Bellingen Shire COUNCIL

BELLINGEN SHIRE **DEVELOPMENT CONTROL PLAN 2017**

Table of Amendments

Amendment	Date Adopted	Date Commenced
1 - Minor review of DCP - DCP 2017 replaces DCP 2010	22 November 2017	6 December 2017
2 - Amendment to DCP 2017 to remove Chapter 11 – Advertising & Notification of Development Applications Note: The Bellingen Shire Community Participation Plan was adopted by Council on 27 November 2019 and commenced operation upon 28 November 2019 when it was uploaded to the NSW Planning Portal. The Community Participation Plan supersedes Chapter 11 in terms of the advertising & notification of Development Applications in Bellingen Shire.	27 November 2019	5 December 2019

Bellingen Shire Development Control Plan 2017

Chapter 1
Single Dwellings

Table of Contents

Table of Amendments

Amendment	Date Adopted	Date Commenced
Minor review of DCP - DCP 2017 replaces DCP 2010	22 November 2017	6 December 2017

1.1 Aims

The aims of this chapter are to:

a) To encourage a high standard of residential development that is respectful to the amenity of neighbours, the character of neighbourhoods and the natural and built environment within which it is located.

b) To encourage development that will contribute towards increased levels of physical activity and healthy living patterns.

1.2 Where this Chapter Applies

This chapter applies to all land within Bellingen Shire upon which a dwelling house is permitted under the provisions of Bellingen Local Environmental Plan 2010, unless any site specific development controls included in later chapters of this DCP nominate alternative requirements. In this case, the provisions of the site specific development controls shall prevail.

1.3 When this Chapter Applies

This chapter applies when any Development Application is received by Council that proposes the erection of a single dwelling, alterations or additions to a single dwelling or the erection of structures that are normally ancillary to the residential use of the land such as sheds, detached garages or the like.

It does not apply when the proposed development can be considered as “exempt” or “complying” development under the provisions of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 or any other Environmental Planning Instrument applying to the land.

1.4 Variations

Council may consider variations to the standards required of development in this chapter when the overall aims of this chapter and any specific aims that may be detailed for that particular standard can be achieved.

1.5 Definitions

Definitions of terms used within this chapter are the same as those contained within Bellingen Local Environmental Plan 2010. Additional terms not defined in BLEP 2010 are included below.

Building Height Plane Envelope is defined by a plane projected at an angle of 35 degrees over the land to be built upon, from a height of 3m above the ground level at the boundary of the site to a maximum height of 10m above natural ground level.

Expanded dwelling is a single dwelling comprised of two or more buildings erected in close proximity to each other.

Privacy screen means:

a) a structure that provides a screen or visual barrier between a window of a habitable room or an outdoor area on a lot and an adjoining lot that:

   (i) has no individual opening more than 30mm wide, and

(ii) has a total area of all openings that is no more than 30% of the surface area of the screen or barrier.

1.6 Development Criteria

1.6.1 Setbacks from boundaries

Aim

a) To preserve the amenity of streetscapes, future occupants, neighbours and the safe functioning of public roads.

b) To preserve the rural character of localities and to minimise adverse impacts on occupants arising from proximity to unsealed roads and incompatible adjoining land uses.

Criteria

1) All dwellings are to comply with the setbacks provided in the following table, unless a written request for a variation to these requirements that outlines a sufficient justification for such a variation together with an explanation of how the proposal meets the aims of this control is lodged with the development application.

Council may consider written requests for variation to side setbacks only where the proposal complies with the Building Code of Australia and will not cause significant adverse impacts on surrounding properties in terms of bulk, overshadowing, ventilation, noise and privacy. Council will require registration of maintenance easements over adjoining properties if there is an inadequate side setback to allow for maintenance of the building.

Table 1.1 Setback Requirements

Land use zoning	Setback (min) to primary road frontage	Setback (min) to secondary road frontage, including rear lanes	Side (min) boundary setback	Rear (min) boundary setback
R1 zoned land	4.5 metres or the average setback of the two nearest dwellings (whichever is greater).	3 metres	900mm from the wall and 450mm from eaves gutter to the boundary.	-
R5 zoned land	10 metres	10 metres	5 metres	5 metres
Rural & Environmental Zones (RU1, RU2, RU4, E3, E4)	20 metres	20 metres	10 metres	10 metres

Note: Greater distances to the road frontage may be warranted depending upon the nature of the adjoining road and noise/traffic issues.

1.6.2 Buffers to adjoining land uses, areas of environmental constraint or risk

Criteria

1) Where the development site adjoins;

a) Land uses that may have an adverse impact on the amenity of the future occupants (eg: intensive agricultural operations, forestry operations, dairies, busy roads, unsealed roads and railways),

b) Areas of environmental constraint (eg: Threatened Ecological Communities), or

c) Key fish habitat, or

d) Areas of bushfire risk,

a greater setback than that specified in Section 1.6.1 may be required to minimise the likelihood of adverse impact.

In such circumstances, the Applicant will need to demonstrate that sufficient buffer zones, or mitigating measures, are to be incorporated into the development site to avoid adverse impact.

Note: For the purposes of determining appropriate setbacks and means to address issues of landuse conflict, Council will have principal regard to the publication titled *Living and Working in Rural Areas – A handbook for managing land use conflict issues on the NSW North Coast, ISBN 978-0-646-48527-0*, as published by the NSW Department of Primary Industries, 2007.

For matters concerning bushfire risk, the relevant regulatory guidelines are specified in Section 79BA of the Environmental Planning & Assessment Act 1979, and the publication titled *Planning for Bushfire Protection, ISBN 0 9585987 8 9*, as produced by the NSW Rural Fire Service.

For the purpose of determining appropriate buffers to key fish habitats, Council will have principal regard to the publication titled *Policy and guidelines for fish habitat conservation and management (Update 2013)*, as published by the NSW Department of Primary Industries, 2013.

For properties adjoining Rail Corridors and Busy Roads, Council will have principal regard to the publication titled *Development Near Rail Corridors and Busy Roads - Interim Guideline, ISBN 978-0-7347-5504-9*, as published by The State Government of NSW through the Department of Planning, 2008.

1.6.3 The Building Height Plane Envelope

Aim

a) To minimise adverse impacts relating to bulk and scale,

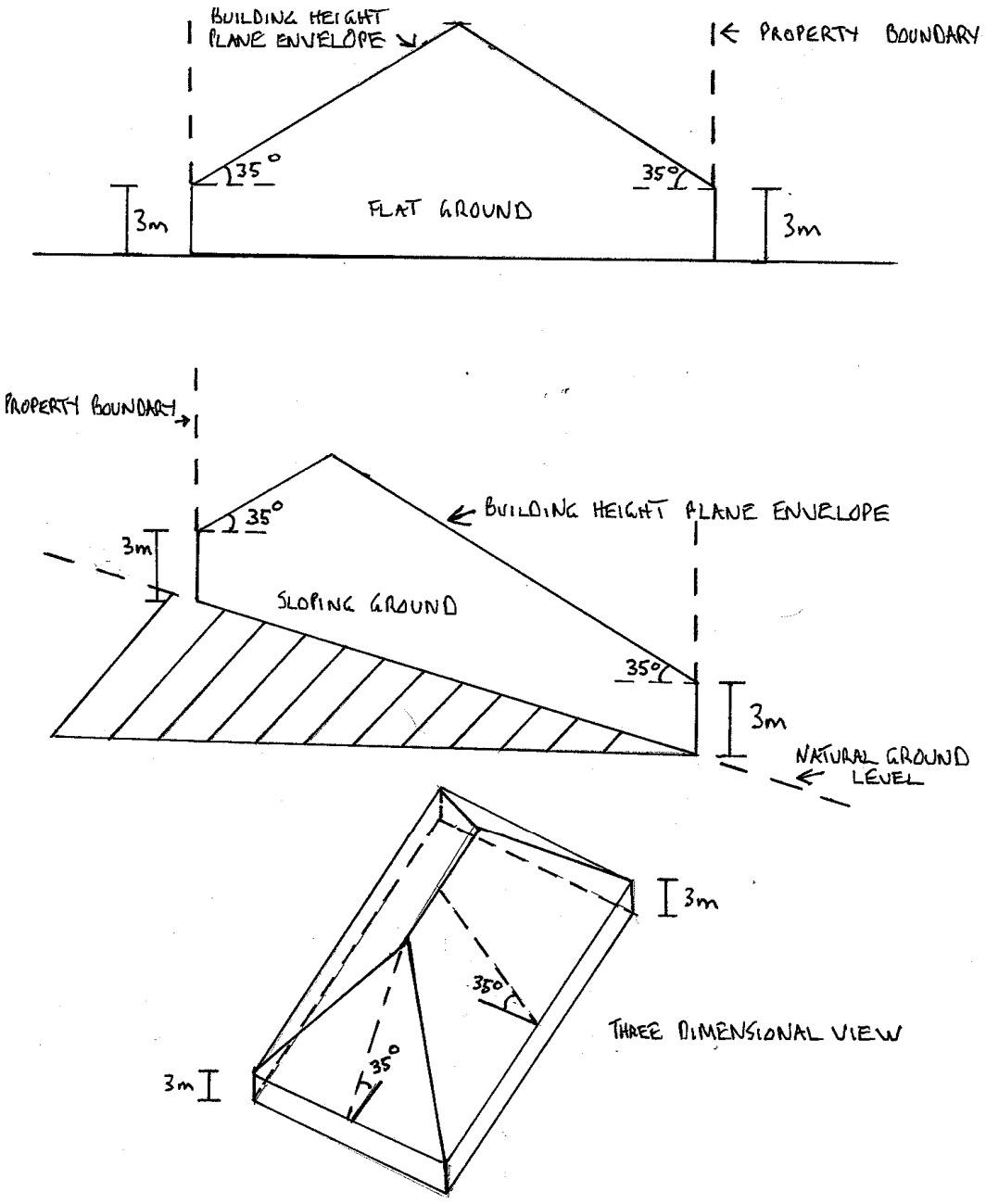
b) To focus larger elements of buildings towards the centre of the site rather than the fringes, and

c) To preserve reasonable levels of solar access to surrounding properties for reasons including health factors, power generation, clothes drying and food production.

Criteria

1) Buildings shall be constructed so that they fit within the Building Height Plane Envelope depicted in Figure 1.1. The Building Height Plane Envelope is defined by a plane projected at an angle of 35 degrees over the land to be built upon, from a height of 3m above the ground level at the boundary of the site to a maximum height of 10m above natural ground level.

Figure 1.1 Building Height Plane Envelope



2) Council will consider a request for a variation to this standard to enable minor encroachments outside the building plane envelope only where Council officers consider that the proposal is unlikely to cause significant overshadowing over adjoining residential properties. To prove this, professionally prepared shadow diagrams must demonstrate to Council's satisfaction that:

   - At least 50% of the principal area of ground level private open space on surrounding land parcels will receive at least 3 hours of unobstructed sunlight between 9am to 3pm on 21 June. Where existing overshadowing

by buildings and fences is greater than this, sunlight is not further reduced by more than 20%.

- Sunlight to windows within living room areas of any surrounding dwelling will not be reduced to less than 3 hours unobstructed sunlight between 9am to 3pm on 21 June.

- Development will not result in the shading of any existing solar energy or hot water panels installed on any surrounding land parcel or existing clothes drying areas.

1.6.4 Design controls

Aim

a) To ensure that dwellings address the street frontage and thereby allow for casual surveillance of the footpath and public areas and encourage walkable environments,

b) To promote ageing in place by extending the usability of new dwellings to meet '"whole of life" needs of the community,

c) To ensure that new development respects, complements and positively contributes to the existing character of the streetscape, and

d) To ensure that new development retains and enhances the coastal village atmosphere of Mylestom.

Criteria

1) Dwellings shall be designed to ensure that a front door and at least one window are visible from the street.

2) Garages shall not be located forward of the front building line.

3) New dwellings are designed to comply with Chapter 13 – Universal Housing.

4) Solid fencing over 1.2 metres in height across street frontages will not be permitted unless necessary for noise mitigation. In such circumstances, fencing shall be articulated and landscaped to provide visual relief.

5) The following construction material and external colour scheme controls apply to all new residential development, including alterations and additions, within Precinct 1 in Mylestom as illustrated in Figure 1.2:

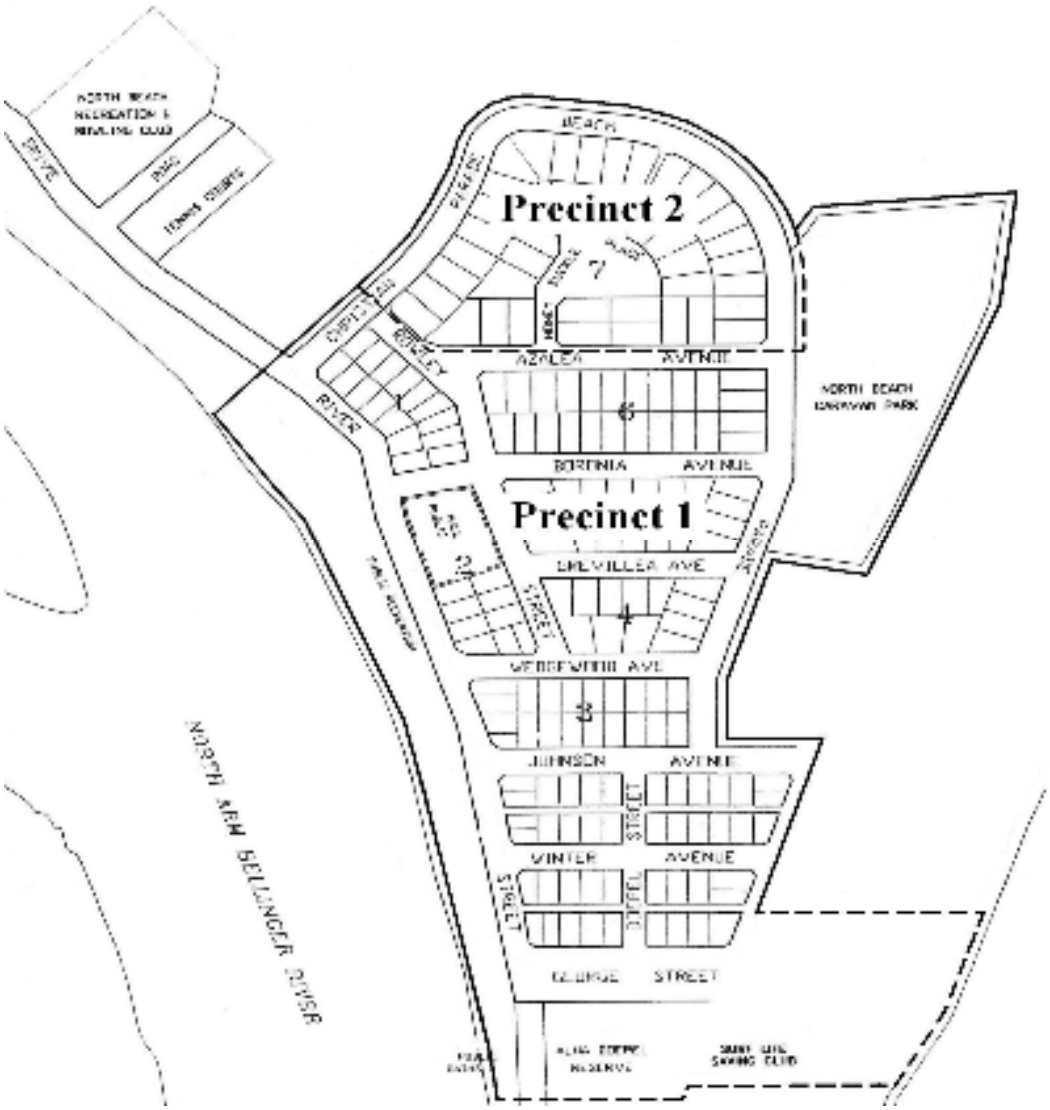
   - External materials are to be of light weight construction, using materials consistent with the coastal village character.

   - Mixed construction is only permitted where the external wall on each facade (excluding windows) is not less than 50% light weight construction.

   - Metal roofing only, with pitched roof to use custom orb profile.

   - External colours must blend in with the coastal and river environment of the landscape. Suggested colours are subdued blues, greens and lighter natural tones.

Figure 1.2 Precincts in Mylestom



1.6.5 Landscaping

Aim

a) To enhance the visual quality and amenity of residential areas,

b) To improve privacy between adjoining dwellings by enabling planting and healthy growth of screening vegetation,

c) To enable planting and healthy growth of suitably located shade trees and other deep rooted vegetation in residential areas and protection of existing mature trees,

d) To enable planting of vegetation that provides additional habitat for native wildlife,

e) To provide sufficient space for domestic fruit and vegetable growing,

f) To enable infiltration of rainwater to the water table and to reduce stormwater runoff from residential areas.

