b>	<b>5</b>
1.1	What is the Plan called? .....	5
1.2	Where does the Plan apply? .....	5
1.3	What is the purpose of the Plan? .....	5
1.4	What are the objectives of the Plan?.....	5
1.5	How does the Plan relate to other DCPs and Environmental Planning Instruments? .....	7
1.6	When does the Plan come into force? .....	8
1.7	Definitions .....	8
1.8	How is the Plan used? .....	9
1.9	How does the Plan relate to the development application process?.....	10
1.10	Departures from the requirements of the Plan .....	11
<b>2.0</b>	<b>BASE INFORMATION.....</b>	<b>11</b>
2.1	Existing character of Wollongbar .....	11
2.2	Land holdings .....	12
2.3	Land use zones .....	13
2.4	Site constraints .....	15
2.4.1	Slope .....	15
2.4.2	Vegetation .....	15
2.4.3	Flooding .....	15
2.4.4	Environmental protection areas.....	15
<b>3.0</b>	<b>DESIGN PRINCIPLES.....</b>	<b>16</b>
3.1	Character statement .....	16
3.2	Aims and objectives of the Plan .....	19
3.3	Design principles for the WUEA .....	19
3.4	Density and lot size provisions.....	20
3.5	Land budget .....	21
3.6	Population projections .....	25
3.7	Structure plan.....	25
<b>4.0</b>	<b>SUBDIVISIONAL REQUIREMENTS .....</b>	<b>26</b>
4.1	Infrastructure provision.....	26
4.2	Land use designations .....	27
4.3	Preferred locations for medium density and duplex development .....	28
4.4	Lot design.....	29
4.5	Geotechnical requirements.....	29
4.6	Buffer provisions .....	29
4.7	Pedestrian/bicycle networks .....	31

4.8	Stormwater management .....	32
4.9	Landscaping.....	34
4.11	Environmental protection zones.....	39
4.12	Retention of native vegetation .....	40
4.13	Internal road design.....	41
4.14	External road works.....	42
4.15	Open space requirements .....	43
4.16	Sewerage .....	43
4.17	Water supply .....	44
4.18	Electricity.....	44
4.19	Telephone.....	45
4.20	Residential development controls and built form .....	45
4.21	Restrictive covenants.....	45
4.22	Bushfire prone land .....	46
5.0	RESIDENTIAL DEVELOPMENT CONTROLS .....	47
5.1	Light-weight construction .....	47
5.2	High likelihood of slip.....	47
5.3	Cut and fill .....	47
5.4	BASIX.....	48
6.0	APPENDIX 1 - SOLAR ACCESS GUIDELINES.....	53
7.0	APPENDIX 2 - BUILT FORM DESIGN REQUIREMENTS (SEE ATTACHMENTS).....	54

## List of Figures

Figure 1	Land to which the Plan applies
Figure 2	Aerial photograph of Wollongbar and WUEA
Figure 3	Zoning (Extract: Amendment No. 38)
Figure 4	Deleted
Figure 5	Vegetation communities
Figure 6	Structure plan
Figure 7	Typical streetscape treatment plan
Figure 8	Typical road cross-sections
Figure 9	Preferred species list
Figure 10	Mixed use site (including district park)
Figure 11	Typical treatment of gullies and watercourses
Figure 12	Deleted
Figure 13	Deleted
Figure 14	Deleted
Figure 15	Indicative locations of stormwater detention basins
Figure 16	LATMs and Link Road intersections
Figure 17	Cycleway route/link

## 1.0 INTRODUCTION

### 1.1 What is the Plan called?

This Plan is referred to as Ballina Shire Development Control Plan No. 15 – Wollongbar Urban Expansion Area.

### 1.2 Where does the Plan apply?

This Plan applies to that land identified by the Ballina Local Environmental Plan 1987 (Amendment No. 38). This area, commonly known as the Wollongbar Urban Expansion Area (WUEA), will comprise part of the Village of Wollongbar and is situated immediately to the north of Wollongbar.

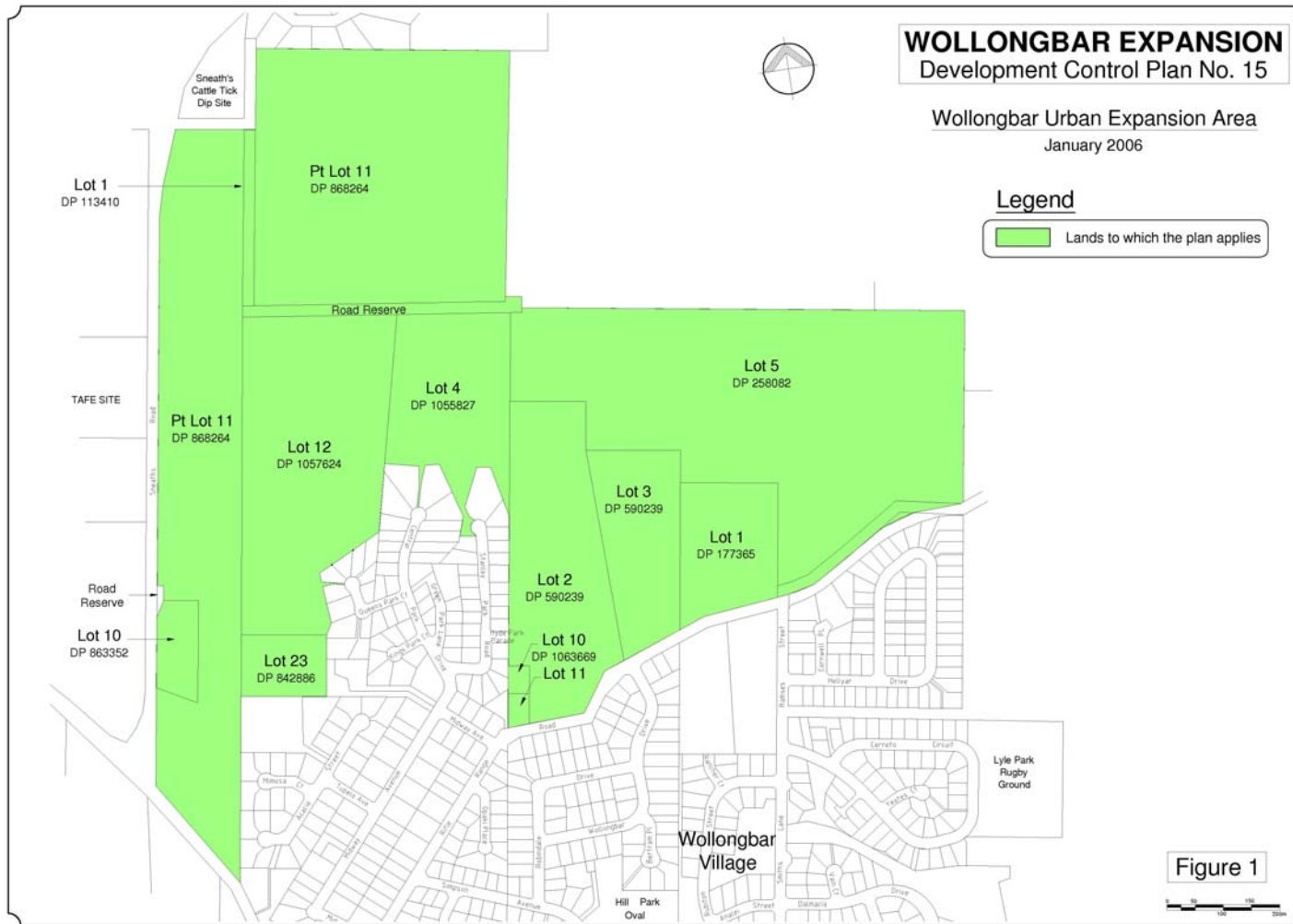
**Figure 1** depicts the land to which this Plan applies. The property details of each lot are provided in **Table 1** of **Section 2.2**.

### 1.3 What is the purpose of the Plan?

The purpose of this Plan is to provide controls and to establish guidelines for the future development of the WUEA (including subdivision and built form).

### 1.4 What are the objectives of the Plan?

1. To provide a “user friendly” document for individuals and organisations involved in the planning, development and management of land within the WUEA.
2. To provide more detailed and locality specific development controls than those contained in the Ballina Local Environmental Plan (BLEP).
3. To provide flexibility in the development of the WUEA and to facilitate integrated outcomes in relation to subdivision and building form.
4. To identify broad density and land use controls for the WUEA.
5. To identify broad engineering requirements (such as stormwater treatment, external roadworks, internal roads, dedication and embellishment of open space etc).
6. To ensure that the natural features, attributes and environmentally sensitive areas of the site and locality are not adversely affected by future development.
7. To identify objectives for the management and treatment of stormwater so to minimise soil erosion and sedimentation of downstream receiving environments.
8. To minimise visual and environmental impacts of cut and fill and avoid potential stability and drainage implications associated with excessive excavation and/or filling and vegetation removal.



9. To promote sensitive use of water by minimising wastage and harvesting stormwater where appropriate.
10. To provide a mix of low to medium density housing that will not detract from the amenity of the urban environment or from the scenic quality of the locality, while promoting an efficient use of the land.
11. To provide for a range of residential lot sizes (inclusive of smaller lots that will achieve affordable housing principles by reducing the land area cost component).
12. To require energy efficient subdivision layout and dwelling design that responds to the site constraints, solar access, climate, prevailing winds, topography etc.
13. To provide useable and well landscaped public and private open spaces to enhance the aesthetics and improve the residential amenity of the locality.
14. To provide suitable buffers between dwellings and adjoining agricultural land, major roads and active open space facilities.
15. To provide transport corridors (roads, pathways, cycleways) that are efficient, safe and convenient for all users (including public transport providers).
16. To protect and embellish existing significant areas of vegetation and improve the habitat value of such vegetation.
17. To ensure that the proposed development is consistent and compatible with the existing character of Wollongbar.
18. To ensure all property frontages facing the street will contribute positively to streetscape.

### **1.5 How does the Plan relate to other DCPs and Environmental Planning Instruments?**

This Plan is to be read in conjunction with and makes reference to a number of other plans and instruments that may be relevant to development of land within the WUEA. These include:

1. Ballina Local Environmental Plan 1987
2. North Coast Regional Environmental Plan 1988
3. The following Chapters of the Ballina Shire Combined Development Control Plan:
  - Chapter 1 – Urban Land
  - Chapter 5 – Bed & Breakfast Establishments
  - Chapter 9 – BASIX - Energy and Water Smart Homes
  - Chapter 11 – Mosquito Management
  - Chapter 13 – Stormwater Management
4. Ballina Shire Development Control Plan - Exempt & Complying Development
5. Ballina Shire Contributions Plans (Section 64 and 94)

A range of Contributions Plans and/or Developer Agreements specific to the WUEA will be adopted/endorsed by Council. Such Plans/Agreements will relate to the provision of public infrastructure and amenities, much of which will be shared across a range of properties and property owners. These Plans/Agreements will cross-reference some of the matters dealt with in this Plan in respect of design standards, staging, maintenance agreements and funding of shared public infrastructure.

When preparing any development application for subdivision, reference shall be made to these Plans/Agreements in respect to the provision of public infrastructure and facilities.

Where an inconsistency arises between this Plan and any environmental planning instrument applying to the same land, the provisions of the environmental planning instrument prevail to the extent of the inconsistency. An environmental planning instrument means a local environmental plan, a State environmental plan or a regional environmental plan.

Where an inconsistency arises between this Plan and any other development control plan applying to the same land, the provisions of this Plan apply to the extent of the inconsistency.

## **1.6 When does the Plan come into force?**

This Plan came into force on the date shown in the header to this page.

This Plan is a formal development control plan prepared and adopted pursuant to Section 72 of the Environmental Planning and Assessment Act 1979. It is a policy document for the guidance of Council in the exercise of its duties and functions under the Act.

The Plan will also be utilised by developers, private certifiers, prospective purchasers and future landowners within the WUEA.

This Plan is to be considered in the context of the Ballina Local Environmental Plan 1987, particularly as amended by Amendment No. 38.

## **1.7 Definitions**

In this Plan:

- “BASIX” means the Building Sustainability Index that is a web-based planning tool designed by the State Government to assess the potential performance of new homes against a range of sustainability indices: landscape, stormwater, water, thermal comfort and energy. BASIX aims to reduce the environmental impacts of these features of new development and to produce homes that are more comfortable to live in and cheaper to run than most existing homes
- “BLEP” means the Ballina Local Environmental Plan 1987 (as amended)
- “DCP” means a Ballina Shire Development Control Plan that is named to give it a unique identifier (refer to **Section 1.5**)



- “DoP” means the Department of Planning
- “dual occupancy” means 2 attached dwelling on a single lot that are to remain unsubdivided from each other
- “duplex” means a residential development containing 2 dwellings (whether attached or detached) on a single lot, or which would have that result if it were not for the fact that the lot is to be subdivided as part of that development
- “EP & A Act” means the Environmental Planning and Assessment Act 1979
- “floorspace ratio” means the total floor space of a building expressed as a ratio of the total site area
- “gross floor area” means the sum of the areas of each floor of a building where the area of each floor is taken to be the area within the outer face of the external enclosing walls as measured at a height of 1400mm above each floor level, excluding:
  - (a) columns, fin walls, sun control devices and any elements, projections or works outside the general lines of the outer face of the external wall;
  - (b) lift towers, cooling towers, machinery and plant rooms and ancillary storage space and vertical air-conditioning ducts;
  - (c) car parking needed to meet any requirements of the council and any internal access thereto;
  - (d) space for the loading and unloading of goods
- “light-weight construction” means flexible structured buildings that are pole framed or on stumps that are clad with light-weight cladding. It does not include slab on ground, brick veneer, concrete or masonry walls or the like
- “SEDA” means the Sustainable Energy Development Authority that was created by the NSW Government to reduce the level of greenhouse gas emissions in NSW

The definitions of some of the other land use terms and descriptions used in this Plan may be found in:

- Clause 5 of the BLEP
- EP & A Act 1979
- EP & A Model Provisions 1980 (as adopted by Clause 6 of the BLEP)

## 1.8 How is the Plan used?

This Plan needs to be read in conjunction with those plans and environmental planning instruments detailed in **Section 1.5** that are of relevance to any proposed development within the WUEA.