Criteria

1) The site must have a landscaped area of at least the following:

- if the lot has an area of at least 200m^2 but not more than 300m^2—10% of the area of the lot,
- if the lot has an area of more than 300m^2 but not more than 450m^2—15% of the area of the lot,
- if the lot has an area of more than 450m^2 but not more than 600m^2—20% of the area of the lot,
- if the lot has an area of more than 600m^2 but not more than 900m^2—30% of the area of the lot,
- if the lot has an area of more than 900m^2 but not more than 1,500m^2—40% of the area of the lot,
- if the lot has an area exceeding 1,500m^2 – 45% of the area of the lot.

1.6.6 Vehicular access and car parking

Chapter 5 – Carparking and Vehicular Access details specific requirements.

1.6.7 Private open space

Aim

a) To ensure that adequate amount of accessible and useable private open space is provided to meet the recreational needs of the residents.

Criteria

1) The dwelling shall be designed and sited to ensure that a ground floor private open space area for the use of future residents of the dwelling is provided.

   This private open space area must be located and orientated to maximise year round use and to provide adequate access to winter sunlight. It also must satisfy the following requirements:

   - Minimum area of 24m^2,
   - Minimum length and width of 4 metres,
   - Maximum grade of 12.5%, and
   - Located and landscaped to provide an adequate level of privacy for future residents of the dwelling.

2) Where the site is steep and a suitable area with a grade less than 12.5% is not available for dedication as a private open space area, a balcony or deck with an area of not less than 10m^2 and with a minimum dimension of 2.5 metres will be accepted as an alternative.

3) Private open space areas must not include any areas used for on-site effluent disposal.

1.6.8 Privacy

Aim

To ensure that dwellings are designed to minimise direct overlooking of private open space areas and habitable rooms of existing dwellings on adjoining properties.

Criteria

Developments shall be designed in accordance with the following provisions:

1) New dwellings and extensions to existing dwellings are to be sited and designed to minimise overlooking of private open space areas and habitable rooms of existing dwellings on adjoining properties.

2) Where a balcony, deck or the like is more than 1 metre above ground level (existing) and the edge of that structure is less than 3 metres from a side or rear boundary, privacy screens (excluding lattice) of at least 1.7 metres above the finished floor level of the deck or balcony shall be installed to direct views away from private open space areas and habitable rooms of existing dwellings.

3) Where a balcony, deck or the like is more than 2 metres above ground level (existing) and the edge of that structure is less than 6 metres from a side or rear boundary, privacy screens (excluding lattice) of at least 1.7 metres above the finished floor level of the deck or balcony shall be installed to direct views away from private open space areas and habitable rooms of existing dwellings.

4) All habitable room windows that are within 3 metres of a side or rear property boundary must be offset from habitable windows in the adjacent dwelling/s **unless** those windows are on a ground floor that has a finished floor level less than 1 metre above ground level (existing) and a common boundary fence of 1.8 metres high already exists or is proposed to be constructed as part of the development.

5) If one or more of the habitable windows in the proposed dwelling does not meet criteria (d), the dwelling design must incorporate one of the following design measures to protect the privacy of existing residents:

    i. The non-complying window has a minimum sill height of 1.5 metres, or

    ii. Translucent glazing will be provided to any part of the non-complying window less than 1.5 metres above floor level, or

    iii. External privacy screens will be installed in front of the non-complying window to block the line of sight to habitable rooms in the adjacent dwelling.

1.6.9 Environmental impacts

Aim

To encourage the location of development in areas that minimise disturbance to existing native or other significant vegetation.

Criteria

1) Further to the provisions of *Clause 7.5 – Biodiversity* (BLEP 2010), areas for dwelling sites, roads, bushfire mitigation measures and other essential infrastructure associated with the residential occupation of land shall be selected to avoid or minimise the need for removal of native or other significant vegetation.

2) Threatened Ecological Communities (TEC's) and Preferred Koala Habitat as shown on the map in Appendix 16.2 of this DCP will be afforded maximum levels of protection and any application involving removal of any part of an TEC or Preferred Koala Habitat will normally require redesign to avoid adverse impacts.

1.6.10 Alteration of natural landform

Aim

a) To encourage the use of building techniques that respond to the particular circumstances of the site.

b) To avoid adverse impacts related to alteration of drainage patterns and undermining.

Criteria

1) Buildings shall be designed such that they are in keeping with the natural landform and respond to the particular characteristics of the site, as illustrated in Figure 1.3.

2) In the R1 zone, excavation and filling is to be limited to a maximum of 1 metre. This is depicted in Figure 1.4.

Figure 1.3 - Following the Natural Landform

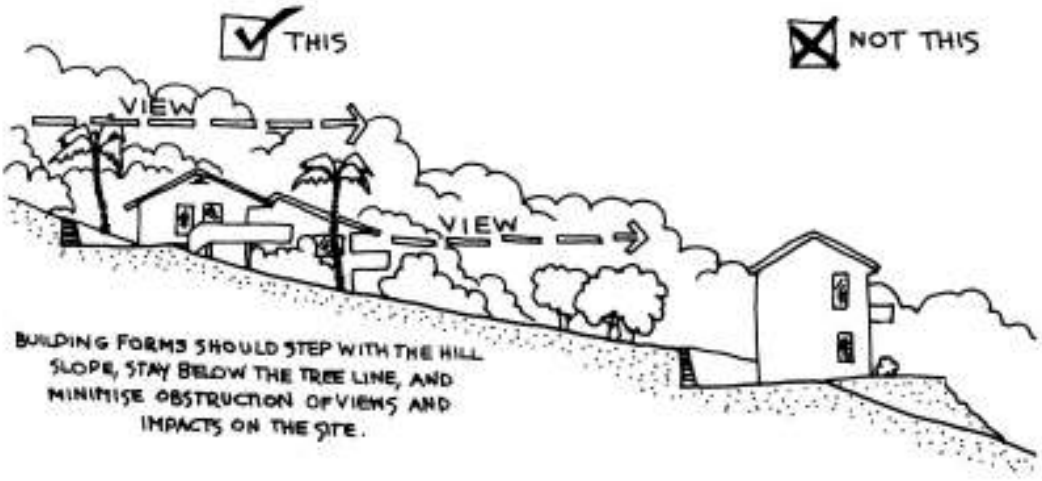
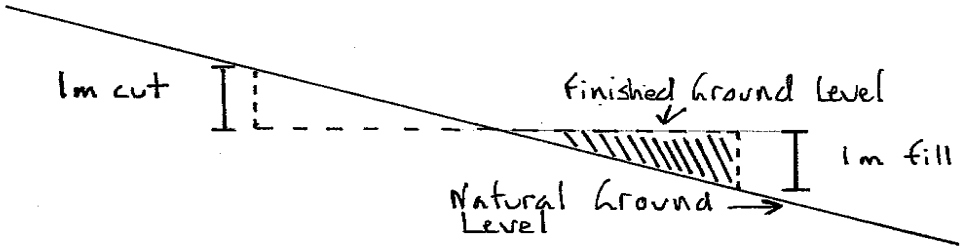


Figure 1.4 – Permissible Excavation and Filling



3) The maximum excavation restriction referred to in criteria b) is not applicable where the excavation is incorporated into the building design up to a maximum of 2 metres.

4) Where earthworks are proposed for swimming pools, the earthworks are to have a maximum depth of no more than 2 metres. Where swimming pools are partially benched into the side of a hill, the pool is to extend no more than 1 metre out of the ground.

5) In R5, Rural (RU1, RU2, RU3 and RU4) and Environmental zones (E3 and E4) zones, Council may consider up to a maximum height of 2 metres of excavation and 2 metres of fill. The increased amount permissible in rural areas is in recognition of the increased setbacks that are possible to adjoining boundaries (and consequently, the ability of the developer to retain any impacts entirely on site), and the desirability of slab construction methods in terms of bushfire safety.

6) Council may consider variations to the abovementioned criteria where;

    i. The visual impact of the proposal is reduced via the variation, and

ii. The variation will not result in adverse drainage outcomes

Council will not support variations where the proposed cut and fill is necessary to accommodate the erection of a dwelling of fixed design (ie. a project home) where meaningful departures from the typical design are not possible and the design has been selected without due reference to the suitability of the site for that particular house.

7) If the proposal involves earthworks on land with a gradient exceeding 15% or involves cut and fill of more than 1 metre, engineering detail that is prepared by a suitably qualified structural or geotechnical engineer is to be submitted with the development application.

1.6.11 Residential infrastructure requirements (R1 zone)

Aim

To ensure that adequate infrastructure exists to support the residential occupation of land.

Water and Sewerage

1) Any construction over a sewer or water main, a sewer or water main easement or within the zone of influence of a main will not be permitted.

2) Dwellings must be connected to a reticulated water and sewerage system. Variations may be considered only where;

- Reticulated services are not currently available to the property and extension of those services is not environmentally or economically realistic, and

- The subject land has demonstrated capability to dispose of effluent pursuant to *Chapter 10 – On-site Sewage Management*, as detailed in a report prepared by a suitably qualified person.

3) Reticulated water services shall not be extended to non-sewered allotments unless they are already fronted by an existing Council Water Main.

Storm water disposal

All excess roof water shall be conveyed in a controlled and nuisance free manner to Council's road gutter by means of an approved drainage pipe system and standard kerb adaptor. Where it is not feasible to direct stormwater to Council's road gutter, Council will consider accepting an alternative legal point of discharge ie. a natural watercourse.

Electricity services

Dwellings shall be connected to mains power supply. Council may consider proposals to utilise alternative power sources where;

1) They are clearly described in the DA and demonstrated to be capable of meeting the reasonable energy demands of the dwelling.

2) They will not result in adverse impacts to surrounding properties by way of noise, emissions or otherwise.

3) There will be no adverse impacts on the health and safety of occupants (eg: smoke alarms can be provided without mains power)

1.6.12 Large lot residential (R5 zone) and rural infrastructure requirements (RU1, RU2, RU4, E3, E4 zones)

Aim

To ensure that adequate infrastructure exists to support the residential occupation of rural residential and rural land.

Water

1) In areas with no reticulated water supply, a minimum of 45,000 litres of storage capacity for potable water shall be provided. (Note: additional requirements may apply in bushfire prone areas – these must be provided in addition to the minimum potable water requirements specified above).

2) Reticulated water services shall not be extended to non-sewered allotments unless they are already fronted by an existing Council Water Main.

Sewer

On site effluent disposal shall be in accordance with the provisions of *Chapter 10 – On-Site Sewage Management* in this DCP.

Stormwater Disposal

Stormwater shall be disposed of initially to a water tank with provision made for nuisance free overflow from the tank. Overflow is to be discharged in a lawful, controlled and nuisance free manner that does not affect adjoining properties, is clear of the effluent disposal area and is directed away from buildings.

Electricity services

As per the requirements of Section 1.6.11.

1.6.13 Expanded dwellings

Aim

a) To provide for flexible living arrangements for occupants of a single dwelling, and

b) To control the spatial extent of the dwelling and reduce the likelihood of separate occupation of individual components.

Criteria

1) Kitchen and laundry facilities shall only be located in the main building.

2) The distance between the external wall of the main building and expanded dwelling components shall be no greater than 30 metres.

3) Any buildings additional to the main building must not have a floor area in excess of 40m^2 (exclusive of verandahs, decks, balconies).

1.6.14 Studios

Aim

To allow for the erection of buildings not within the curtilage of the main dwelling where these are small scale, visually unobtrusive and intended for use by only the permanent occupants of the main dwelling for artistic or creative purposes.

Criteria

1) Must be one room only (with exception of toilet facilities if necessary).

2) Must be located on the same lot as the dwelling.

3) The floor area of the studio must not exceed 30m^2 (exclusive of verandahs, decks, balconies).

1.6.15 Retention of original dwellings on rural properties

Aim

To enable retention of original dwellings in rural areas, where appropriate.

Criteria

In rural or environmental zones where a new dwelling has been constructed, the existence of the former dwelling on a property shall be inadequate justification in its own right to retain it as an “expanded dwelling”. Any intention to retain the former dwelling as either an “expanded dwelling” or a storage building will require that it be modified to;

- In the case of storage buildings, have no internal separations or rooms (with the exception of toilet/bathroom facilities),
- Have no kitchen or laundry facilities, and
- Be reduced in size through the removal of non-original parts of the building (provided these have no heritage significance) including lean to or other additions and rooms created by verandah enclosure.

Such a proposal would need to be supported by a Structural Engineer’s Report detailing necessary works to ensure the stability of the structure. Buildings with identified heritage significance may not be permitted to undergo alterations.

Note: An alternative option, if the building has a floor area less than 60m^2, is to seek development consent for the change of use of this building to a secondary dwelling, as defined in the BLEP 2010, where such a use is permissible with consent. Refer to Clause 5.4 of the BLEP 2010 and Chapter 2 of this DCP for applicable controls in this regard.

1.6.16 Relocated houses

Aim

To ensure that relocated houses are structurally and aesthetically adequate.

Criteria

Council will permit the relocation of dwellings in the following circumstances.

1) A report from a qualified building consultant is submitted to Council attesting to the structural suitability of the building. This is to include identification of any asbestos products and recommendations regarding its removal and/or retention and relocation and compliance with Workcover requirements.

2) The building, once relocated within the Bellingen Shire, must have any necessary improvements made to its external features (eg: claddings, roofing materials, painting) such that it demonstrates compatibility with the existing character of the neighbourhood to which it is relocated.

3) Prior development approval is to be obtained for the relocation of the building. Council will not allow the temporary relocation of dwellings prior to consent as this pre-empts the consent process and the thorough consideration of all issues regarding its siting.

   Note: Council may require the submission of a bond to guard against damage to Council infrastructure (eg: narrow bridges) in the relocation process.

1.6.17 Shop top housing

Aim

a) To provide opportunities for residential accommodation in areas with superior access to facilities.

b) To provide opportunities for passive surveillance of commercial areas in non-business hours.

Criteria

The following criteria shall apply to the establishment of shop top housing, for a single dwelling only.

1) Dedicated car parking for the residential component is not required, however provision must be made at ground floor level for a lockable enclosure within which it is possible to store two bicycles and which is allocated for the exclusive use of any dwelling not at ground floor level and which is not associated with the ground floor business

   Note: Council will not support and does not operate any scheme for the allocation of on street parking spaces for the exclusive use of local residents, in the absence of dedicated on site parking for residents of shop top housing.

2) Any application for shop top housing must clearly demonstrate the functional relationship between the retail/business component and the residential component. Dwellings that are intended for occupation by the proprietors of the attached business will require reduced levels of independence from the business operations than those intended to be occupied separately. Any consent for such a dwelling will be conditioned so as to prevent occupation of the dwelling by persons unrelated to the business.

3) Shop top housing that is to be occupied by persons not associated with the ground floor business must be able to be directly accessible from the main

street frontage of the premises and function separately from the ground floor operations. Matters such as garbage bin storage and bicycle lock up areas must be addressed in any Development Application.

4) Shop top housing that is being created as part of an entirely new building must include a 1st floor balcony area for occupants of 10m^2 in area with a minimum width of 2.5m. This balcony is to be located so that the outlook is towards public areas rather than adjoining buildings.

5) The development is to be designed to minimise noise impacts on residents and to ensure that noise sensitive areas are screened from noise sources.

Note: Council strongly advises that any proposal to create 1st floor residential accommodation is designed with the potential for future strata subdivision in mind. Failure to consider this in the design of the development may result in future subdivision options being made prohibitively expensive or problematic.

APPENDICES

There are no Appendices for this Chapter

Bellingen Shire Development Control Plan 2017

Chapter 2

Multiple Dwelling Construction

Table of Contents

Table of Amendments

Amendment	Date Adopted	Date Commenced
Minor review of DCP - DCP 2017 replaces DCP 2010	22 November 2017	6 December 2017

2.1 Aims

The aims of this chapter are to:

a) To encourage a high standard of residential development that is respectful to the amenity of neighbours, the character of the locality and the natural and built environment within which it is located.

b) To encourage development that will contribute towards increased levels of physical activity and healthy living patterns.

c) To encourage the provision of a range of dwelling sizes to accommodate changing housing needs.

d) To improve housing affordability in the Bellingen Shire.

e) To encourage and support the provision of more affordable dwelling types.

f) To ensure that increased densities of development only occur where the developers make an appropriate contribution to the progressive improvement of the social, physical and environmental infrastructure necessary to support those increased densities.

2.2 Where This Chapter Applies

This chapter applies to all land within Bellingen Shire upon which multiple dwelling construction is permitted under the provisions of Bellingen Local Environmental Plan 2010, unless any site specific development controls included in later chapters of this DCP nominate alternative requirements. In this case, the provisions of the site specific development controls shall prevail.

2.3 When This Chapter Applies

This chapter applies when any Development Application is received by Council that proposes the erection of more than one dwelling on a parcel of land.

It does not apply when the proposed development can be considered as “exempt” or “complying” development under the provisions of either State Environmental Planning Policy (Exempt and Complying Development Codes) or any other Environmental Planning Instrument applying to the land.

It does not apply when standards for multiple dwelling construction are inconsistent with those specified elsewhere in an Environmental Planning Instrument. In these circumstances, the provisions of the EPI shall prevail to the extent of the inconsistency.

2.4 Variations

Council may consider variations to the standards required of development in this chapter when the overall aims of this chapter and any specific aims that may be detailed for that particular standard can be achieved.

2.5 Definitions

Definitions of terms used within this chapter are the same as those contained within Bellingen Local Environmental Plan 2010. Additional terms not defined in BLEP 2010 are included below.