Before preparing a development application, applicants/proponents should consult with Council’s Regulatory Services Group to ensure that the type of development being proposed is appropriate and consistent with the planning for the land and the provisions of this Plan.

Potential future residents are likely to be principally interested in the required design principles, subdivision requirements and residential development controls.

Proponents and developers are likely to be principally interested in the overall objectives of the Plan, the required design principles, subdivision requirements and the residential development controls.

Council and other statutory and supply authorities will be principally concerned that the proposed development complies with the objectives and standards of the Plan. This will involve an evaluation of the Plan's objectives and development standards in association with other related planning instruments and plans.

### **1.9 How does the Plan relate to the development application process?**

Where development is proposed in respect of land to which this Plan applies, Council shall take the provisions of the Plan into consideration in determining any application for development. Council will consider this Plan in assessing how the development satisfies the objectives of the zone and the BLEP generally.

All development applications for urban subdivision (excluding Strata Title subdivision) are to be accompanied by details of any proposed residential development controls that address the built form, land use designations and any other specific requirements for lots within that subdivision (or individual stages of that subdivision).

Upon approval and adoption of any residential development controls, they will be attached as an addendum to this Plan as advisory notes. These provisions will be underpinned by the requirements of the development consent to subdivide and/or develop the land.

Most development in the WUEA will require development consent. The exception will be development that comprises exempt or complying development for the purposes of Ballina Shire Development Control Plan – Exempt and Complying Development. Complying development includes single storey dwelling houses, detached garages, decks, verandahs and the like subject to such development complying strictly with pre-determined development standards and provisions.

Council may refuse consent to any development that does not comply with this Plan, or may modify the development by way of consent conditions so that it does comply.

Compliance with the provisions of this Plan does not necessarily imply that Council will grant consent to an application. Council must, in relation to development applications, also take into consideration those matters listed in Section 79C of the EP & A Act.

All development applications for urban subdivision within the WUEA (not including Strata Title subdivision and exempt and complying development) will be advertised by Council in accordance with its public exhibition policy in force at the time of advertising.

Development consent for urban subdivision within the WUEA will not be issued by Council until such time as the Contributions Plans and/or Developer Agreements listed in **Section 4.1** of this Plan have been adopted by Council and have come into effect.

Nominated multi-unit sites will need to comply as a minimum to the standards that are required of a single dwelling.

### **1.10 Departures from the requirements of the Plan**

In special circumstances, Council may consent to an application that departs from the provisions of this Plan, where the proponent can provide sound documented reasoning and justification for the proposed departure. In approving any departure, Council must be satisfied that the proposal achieves the objectives of the Plan, is reasonable having regard to the circumstances of the case and is not contrary to the best public interest.

## **2.0 BASE INFORMATION**

### **2.1 Existing character of Wollongbar**

The Village of Wollongbar is situated on an elevated plateau approximately 2km north-west of Alstonville, 17km west of Ballina and 21km east of Lismore. The Village is situated on the northern side of the Bruxner Highway and is surrounded by expansive rural lands with the exception of the TAFE Campus to the west and the Russellton Industrial Estate to the south-east.

Wollongbar is essentially a residential village with a 2001 resident population of 1959 persons housed in 737 dwellings. The Village has an occupancy rate of 2.73 persons per dwelling (ABS Census 2001).

The future population of Wollongbar is set to increase significantly over the next decade, as and when land within the WUEA is subdivided and developed for residential purposes.

Wollongbar is characterised by a predominance of low density residential housing (single dwellings, duplexes, dual occupancies and small residential flat developments) with substantial established domestic landscaping and tree-lined streets. Dwellings are predominantly of brick and tile construction.

The character of the existing adjoining residential development and streetscape is quite consistent in its spread.

The Village has a small community shopping centre that contains 12 tenancies and a hotel. A primary school and sports oval are generally centrally located within the existing Village.

An aerial photograph of Wollongbar and the WUEA is provided as **Figure 2**.

## 2.2 Land holdings

The WUEA contains multiple land parcels with multiple owners. The lots and ownership details are provided in the table following and are identified on **Figure 1**.

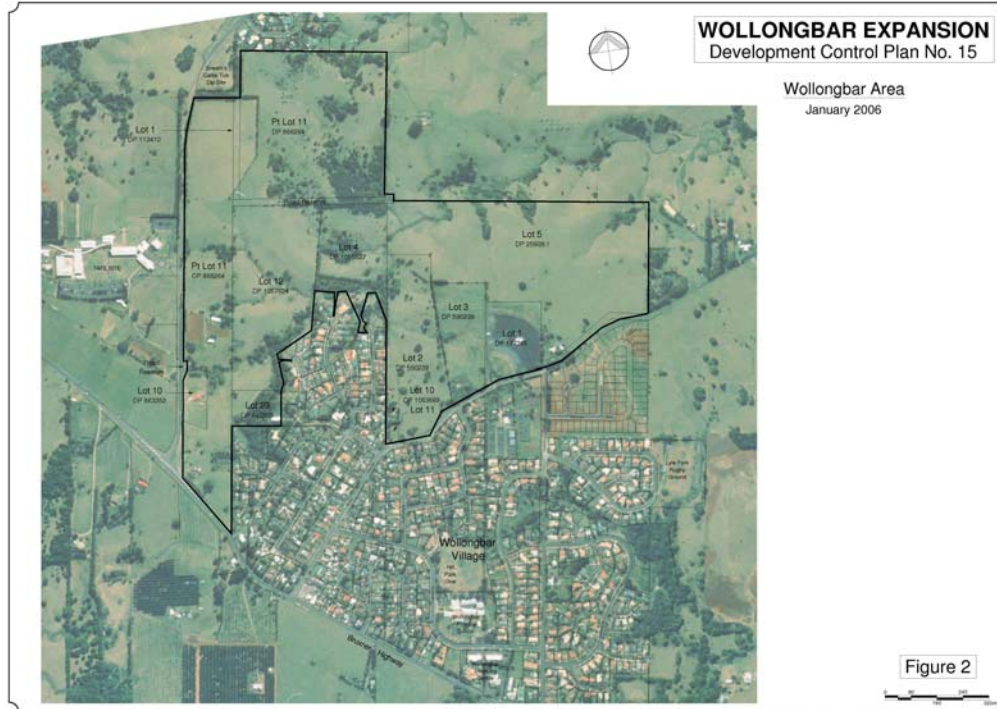


Table 1 – Property details

Property Description	Area
Lot 11 DP 868264 No. 8 Sneaths Road	37.01ha
Lot 1 DP 113410 Sneaths Road	0.62ha
Lot 10 DP 863352 No. 14 Sneaths Road	1.23ha
Lot 12 DP 1057624 No. 17 Queens Park Court	13.18ha
Lot 23 DP 842886 No. 43 Midway Avenue	2.01ha
Lot 4 DP 1055827 Central Park Drive	6.39ha
Lot 2 DP 590239 Rifle Range Road	8.8ha
Lot 11 DP 1063669 Rifle Range Road	2102m <sup>2</sup>
Lot 10 DP 1063669 Rifle Range Road	1944m <sup>2</sup>
Lot 3 DP 590239 No. 85 Rifle Range Road	4.74ha
Lot 1 DP 177365 No. 93 Rifle Range Road	3.96ha
Lot 5 DP 258082 No. 121 Rifle Range Road	24.86ha
Lot 1 DP 1029668 Rifle Range Road	6087m <sup>2</sup>
Lot 76 1047941 Rifle Range Road	339m <sup>2</sup>
Crown Road Reserve	1.01ha
<b>Total</b>	<b>104.8ha</b>

Source: Ballina Shire Council – July 2004  
(NB: Areas subject to final survey)

An application will be made to the Crown to close and purchase the road reserve prior to, or as part of any residential subdivision application for lands affected by the road reserve.

### 2.3 Land use zones

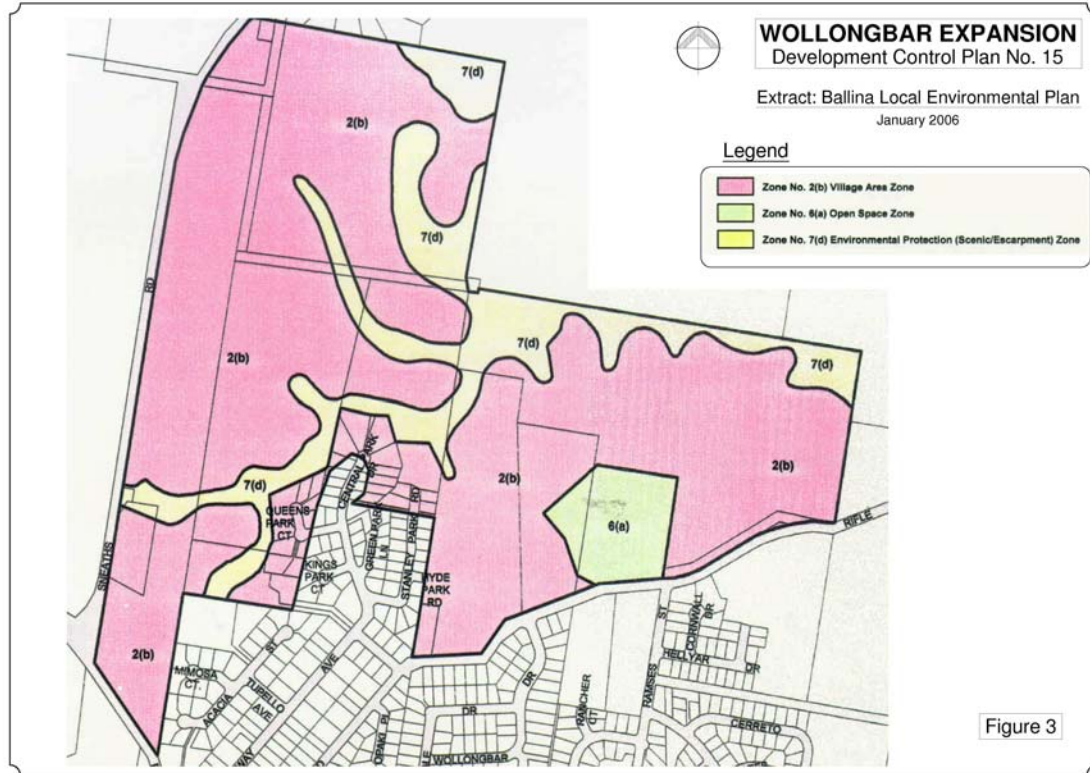
As a consequence of BLEP Amendment No. 38, the WUEA was rezoned to part 2(b) – Village Area Zone, part 7(d) – Environmental Protection (Scenic/Escarpment) Zone and part 6(a) – Open Space Zone in 2002. A copy of Amendment No. 38 that identifies the zoning of the WUEA is provided as **Figure 3**.

Residential development will be situated within the 2(b) zone. Environmentally significant land was identified during the rezoning process and was zoned 7(d). This land generally comprises steeper vegetated gullies (potentially geologically hazardous) and watercourses.

Active and/or passive open space and community facilities will be provided within 6(a) zoned land. Passive open space will also be provided within the 7(d) zone. The objectives of these zones, as identified in the BLEP are as follows.

The objectives of the 2(b) zone are:

- “(a) to regulate the subdivision and use of land to permit a wide range of urban purposes; and*
- (b) to allow detailed provision to be made, by means of a development control plan, to set aside specific areas within the zone for varying housing densities, commercial and special uses and other urban and tourist facility purposes.*



*The secondary objectives are to allow a variety of housing types and designs and to encourage greater visual amenity by requiring site landscaping.”*

The objectives of the 7(d) zone are:

- “(a) to protect and enhance those areas of particular scenic value to the Shire of Ballina; and*
- (b) to minimise soil erosion from escarpment areas and prevent development in geologically hazardous areas.*

*The secondary objective is to enable development as permitted by the primary and secondary objectives for Zone No. 1(b), except for development which could conflict with the primary objectives of this zone.”*

The objectives of the 6(a) zone are:

- “(a) to identify land that is used or capable of being used for active or passive recreation purposes;*
- (b) to encourage the development of open spaces in a manner which maximises the satisfaction of the community’s diverse recreation needs; and*
- (c) to enable development associated with, ancillary to or supportive of recreation use; and*

- (d) *to enable development that assists in meeting the social and cultural needs of the community.”*

There is an exception to each of these zones, which is development of land for public works and services, outside the parameters specified in the primary objectives.

## **2.4 Site constraints**

Parts of the WUEA are constrained by slope. These are generally the same lands that are predominated by significant vegetation, contain watercourses and which have been zoned for environmental protection purposes. The site constraints are detailed in the following **Sections 2.4.1 – 2.4.4**.

### **2.4.1 Slope**

A geotechnical study shall be undertaken to verify the suitability of areas within the WUEA prior to the commencement of any development. Areas identified as medium likelihood of instability will require additional detailed geotechnical investigations having regard to development proposals submitted for development consent. No structures shall be permitted in areas identified as having a high likelihood of slope instability.

### **2.4.2 Vegetation**

The site comprises cleared grazing land and gullies containing watercourses with remnant riparian and rainforest vegetation in various states of condition. Areas adjacent to watercourses are generally steep to undulating. The more heavily vegetated areas of the WUEA are situated within the gullies and have been zoned for environmental protection purposes. The vegetation communities are identified in Figure 6. The vegetation spread over the WUEA is identified in the aerial photograph provided as **Figure 2**.

### **2.4.3 Flooding**

The land is situated on elevated land and is therefore not identified as being subject to flooding by the 1 in 100 year ARI event. However, localised minor flooding may occur within the gullies near the confluence of the streams and gullies that dissect the land.

There will be no residential development within these areas of the site.

### **2.4.4 Environmental protection areas**

The most environmentally constrained land within the WUEA was identified and consequentially placed in an environmental protection zone as part of Amendment No. 38. As has been identified in **Section 2.3** of this Plan, the objectives of this zone are to protect and enhance those areas of significant scenic value, prevent development in geologically hazardous areas and minimise soil erosion.

The environmentally significant areas and 7(d) zone boundary is identified on **Figure 5**. There will be no residential development within the 7(d) zone. Passive open space and stormwater facilities will be accommodated within these areas. All of the 7(d) zoned land will be dedicated to Council as open space. Upon dedication, it will be public land that is under the care, control and management of Council.