Building Height Plane Envelope is defined by a plane projected at an angle of 35 degrees over the land to be built upon, from a distance of 3m above the ground level at the boundary of the site to a maximum height of 10m above natural ground level.

Multiple Dwelling Construction means any Development Application that proposes, or would result in, the erection of more than one dwelling on a parcel of land.

Note: differs from definition of "multi-dwelling housing" in BLEP 2010.

2.6 Development Criteria

2.6.1 Rural Dual Occupancy

Aim

a) To provide for effective visual integration of attached buildings.

b) To ensure that the vehicular movements for each dwelling can function independently of each other.

Criteria

1) Compliance with all relevant provisions in Chapter 1.

2) Both dwellings shall be attached, as per the requirements of BLEP 2010. For the purpose of administering this provision, the two dwellings shall be considered as attached if they show a clear integration in terms of building elements such as external walls and rooflines and materials, thereby creating the impression of a single dwelling only. The two dwellings may be joined by a garage or carport.

3) One separate car parking space must be provided for each dwelling. These shall be located so that each parking space can function independently of the other. Shared garages are not considered acceptable for the purpose of compliance with this provision.

2.6.2 Rural Multiple Occupancy

Aim

To confirm the relationship between Council policy and Schedule 1 – Rural Landsharing Communities of SEPP (Integration and Appeals) 2016.

Criteria

House sites endorsed as part of any application made to Council pursuant to SEPP (Integration and Appeals) 2016 shall demonstrate compliance with the provisions of Chapter 1 of this DCP.

2.6.3 Permissible densities for development in residential zones

Aim

a) To allow for increased residential density in unconstrained areas that are within easy walking distance of town centres, open space areas and services provided existing infrastructure has capacity for this increase in population.

b) To encourage walking and healthy lifestyles and a reduction in private vehicle dependency.

c) To improve the vibrancy of existing town centres.

d) To increase community access to and use of both local and regional open space areas

Criteria

1) Land identified within localities identified in Appendix 2.1 – Density Localities may be developed in accordance with the densities prescribed for each locality in Table 2.1 below.

Table 2.1. Permissible densities by locality

	Site area required for each dwelling	**Minimum landscaped area for each dwelling**
Locality 1	600m^2	300m^2
Locality 2	450m^2	220m^2
Locality 3	300m^2	100m^2
Locality 4	150m^2	40m^2

2) The provisions of this chapter do not apply to any land zoned R1 that is unsewered.

3) In order to encourage the provision of a wider range of housing stock in Bellingen Shire, any development that proposes a new one or two bedroom dwelling in the overall development layout may utilise the next highest density locality requirement in determining the site and landscaped area required for that particular dwelling. For example, if land is within Density Locality 2 then for each one or two bedroom dwelling proposed, the site area required for the dwelling will be 300m^2 (as required by Density Locality 3).

   In any case, any development that proposes the construction of 4 or more dwellings must include the construction of 1 x one or two bedroom dwelling within each 4 dwelling mix. For 8 dwellings, there must be 2 x one or two bedroom dwellings, for 12 dwellings there must be 3 x one or two bedroom dwellings and so on.

4) The required landscaped area may include those areas required for “private open space” by Section 2.6.9 of this DCP, where those areas meet the definition of landscaped area in the BLEP 2010.

5) The required landscaped area may be individually allocated to dwellings, incorporated into a common area accessible to all occupants, or be a combination of both.

6) Council will usually only consider variations to the abovementioned criteria where the design ensures;

- the impact of the development on the privacy of adjoining lots is minimised (demonstrated by compliance with Section 2.6.12);
- compatibility with the existing character of the street;
- the increased density will not have an undesirable impact of overshadowing of adjoining development (demonstrated by compliance with Section 2.6.6);
- essential services in the locality are adequate for the additional density;
- the increased density will not unduly decrease views from adjoining dwellings; and
- where the proposal is located in the Bellingen Conservation Precinct, the proposal includes the retention of an existing dwelling which enhances the value of the Conservation Area.

2.6.4 Secondary dwellings

Aim

To confirm standards for secondary dwellings that cannot be approved as complying development pursuant to State Environmental Planning Policy (Affordable Rental Housing) 2009.

Criteria

In circumstances when a secondary dwelling is not able to be approved as "Complying Development", Council may permit the erection of a secondary dwelling in accordance with the following criteria.

1) Compliance with all relevant criteria for single dwellings in Chapter 1 of this DCP.

2) If a separate garbage service is proposed to be provided for the secondary dwelling, details of the design and location of the proposed garbage storage area serving the secondary dwelling must be provided as part of the development application.

3) Where the property has dual frontage to a rear lane, and it is proposed to access the secondary dwelling from the lane, the secondary dwelling is designed to ensure that it is orientated towards the lane.

4) For the purpose of calculating Developer Contributions, the secondary dwelling shall be viewed as additional bedroom/s to the principal residence.

   Note: A 60m^2 floor area restriction applies to secondary dwellings in the BLEP 2010.

   Note: Council resolved to waive the requirement for payment of Section 94 contributions in relation to secondary dwelling applications for the 2016-2018 financial years on the 27th July 2016. This waiver may continue beyond this timeframe so it is recommended that you seek advice from Council as to whether or not developer contributions will be charged prior to the lodgement of your application.

2.6.5 Setbacks from boundaries

As per requirements of Section 1.6.1 of Chapter 1 – Single Dwellings.

2.6.6 The Building Height Plane Envelope

As per requirements of Section 1.6.3 of Chapter 1 – Single Dwellings.

2.6.7 Vehicular access

Aim

a) To minimise adverse cumulative impacts (on occupants, neighbours and the public road network) associated with additional vehicle movements.

b) To ensure that existing pedestrian safety is maintained or improved by new development.

c) To ensure that the visual impact of new carparking areas and driveways on the amenity of residential areas is minimised.

Criteria

These criteria are specific to multiple dwelling construction and are additional to core criteria specified in Chapter 5 - Carparking and Vehicular Access.

1) Developments shall be designed so as to have a single point of access to the public road network on any frontage, except for laneways.

2) New driveways shall have a minimum pavement width of 3m, within a specified 4m reservation. Driveways adjoining property boundaries must:

- Be setback a minimum of 1m from the boundary,
- Be fully fenced at the developers cost with a 1.8m high solid fence up to the front building line of the new development. If fencing is proposed between the front property boundary and the front building line, this is to have a maximum height of 1.2m above existing ground level.
- Provide landscaping within the 1m setback to the side property boundary (provided this does not interfere with underground services or traffic safety).

3) Provision must be made for all vehicles to enter and leave the site in a forward direction.

4) Any driveway servicing more than 3 dwellings shall be centrally located within the development site rather than abutting neighboring boundaries. Consideration may be given to variations having regard to the sensitivity of the adjoining land uses.

5) Driveways of excessive length shall incorporate:

- landscaped blisters to avoid the visual impact of gun barrel style driveways and to provide for traffic calming, and
- passing bays.

6) Any new vehicular access point onto a laneway will necessitate an upgrade of the rear lane where its characteristics do not meet Council's urban road standards, as follows:

   i. Reconstruction of the laneway including provision of a minimum bitumen seal width of 4.5 metres with controlled drainage with rolled kerb and gutter for the full laneway frontage of the property.

   ii. Where Council considers that the existing lane surface and profile beyond the laneway frontage of the property is unable to cater for the projected increase in traffic, the lane shall be upgraded to comply with Council standards.

   iii. Any required lane upgrade works shall tie in with the existing profile to Council's satisfaction.

   iv. Where the existing drainage infrastructure within the lane is unable to accommodate the projected additional storm water runoff that will be generated from the proposed development, the new drainage infrastructure is to be extended to a legal point of discharge including any required piped drainage system so as to prevent any adverse impacts on adjoining properties and Council infrastructure.

7) Vehicular access must be constructed having regard to the proposed form of subdivision (if any) proposed for the development. Note: Chapter 3 of this DCP provides standards for vehicular access for subdivisions.

2.6.8 Urban design

Aim

a) To ensure that dwellings address the street frontage and thereby allow for casual surveillance of public areas,

b) To ensure that new development respects, complements and positively contributes to the existing character of the streetscape,

c) To promote ageing in place by extending the usability of dwellings to meet '"whole of life" needs of the community.

Criteria

Multiple dwelling developments shall;

1) Incorporate articulated facades and rooflines into the building design. In general, any elevation of a building shall not exceed 10m in length without being broken by a change in external walls and rooflines.

2) Ensure that front elevations to primary street frontages include front doors, windows or balconies.

3) Incorporate genuine variations in design between different components of the development. Variability must be demonstrated in terms of the building configuration, colour schemes, materials and finishes.

4) Ensure that garages do not visually dominate the street frontage.

5) Be designed to comply with Chapter 13 – Universal Housing.

2.6.9 Private open space

Aim

a) To ensure that the residents of each dwelling within the development have access to a suitably located private open space area to provide for their recreational needs.

Criteria

1) A minimum area of 24m^2 of private open space shall be provided for each dwelling with ground floor access to land.

2) The ground floor private open space area must have a minimum width and length of 4 metres and be sited on land with a maximum grade of 12.5%. It also must be located, orientated and landscaped so as to:

   - Maximise access to sunlight in winter and shade in summer,
   - Minimise overlooking from neighbouring buildings, and
   - Provide an adequate level of privacy for future residents.

3) Where site orientation or natural features of the site warrant placement of the private open space areas within the front setback of the property, these areas must be screened from the street using a combination of suitable fencing and landscaping. Note: Provision of private open space areas within front setback areas must not totally obscure the view of the street from within the dwelling or the front garden and generally will only be permitted for 2 storey developments that incorporate 1st floor balconies on the street frontage. Details of proposed fencing and a landscaping plan that demonstrate how the criteria will be complied with must be submitted with the development application.

4) Where dwellings have no ground floor component or where the site is steep and a suitable area with a grade less than 12.5% is not and cannot be made available for dedication as a private open space area for each dwelling, a balcony with an area of not less than 10m^2 and with a minimum dimension of 2.5 metres will be accepted as an alternative. Balcony areas shall be provided on northern elevations where practical.

2.6.10 Clothes drying areas

Aim

a) To ensure that suitably located clothes drying areas are provided to meet the projected needs of residents.

b) To mimimise the visual impact of clothes drying areas on the streetscape and amenity of the area.

c) To minimise the need for electric clothes dryers and improve energy efficiency of the development.

Criteria

1) Provision shall be made for outdoor clothes drying areas for each dwelling included in the application.

2) Clothes drying areas may be located in a common service area or in each private open space area, provided they are not located on balconies or within the front setback.

3) Where clothes drying areas are to be provided in a common service area, a minimum of 7.5 metres of clothes line shall be provided for each dwelling.

4) The clothes drying area shall be suitably screened from public view.

5) The clothes drying area shall be located so as to maximise solar access.

2.6.11 Landscaping

As per the requirements of Chapter 9 – Landscaping Requirements.

2.6.12 Privacy

Aim

To provide for the incorporation of permanent and structural design measures into dwellings that provide an appropriate level of privacy to surrounding landowners and residents within the development site.

Criteria

Privacy shall be provided between windows in adjoining occupancies and between private open space areas (including balconies and ground floor areas). Developments shall be designed in accordance with the following provisions:

1) In multi dwelling housing, semi-detached dwellings and attached dual-occupancy developments, living areas shall be located on the ground floor to minimise the occurrence of casual overlooking of private open space areas of surrounding dwellings.

2) 1st floor balconies must be located and designed so as to minimise the casual overlooking of private open space areas of existing dwellings on adjoining properties. It is Council's preference that permanent and structural building design measures (eg: solid walls, building orientation, recessed balconies) shall be utilised to direct views away from such areas. Where this is not feasible, the installation of privacy screens of at least 1.7 metres above the finished floor level of the balcony that direct views away from private open space areas and habitable rooms of existing dwellings may be accepted.

3) All habitable room windows that are within 3 metres of a side or rear property boundary must be offset from habitable windows in the adjacent dwelling/s unless those windows are on a ground floor that has a finished floor level less than 1 metre above ground level (existing) and a common boundary fence of 1.8 metres high already exists or is proposed to be constructed as part of the development.

4) If one or more of the habitable windows in the proposed dwelling does not meet criteria 3), the dwelling design must incorporate one of the following design measures to protect the privacy of existing residents:

   i. The non-complying window has a minimum sill height of 1.5 metres, or

   ii. Translucent glazing will be provided to any part of the non-complying window less than 1.5 metres above floor level, or

iii. External privacy screens will be installed in front of the non-complying window to block the line of sight to habitable rooms in the adjacent dwelling.

2.6.13 Garbage storage areas

As per the requirements of Chapter 14 – Site Waste Minimisation and Management

2.6.14 Letterboxes

Aim

a) To ensure that each dwelling is allocated a letterbox.

b) To ensure that letterboxes are suitably designed and located.

Criteria

1) Letterboxes shall be provided for each dwelling of the development.

2) Letterboxes shall be located so they:

- are wholly located within property boundaries,
- are visible from at least one dwelling that is part of the development, and
- facilitate ease of access by delivery vehicles and residents.

3) Letterbox banks shall be constructed so as to integrate with the design and materials of the overall development.

2.6.15 Infrastructure requirements

Aim

To ensure that adequate infrastructure exists to support the residential occupation of land.

Criteria

As per Section 1.6.11 of Chapter 1 – Single Dwellings, with the following exceptions:

Kerb and Guttering

It is Council's intention that development proceeds in an orderly and generally sequential manner with contemporary connections to public infrastructure.

Therefore, Council will require at a minimum, construction of kerb and guttering across the frontage of the development site. This work shall tie in with the existing kerb and gutter profile in the street to Council's satisfaction.

Water and Sewer

1) Multiple dwelling developments should be designed with a view towards future subdivision potential and required infrastructure installed at construction stage.

For example, if Torrens Title Subdivision is proposed the sewer main will be required to be extended to each individual allotment.

2) Council will require the installation or upgrading of essential services infrastructure (i.e.: water mains and hydrants for fire fighting purposes; sewer mains) where necessary. Council is unlikely to support incremental increases in demand upon already substandard systems (eg: where water mains are in rear lanes) and may require the development and installation of new servicing strategies should increased densities of development be proposed.

   Note: Applicants should liaise with Council's Water and Wastewater Division regarding system capacities.

3) Construction over a sewer main is not permitted. Driveways may be permitted, provided segmented pavement is used to enable access to the main if necessary without impacting upon the remainder of the driveway.

2.6.16 Shop top housing

Aims

a) To provide opportunities for residential accommodation in areas with superior access to facilities.

b) To provide opportunities for passive surveillance of commercial areas in non-business hours.

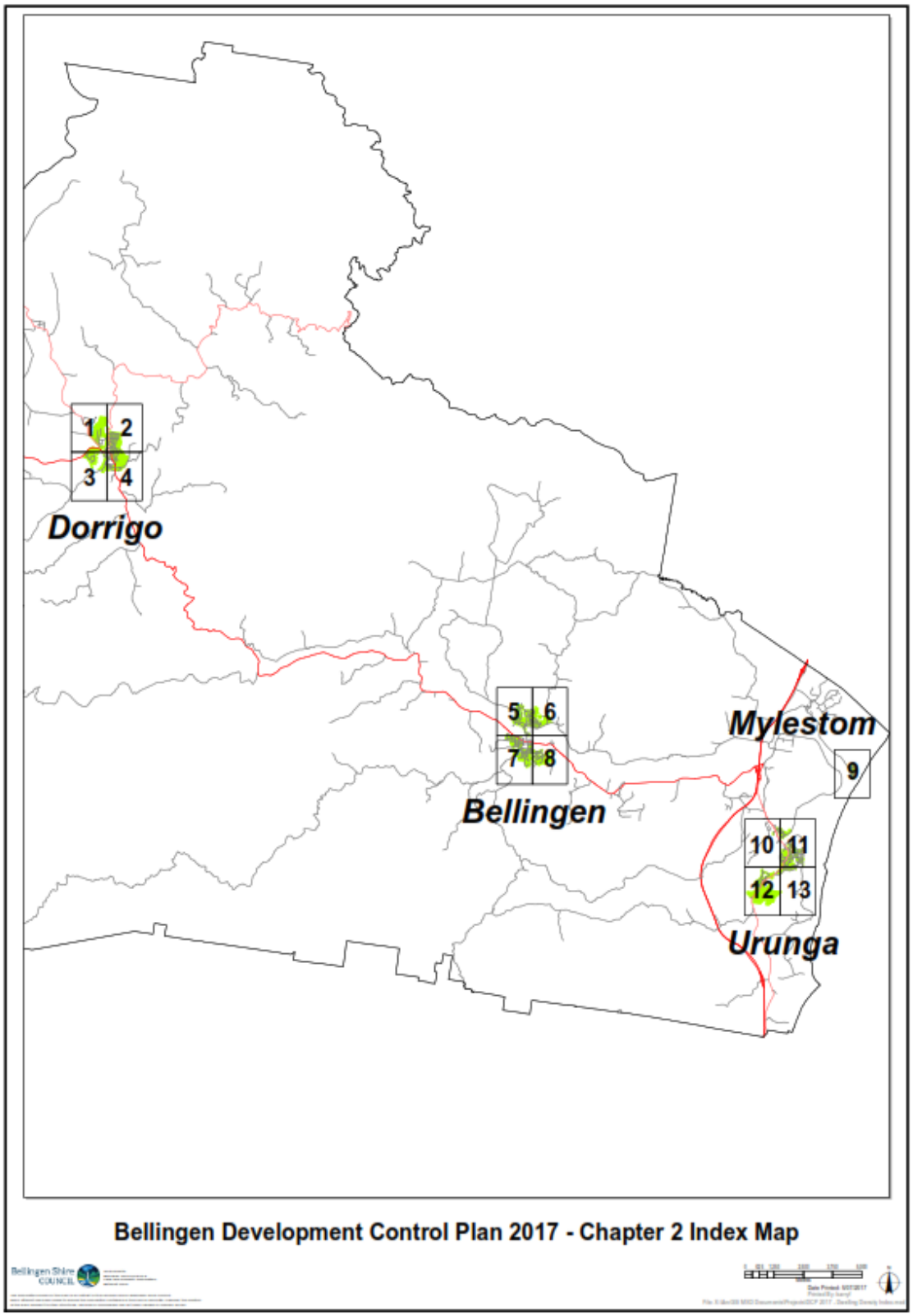
Criteria

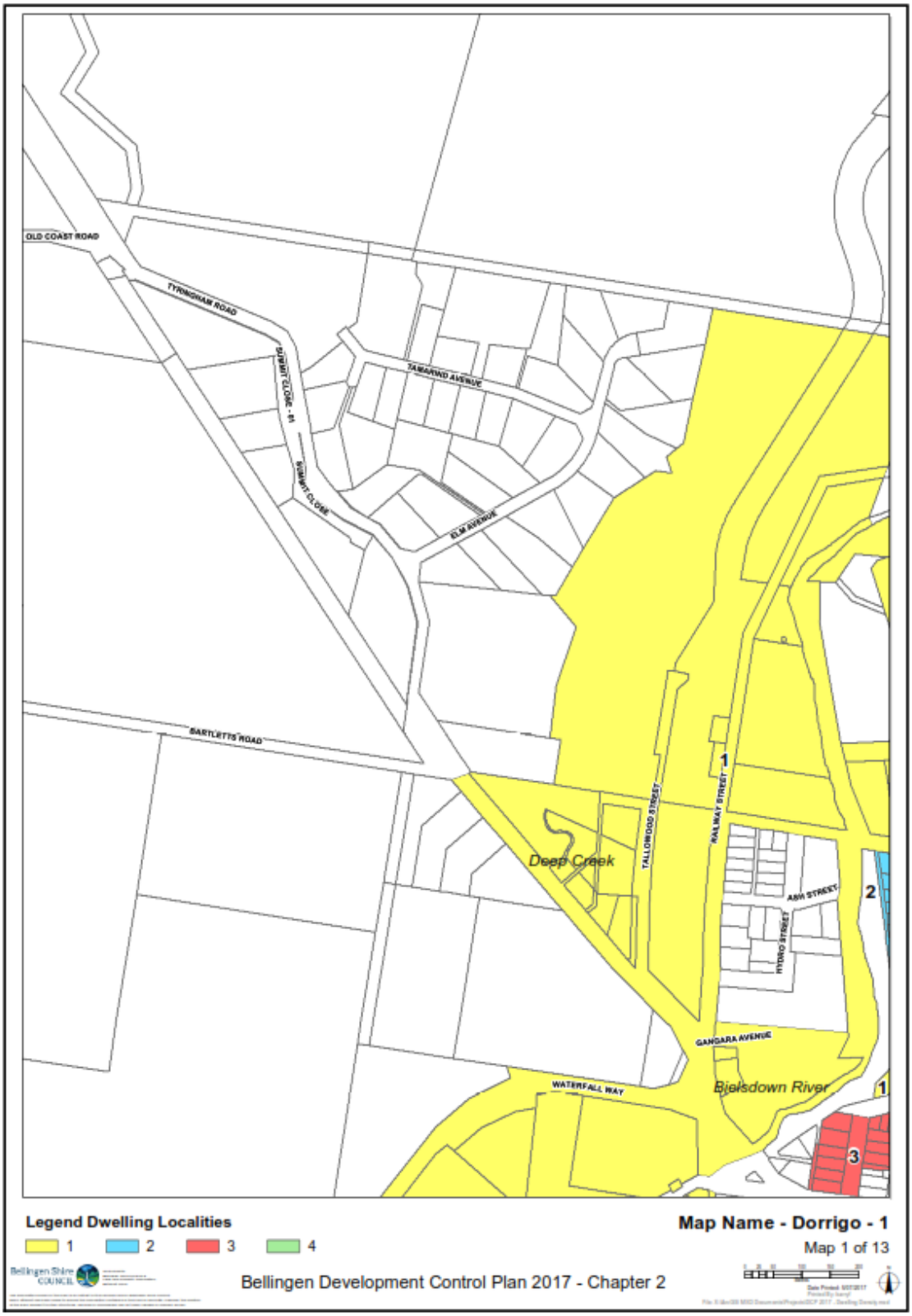
1) Shop top housing developments are designed to comply with criteria 2) to 5) of 1.6.7 in Chapter 1 – Single Dwellings and all relevant sections of this Chapter.

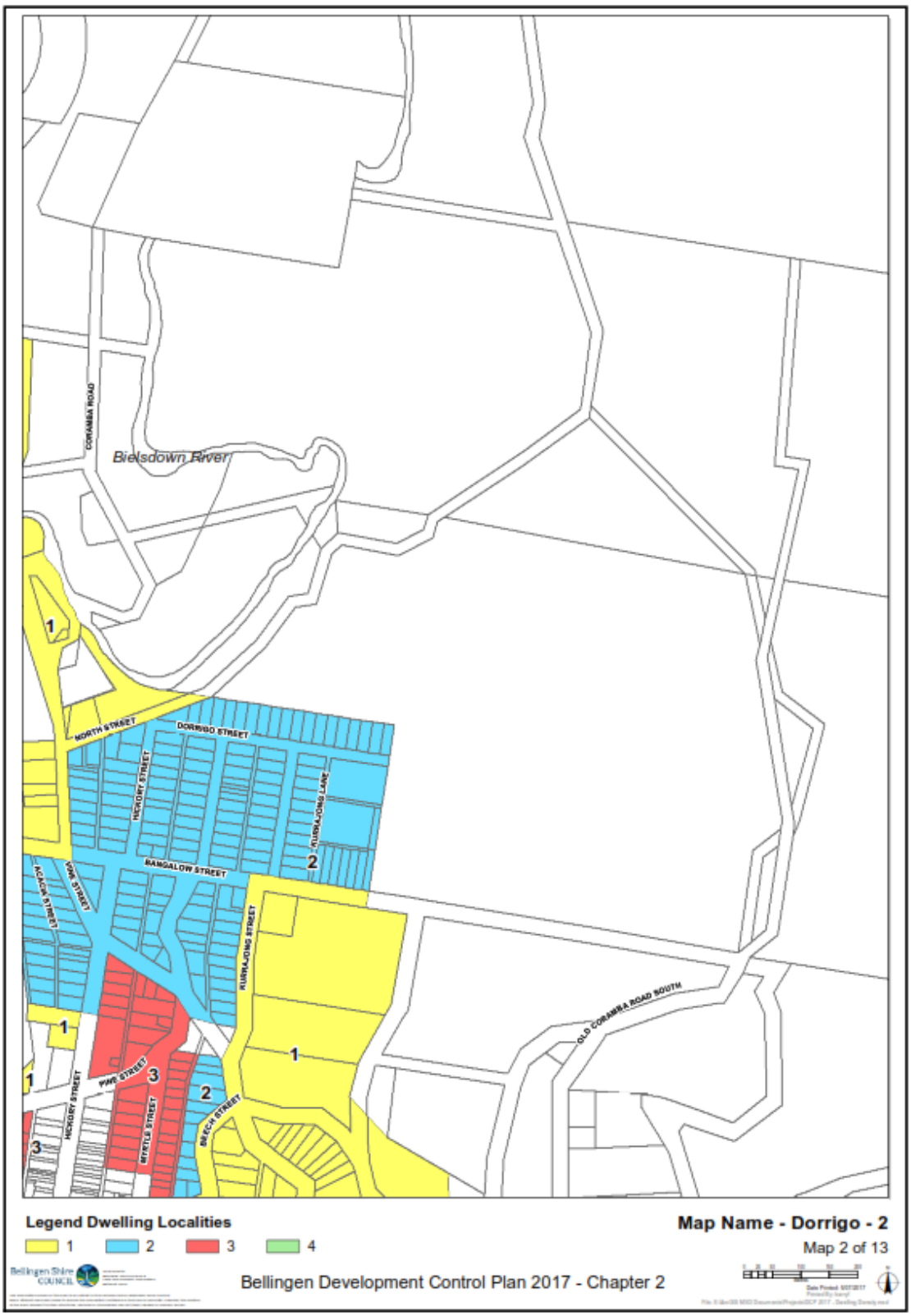
2) Car parking shall be provided on-site as per Chapter 5 – Carparking and Vehicular Access.