### **3.0 DESIGN PRINCIPLES**

#### **3.1 Character statement**

The future character of the WUEA as proposed by this Plan, will be strongly influenced by its rural setting, undulating to hilly topography, riparian vegetation and relationship with the existing Village of Wollongbar.

The built environment is to be characterised by residential development that is designed and constructed in a manner that will enable ready identification of individual tenancies. Residential tenancies are to comprise discreet, low impact and non-bulky structures.

The WUEA adjoins residential development to the south (with a spur of residential land projecting into the south-western sector). The Wollongbar TAFE Campus is located across Sneaths Road to the west. A rural residential estate and a cattle tick dip site adjoin to the north-west. Rural/agricultural land adjoins all other boundaries.

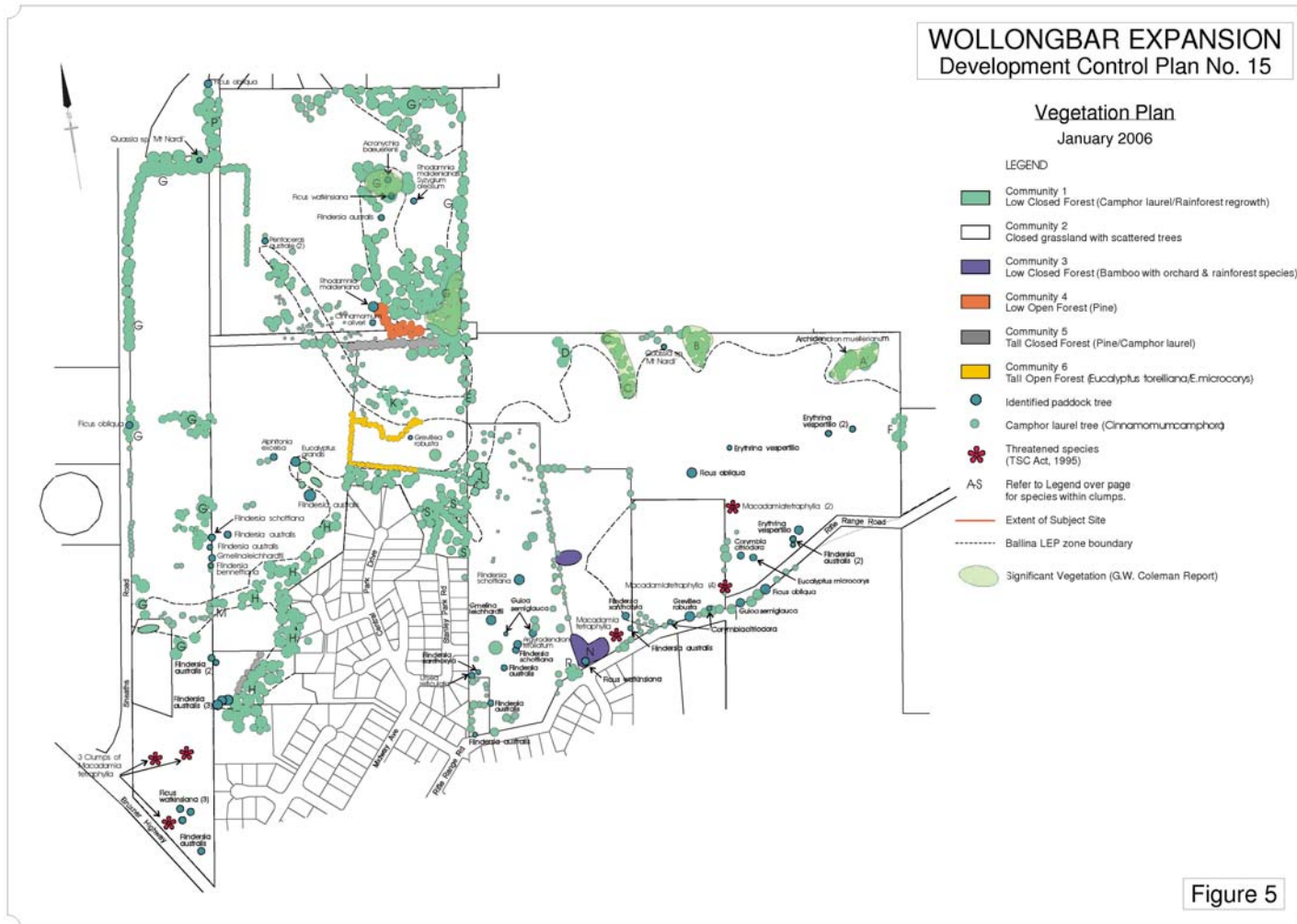
The WUEA is to be characterised by a range of lot sizes that will be developed for a mix of residential dwelling types and densities. Housing choice will comprise single dwellings, dual occupancies, duplexes and small scale residential flat developments. A range of lot sizes will be provided that will be responsive to topographic constraints and to affordable housing principles.

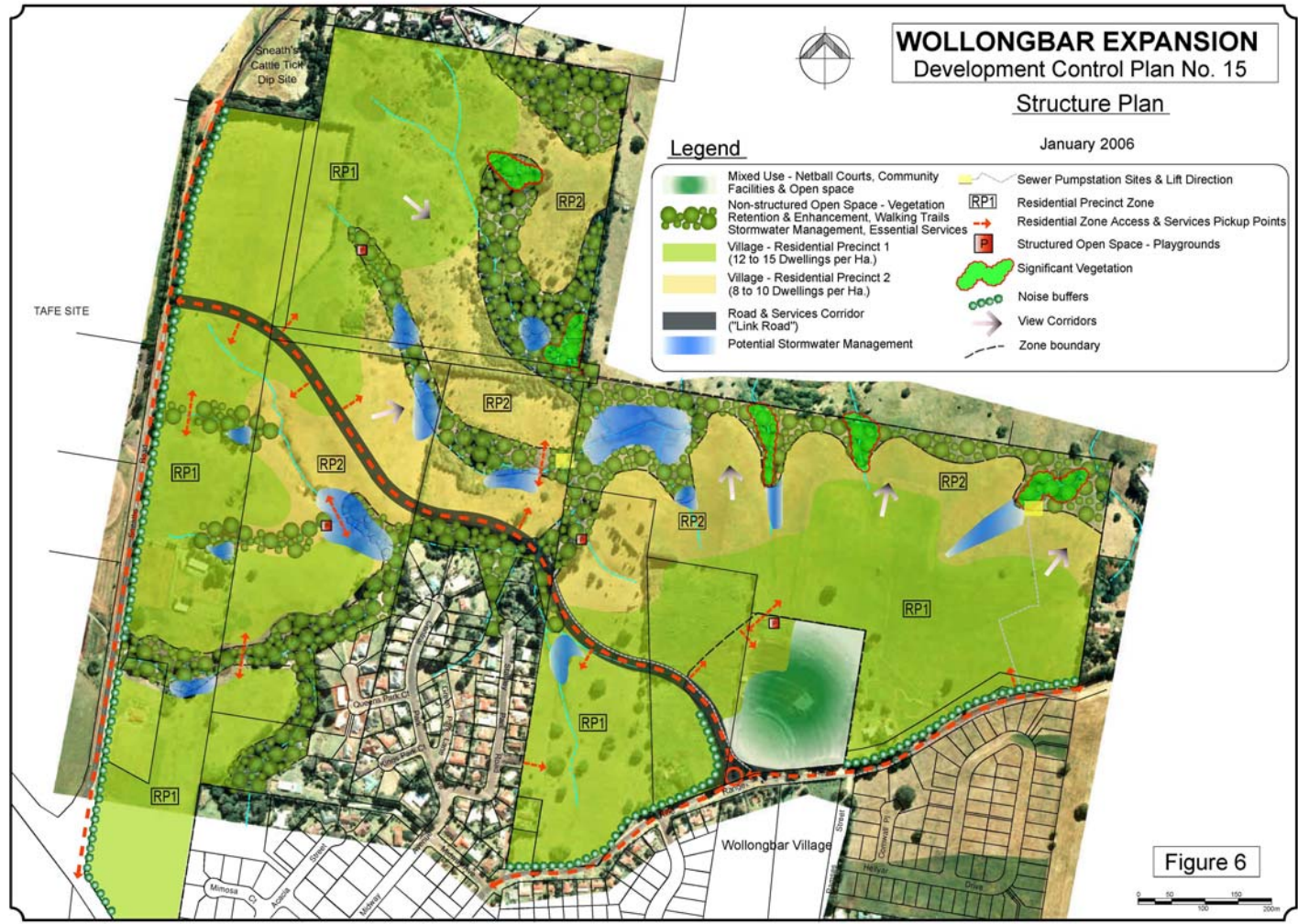
In response to topographic constraints, the WUEA has been divided into 2 distinct residential precincts. Precinct 1 contains land that is characterised by slopes less than 12°. Precinct 2 contains land that is characterised by slopes in excess of 12°. These precincts are identified on **Figure 6**.

Dwelling design and construction materials will vary between the 2 precincts. The design and construction materials are to be responsive to the local topography and climate and will attain energy efficiency and sustainability principles.

Development shall maximise the connections/pathway between the WUEA and the existing village, school, shops and TAFE.







Streets and lots are to be designed and oriented to maximise solar access and efficiency, views, pedestrian/cyclist connectivity and residential amenity.

A network of formal and informal pathways that will provide both transport corridors and recreation facilities will traverse the WUEA.

The formal pathways will be constructed with all-weather surfaces. They will generally be contiguous with roadways and will function as pedestrian and cycle access corridors.

The informal pathways will be constructed of pervious surfaces (eg selected road base or like material). They will be situated within passive open space areas (predominantly gullies and riparian areas) and will function as pedestrian access corridors and recreation facilities. Walking and nature appreciation will be encouraged within the environmentally significant areas of the WUEA.

Environmental protection and embellishment works will be undertaken within gullies and riparian areas. This will involve retention, protection and supplementary planting of endemic native flora, weed control and stabilisation works.

The integrated open space network will complement the rural and natural characteristics of the WUEA and will provide improved flora and fauna habitat corridors.

In summation, the character statement for the WUEA is *“..to provide a diversity of dwelling types with innovative and energy efficient designs in streetscapes that are complementary with the rural character of the locality and that will provide a high level of residential amenity and liveability..”*

### **3.2 Aims and objectives of the Plan**

The broad aims and objectives of this Plan are detailed in **Section 1.4**. The components of the Character Statement stipulated in **Section 3.1** are for all intents and purposes, tantamount to objectives. In summary, the primary objective of the Plan and thus the WUEA is the same as the Character Statement in **Section 3.1**.

### **3.3 Design principles for the WUEA**

This section of the Plan identifies the range of design principles that form the basis of the Plan. The design principles for subdivision and dwelling construction have been specifically chosen to ensure that the development of the WUEA attains energy efficiency and sustainability principles and facilitates an amenable residential environment.

The subdivisional design principles that are prescribed by the Plan include, but are not limited to:

- Where desirable, possible and practicable, attaining DOP's preferred density requirement of 15 dwellings per hectare
- SEDA principles

- Preferred locations for medium density development
- Geotechnical constraints
- Buffers
- Preferred locations for local parks
- Pedestrian and cycle path connectivity and accessibility
- Landscaping (ie public places including road network)
- Environmental remediation/enhancement
- Preferred locations of community facilities
- Protection (where possible and practicable) of significant native vegetation within 2(b) zoned land

These subdivisional design principles are detailed in **Section 4.0** of this Plan. These principles are to be addressed in the preparation of a development application for subdivision within the WUEA. Council will assess any development application for subdivision against these principles.

Detailed built form controls (ie building design and construction materials for dwellings) are to be provided to Council at the development application stage for any subdivision within the WUEA. These controls are to be consistent with those requirements detailed in **Section 5.0** of this Plan.

### **3.4 Density and lot size provisions**

Neighbourhood dwelling density is defined as “... *the number of dwelling units per hectare, including residential lots, local open space, local roads, neighbourhood shopping centres and primary schools, but excluding regional facilities.*” (North Coast Urban Planning Strategy - NCUPS).

For the purposes of this Plan, the en globo area of land used to determine density relates only to the 2(b) zoned land. The density calculations do not relate to the 7(d) zoned land, as this comprises environmentally significant land that is constrained, protected and not available for residential development.

The density calculations will however relate to approximately 1.1ha of the 6(a) zoned land, as Council has reserved this area for investigation for future potential residential development.

Further, the density calculations do not relate to the area of land that is the Link Road corridor, as when constructed, this road will function as a collector road that is integral to the future Ballina road hierarchy (particularly with respect to Wollongbar).

The spatial arrangement of the range of lot sizes and resultant potential residential land uses in the WUEA is largely dependent upon topographical constraints. As a consequence, the WUEA has been divided into 2 precincts, the demarcation of which has been determined primarily by slope (refer **Figures 4 and 6**).

In recognition of the constraints that slope can impose on residential development, there is a different density target within each precinct. An average residential density of 15 dwellings per hectare is recommended over the whole of new release areas by DOP in the NCUPS.

Having regard to DOP's preferred density requirements, the density target for each precinct is:

- Precinct 1 – between 12-15 dwellings/ha
- Precinct 2 – between 8-10 dwellings/ha

Each development application for subdivision is required to individually demonstrate compliance with these density targets for each precinct. Departure from the target density(s) may be considered by Council where sound justification is provided as to why the target cannot be achieved.

It should be noted that this Plan does not prohibit nor preclude the development of other less traditional forms of housing development (eg Community Title developments) on any land within the WUEA. In proposing alternative forms and types of development, the density provisions contained in this Plan should be achieved where possible.

Land identified as being of low to medium likelihood of slope instability (Precinct 1) is to be characterised by smaller residential lots. This is in recognition of the fact that the land is not constrained by slope and has a potentially higher development and density yield.

Land identified as being of medium to high likelihood of slope instability (Precinct 2) is to be characterised by larger lots. This is in recognition of the fact that significant areas of such land may be constrained by slope and not be suitable for the erection of buildings.

Where lots are significantly constrained, the development application for subdivision should propose building restrictions such as nominating building envelopes, site coverage maximums, floor space ratios and the like. The proposed appropriate restrictions will have to be considered in conjunction with stormwater management (ie absorption areas) and other general design issues.