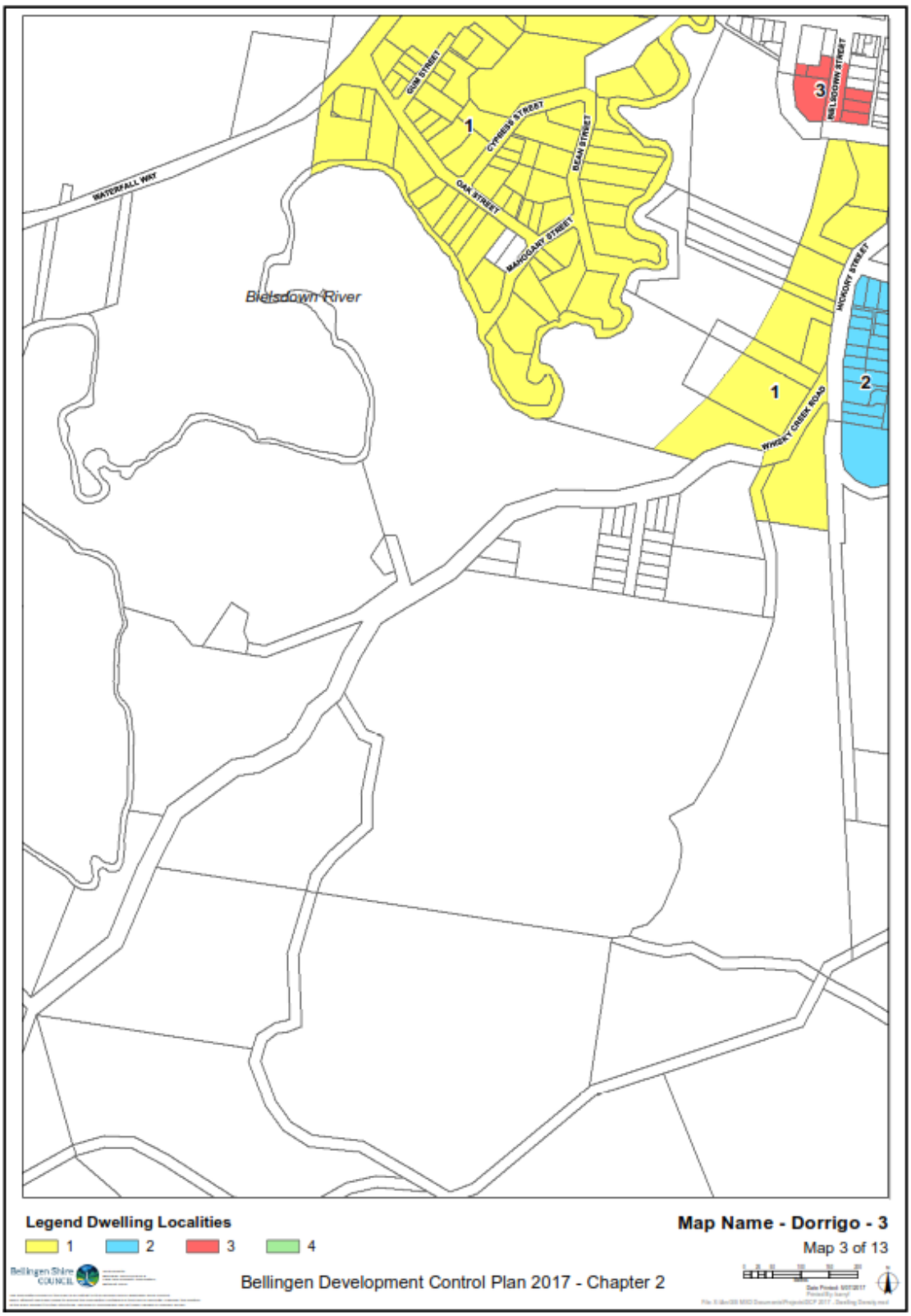
APPENDICES

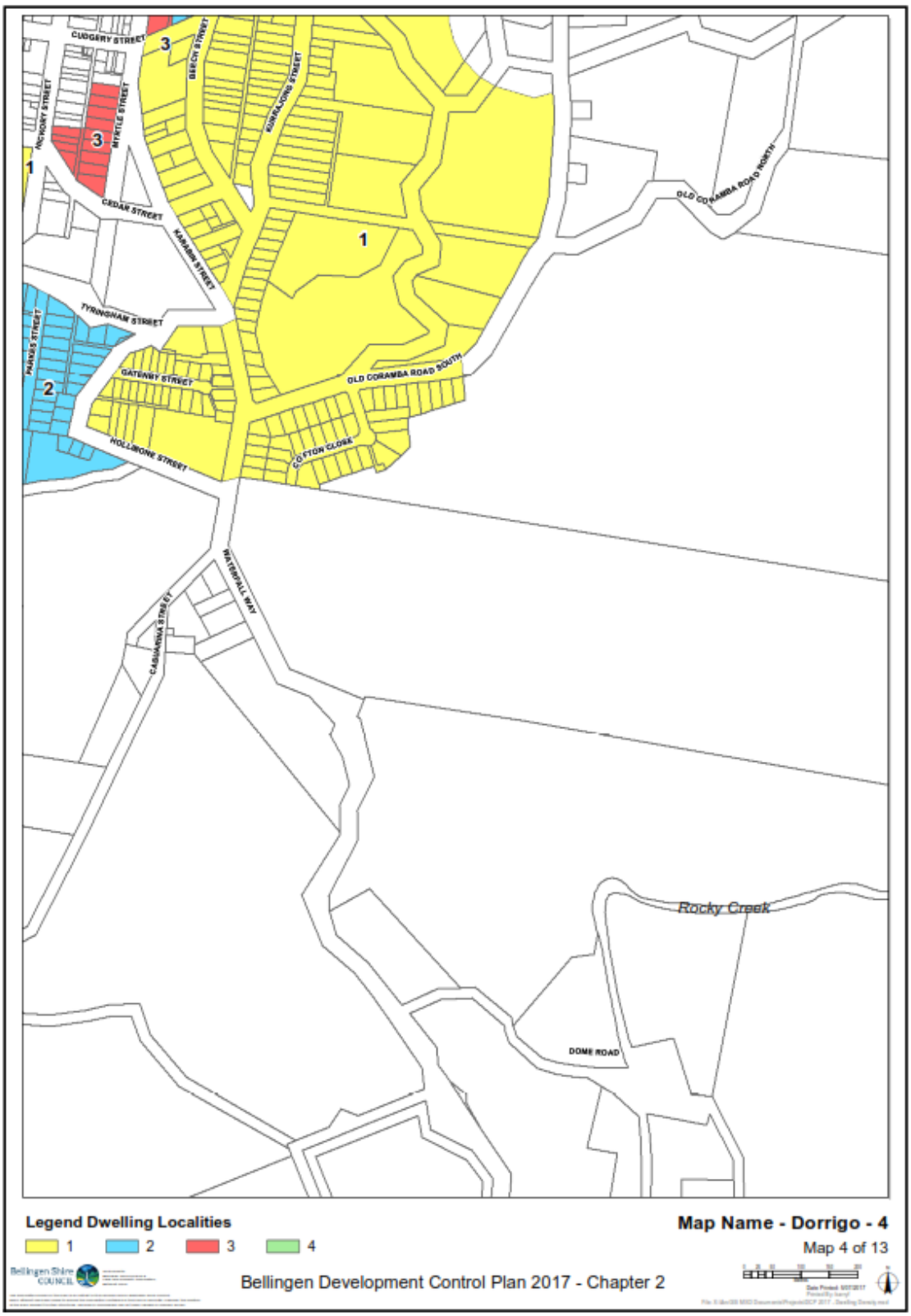
APPENDIX 2.1 – DENSITY LOCALITIES

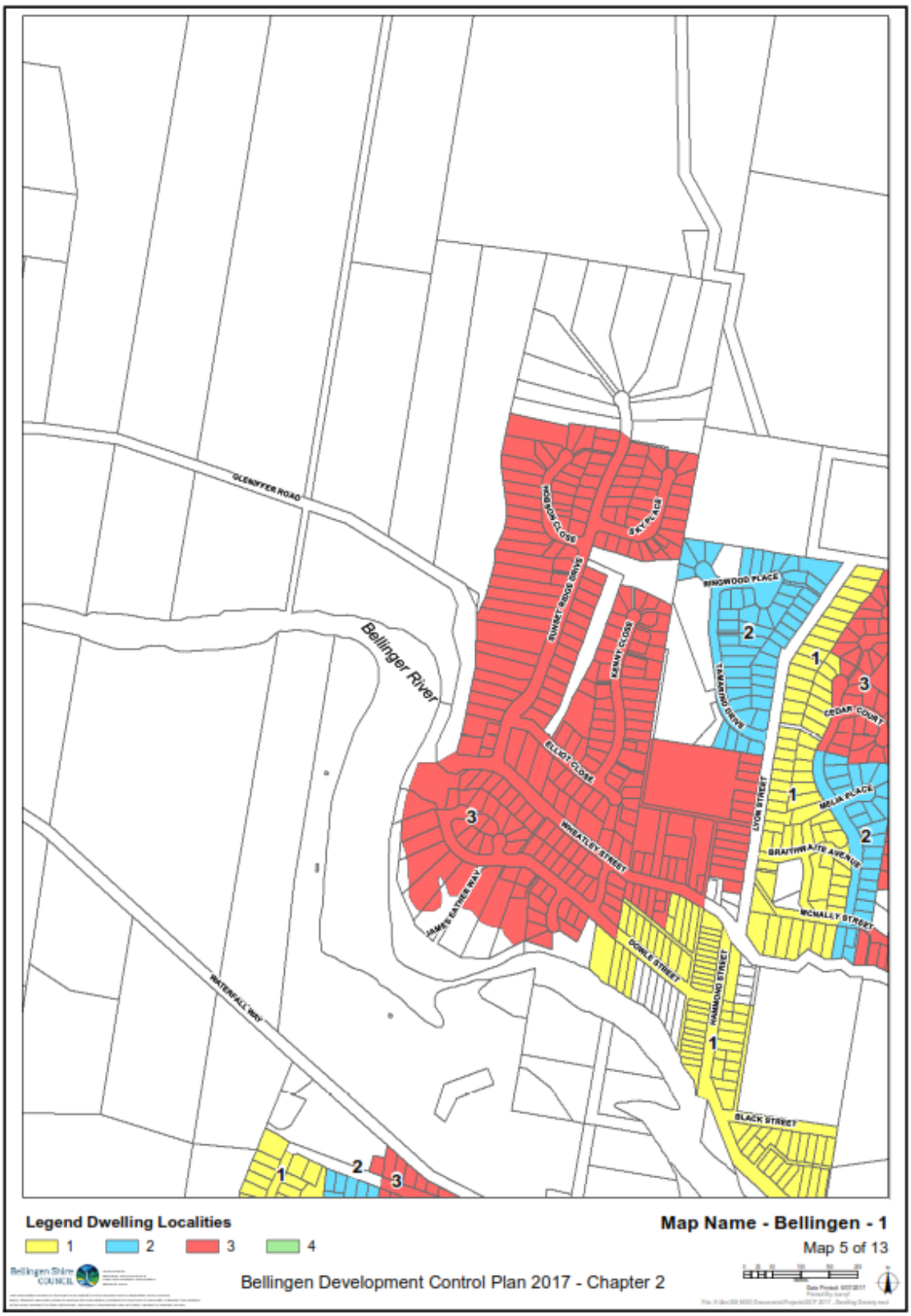


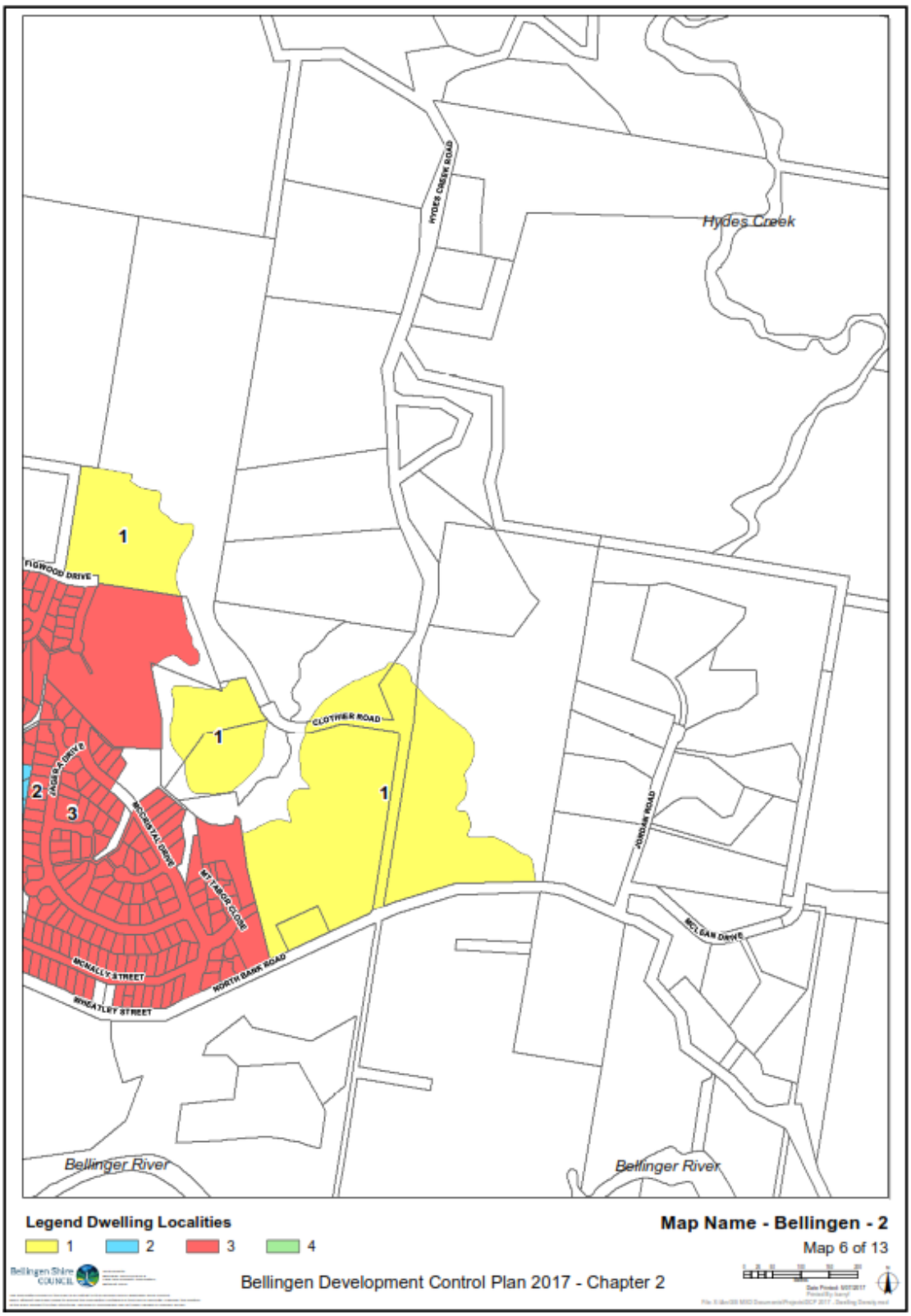

OLD COAST ROAD
TYRRIGHAM ROAD
SUMMIT CLOSE - #1
SUMMIT CLOSE
TAMARIND AVENUE
ELM AVENUE
BARTLETTS ROAD
Deep Creek
TALLOWWOOD STREET
RAILWAY STREET
ASH STREET
HYDRO STREET
GANGARA AVENUE
WATERFALL WAY
Bielsdown River
1
2
3
Legend Dwelling Localities
1
2
3
4
Map Name - Dorrigo - 1
Map 1 of 13
Bellingen Development Control Plan 2017 - Chapter 2

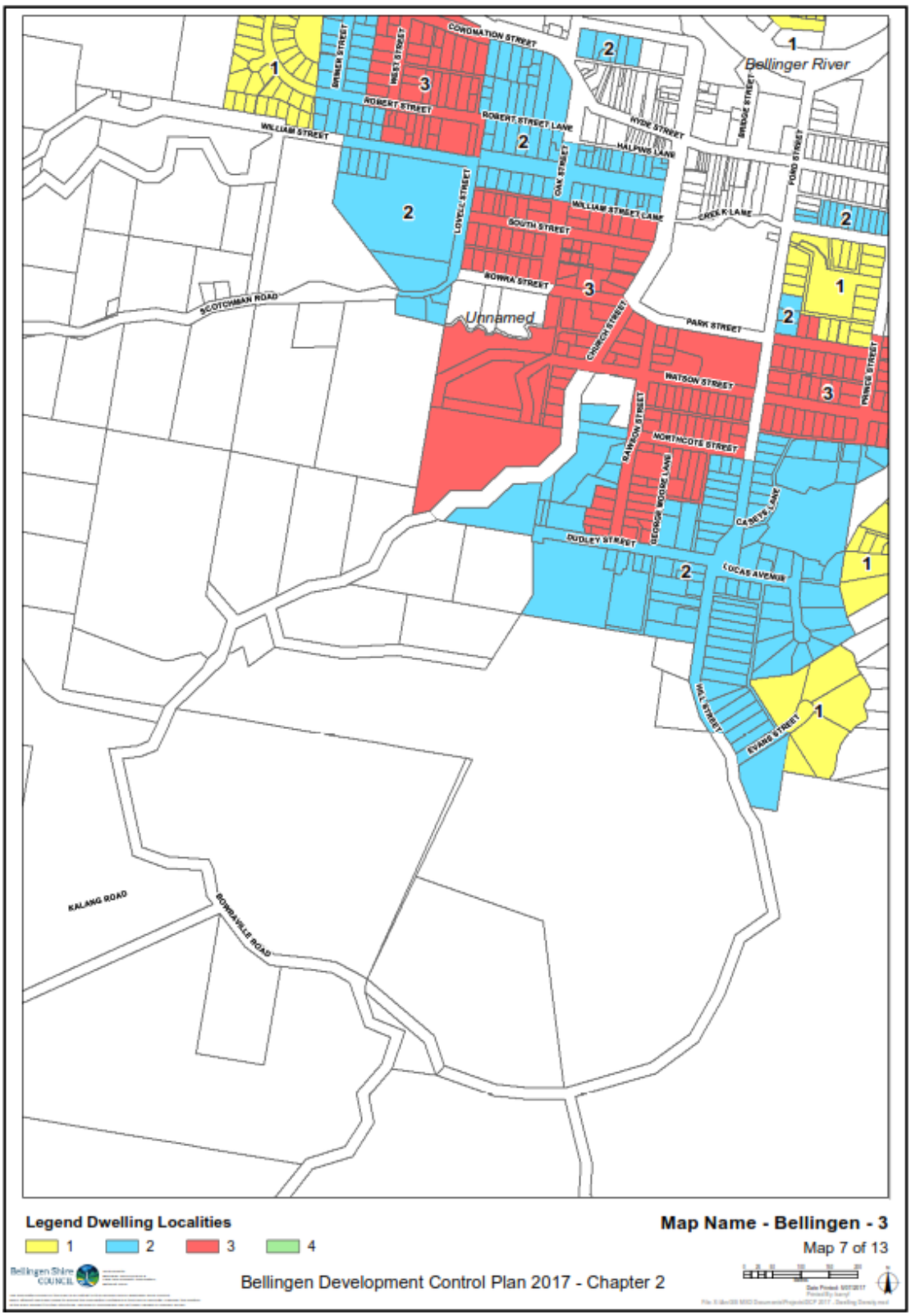

Bielsdown River
CORAMBA ROAD
NORTH STREET
DORRIGO STREET
HICKORY STREET
KURRAJONG LANE
BUNGALOW STREET
ACACIA STREET
VINE STREET
KURRAJONG STREET
OLD CORAMBA ROAD SOUTH
PINE STREET
HICKORY STREET
MYRTLE STREET
BEACH STREET
1
2
3
Legend Dwelling Localities
1
2
3
4
Map Name - Dorrigo - 2
Map 2 of 13
Bellingen Development Control Plan 2017 - Chapter 2

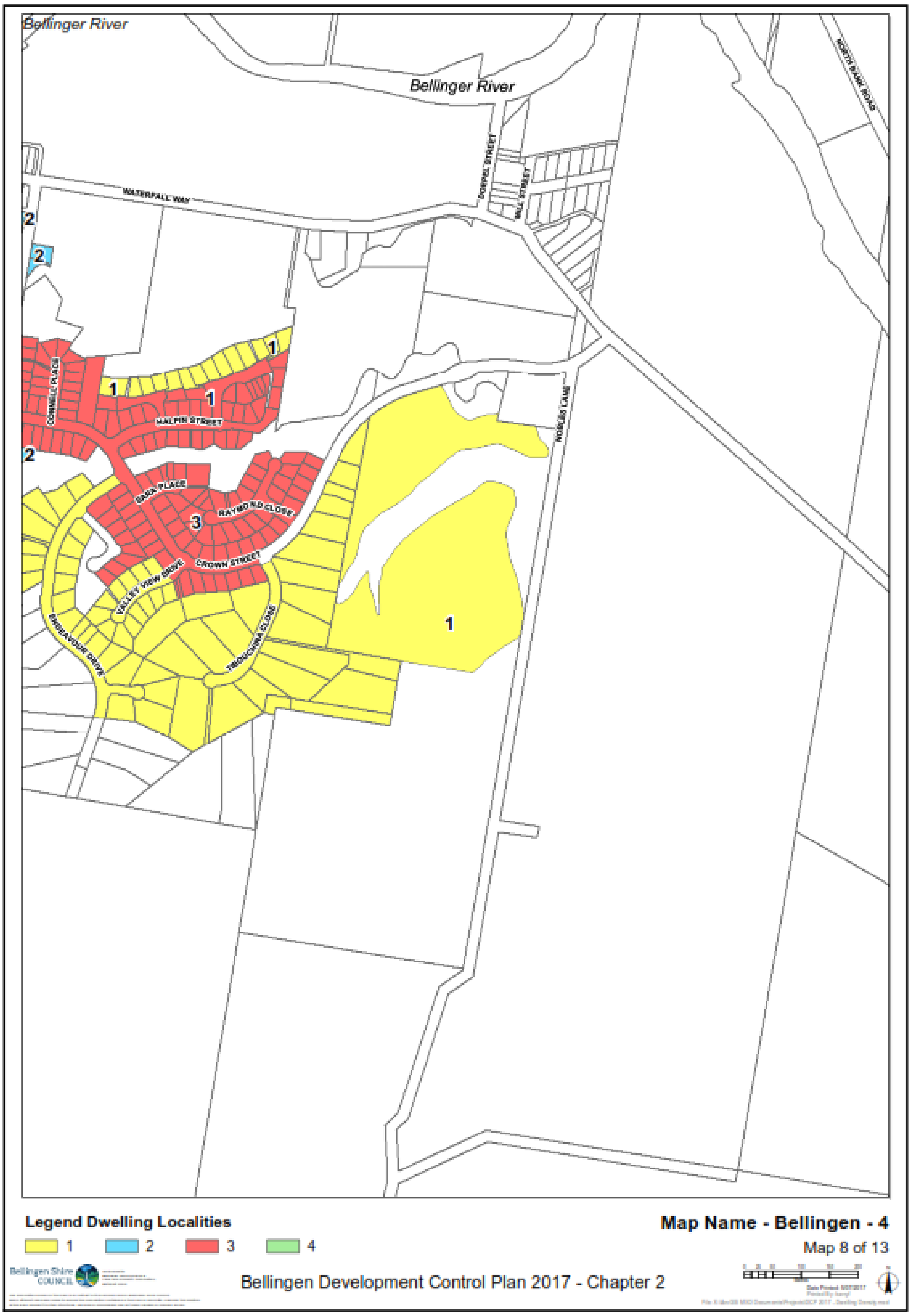

GUM STREET
CYPRESS STREET
BEAN STREET
OAK STREET
MAHOGANY STREET
WATERFALL WAY
Bielsdown River
HILLSDOWN STREET
HICKORY STREET
WHEATY CREEK ROAD
1
2
3
Legend Dwelling Localities
1
2
3
4
Map Name - Dorrigo - 3
Map 3 of 13
Bellingen Development Control Plan 2017 - Chapter 2


CUDGERY STREET
HICKORY STREET
MYRTLE STREET
BEECH STREET
KURRAJONG STREET
CEDAR STREET
KARAMA STREET
OLD CORAMBA ROAD NORTH
TYRINGHAM STREET
PARKES STREET
GATENBY STREET
OLD CORAMBA ROAD SOUTH
COFTON CLOSE
HOLLYBORNE STREET
WATERFALL WAY
CASUARINA STREET
Rocky Creek
DOME ROAD
1
2
3
Legend Dwelling Localities
1
2
3
4
Map Name - Dorrigo - 4
Map 4 of 13
Bellingen Development Control Plan 2017 - Chapter 2