The maximum achievable density of any lot will be dependent upon its site area.

Where a lot is dissected by the boundary line between Precinct 1 and 2, at least 75% or more of the lot is to be contained within Precinct 1 for it to be developed at the density provisions for Precinct 1.

This Plan does not prescribe preferred minimum lot sizes, average lot sizes or density provisions for medium density sites. These controls and the rationale therefore are to be provided with the development application for subdivision. Notwithstanding that Chapter 1 is relevant to the development of land within the WUEA, the minimum lot size standards contained in Policy Statement No. 4 – Urban Subdivision do not apply to land within the WUEA.

### **3.5 Land budget**

The following table comprises the land budget that identifies the major components (and their approximate areas) of the WUEA:

### Areas identified on Structure Plan.

Land use Group	Specific uses	specific uses area (ha)	Landuse Group area (ha)	Lot Areas (ha)	Dwell's. per ha	dwell's	Pop Project - 2.7 pers / dwell
<b>Lot 11 DP 868264, No 8 Sneaths Rd</b>							
				<b>37.01</b>			
Arterial Road			<b>0.82</b>				
	<i>Link Road</i>	0.31					
	<i>Noise Buffers (Bruxner Hwy)</i>	0.2					
	<i>Noise Buffers (Sneaths Rd)</i>	0.31					
Open Space			<b>6.05</b>				
	<i>7(d) zone/environment restoration (includes buffers to vegetation and environmentally sensitive land)</i>	6.05					
Precinct 1 (developable)			<b>25.28</b>		<b>15</b>	<b>379.2</b>	<b>1023.8</b>
Precinct 2 (developable)			<b>4.86</b>		<b>10</b>	<b>48.6</b>	<b>131.2</b>
<b>Lot 1 DP 113410, Sneaths Rd</b>							
				<b>0.62</b>			
Precinct 1 (developable)			<b>0.62</b>		<b>15</b>	<b>9.3</b>	<b>25.1</b>
<b>Lot 10 DP 863352, No 14 Sneaths Rd</b>							
				<b>1.23</b>			
Arterial Road			<b>0.065</b>				
	<i>Noise Buffers (Sneaths Rd)</i>	0.065					
Open Space			<b>0.26</b>				
	<i>7(d) zone/environment restoration (includes buffers to vegetation and environmentally sensitive land)</i>	0.26					
Precinct 1 (developable)			<b>0.905</b>		<b>15</b>	<b>13.6</b>	<b>36.7</b>
<b>Lot 12 DP 1057624, No 17 Queens Pk Ct</b>							
				<b>13.18</b>			
Arterial Road			<b>0.65</b>				
	<i>Link Road</i>	0.65					
Open Space			<b>2.84</b>				
	<i>7(d) zone/environment restoration (includes buffers to vegetation and environmentally sensitive land)</i>	2.84					
Precinct 1 (developable)			<b>4.68</b>		<b>15</b>	<b>70.2</b>	<b>189.5</b>
Precinct 2 (developable)			<b>5.01</b>		<b>10</b>	<b>50.1</b>	<b>135.3</b>
<b>Lot 23 DP 842886, No. 43 Midway Ave</b>							
				<b>2.01</b>			
Open Space			<b>0.68</b>				
	<i>7(d) zone/environment restoration (includes buffers to vegetation and environmentally sensitive land)</i>	0.68					
Precinct 1 (developable)			<b>1.07</b>		<b>15</b>	<b>16.1</b>	<b>43.3</b>
Residue			<b>0.26</b>				
<b>Lot 4 DP 1055827, Central Park Dr</b>							
				<b>6.39</b>			
Arterial Road			<b>0.5</b>				
	<i>Link Road</i>	0.5					
Open Space			<b>2.25</b>				
	<i>7(d) zone/environment restoration (includes buffers to vegetation and environmentally sensitive land)</i>	2.25					
Precinct 2 (developable)			<b>3.64</b>		<b>10</b>	<b>36.4</b>	<b>98.3</b>

Land use Group	Specific uses	specific uses area (ha)	Landuse Group area (ha)	Lot Areas (ha)	Dwell's. per ha	dwell's	Pop Project - 2.7 pers / dwell
<b>Lot 2 DP 590239, Rifle Range Rd</b>							
				<b>8.8</b>			
Arterial Road			<b>0.62</b>				
	<i>Link Road</i>	0.29					
	<i>Noise Buffers (Rifle Range Rd)</i>	0.21					
	<i>Rifle Range Road Realignment</i>	0.12					
Open Space			<b>0.46</b>				
	<i>7(d) zone/environment restoration (includes buffers to vegetation and environmentally sensitive land)</i>	0.46					
Precinct 1 (developable)			<b>5.81</b>		<b>15</b>	<b>87.2</b>	<b>235.3</b>
Precinct 2 (developable)			<b>1.91</b>		<b>10</b>	<b>19.1</b>	<b>51.6</b>
<b>Lot 11 DP 1063669, Rifle Range Rd</b>							
				<b>0.210</b>			
Arterial Road			<b>0.03</b>				
	<i>Rifle Range Road Realignment</i>	0.01					
	<i>Noise Buffers (Rifle Range Rd)</i>	0.02					
Precinct 1 (developable)			<b>0.18</b>		<b>15</b>	<b>2.7</b>	<b>7.3</b>
<b>Lot 10 DP 1063669, Rifle Range Rd</b>							
				<b>0.194</b>			
Precinct 1 (developable)			<b>0.194</b>		<b>15</b>	<b>2.9</b>	<b>7.9</b>
<b>Lot 3 DP 590239, No. 85 Rifle Range Rd</b>							
				<b>4.74</b>			
Arterial Road			<b>0.53</b>				
	<i>Link Road</i>	0.425					
	<i>Noise Buffers (Rifle Range Rd)</i>	0.065					
	<i>Rifle Range Road Intersection</i>	0.02					
	<i>Rifle Range Road Realignment</i>	0.02					
Structured Open Space (based on GeoLink Plan dated 8/2004 Option 3)			<b>0.12</b>				
	<i>Community Facilities</i>	0.04					
	<i>Open Space (may include any of the following: multi-use courts, skate park, car parking, play equipment and the like)</i>	0.08					
Medium density (Precinct 1 developable)			<b>0.55</b>		<b>33</b>	<b>18.2</b>	<b>49.0</b>
Precinct 1 (developable)			<b>3.38</b>		<b>15</b>	<b>50.7</b>	<b>136.9</b>
Precinct 2 (developable)			<b>0.16</b>		<b>10</b>	<b>1.6</b>	<b>4.3</b>
<b>Lot 1 DP 177365, No. 93 Rifle Range Rd</b>							
				<b>3.96</b>			
Arterial Road			<b>0.18</b>				
	<i>Link Road</i>	0.06					
	<i>Rifle Range Road Intersection</i>	0.12					
Structured Open Space (based on GeoLink Plan dated 8/2004 Option 3)			<b>3.46</b>				
	<i>Community Facilities</i>	0.09					
	<i>Open Space (may include any of the following: multi-use courts, skate park, car parking, play equipment and the like)</i>	3.37					
Medium density (Precinct 1 developable)			<b>0.32</b>		<b>33</b>	<b>10.6</b>	<b>28.5</b>

Land use Group	Specific uses	specific uses area (ha)	Landuse Group area (ha)	Lot Areas (ha)	Dwell's. per ha	dwell's	Pop Project - 2.7 pers / dwell
<b>Lot 5 DP 258082, No. 121 Rifle Range Rd</b>							
				<b>24.86</b>			
Arterial Road			<b>0.035</b>				
	<i>Rifle Range Road Realignment</i>	0.0135					
	<i>Noise Buffers (Rifle Range Rd)</i>	0.0215					
Open Space			<b>6.605</b>				
	<i>7(d) zone/environment restoration (includes buffers to vegetation and environmentally sensitive land)</i>	5.82					
	<i>Buffer to Rural land</i>	0.135					
	<i>Buffer to 6(d) zone land</i>	0.65					
Precinct 1 (developable)			<b>10.55</b>		<b>15</b>	<b>158.3</b>	<b>427.3</b>
Precinct 2 (developable)			<b>7.67</b>		<b>10</b>	<b>76.7</b>	<b>207.1</b>
<b>Lot 1 DP 1029668, Rifle Range Rd</b>							
				<b>0.609</b>			
Arterial Road			<b>0.14</b>				
	<i>Rifle Range Road Realignment</i>	0.0225					
	<i>Noise Buffers (Rifle Range Rd)</i>	0.1175					
Precinct 1 (developable)			<b>0.469</b>		<b>15</b>	<b>7.0</b>	<b>19.0</b>
<b>Lot 76 DP 1047941, Rifle Range Rd</b>							
				<b>0.034</b>			
Arterial Road			<b>0.022</b>				
	<i>Rifle Range Road Realignment</i>	0.01					
	<i>Noise Buffers (Rifle Range Rd)</i>	0.012					
Precinct 1 (developable)			<b>0.012</b>		<b>15</b>	<b>0.2</b>	<b>0.5</b>
<b>Crown Road Reserve</b>							
				<b>1.01</b>			
Open Space			<b>0.32</b>				
	<i>7(d) zone/environment restoration (includes buffers to vegetation and environmentally sensitive land)</i>	0.32					
Precinct 1 (developable)			<b>0.27</b>		<b>15</b>	<b>4.1</b>	<b>10.9</b>
Precinct 2 (developable)			<b>0.42</b>		<b>10</b>	<b>4.2</b>	<b>11.3</b>
<b>Total</b>			<b>104.857</b>	<b>104.857</b>		<b>1067</b>	<b>2880</b>



### 3.6 Population projections

The 2001 ABS Census revealed that Wollongbar had an occupancy rate of 2.7 persons per dwelling. It is likely that this rate will be sustained. This assumption is based on an expected predominance of younger families within the WUEA.

It is estimated that the WUEA will achieve a final resident population in the order of 2337-2918 persons (average 2628 persons). This estimate is based on the land budget (**Section 3.5**) and a number of assumptions with respect to a range of variables, being:

- 79ha of en globo land being available for residential development
- A density of between 12-15 dwellings/ha for Precinct 1 and 8-10 dwellings/ha for Precinct 2
- An occupancy rate of 2.7 persons/dwg

### 3.7 Structure plan

The Structure Plan provided as **Figure 6** identifies the proposed key components of the WUEA and was formulated having regard to the constraints and opportunities of the site. The key components comprise:

- Residential precinct boundaries
- Bulk stormwater treatment facilities
- Community support infrastructure
- Pedestrian and cycle path linkages
- Main roads (existing and proposed)
- Conservation and rehabilitation areas
- Active and passive open space
- Views

The Structure Plan sets the broad framework or “blueprint” for the future development (including subdivision) of the WUEA. All development applications must demonstrate compliance with the framework established by the Structure Plan.

## 4.0 SUBDIVISIONAL REQUIREMENTS

The WUEA will be a fully serviced urban area. It is the planned northern expansion of the Village of Wollongbar, and will contain the following:

- Reticulated water, sewerage, electricity and telephone services provided to each lot
- Sealed roads with kerb and gutter
- A formal and informal network of pedestrian and cycleway paths
- Stormwater management
- Landscaped open space (passive and active)
- Broadband access

The matters detailed in **Sections 4.2 – 4.22** are to be addressed and complied with (unless specific exemption is granted by Council in accordance with **Section 1.10**) in the preparation of any development application for subdivision of any of the residential precincts.

Infrastructure required for future development shall generally comply with the requirements of the Northern Rivers Local Government Development and Design Manual.

### 4.1 Infrastructure provision

As a consequence of multiple landowners and a need for 'shared and integrated infrastructure' that traverses individual property boundaries within the WUEA, it has been determined that certain services will be provided in accordance with Contributions Plans and/or Planning Agreements.

This Plan permits where practical and appropriate, the use of Planning Agreements as an alternative to a Contributions Plan, to fund the delivery and provision of public infrastructure to and within the WUEA.

Unless appropriate alternative arrangements are made with Council, Contributions Plans that are specific to the WUEA will be adopted by Council for the following:

- Stormwater management and disposal
- Local Area Traffic Management works within the existing Wollongbar Village (including external pathways)
- Construction of the Link Road and associated intersections

The following public infrastructure for the WUEA will be addressed through Shirewide Contribution Plan/s.:

- Community Facilities
- Acquisition and embellishment of Open Space (with the exception of land for local parks)
- Shire Roads as per the Ballina Road Contributions Plan

It is anticipated that the existing Section 64 Development Servicing Plans will apply and be modified where required to the following:

- Water supply amplification of storage and mains
- Sewerage headworks

Development consent for subdivision of any part of the WUEA may only be granted by Council where provision and funding of the infrastructure referred to above is satisfactorily addressed by the development application, a contribution plan and/or Planning Agreements.

This Plan does not preclude the staged development of residential areas where it is demonstrated that such staging:

1. is logical, orderly and practical
2. will deliver improved planning outcomes
3. will result in the WUEA being developed in an integrated and co-ordinated manner
4. will ensure that appropriate urban infrastructure and facilities are available to the land in a manner that does not create an unreasonable or economic demand, or both, for the provision or extension of such services

Details of staging (including justification) are to be provided in any development application for subdivision where staging is proposed.

## 4.2 Land use designations

As identified in **Section 3.4**, this Plan has divided the WUEA into 2 precincts (refer **Figure 6**).

Development applications for subdivision are to provide for a mix of residential uses and densities within each precinct. The residential use and density of each lot will have regard to its size, slope, location and any other relevant matter as detailed in this Plan.

The development application is to provide a subdivision plan identifying the size and shape of the proposed lots and road network. Land use designations for all lots are to be identified on the subdivision plan, in accordance with those contained in DCP No. 1, being:

- L2 – Low Density (Single Dwellings & Dual Occupancy)
- L1 – Low Density (Large Lots)
- D – Duplex
- M1 – Medium Density
- O1 – Open Space
- LDC – Long Day Care Centre
- CF – Community Facilities

It may be appropriate and necessary for new land use designations to be formulated for land uses (particularly non-conventional residential uses) that are not accurately described by the existing designations. Any new designations should be clearly articulated in any development application for subdivision within the WUEA.

All residential subdivision plans (excepting Strata Title Subdivision approvals) that are approved by Council are to be appended to this Plan and are to be incorporated into DCP No. 1 – Urban Land.

### **4.3 Preferred locations for medium density and duplex development**

Specific consideration shall be given when designing any urban subdivision within the WUEA to the location of medium density and duplex sites.

Medium density lots are encouraged on land that:

- adjoins open space
- has convenient access to services and amenities
- is not heavily constrained by slope
- is not of a battle-axe configuration

Duplex lots are encouraged on land that:

- adjoins open space
- has convenient access to services and amenities
- is not heavily constrained by slope
- is a corner lot

The concentration of medium density and duplex lots is not encouraged in cul-de-sacs unless it can be demonstrated that the residential amenity of the cul-de-sac will not be detrimentally impacted upon by traffic generation and on-street car parking.

#### **4.4 Lot design**

The design and orientation of all residential lots within the WUEA is to be undertaken in accordance with SEDA's "Solar Access for Lots – Guidelines for Residential Subdivision in NSW". A copy of this guideline is provided as **Appendix 1** and is available at [www.energysmart.com.au](http://www.energysmart.com.au).

Compliance with these guidelines will ensure that designs maximise solar access into living areas and living spaces of dwellings built on "greenfield" residential subdivisions. This will result in energy efficient housing with significantly increased residential amenity in the WUEA.

Any development application for residential subdivision (not including Strata Title subdivision) within the WUEA is to provide detail of compliance with Steps 1-6 in the SEDA guideline.

#### **4.5 Geotechnical requirements**

A detailed geotechnical report is to be provided with each development application for subdivision (excluding Strata Title subdivision). The report shall cover all of that land that is identified as being of 'medium' likelihood of slope instability that is proposed to be developed with residential structures.

No dwellings are permitted to be constructed on any part of any land that is identified as being 'high' likelihood of slope instability.

A minimum building area of 180m<sup>2</sup> is to be available on each residential allotment (eg a minimum 15m diameter circle behind the building line). The building area is to be situated wholly on land that is identified as being of low or medium risk of slope instability. The building area is to be clearly identified on each lot on the subdivision plan that accompanies the development application for subdivision.

#### **4.6 Buffer provisions**

Appropriate buffers are to be provided between residential lots and adjacent uses that may be a source of conflict with the residential occupation of those lots. Such uses may include major roads, agricultural land uses, active open space facilities and significant native vegetation where appropriate.

Buffers are also required to be provided on land that is identified as being bush fire prone land on the Ballina Bush Fire Prone Land Map as determined by an assessment made in accordance with the requirements of Planning for Bushfire Protection (2001) or any subsequent update.

Where required, buffers are to comprise an appropriate setback distance within which intensive landscaping and/or physical structures (eg earthen mounds, fences, walls etc) can be constructed. The actual setback distance and appropriate structure will be determined pending detailed investigations at the development application stage for subdivision (excluding Strata Title subdivision) of any land within the WUEA.

As a general guide, the following table identifies buffers that will likely be required including indicative buffer widths. These buffers are also identified diagrammatically on the Structure Plan (**Figure 6**).

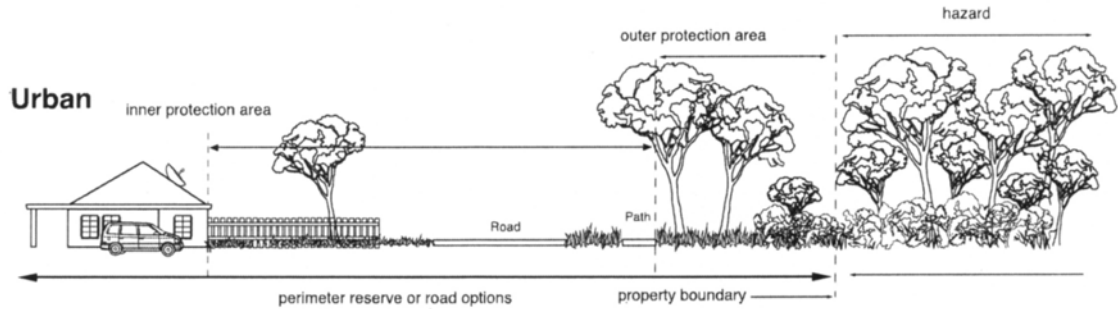
Adjoining land use to be buffered	Indicative buffer width	Acceptable solutions
Rifle Range Road	Minimum 5m from existing road reserve	Widening of road reserve + landscaping/mound/fencing/barrier within the road reserve + rear building setbacks to be included with residential design controls
Bruxner Highway	To be determined having regard to Alstonville By-pass design implications	Noise report to be submitted with development application for subdivision of affected land
Sneaths Road	Minimum 5m from existing road reserve	Widening of road reserve + landscaping/mound/fencing/barrier within the road reserve + rear building setbacks to be included with residential design controls
Major open space facility	Minimum 10m	Construction of road adjacent to open space boundaries or landscaping/mound/fencing/barrier
Agricultural land	Minimum 10m from boundary	Landscaping buffer zone to be dedicated to Council
Significant native vegetation	Minimum 5m from outer edge of canopy (depending upon type and height of vegetation)	Physical separation
Vegetation that is identified as a bushfire hazard (bushfire prone land)	As determined by Section 4.2 of Planning for Bushfire Protection	Asset protection zones, setbacks, building construction standards

The above figures are indicative only. It is appropriate that actual buffer widths and treatments thereof be determined at the development application stage having regard to the subdivision layout, land use designations and adjacent land uses from which buffering is considered necessary.

It is a requirement of this Plan that a buffer (with the preferred form being a constructed road) is required around the full perimeter of any major open space facility.

Residential areas shall be designed where ever possible with perimeter roads to areas identified as being bush fire prone in accordance with the recommended design solution contained in "Planning for Bush Fire Protection" (December 2006). Perimeter roads will:

- act as a fire buffer
- increase the accessibility for fire fighting
- Reduce the area of land that has to be maintained in a cleared/mown state.



Source: Figure 4.3 Planning for Bush Fire Protection - December 2006

#### 4.7 Pedestrian/bicycle networks

An integrated network of pedestrian/cycle paths shall be provided throughout the WUEA such that it provides safe, convenient and direct access to and within the residential areas. The internal pathway network shall be linked to the available external network in Wollongbar. Pathways within road reserves and at the end of cul-de-sacs shall be of concrete construction. Pathways within open space and/or environmental protection areas shall be sealed.

The pathway network shall be designed so that conflict points with vehicles and travel distances are minimised. The pathway system may in some cases, perform a drainage, service and/or access corridor function for public infrastructure supply.

Pathways (combined pedestrian and cycle) shall be constructed within the road reserve of the Link Road and any collector street as detailed in **Sections 4.13** and **4.14**.

Pathway/cycleway linkages are to be provided to existing networks servicing the TAFE Campus, the Wollongbar Shopping Centre, Wollongbar Primary School and Hill Park Oval. The internal pathway network will connect with the external network at the intersections of the Link Road with Sneaths Road and Rifle Range Road.

An indicative route for the cycleway through the existing village of Wollongbar to the school and shopping centre is provided as **Figure 17**.

Pathways are to be constructed in the following locations:

- on both sides of the Link Road
- between cul-de-sacs and open space and/or or any other constructed pathway/cycleway
- between two cul-de-sacs to have direct access from one cul-de-sac to the other without having to travel a longer distance by road
- along the northern side of Rifle Range Road from its intersection with the Link Road to the constructed pedestrian refuge in Rifle Range Road

Pedestrian pathways are also to be provided and integrated throughout the casual open space areas. They shall be designed such that grades permit walking for the majority of the expected population. Pedestrian pathways shall be provided along all environmental protection gullies upstream of the potential stormwater management area in the north west corner of lot 5 DP 258081, as well as along the buffer area located the eastern boundary of this land.

Sealed pathways are to be an integral component of the rehabilitation works within the environmental protection zones.

A concrete pathway/cycleway is to be constructed connecting the WUEA to the Wollongbar shops and school. Options for the route of the cycleway include Wollongbar Drive, Bertram Place, Robindale Drive and Simpson Avenue. The actual route, design and construction standard of this pathway/cycleway will be embodied in a Developer Contributions Plan.

#### **4.8 Stormwater management**

The WUEA is located within a catchment that drains to the north-east towards Maguires Creek. Effective stormwater management is critical to the future development of the WUEA to ensure that the quantity and quality of run-off is such that it will have minimal impact upon the down stream environment.

Chapter 13 – Stormwater Management applies to urban residential subdivisions and other development. A Soil and Water Management Plan (SWMP) and an Erosion and Sediment Control Plan (ESCP) are to accompany each development application for residential subdivision within the WUEA (excluding Strata Title subdivision).

These plans are to define the specific stormwater treatment and management objectives for both the construction and operational phases of the development and are to be generally consistent with the principles and measures contained in this Section.

A Stormwater Management Plan (SWMP) is being prepared for the WUEA. The objective of the Plan is to improve water quality and maintain the existing peak flows from the site.

Stormwater treatment will comprise a treatment train that incorporates current 'best management practices' (BMPs). Treatment will involve end of line, point source and indirect measures to achieve an acceptable level of water quality before discharge.

The treatment train will comprise the construction and use of enviropods and bio-retention swales and well designed landscaped retention basins that will double as attractive open space to control pollutants.

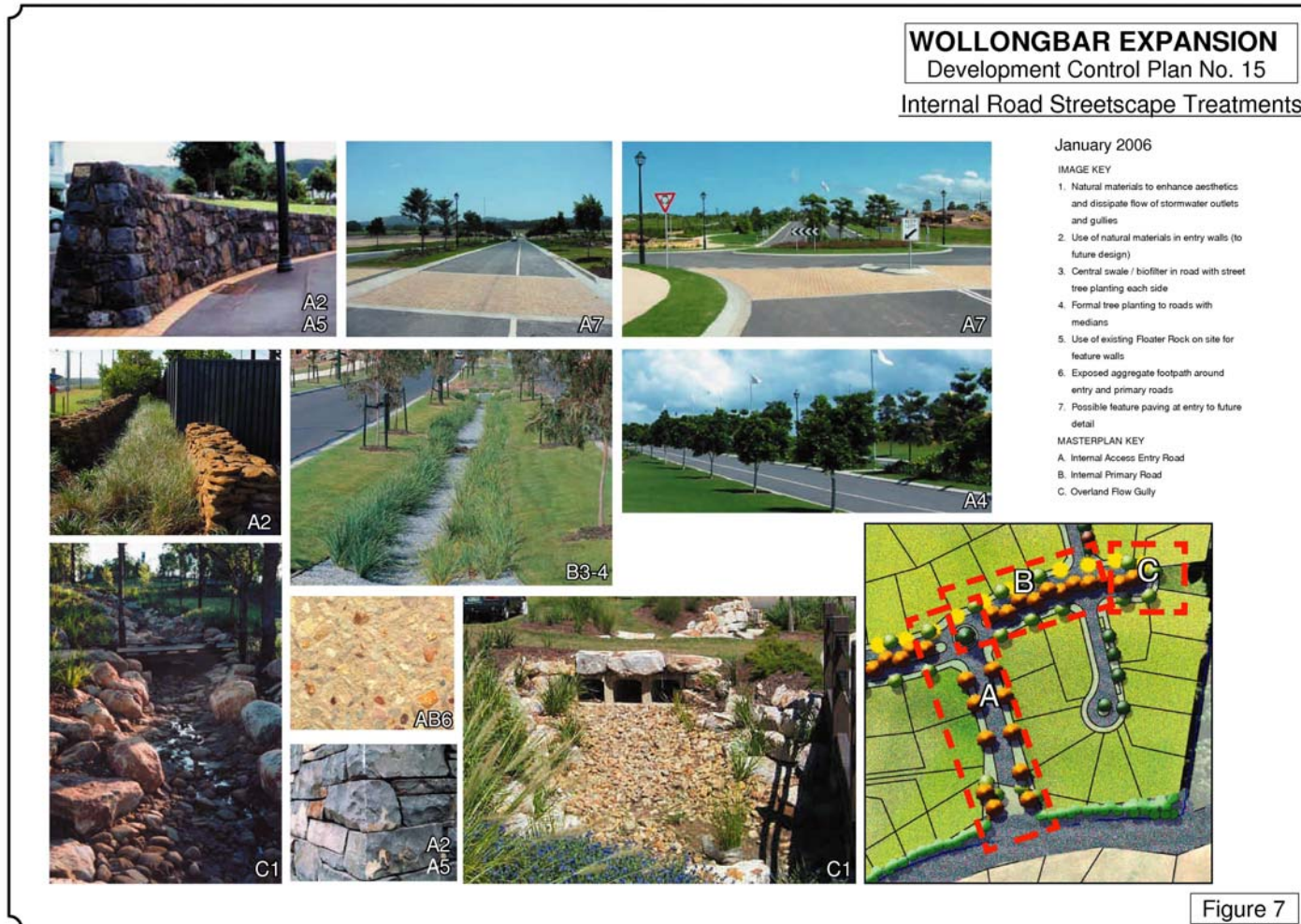
Stormwater treatment and disposal shall not rely solely on any end of line facility. A treatment train must be proposed that incorporates a range of facilities, inclusive of measures, where appropriate, within the road system. Indicative facilities within the road system are provided as C1, A2 and B3-4 on **Figure 7**.

BMPs include dispersion techniques such as dissipaters, litter and debris control traps and associated trunk line drainage structures in controlling sediment and reducing phosphate/nitrate levels.

Where possible and practicable, these structures are to be designed sympathetic to the surrounding environment and constructed of natural materials such as boulders and rock features and landscaped.

**Figure 15** identifies the indicative locations suitable for temporary and/or permanent detention basin systems.





## 4.9 Landscaping

The rural and semi-rural character of the locality is to be carried through into the landscaping theme. The features and design of the landscaping is to comprise the use of natural materials such as timber and locally sourced rock. There is a predominance of “floater” rocks at surface level over the site which are proposed to be re-used if possible for retaining structures/walls.

Native endemic plant species are to be used in the planting schemes that will further enhance the local character and aesthetics of the site and improve habitat value.