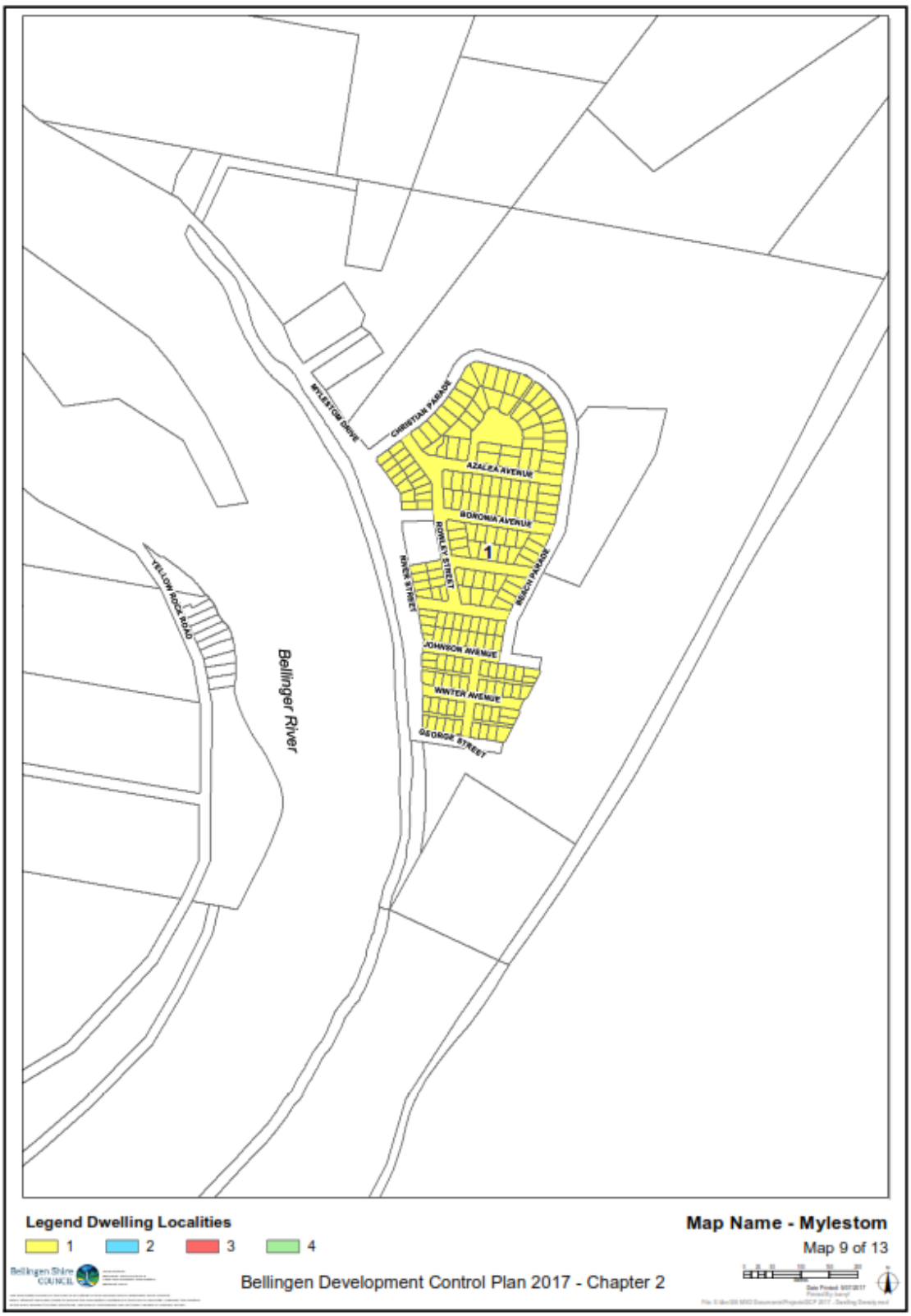

GLENOFFER ROAD
Bellinger River
WATERFALL WAY
HOBSON CLOSE
SKY PLACE
SUNSET RIDGE DRIVE
KANAT CLOSE
ELLIOT CLOSE
WHEATLEY STREET
JAMES EATHER WAY
RINGWOOD PLACE
TAMARIND DRIVE
LYON STREET
CEDAR COURT
MILIA PLACE
BRAITHWAITE AVENUE
MCMALLY STREET
DOWLE STREET
HAMMOND STREET
BLACK STREET
1
2
3
Legend Dwelling Localities
1
2
3
4
Map Name - Bellingen - 1
Map 5 of 13
Bellingen Development Control Plan 2017 - Chapter 2

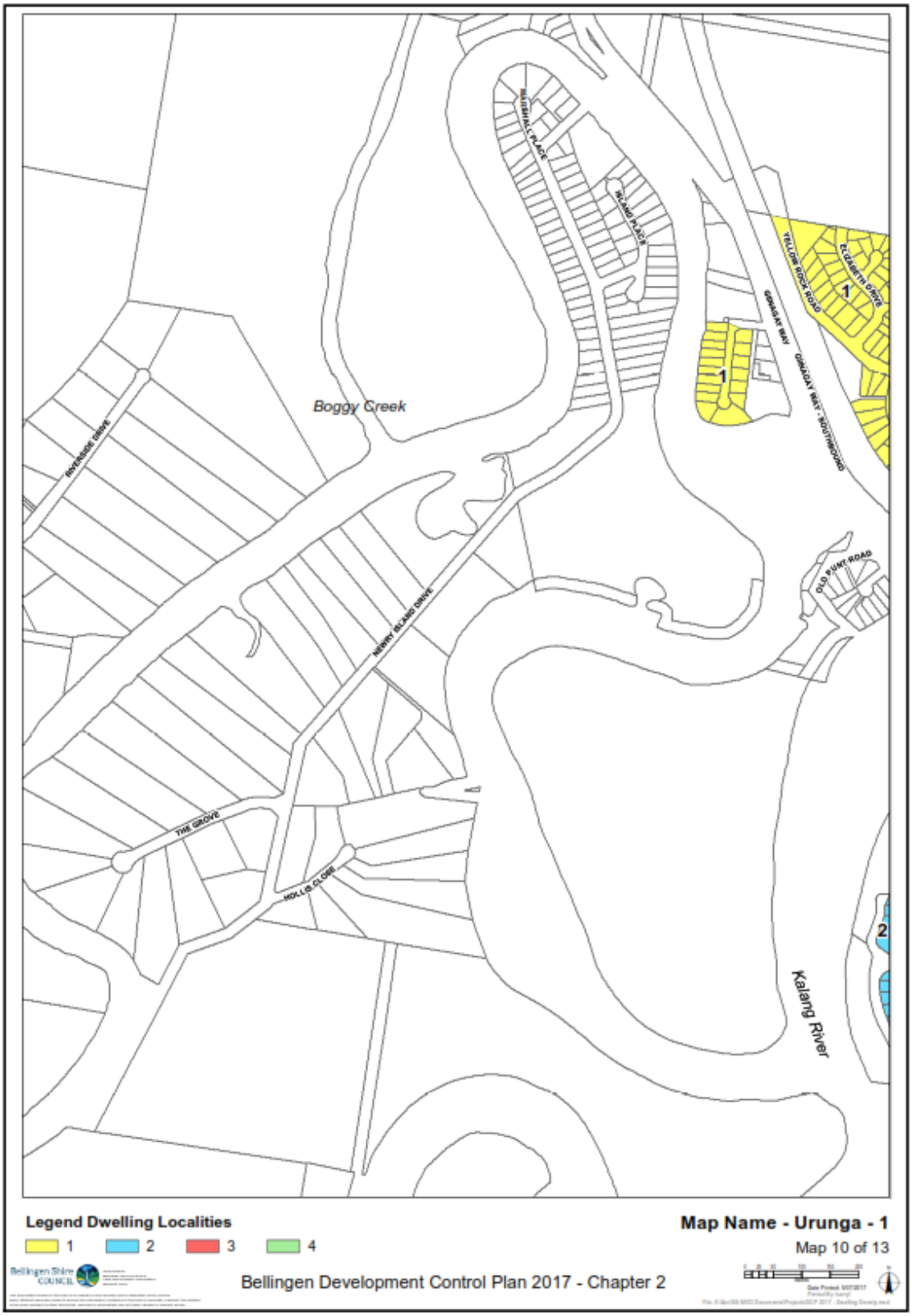

Hydes Creek
HYDES CREEK ROAD
FIGWOOD DRIVE
CLOTHIER ROAD
JAGGERA DRIVE
MOORETAL DRIVE
MT TABOR CLOSE
JOHNSON ROAD
MCLEAN DRIVE
MCNALLY STREET
WHEATLEY STREET
NORTH BANK ROAD
Bellinger River
Bellinger River
1
2
3
4
Legend Dwelling Localities
1
2
3
4
Map Name - Bellingen - 2
Map 6 of 13
Bellingen Development Control Plan 2017 - Chapter 2

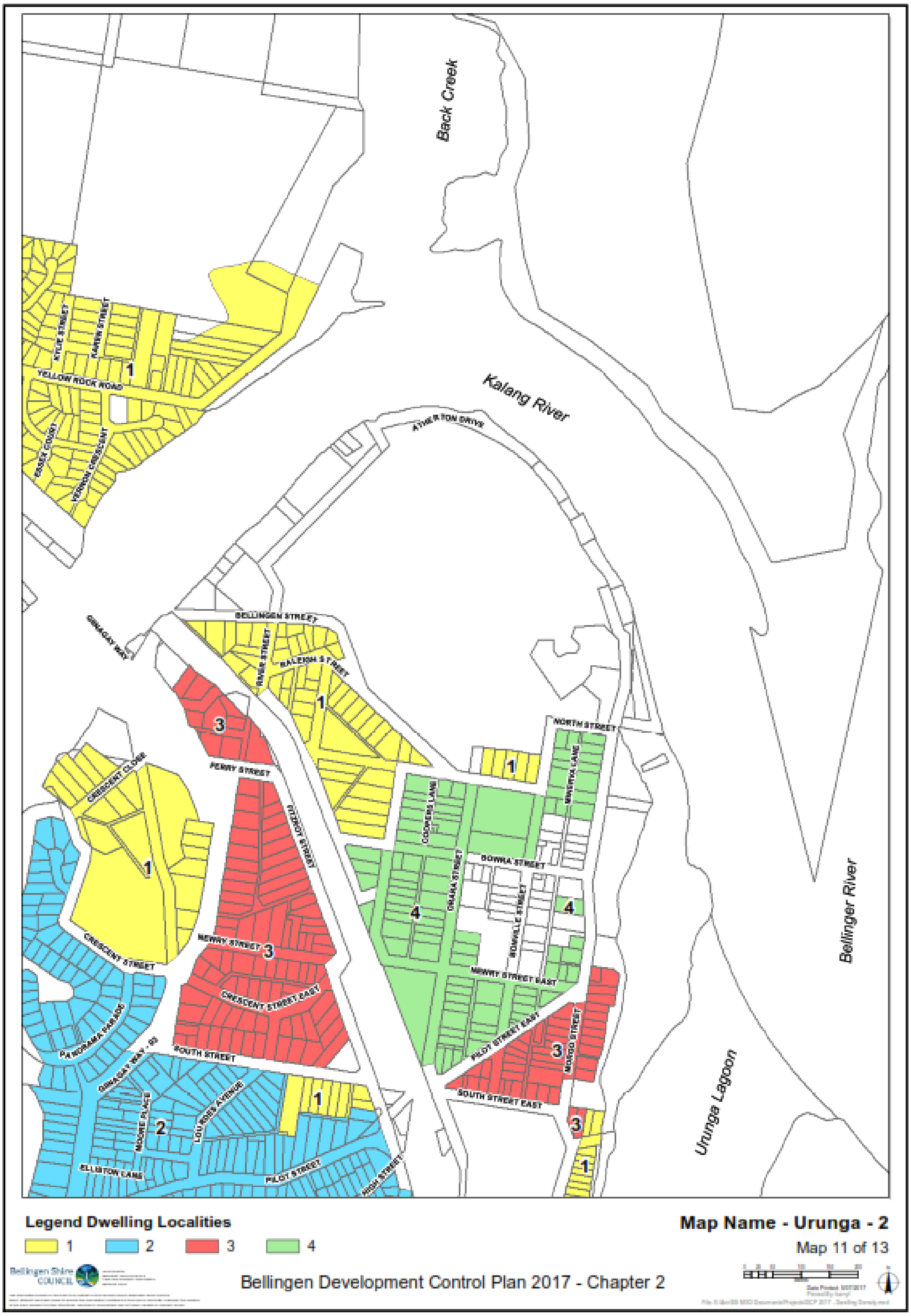

Bellinger River
Unnamed
CORONATION STREET
WILLIAM STREET
ROBERT STREET
ROBERT STREET LANE
HYDE STREET
HALPINS LANE
BRIDGE STREET
FORD STREET
WILLIAM STREET LANE
CREEK LANE
SOUTH STREET
BOWRA STREET
SCOTCHMAN ROAD
CHURCH STREET
PARK STREET
WATSON STREET
PRINCE STREET
NORTHCOTE STREET
DAWSON STREET
GEORGE WOOD LANE
CASEY'S LANE
DUDLEY STREET
LUCAS AVENUE
HILL STREET
EVANS STREET
KALANG ROAD
BOMBAVILLE ROAD
Legend Dwelling Localities
1
2
3
4
Map Name - Bellingen - 3
Map 7 of 13
Bellingen Development Control Plan 2017 - Chapter 2