The photographs included in **Figure 7** provide conceptual and indicative streetscape treatments that could be developed throughout the WUEA. Typical indicative internal road cross-sections are provided as **Figure 8**. The landscaping of the roads is to be designed to address issues of visual amenity, streetscape harmony, shade, road hierarchy and stormwater management and treatment.

Divided roads will be characterised by more formal streetscape planting regimes with stormwater drainage facilities situated in central medians.

A list of preferred plant species for landscaping within the WUEA is provided as **Figure 9**.

A conceptual land use and landscaping master plan for the 6(a) zoned land is provided as **Figure 10**. Indicative treatments for gullies and watercourses are provided as **Figure 11**.

The uses (and approximate areas therefore) that are being considered on the 6(a) zoned land are as follows:

- Residential – 1.1ha
- Netball courts and parking – 1.0ha
- District park – 2ha
- Community precinct – 0.5ha

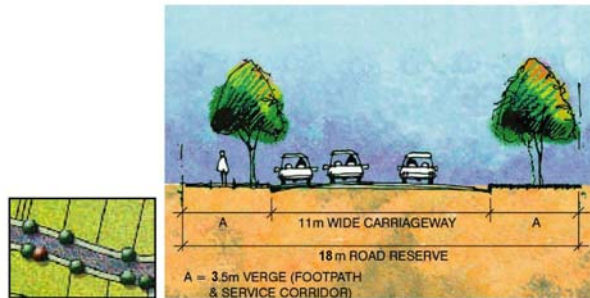
A conceptual landscaping plan is to be prepared and lodged with any development application for subdivision within the WUEA. Such plan is to be prepared in accordance with the landscaping requirements of this Plan.

**WOLLONGBAR EXPANSION**

Development Control Plan No. 15

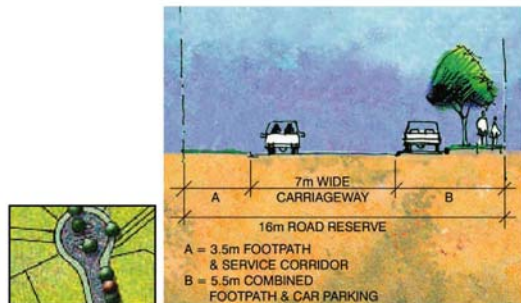
Typical Road Cross Sections

January 2006



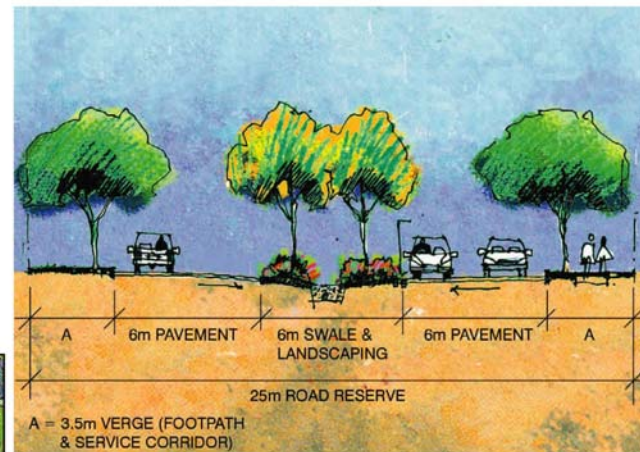
**INTERNAL ACCESS ENTRY ROADS**

- On street parking
- 'Random' tree planting (min. 4m apart)
- Trees planted in small 'groups' rather than even spacing



**ACCESS ROADS / CUL DE SACS**

- Small tree planting to one side
- Permeable paving to on street parking



**INTERNAL PRIMARY ROADS / DIVIDED ROAD WITH STORMWATER TREATMENT ZONE**

- Central swale
- Double tree planting to median
- Single crosstall with flush kerbs in median

Figure 8



**WOLLONGBAR EXPANSION**  
Development Control Plan No. 15

Preferred Plant Species

January 2006

**PROPOSED PLANT SPECIES**

The proposed plant species nominated below are selected for indication only of species to be used and this list is not exhaustive. Proposed plants have been derived from those indicated as existing on site in the James Warren Environmental Management Report.

All plants nominated are subject to availability. Generally plant species will be selected in response to localised site conditions, location and functional requirements. Landscaping at corners and driveways will allow for adequate vision. Generally plants will be grouped in mulched beds where possible.

**INDICATIVE PLANT SPECIES LIST**

- Trees**  
 Alphitonia excelsa  
 Aphanathe philippinensis  
 Araucaria cunninghamii  
 Backhousia citriodora  
 Brachychiton acerifolius  
 Brachychiton discolor  
 Cryptocarya glaucescens  
 Ficus obliqua  
 Flindersia australis  
 Flindersia bennettiana  
 Glochidion ferdinandi  
 Macadamia tetraphylla  
 Mallotus discolor  
 Melicope elleryana  
 Rhodamnia rubescens  
 Synoum glandulosum  
 Syzygium moorei  
 Syzygium leuhmannii  
 Waterhousia floribunda

- red ash  
 native elm  
 hoop pine  
 lemon myrtle  
 flame tree  
 lace flower  
 jackwood  
 small leaf fig  
 native teak  
 bennetts Ash  
 cheese tree  
 queensland nut  
 yellow kamala  
 butterfly tree  
 scrub turpentine  
 scentless rosewood  
 coolamon tree  
 small leaved lilly pilly  
 Weeping lilly pilly

**Shrubs and Groundcovers**

- Alectryon coriaceus  
 Alpinia caerulea  
 Backhousia myrtifolia  
 Cordyline petiolaris  
 Crinum pedunculatum  
 Cyathea cooperi  
 Dianella caerulea  
 Lomandra longifolia  
 Melastoma affine  
 Syzygium australe  
 Syzygium oleosum

- beach birds eye  
 native ginger  
 grey myrtle  
 palm lily  
 river lily  
 tree fern  
 blue flax lily  
 matt rush  
 blue tongue  
 bush cherry  
 blue lilly pilly



SCREEN PLANTING TO MAIN ROAD



WATERHOUSIA FLORIBUNDA



FLINDERSIA BENNETTIANA



MELICOPE ELLERYANA



ARAUCARIA CUNNINGHAMII



BRACHYCHITON ACERIFOLIUS



BACKHOUSIA MYRTIFOLIA

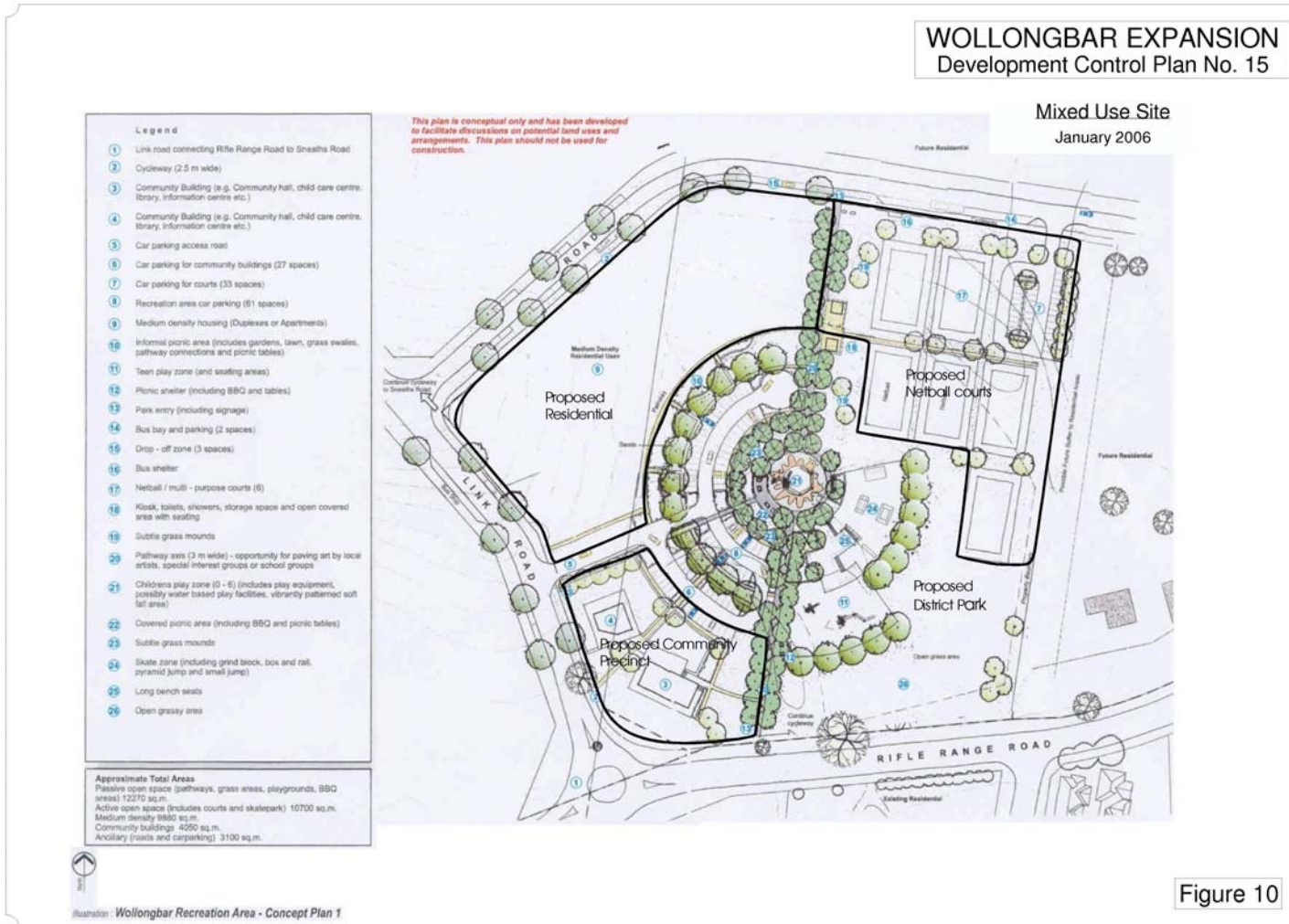


SYZYGIVM LEUHMANNII



SYZYGIVM MOOREI

Figure 9



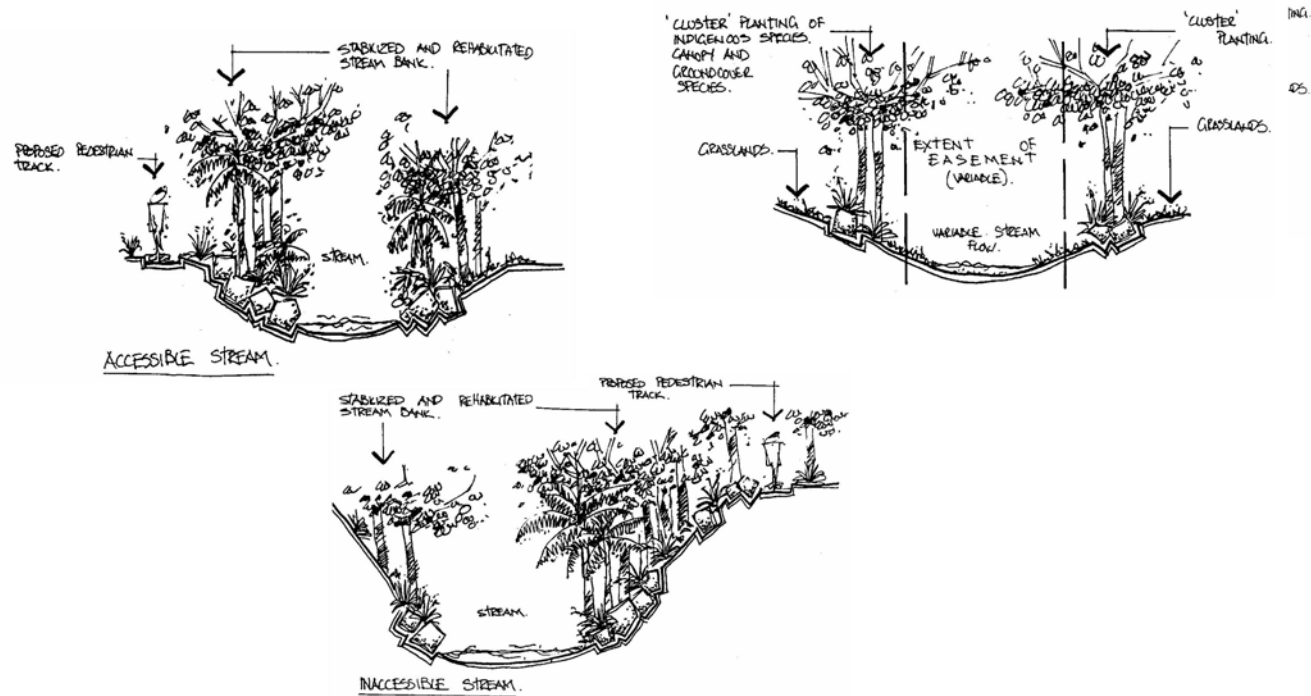


Figure 11 Typical Treatment of Gully and Watercourse

#### 4.10 Fencing to public places

It is a requirement of this Plan that details of fencing to public places (including main roads, open space and environmental protection areas) be provided with the development application for urban subdivision.

Uniformity and appropriateness of design and construction of fencing is particularly important where multiple properties front such public places and the fencing will be highly visible in the landscape (eg where houses back onto Rifle Range Road).

The design and construction standard of any fencing must satisfy its intended purpose. That is, if it is to be an acoustic barrier, it must be able to achieve the determined noise reduction targets.

It is a requirement that highly visible fencing along main roads and public places be uniform in terms of design, height, materials and colours so that it presents attractively and consistently in the streetscape. It will be a requirement upon the subdivision that such fencing be constructed at the time of subdivision.

Fencing of the environmental protection zones along residential boundaries is to be provided that is consistent with the theme of the subdivision and can be seen through the WUEA. Regard shall be had to the need to construct such fencing of fire retardant materials. It will be a requirement upon the subdivision that such fencing be constructed as part of the subdivision.

Appropriate silt/sediment and barrier fencing is to be erected around the environmental protection zones and significant vegetation during civil and construction works such that the vegetation is not impacted upon by silt/sediment and is protected from physical damage.

Fencing is to be integrated into the landscaping of any urban subdivision and is to be detailed in the landscaping plan. Fencing is to be compatible with and sympathetic to the desired urban character and context.

#### 4.11 Environmental protection zones

A detailed report (GW Coleman) was prepared for the natural watercourse regimes and environs for the WUEA in association with the rezoning (Amendment No. 38). The objective of the report was to outline the key issues in the development of a Master Plan and associated Management Report on the natural watercourse regimes and environs for the WUEA.

Those areas of the WUEA that have been nominated to be set aside for environmental protection are identified in **Figure 6**. This land generally coincides with the significant watercourse/riparian environs existing on the site and will function as open space and habitat corridors.

The environmental protection areas are generally zoned 7(d) – Environmental Protection (Scenic/Escarpment) Zone. (refer to **Figure 3**).

These areas will be subject to rehabilitation and management works including:

- Erection of protective fencing around individual and vegetation clusters to limit disturbance caused by earthworks. The protective fencing is to be installed to a minimum distance of the 'drip line' and maintained for the duration of the civil works.
- Installation and maintenance of erosion and sedimentation controls.
- Weed eradication and control.
- Revegetation and stabilisation of disturbed areas (vegetation of existing erosion prone areas) with native endemic species.

The purpose of rehabilitating the 7(d) zoned land includes:

- Retention of the site's existing rural and riparian character by restricting vegetation removal and the implementation of reclamation strategies in regard to catchment management procedures and policies.
- Minimising on-going maintenance.
- Control of potential weed growth, stream bank erosion and water quality control.
- Creation of natural vegetation buffers between proposed lots and stream bank areas.

As part of the integrated recreational and open space use of the environmentally significant land, pedestrian tracks/paths will be constructed therein. The standard of these tracks is detailed in **Section 4.7** of this Plan.

Council will accept dedication of the 7(d) zoned land (refer to **Figure 3**) subject to completion of rehabilitation works, provision pedestrian paths and minimisation of cleared bushfire buffers by the provision of perimeter roads.

**Figure 11** is a diagrammatic representation of the proposed treatment of the gullies and watercourses.

All of the 7(d) Zone shall be rehabilitated and embellished by individual land owners as part of the development their land. Any development application shall be accompanied by a rehabilitation plan that includes staging (relative to time and lot release) and costings. A bond will be taken by Council for these work refundable upon completion..

Such plan shall provide details of when the land will be dedicated to Council and shall be approved by Council prior to the granting of consent for any residential subdivision in the WUEA.

#### **4.12 Retention of native vegetation**

Not all of the significant native vegetation exists within the 7(d) zoned areas of the WUEA. **Figure 6** identifies native vegetation that is situated within 2(b) zoned land.

The design and layout of residential subdivision is to be undertaken in such a manner that will where possible and practicable, maintain and protect existing native vegetation.

Buffers are to be provided to residential development, where appropriate, around such native vegetation. Buffer requirements are provided in **Section 4.6** of this Plan.



Buffers are to be clearly identified on the subdivision plan accompanying the development application for urban subdivision.

Where a development application for urban subdivision (excluding Strata Title subdivision) proposes the removal of significant native vegetation, a detailed flora and fauna impact assessment report is to be prepared and submitted with the development application.

#### **4.13 Internal road design**

The design and hierarchy of internal roads is to be in accordance with the requirements set out in the Northern Rivers Local Government 'Development and Design Manual' unless other details are specified below.

The 'Link Road' is identified as a collector road in the Future Ballina Road Hierarchy Plan (Eppell Olsen & Partners) and is integral to the WUEA. The preferred alignment of the Link Road is detailed in **Figure 6**.

The Link Road will dissect the WUEA and will be intersected by the local roads within the residential precincts. The Link Road will intersect with and provide a connection between Rifle Range Road and Sneaths Road. Both of these intersections will be designed and constructed to a standard to service the expected traffic movements.

Details relating to the construction and funding of the Link Road and the intersection standards with Rifle Range Road and Sneaths Road will be embodied into the WUEA Roads Contribution Plan and/or Developer Agreement.

Typical cross sections of roads (exclusive of the Link Road) are provided as **Figure 8**. The provision of landscaping and the planting of street trees is integral to the local road network. Typical streetscape treatments are detailed in **Figure 11**.

Formal concrete footpaths are to be constructed as part of the local road network in accordance with **Section 4.7** of this Plan.

Constructed designated on-street car parking is to be provided within the head of each cul-de-sac that services more than 20 dwellings at a rate of 1 parking space per 5 dwellings serviced by the cul-de-sac. The location of parking shall be provided in the carriageway leading to the cul-de-sac or the cul-de-sac is to be designed with car parking in the centre.

The developers will be responsible for the construction of internal roads. All roads will be dedicated to Council as public roads. Upon dedication and when 'off maintenance', Council will be responsible for the on-going maintenance of the roads.

Traffic management measures are to be incorporated into each subdivision design to achieve the required road design speeds.

Collector streets and the Link Road are to be of sufficient construction standard, alignment and geometry to provide for bus routes. Due to the size and shape of the WUEA, it is possible for at least 80% of all lots to be within 400m walking distance of a street that will be used as a bus route.

Wollongbar is currently serviced by a local bus service provider (Kirklands). The service provider will be responsible for determining appropriate bus routes within the WUEA. Bus routes should be selected so that they service a maximum number of dwellings. The service provision target is that 80% of dwellings are within 400m of, and that no dwelling is further than 500m from, a bus route.

Bus stops (inclusive of "hail and ride" J poles) are to be provided along nominated bus routes at intervals of 400m. Strategic bus stops are to be provided with constructed bus shelters that are to be designed, constructed and sited to the requirements and satisfaction of Council's Engineer at no cost to Council. Bus shelters are to be no greater than 800m apart and are to be located in positions that will service the maximum number of dwellings.

A bus servicing plan will be prepared which will identify the general locations of bus routes and facilities.

#### **4.14 External road works**

Prior to any development being undertaken negotiations will be required to be undertaken with the NSW Roads and Traffic Authority on the extent of works required to address the traffic impacts on the intersections of Rifle Range Road and Sneath Road with the Bruxner Highway. A developer agreement or contribution plan must be put in place to fund any required works prior to any development proceeding.

A Local Area Traffic Management Study was prepared by TTM Traffic Engineering (June 2004). The Study involved a comprehensive review of existing road network and traffic conditions in Wollongbar and a detailed assessment of the likely impact of traffic generated in the WUEA upon the existing local street network in Wollongbar.

The Study concluded that it would be desirable to implement traffic management devices throughout the local street network in Wollongbar, between the WUEA and the commercial precinct in Simpson Avenue.

The TTM report recommends the implementation of a number of traffic management devices throughout the local street network in Wollongbar, between the WUEA and the Wollongbar shopping centre. The works are considered desirable to Wollongbar Drive, Robindale Drive, Ramses Street and Rubiton Street in order to identify them as local residential streets and promote them as being traffic calmed.

The required traffic management works relate to the Ramses St – Rubiton St and Wollongbar Dr – Robindale Dr routes. The works comprise the installation of 4 entrance statements at each end of each route with the implementation of 2 traffic calming devices along each route.

The report also recommends the construction of pedestrian refuge facilities in Rifle Range Road at the proposed new intersection (near Wollongbar Drive).

The required intersection treatments for the Link Road with the external road network are as follows:

- Rifle Range Rd – 2 lane, 3 leg roundabout
- Sneaths Rd – Type C intersection (inclusive of pavement widening in Sneaths Rd)

Details of the Sneaths Rd and Rifle Range Rd intersections and the location and proposed treatment method of the external traffic management facilities are provided on **Figure 16**.

The provision of external road works and local area traffic management devices and cost apportionment therefore will be embodied into a Contributions Plan and/or Developer Agreement for External Roads.

Rifle Range Road shall be upgraded including realigned to a 13 metre wide carriageway with suitable clearance from adjoining residential properties. Barrier kerb and guttering shall be provided at the edge of the seal. Acoustic barriers and/or sound mounds (planted out with native plants) shall be provided as part of the development of the adjoining land.

#### **4.15 Open space requirements**

'Open Space requirements will generally be provided and funded by way of a shirewide Section 94 Contribution Plan. The exception is the provision of local parks, the location of which are identified in **Figure 6**

The requirements for local parks are to:

- be situated throughout the WUEA so that each dwelling is within a 400m radius of a local park;
- be situated on land that is readily accessible to the surrounding dwellings and be physically connected to the pathway network;
- contain a minimum usable park area of 2000m<sup>2</sup>;
- be designed and located so as to maximise street frontage and encourage natural surveillance from surrounding residents;
- be installed and equipped with play equipment and/or alternative park furniture;
- include soft-fall under all play equipment in accordance with the relevant Australian Standards;
- be designated with a 'P' on the development application plans.

At the time of adoption of this Plan, the minimum standard of playground equipment is that which would be equivalent to the Megatoy Play Systems 'Foreshore' Play System and 'Euro Swingset'.

The provision, standard and funding arrangements of local parks is to be carried out in accordance with an Open Space Contributions Plan and/or Developer Agreement.

For the purpose of this section the proposed district park will serve as a local park.'

#### **4.16 Sewerage**

The WUEA will be serviced with a reticulated sewerage system that provides for the treatment of waste water at the Alstonville Sewage Treatment Works. All lots within the WUEA are to be connected to this reticulated system.

A sewerage planning report has been prepared for the WUEA. This report identifies basic sewerage infrastructure (location of pump stations) that was based on the following principles:

- Conventional gravity system with major pump stations
- Major infrastructure (pump stations) being situated on public land
- Conventional gravity sewer mains being generally situated on private property
- The use of temporary infill infrastructure to service staged development and land release (if required)
- The use of temporary infill infrastructure measures to facilitate staged development and land release

Sewer contributions shall be in accordance with Council's headworks charges. Headworks charges will be levied by Ballina Shire Council for the disposal of sewage from the development site pursuant to the Water Supply Act.

Each development application for subdivision will be required to provide a concept plan demonstrating the proposed means of servicing the development.

#### **4.17 Water supply**

Rous Water supplies bulk water to Ballina Shire Council.

Ballina Shire Council will be responsible for the installation of a trunk supply main to and through the WUEA along with the provision of take-off points for individual residential precincts.

All lots used for urban purposes shall be connected to the reticulated domestic water supply system.

Water supply contributions shall be in accordance with Council's headworks charges. Headworks charges will be levied by Ballina Shire Council and Rous Water for the provision of water supply to the development site pursuant to the Water Supply Act.

Each development application for subdivision will be required to provide a concept plan demonstrating the proposed means of servicing the development.

#### **4.18 Electricity**

Electricity supply is provided to each allotment in the WUEA by the appropriate electricity supply authority via an underground reticulation system.

Domestic solar hot water systems are encouraged to minimise the demands placed upon the supply grid (refer **Section 4.19.4**).

#### **4.19 Telephone**

Telephone supply with broadband capacity is to be provided to each allotment in the WUEA by the appropriate telecommunications supply authority via an underground reticulation system.

#### **4.20 Residential development controls and built form**

The following is a list of residential development controls that are to be addressed in detail at the development application stage for any subdivision within the WUEA. This section details broad preferred parameters/development standards that are to be complied with.

Detailed residential design controls are to be provided with the development application for urban subdivision. These controls will be publicly exhibited with the development application and upon approval by Council will be appended to, and become an addendum to this Plan.

- Setbacks
- Building height
- Roof design and pitch
- Construction materials and finishes
- Car parking (garages and carports)
- Garden sheds
- Rainwater storage tanks
- Geotechnical requirements
- Cut and fill requirements
- Fencing
- Landscaping
- Access restrictions and driveways
- Duplex and medium density provisions
- Dual occupancy provisions
- Signs
- Air conditioning units
- Television and radio antennae/satellite dishes
- Solar water heaters
- Other structures and items

#### **4.21 Restrictive covenants**

The use of restrictive covenants within the WUEA should be avoided where possible. Covenants will only be considered where it can be demonstrated that they would be effective in achieving a particular desirable planning outcome. This applies to all covenants where they are related to building form or not

Details of any proposed covenants, and the justification and reasoning for their use, is to be provided with the development application for subdivision of land within the WUEA.

#### **4.22 Bushfire prone land**

Several relatively small sections of the WUEA are identified on the Ballina LGA Bush Fire Prone Land Map (certified 16 September 2003) as being bushfire prone. When preparing a development application for subdivision or for a subsequent residential building, consideration is to be given to Planning for Bushfire Protection 2001 (PFBP)

The application will have to demonstrate how the proposed development satisfies the relevant development standards of the PFBP.

## 5.0 RESIDENTIAL DEVELOPMENT CONTROLS

The following controls relate to the construction of residential buildings on all lots within the WUEA. These controls will have to be considered in the preparation of any development application for subdivision and/or residential buildings.

### 5.1 Light-weight construction

Light-weight construction is required for lots where the building envelope is identified as being 'medium' likelihood of slip. This is to ensure that the risk of landslip does not increase due to the potential for natural drainage to be altered or slopes steepened by excavation or filling, as can the case with 'slab on ground' construction.

Reference should be made to **Sections 2.4.1** and **4.17.8** of this Plan regarding slope stability and associated requirements.

### 5.2 High likelihood of slip

No dwellings or other ancillary residential structures are permitted to be constructed on land that is identified on **Figure 4** as having a 'high' likelihood of slope instability. This prohibition is in acknowledgment of the potential for landslip that could be significantly exacerbated if the natural drainage is altered or slopes are modified by excavation or filling.

Examples of good and poor hillside practice and guidelines for hillside construction are provided as **Figures 13** and **14**.

### 5.3 Cut and fill

The maximum permitted extent of cut and/or fill within the WUEA in association with the construction of dwellings is 1.2m. This restriction on cut does not apply to the construction of in-ground swimming pools.