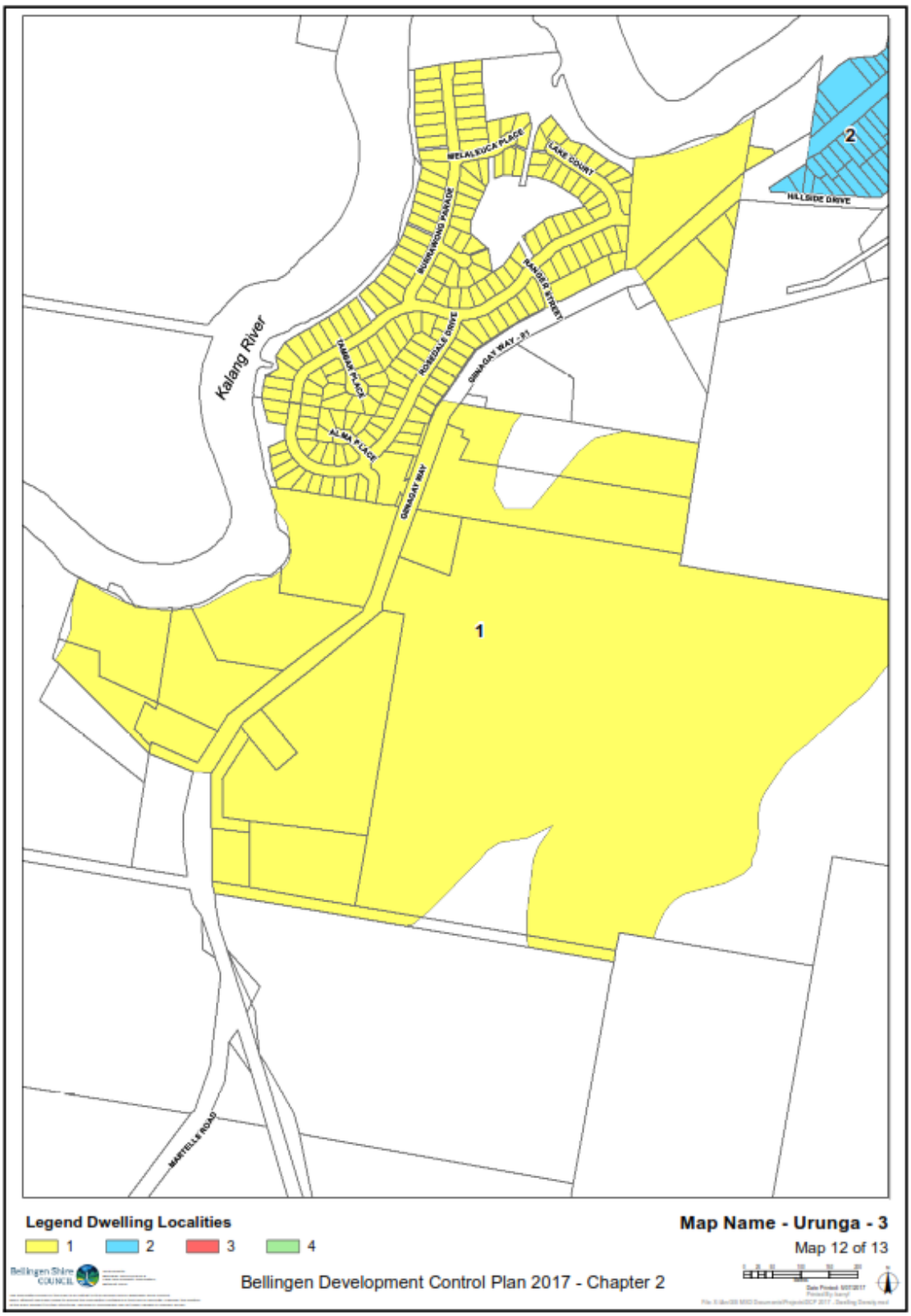


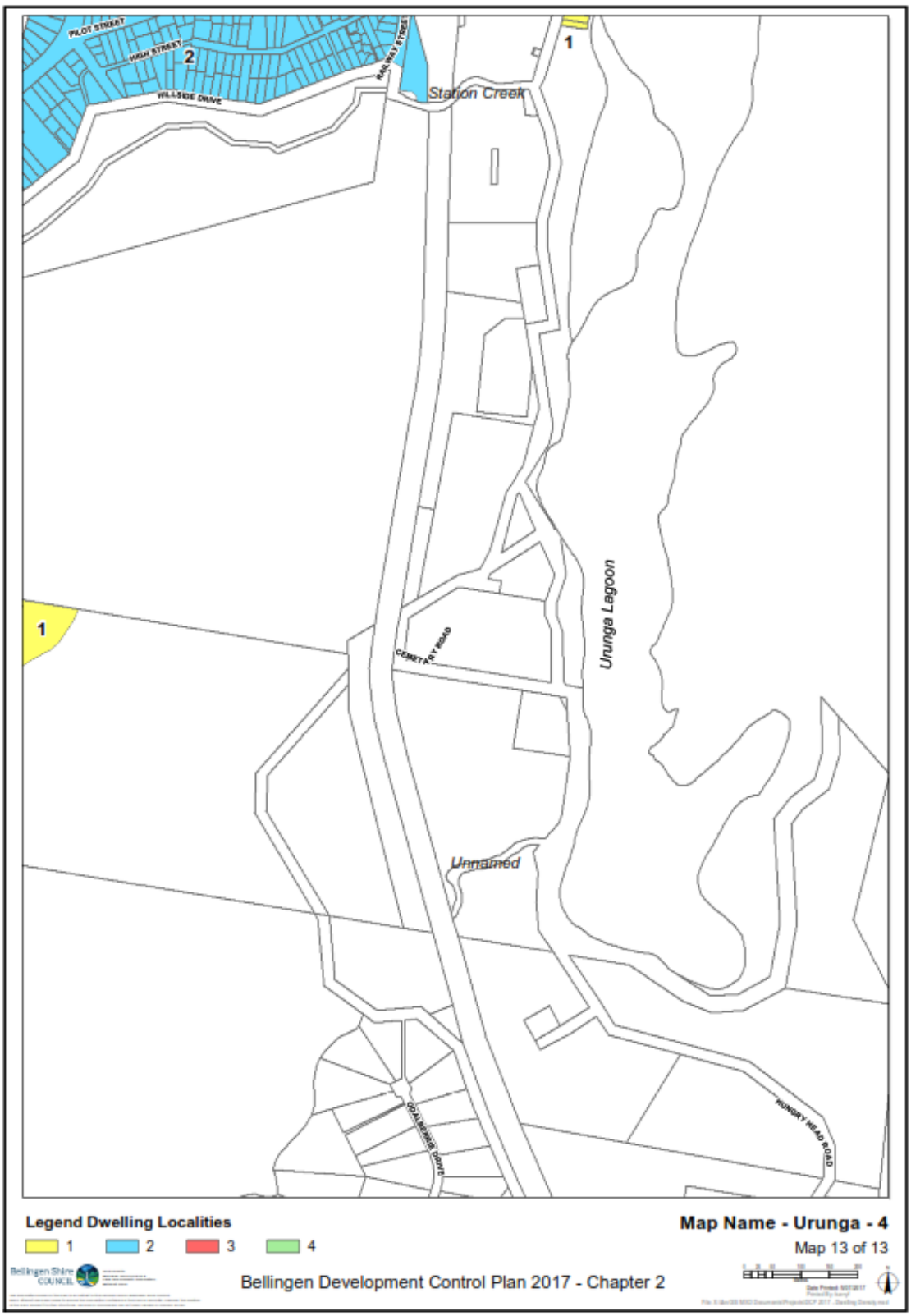
Bellinger River
Bellinger River
WATERFALL WAY
HALPIN STREET
SARA PLACE
RAYMOND CLOSE
CROWN STREET
VALLEY VIEW DRIVE
ENDEAVOUR DRIVE
TIBOUCHINA CLOSE
NOBLES LANE
1
2
3
Legend Dwelling Localities
1
2
3
4
Map Name - Bellingen - 4
Map 8 of 13
Bellingen Development Control Plan 2017 - Chapter 2


CHRISTIAN PARADE
MYLESTOM DRIVE
AZALEA AVENUE
BONOMIA AVENUE
RONLEY STREET
ROSES STREET
BEACH PARADE
1
YELLOW ROCK ROAD
Bellinger River
JOHNSON AVENUE
WINTER AVENUE
GEORGE STREET
Legend Dwelling Localities
1
2
3
4
Map Name - Mylestom
Map 9 of 13
Bellingen Development Control Plan 2017 - Chapter 2


Boggy Creek
MARSHALL PLACE
WILKINS PLACE
YELLOW ROCK ROAD
ELIZABETH DRIVE
GORDON WAY
GORDON WAY - NORTHBOUND
1
1
RIVERSIDE DRIVE
NEWRY ISLAND DRIVE
OLD PUMP ROAD
THE GROVE
HOLLIS CLOSE
2
Kalang River
Legend Dwelling Localities
1
2
3
4
Map Name - Urunga - 1
Map 10 of 13
Bellingen Development Control Plan 2017 - Chapter 2


Back Creek
Kalang River
Bellinger River
Urunga Lagoon
YELLOW ROCK ROAD
KYLIE STREET
ESSEX COURT
VERNON CRESCENT
ATHERTON DRIVE
BELLINGEN STREET
RALEIGH STREET
NORTH STREET
PERRY STREET
FITZROY STREET
CRESCENT CLOSE
COOPERS LANE
MINERVA LANE
BOWRA STREET
ORARA STREET
BONVILLE STREET
NEWRY STREET
NEWRY STREET EAST
CRESCENT STREET
CRESCENT STREET EAST
PANORAMA PARADE
SOUTH STREET
SOUTH STREET EAST
PILOT STREET EAST
MORGO STREET
MOORE PLACE
LOURDES AVENUE
ELLISTON LANE
PILOT STREET
HIGH STREET
Legend Dwelling Localities
1
2
3
4
Map Name - Urunga - 2
Map 11 of 13
Bellingen Development Control Plan 2017 - Chapter 2


Kalang River
WELALEUCA PLACE
LAKE COURT
HILLSIDE DRIVE
BUNGAWONG PARADE
RANGER STREET
TAMBAR PLACE
ROSEDALE DRIVE
GINAGAY WAY - PT
ALMA PLACE
GINAGAY WAY
MARTELLE ROAD
1
2
Legend Dwelling Localities
1
2
3
4
Map Name - Urunga - 3
Map 12 of 13
Bellingen Development Control Plan 2017 - Chapter 2


PILOT STREET
HIGH STREET
HILLSIDE DRIVE
RAILWAY STREET
2
1
Station Creek
Urunga Lagoon
1
CEMETERY ROAD
Unnamed
GOANNA DRIVE
HUNGRY HEAD ROAD
Legend Dwelling Localities
1
2
3
4
Map Name - Urunga - 4
Map 13 of 13
Bellingen Development Control Plan 2017 - Chapter 2

Bellingen Shire Development Control Plan 2017

Chapter 3
Subdivision

Table of Contents

Table of Amendments

Amendment	Date Adopted	Date Commenced
Minor review of DCP - DCP 2017 replaces DCP 2010	22 November 2017	6 December 2017

3.1 Aims

The aims of this chapter are to:

a) To encourage a high standard of residential development that is respectful to the amenity of neighbours, the character of the neighbourhood and the natural environment within which it is located.

b) To encourage development that will contribute towards increased levels of physical activity and healthy living patterns and reduces reliance on private motor vehicles.

c) To ensure that subdivision of land may only occur where the developers make an appropriate contribution to the progressive improvement of the social, physical and environmental infrastructure necessary to service the increased population.

d) To ensure that infrastructure and services are provisioned to development in a logical sequence and efficient manner.

e) To encourage the use of innovative and best practice engineering approaches to subdivision development.

f) To support use of alternative energy technologies for domestic and farm use in rural-residential and rural areas.

g) To encourage subdivision design that reduces the energy requirements and fuel use of future residents.

3.2 Where this Chapter Applies

This chapter applies to all land within Bellingen Shire where subdivision is permitted under the provisions of Bellingen Local Environmental Plan 2010. Where any site specific development controls included in later chapters of this DCP nominate alternative requirements, the provisions of the site specific development controls shall prevail.

3.3 When this Chapter Applies

This chapter applies when any Development Application is received by Council for the subdivision of land.

It does not apply when the proposed development can be considered as “exempt” or “complying” development under the provisions of either the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008* or any other Environmental Planning Instrument applying to the land.

3.4 Variations

Council may consider variations to the standards required of development in this chapter when the overall aims of this chapter and any specific aims that may be detailed for that particular standard can be achieved.

3.5 Definitions

Definitions of terms used within this chapter are the same as those contained within Bellingen Local Environmental Plan 2010.

3.6 Development Criteria – General

3.6.1 Land suitability

Aim

To provide appropriate levels of protection for environmentally sensitive or constrained areas of land from development pressure.

Criteria

Watercourses in Urban Areas (land with a minimum lot size of 1ha or less)

1) Further to the provisions of Clause 7.5 of BLEP 2010 (Biodiversity) and to avoid the creation of additional riparian rights and fencing within riparian zones, subdivision layouts shall avoid creating additional lots with frontages to watercourses.

2) Where a development site has a frontage to a watercourse, the length of the riparian corridor shall either be incorporated into a single allotment or become common property in a Community Title subdivision.

   Alternatively, in residential localities where the riparian land directly adjoins Council's existing open space network, Council may consider dedication of this riparian land to Council. This would be on the provision that the riparian land is made free of weeds as identified by Chapter 6 of this DCP and in accordance with an approved Weed Management Plan, is landscaped and embellished in accordance with an approved Landscape Masterplan and maintained in accordance with an approved Maintenance and Management Plan prior to handover to Council.

Steep Lands

3) Subdivision layouts shall avoid the need for development of land with a slope in excess of 25%.

4) Roads shall be located to ensure that the need for cut and fill to facilitate construction is minimised.

5) Proposed public roads must not exceed a grade of 16%.

Flood liable land

6) The filling of flood liable land to create suitable building envelopes for subdivision shall be avoided. Council may consider minor amounts of filling where the essential features of the landscape are not significantly altered and compliance with the provisions of Chapter 8 – Flooding and Riverine Processes is demonstrated.

Vegetated Land

7) Further to the provisions of Clause 7.5 of BLEP 2010 (Biodiversity) subdivision layouts shall be designed to minimise disturbance to existing areas of native vegetation. The degree of clearing necessary to develop the subdivision includes that necessary for the construction of roads as part of the subdivision construction works, the installation of infrastructure (e.g.: electricity supply, stormwater control and treatment), for house construction and bushfire Asset Protection Zones (APZ's).

8) Threatened Ecological Communities (TEC's) and Preferred Koala Habitat as shown on the map in Appendix 16.2 of this DCP will be afforded maximum levels of protection and any application involving removal of any part of an TEC or Preferred Koala Habitat will normally require redesign to avoid adverse impacts.

9) Areas of remnant native vegetation shall, where possible, be retained in single ownerships (or common property arrangements) to prevent fragmented management techniques and future clearing for the creation of fencelines.

10) Clearing of land prior to the construction of dwellings on individual lots will only be permitted where an indicative building envelope is registered on the title restricting a dwelling to that location and where the development application for subdivision explicitly requests approval for the clearing.

Note: Any consent involving the clearing of native vegetation will be conditioned to prohibit the burning of cleared material.

Ridgelines

11) Allotment layout shall be designed to prevent or discourage residential development on prominent ridgelines. Where the only practical location for building on an allotment is toward a ridgeline, Council may require restrictions to be imposed on future development of the lots to ensure that buildings will not intrude into the skyline and cause adverse visual impacts. This restriction would be required to be described on the plan of subdivision and section 88B instrument.

Previous land uses and potential contamination

For development applications to subdivide previously undeveloped land:

12) As a minimum, a Preliminary Investigation of land proposed for subdivision must be undertaken for any subdivision application in accordance with Council's adopted *Contaminated Land Policy* (2016) and *Contaminated Land Policy Guidelines* (2016).

13) Council may require more detailed investigations and remediation depending upon the outcomes of the Preliminary Investigation.

Aboriginal Cultural Heritage

14) If an Aboriginal Heritage Impact Permit (AHIP) has not been obtained for the proposed development and lodged with the development application, applicants must demonstrate to Council that due diligence has been followed in accordance with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW* (2010) produced by the NSW Department of Environment, Climate Change and Water. This information must be lodged as part of the supporting documentation for the development application.

3.6.2 Buffers to adjoining land uses, areas of environmental constraint or risk

Criteria

1) Where the development site adjoins or contains;

a) Landuses that may have an adverse impact on the amenity of the future occupants (eg: intensive agricultural operations, forestry operations, dairies, busy roads and railways), or

b) Areas of environmental constraint (e.g.: Threatened Ecological Communities), or

c) Key fish habitat, or

d) Areas of bushfire risk,

the Applicant will need to demonstrate that sufficient buffer zones, or mitigating measures, will be incorporated into the development site to avoid adverse impact.

Note: For the purposes of determining appropriate setbacks and means to address issues of landuse conflict, Council will have principal regard to the publication titled *Living and Working in Rural Areas – A handbook for managing land use conflict issues on the NSW North Coast, ISBN 978-0-646-48527-0*, as published by the NSW Department of Primary Industries, 2007.

For the purpose of determining appropriate buffers to key fish habitats, Council will have principal regard to the publication titled *Policy and guidelines for fish habitat conservation and management (Update 2013)*, as published by the NSW Department of Primary Industries, 2013.

For matters concerning bushfire risk, the relevant regulatory guidelines are specified in Section 79BA of the *Environmental Planning and Assessment Act* 1979, and the publication titled *Planning for Bushfire Protection, ISBN 0 9585987 8 9*, as produced by the NSW Rural Fire Service.

For properties adjoining Rail Corridors and Busy Roads, Council will have principal regard to the publication titled *Development Near Rail Corridors and Busy Roads - Interim Guideline, ISBN 978-0-7347-5504-9*, as published by The State Government of NSW through the Department of Planning, 2008.

3.7 Development Criteria – Subdivision of land with a 600m^2 Minimum Lot Size requirement

3.7.1 Minimum lot size requirements

Aim

a) To confirm minimum lot sizes for subdivision of land where that land contains approved or existing residential accommodation (other than a secondary dwelling) and each lot will contain a dwelling.

b) To ensure that lots approved for residential purposes are of sufficient size to enable the erection of a dwelling and ancillary buildings as well as provision for vehicular access, car parking, private open space, adequate solar access into the building, an outdoor clothes drying area, landscaping and any other necessary or desirable infrastructure without causing undue interference to surrounding properties.

Criteria

1) The minimum lot size for the creation of a residential allotment (independent of an approved dwelling design) is 600m^2.

Note: This requirement is contained within BLEP 2010 and can only be varied in accordance with BLEP 2010 Clause 4.6 – Exceptions to development standards.

2) The minimum lot size for the creation of a residential allotment in conjunction with an approved dwelling design (excluding strata subdivision) shall be no less than 230m^2.

3) In calculating minimum lot size, any access handle serving an allotment/s shall be excluded from the lot size.

3.7.2 Subdivision of lots with approved dwelling

Aim

a) To ensure that all newly created undersized residential allotments are developed with well-designed and site responsive dwellings.

b) To ensure that small lot subdivisions only occur in locations where Council has planned for and where the community expects increased residential densities.

Criteria

1) Council will not consent to the creation of a lot less than 600m^2 in area unless a dwelling has been approved in conjunction with the Development Application for the subdivision or if a dwelling already exists on the proposed undersized lot.

2) The development must be designed so that the new dwelling complies with:

   i. all relevant requirements contained within Chapter 1, and

   ii. the minimum site area requirements of the density locality in which the property is located as per Section 2.6.3 of Chapter 2 of this DCP.

3) The development must be designed so that the existing dwelling complies with:

   i. The minimum landscaped area and private open space area requirements specified in Sections 1.6.5 and 1.6.7 of this DCP,

   ii. The car parking requirements in Chapter 5 – Car parking and Vehicular Access,

   iii. The residential infrastructure requirements of Section 1.6.11 of this DCP, and

   iv. the minimum site area requirements of the density locality in which the property is located as per Section 2.6.3 of Chapter 2 of this DCP.

4) Council will not release the Subdivision Certificate for the proposed subdivision unless the approved dwelling is constructed and a final occupation certificate is issued for that dwelling.

3.7.3 Lot orientation and frontages

Aim

a) To ensure that future dwellings are able to designed and sited to address the primary street frontage of each lot.

b) To ensure that all new lots have sufficient solar access.

c) To ensure that parking and garbage collection functions are able to undertaken in front of the same respective dwellings.