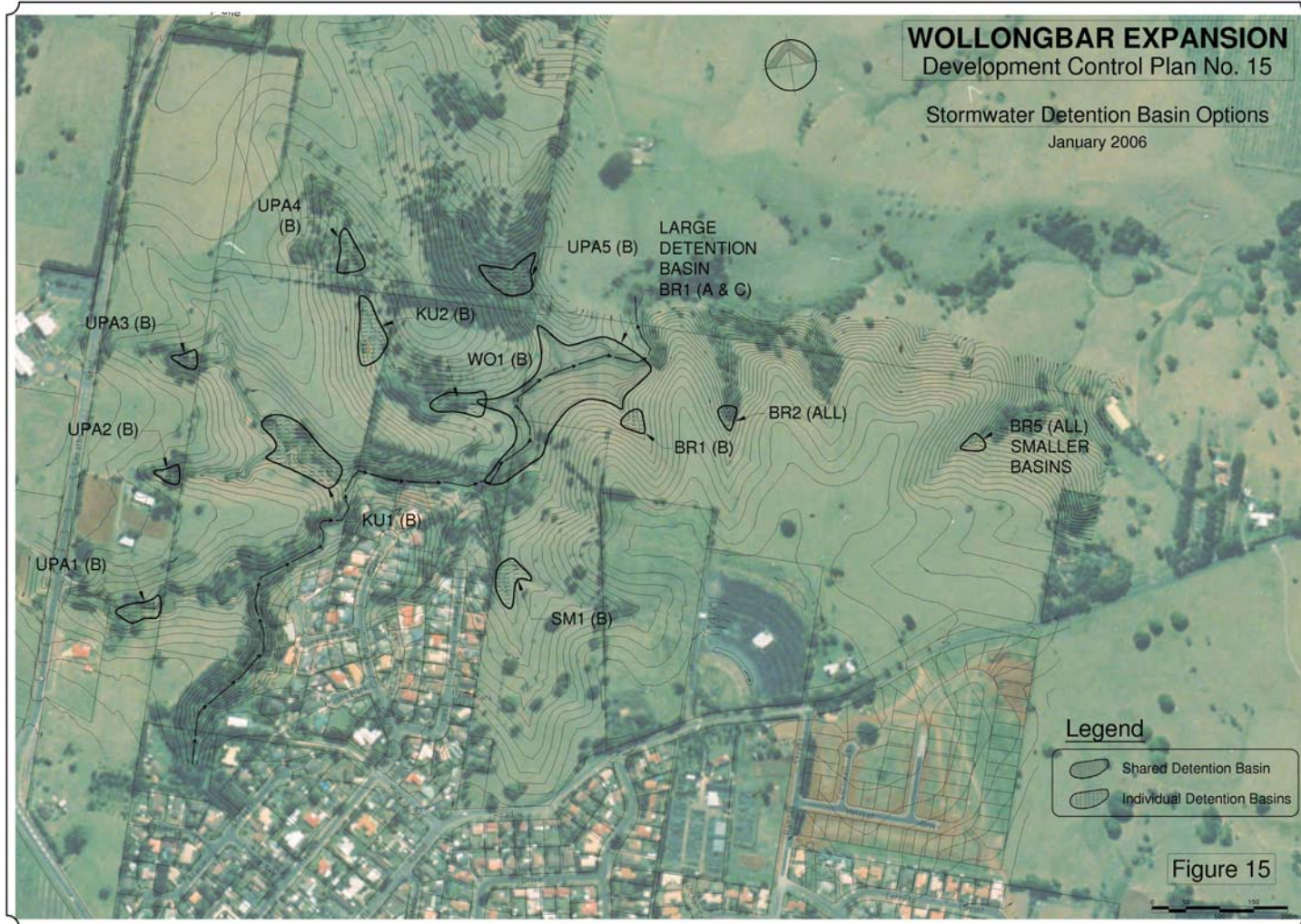
## 5.4 BASIX

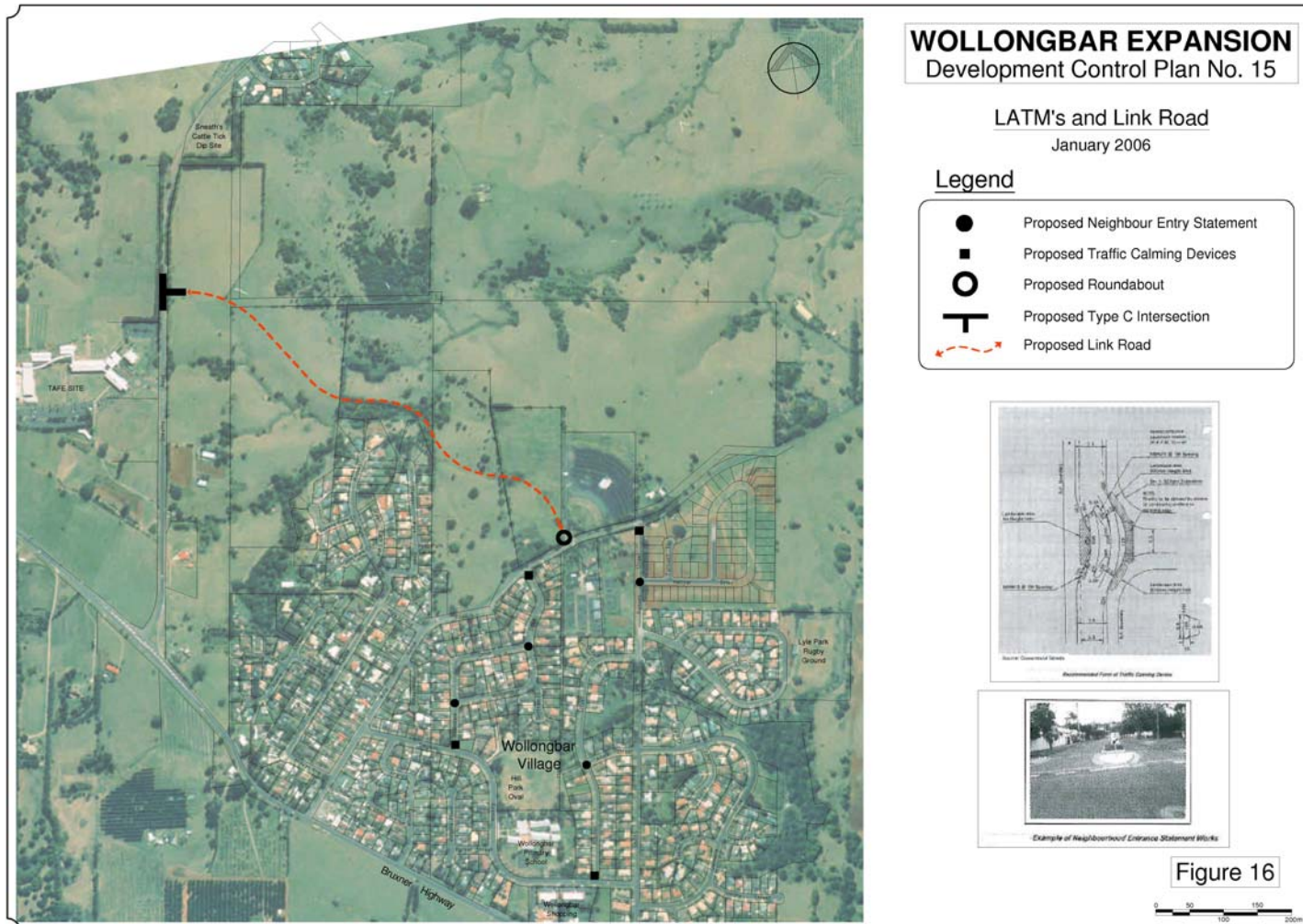
The BASIX assessment is to be completed using the on-line assessment at [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au). A BASIX Certificate will only be able to be printed if the proposal meets the BASIX targets. The Certificate will include a list of the commitments made in the assessment, which must be shown on plans and specifications. The Certificate is then lodged with Council with the development application.

BASIX offers advice on water and energy saving tips that will assist in achieving the objective of BASIX which is “..to conserve water and reduce the impact of greenhouse gases on our climate”. Water and energy saving tips that will assist in obtaining a BASIX Certificate are:

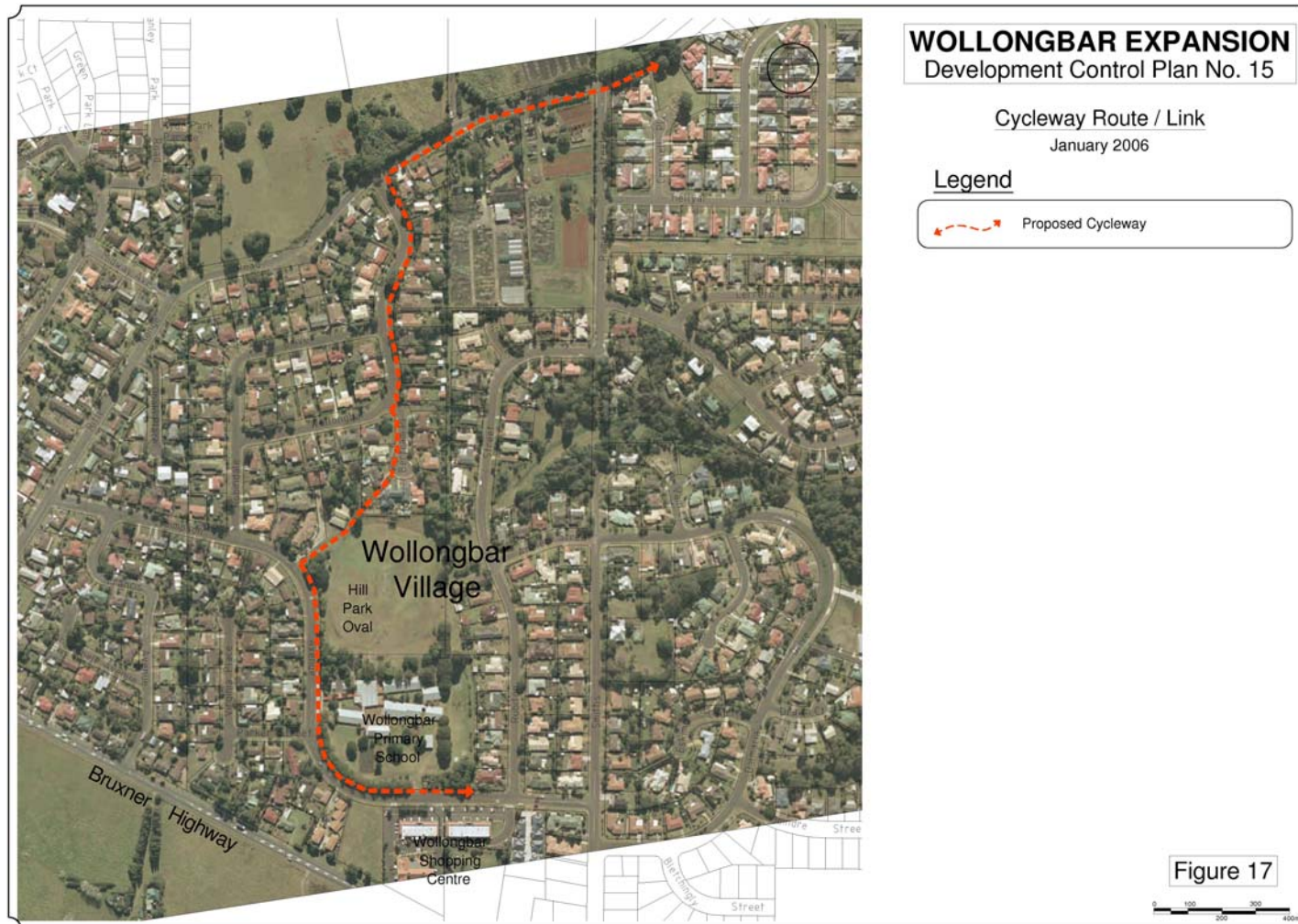
- *Use native plants in the garden to cut water use.*
- *Install rainwater tanks to collect water for toilet flushing and garden use.*
- *Fit water-saving showerheads, taps and dual-flush toilets.*
- *Ensure walls and ceilings are well insulated.*
- *Choose a building site with minimal overshadowing to allow natural light and warmth.*
- *Use wide eaves and reduce window area on the western side to avoid air-conditioning costs.*
- *Choose a light colour for the roof to reduce cooling costs.*
- *Use skylights to bring natural light into kitchens and bathrooms.*
- *Use compact fluorescent globes instead of standard light globes.*











## REFERENCES

1. GW Coleman – Wollongbar Village Expansion – Design Proposal – Natural Watercourses. Master Plan and Management Report (January 1998)
2. Coffey Geosciences Pty Ltd – Assessment of the Stability of Natural Slopes – Land Rezoning, Rifle Range Road (28 August 2001)
3. HK Clarke & Associates Pty Ltd – A Noise Impact Statement for the proposed Link Road at Wollongbar (18 June 2001)
4. Gilbert and Sutherland – Stormwater Management Plan for the Urban Investigation Area, Rifle Range Road, Wollongbar (June 2001)
5. Ballina Shire Council – Subdivision Code and DCP No. 13 – Stormwater Management
6. J Warren & Associates – Flora and Fauna Assessment for proposed Rezoning of Land at Sneaths Road and Rifle Range Road, Wollongbar (June 2001)
7. J Warren & Associates – Supplementary Flora and Fauna Report Wollongbar Rezone Area (April 2002)
8. Ardill Payne & Partners – Planning Study and Rezoning Submission – Wollongbar (September 2001)
9. PlanningNSW & NSW Rural Fire Service - Planning for Bushfire Protection (December 2001)

## **6.0 APPENDIX 1 - SOLAR ACCESS GUIDELINES**

### **Solar Access for Lots – Guidelines for Residential Subdivision in NSW (SEDA)**

An electronic version of this document can be accessed via [www.energysmart.com.au](http://www.energysmart.com.au).

## **7.0 APPENDIX 2 - BUILT FORM DESIGN REQUIREMENTS**

### **ATTACHMENT 1**

**Avalon Estate (DA 2007/876), Built Form Design Principles & Requirements**

### **ATTACHMENT 2**

**Avalon Estate (DA 2007/876), Stage 1 Building Control Plan**

### **ATTACHMENT 3**

**Avalon Estate (DA 2007/876), Stage 2 Building Control Plan**

### **ATTACHMENT 4**

**Wollongbar Park Estate (DA 2009/664), Building Control Plan (Northern Precinct)**

### **ATTACHMENT 5**

**Wollongbar Park Estate (DA 2009/664), Building Control Plan (Southern Precinct)**