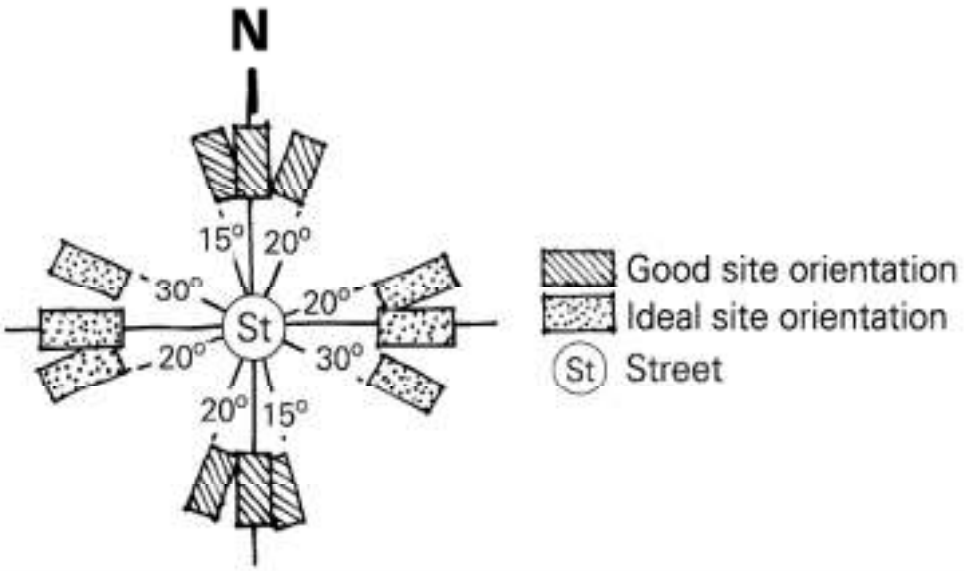
Criteria

1) Lots shall be oriented so as to provide optimal opportunities for solar access, in accordance with Figure 3.1 below. The following general principles shall be observed in lot layout and configuration

   - Lots oriented along the acceptable E/W axis shall have comparably greater widths than those oriented along the acceptable N/S axis to allow for greater containment of overshadowing within property boundaries.

   - Lots that fall back towards the south shall have comparably deeper N/S dimensions to account for reduced solar access.

Figure 3.1 – Desired Lot Orientations for Solar Access



Source: Australian Government (2013)

2) Lot frontages shall be of sufficient width to enable future dwellings to address the street frontage. In this regard, battleaxe allotments are not acceptable as a repeated design measure throughout subdivisions.

3) Circumstances in which a battleaxe arrangement may be acceptable include small scale infill development where options for redevelopment are limited and circumstances where access is not feasible from a certain road (eg: blocks backing onto a classified road where additional vehicular accesses are undesirable).

4) Where battleaxe allotments are proposed within a subdivision layout they shall have a minimum access handle width of 4m. The driveway within this access handle is to be constructed as part of the development and completed to Council's satisfaction prior to the issue of the Subdivision Certificate. An increased access handle width may be required to accommodate the full range of services.

3.7.4 Road Network

Criteria

1) For subdivisions involving the construction of new public roads, a Road Hierarchy must be developed for the proposal. The Road Hierarchy shall be developed in accordance with Council's engineering specifications.

2) For new public roads, road reserves must comply with the minimum widths shown in Table 3.1.

Table 3.1 Public road reserve minimum widths

	Access Place	Access Street	Collector Road	Industrial	Distributor
Road Reserve Width	16	16	20	22	22

3) For community title subdivisions involving the construction of a private road, the minimum sealed widths as shown in Table 3.2 apply:

Table 3.2. Community Title Road Requirements

Number of Lots Serviced	Minimum sealed Width	Shoulder
2	3.50 m	0.5m on either side
3	4.0 m	1 m on either side
4 or above	5.0 m	1 m on either side

4) Council will not permit the creation of rights of carriageway for the purpose of providing vehicular access. Shared sections of vehicular access ways shall be designated as common property in either a Strata or Community Title subdivision (as is appropriate depending upon the nature of the development).

3.7.5 Subdivision pattern and connectivity

Aim

To encourage reduced reliance on private motor vehicles by improving the legibility and connectivity of the road network, thereby encouraging greater levels of walking and cycling in neighbourhoods.

Criteria

1) Subdivision layouts shall provide road networks based on a grid pattern. The road layout need not be rigidly rectilinear however must demonstrate a comparable level of connectivity to that which is provided by a grid pattern style of subdivision. Connectivity must be provided by the public road network

rather than narrow pedestrian linkages provided between different areas of development.

2) Cul-de-sacs shall not be the dominant element of road design. Minor cul-de-sacs coming off a road network that demonstrates a high overall degree of connectivity, as required by Criteria 1) of this section, may be considered if it can be demonstrated that they are appropriate given the nature of the local landform and where they do not provide the sole point of access to a Council road for any more than 10% of lots proposed within a subdivision proposal.

3) Subdivision layouts shall not involve the creation of lots that back onto public reserves or drainage lines. Public Reserves, drainage reserves and the like must be bordered by a public road, with measures for storm water control and enhanced opportunities for public use of the reserve area considered as part of the Development Application.

3.7.6 Infrastructure requirements

General

Aim

To ensure that future residents of residential subdivisions are adequately serviced with modern urban infrastructure.

Criteria

1) The majority of public infrastructure required as part of the subdivision process is contained within the road reserves. Therefore, the provision of infrastructure in association with subdivision must be considered in conjunction with the development of the road hierarchy and design for the subdivision.

2) Council will require the submission of sectional details throughout the road network illustrating how the various infrastructure requirements as well as street tree plantings and landscaping will be accommodated within the various road reserves as part of the supporting documentation lodged with the development application.

3) In addition to infrastructure directly necessary for the proposed development, Council may require the upgrading or provision of additional infrastructure beyond the development site to ensure appropriate connections to the existing public infrastructure system. This may be expected where:

   i. The proposed development does not conform with the logical sequence of development such that contemporary infrastructure is not yet available to the site, or

   ii. The connecting infrastructure is of a standard that will not be able to safely or adequately accommodate the additional usage resulting from the development.

Kerb and Guttering

Aim

To ensure that a suitable kerb and guttering system is selected.

Criteria

Council will require the provision of a kerb and guttering system that is appropriate for the selected means of stormwater conveyance and the width of the road system. The selected stormwater conveyance and treatment system shall have

regard to Water Sensitive Urban Design (WSUD) principles as required by Chapter 12 of this DCP.

Footpaths and/or shared footpaths and cycleways

Aim

To ensure that subdivisions are designed to encourage future residents to regularly engage in physical activity and to connect people to public open space areas, community facilities and commercial nodes and centres.

Criteria

New greenfield subdivisions and infill subdivisions involving the construction of a new public road shall provide a 1.2 metre wide concrete footpath across the street frontage of the development site (if no footpath exists) and on one side of all new public roads. Where the development site has frontage to an identified location for a shared bicycle/pedestrian path (pursuant to the Bellingen Shire Council's Pedestrian Accessibility and Mobility Plan and Bicycle Plan) the path must be 2.5 metres wide.

Electricity and telephone services

Aim

a) To ensure the nuisance free provision of necessary services.

b) To provide for landscapes not dominated by overhead lines and to allow for vegetation within road reserves that will not impact upon services.

Criteria

1) New subdivisions must have electricity and telephone services provided to each allotment.

2) For greenfield sites, electricity and telephone services must be provided underground.

3) For infill development, Council may consider above ground servicing where it would be illogical or impractical to provide underground services given the nature of the existing network. Relative costs of different options shall not be considered as the sole justification for a lesser standard.

4) The location of services shall be considered in conjunction with other landscaping and infrastructure requirements within the road reserve and depicted on the sectional road reserve plan. Where possible, subdivision design should provide for common trenching of services. Note: this may require some level of prior consultation with relevant agencies in subdivision design.

5) Where telecommunications and/ or mains power are required to be provided, written confirmation that the services have been installed to the satisfaction of Essential Energy and a telecommunications carrier licenced under the *Telecommunications Act 1997* shall be provided to Council prior to the issue of the Subdivision Certificate.

   However, in instances where installation of services is causing undue delay for lot release, Council will accept the following service authority clearances:

i. A letter from Essential Energy stating that satisfactory arrangements have been made for the provision of electricity to all allotments to be proposed to be released, including any necessary street lighting and easements, and

ii. A letter from a licensed telecommunications carrier under the *Telecommunications Act 1997* that satisfactory arrangements have been made for the provision of underground or above ground telecommunication services (whichever has been approved by Council) to all lots proposed to be released, including any necessary easements.

Reticulated water

Aim

To ensure a water supply network capable of meeting normal domestic and emergency water supply needs.

Criteria

1) Individual allotments must each have a connection point to a Council water main.

2) Adequate water volume and pressure must be available to provide for the domestic and emergency water supply needs of the proposed development and other areas reliant upon the water supply system in the locality. (Note: standards are contained within the BSC Water Supply Standards for Service). Where there are inadequacies within the existing network, these may also need to be rectified as part of the development process.

3) Fire hydrants compliant with AS2419.1 – 2005 must be provided within the water supply system where necessary to comply with contemporary servicing requirements. Furthermore, the distance between two successive hydrants shall be maintained at a maximum 60m apart. Note: Council will allow the installation of a feed hydrant to comply with the specified standard only in exceptional circumstances.

4) Where development is likely to extend beyond the development site, Council may require a higher standard/diameter of water main than that necessary for the subject development alone, to provide for the future development of land beyond the subject site.

Reticulated Sewer

Aim

To provide for the environmentally sustainable disposal of sewage generated by new subdivisions.

Criteria

1) New subdivisions, where possible, must gravity drain to the existing sewerage system or sewage treatment plant. Council will not support the creation of new sewer pump stations where there is a viable gravity alternative.

Note: Gravity systems are preferred as;

- They are less expensive to operate and maintain,
- They have a longer useful life,
- They are less prone to breakdowns and interruptions of service,
- They offer greater flexibility in serving future development,
- They are less likely to require flushing with fresh water than a pumped system,
- They avoid the possible odour and corrosion problems associated with a rising main, and
- They are more sustainable.

2) Pump stations will only be considered where there is not a viable gravity alternative and a geotechnical investigation or comprehensive report undertaken by a suitably qualified person in accordance with Section 10.6.3 of this DCP demonstrates that the site is not suitable for on-site sewerage management.

3) Each Torrens title allotment created by subdivision must be provided with a connection point to a Council sewer main. Internal lots within Strata and Community Title subdivisions may have an alternative standard, provided that the common property lot connects to a Council sewer main.

4) Each allotment created by subdivision must be provided with a sewer connection point capable of commanding an appropriate building envelope by gravity connection. (Note: any property subject to a restricted building envelope must have appropriate notation recorded on the title plan).

Stormwater

Aim

a) To ensure that stormwater harvesting (source control) measures are implemented to prevent increases in the quantity of stormwater discharge leaving the development site and to minimise the impact of the development on the environment downstream.

b) To maintain the high ecological, recreational and agricultural values of waterways.

Criteria

1) Where a new public road is proposed to be constructed as part of the development, Level 3 water quality treatment is required in accordance with Section 12.6.1 of Chapter 12 – Stormwater.

3.7.7 Landscaping

As per requirements of Chapter 9 – Landscaping.

3.7.8 Split zoned land parcels

The layout of any subdivision of any land that contains two zonings pursuant to BLEP 2010 must ensure that an adequate building envelope is located on that portion of the land that is zoned R1 – General Residential.

3.7.9 *Infill development with rear lane access*

Aim

a) To ensure that infill development occurs in a coordinated matter,

b) To ensure that all new residential lots are serviced with contemporary urban infrastructure, and

c) To ensure safe pedestrian and vehicular movement is maintained.

Criteria

1) The re-subdivision of existing residential lots that rely on or propose rear lane vehicular access will necessitate an upgrade of the rear lane where its characteristics do not meet Council's urban road standards, as follows:

   i. Reconstruction of the laneway including provision of a minimum bitumen seal width of 4.5 metres with controlled drainage with rolled kerb and gutter for the full laneway frontage of the property.

   ii. Where Council considers that the existing lane surface and profile beyond the laneway frontage of the property is unable to cater for the projected increase in traffic, the lane shall be upgraded to comply with Council standards.

   iii. Any required lane upgrade works shall tie in with the existing profile to Council's satisfaction.

   iv. Where the existing drainage infrastructure within the lane is unable to accommodate the projected additional storm water runoff that will be generated from the proposed development, the new drainage infrastructure is to be extended to a legal point of discharge including any required piped drainage system so as to prevent any adverse impacts on adjoining properties and Council infrastructure.

2) Driveways are to be installed in concrete between the layback and the property boundary.

3) Legal pedestrian access from the rear lot to the main street frontage is to be provided via an access handle. Where this is to be used for pedestrian purposes only, the handle is to be a minimum of 1.2 metres wide to facilitate easy access and manoevering of a garbage bin whilst also providing a main street frontage for visitors and postal delivery services.

3.8 Development Criteria – Subdivision of Land with a 1ha Minimum Lot Size requirement

3.8.1 *Areas of application*

This section relates to subdivision of land with a 1ha minimum lot size, as shown on the Lot Size Map in the Bellingen Local Environmental Plan 2010.

3.8.2 *Vehicular access and road network*

Aim

To provide safe, durable and nuisance free vehicular access to rural residential allotments and urban centres.

Criteria

1) Where a subdivision will increase the number of allotments upon which a dwelling may be legally erected, the subdivision must be linked by a bitumen sealed road to the nearest urban service centre. The bitumen road must be constructed (or upgraded) for the full length of all lot frontages, with the exception of any residue allotment.

2) A concrete edge kerb or V drain system that is appropriate for the selected means of stormwater conveyance and the width of the road system is to be provided for all road frontages in the subdivision, with the exception of large residue allotments.

3) The road network requirements are as stipulated for urban subdivision in Section 3.7.4 of this Chapter.

4) Where the vehicular access point for a new lot is restricted to one location due to site constraints, Council may require that the driveway crossover from the public road to the property boundary be constructed as part of the subdivision construction works in accordance with Council's engineering standards at the time of application and the provisions of Section 5.6.2 of Chapter 5.

3.8.3 Effluent disposal

Aim

To prevent adverse cumulative water and soil quality impacts as a result of on-site effluent disposal systems.

Criteria

1) In order to determine the suitability of land for the purposes of effluent disposal, a comprehensive signed and dated site evaluation report must be prepared by a suitably qualified person, as defined in Chapter 10 – Onsite Sewerage Management, that includes a Site Assessment, Soil Assessment and Recommended Sewage Management System.

2) The report must address criteria for compliance contained within Chapter 10 - Onsite Sewage Management.

3.8.4 Water supply

Aim

To prevent overloading of effluent disposal systems as a result of additional water usage linked to having a reticulated supply.

Criteria

1) Council will not permit the extension of water mains to provide reticulated (town) water to subdivisions approved in accordance with this section.

2) Where an existing water main conveying potable water runs across the frontage of a proposed rural residential allotment, Council may permit the connection of that lot only to the water main upon payment of the necessary Section 64 Contribution to Council.

3.8.5 Stormwater

Aim

a) To ensure that stormwater harvesting (source control) measures are implemented to prevent increases in the quantity of stormwater discharge leaving the development site and to minimise the impact of the development on the environment downstream.

b) To maintain the high ecological, recreational and agricultural values of waterways.

Criteria

1) Where a new public or community title road is proposed to be constructed as part of the development, Level 3 water quality treatment is required in accordance with Section 12.6.1 of Chapter 12 – Stormwater.

3.8.6 Electricity and telephone services

Aim

a) To provide for landscapes not dominated by overhead lines and to allow for vegetation within road reserves that will not impact upon services.

b) To ensure the provision of necessary services in a manner that does not adversely impact on the amenity of nearby residents or unfairly disadvantage the future development of adjoining and nearby land.

Criteria

1) Mains electricity and conventional telephone connections shall be provided to each allotment. Council may consider proposals to utilise alternative power sources only where supporting information submitted with the development application demonstrates that each lot created by the subdivision has the attributes necessary to generate sufficient electricity for domestic and farm use using the nominated renewable energy system and where:

   i. The proposal will not unfairly disadvantage the future development of adjoining and nearby land,

   ii. The nominated renewable energy system is not likely to result in adverse impacts to surrounding properties by way of noise, emissions or otherwise,

   iii. A Restriction as to User will be registered on any block not provided with mains power to inform future purchasers, and

   iv. An easement that would allow for future access to grid power over any property involved in the application is registered on the plan of subdivision.

2) Where telecommunications and/ or mains power are required to be provided, written confirmation that the services have been installed to the satisfaction of Essential Energy and a telecommunications carrier licenced under the

Telecommunications Act 1997 shall be provided to Council prior to the issue of the Subdivision Certificate.

However, in instances where installation of services is causing undue delay for lot release, Council will accept the following service authority clearances:

i. A letter from Essential Energy stating that satisfactory arrangements have been made for the provision of electricity to all allotments to be proposed to be released, including any necessary street lighting and easements, and

ii. A letter from a licensed telecommunications carrier under the *Telecommunications Act 1997* that satisfactory arrangements have been made for the provision of underground or above ground telecommunication services (whichever has been approved by Council) to all lots proposed to be released, including any necessary easements.

3) For green field sites, mains electricity and telephone services must be provided underground.

4) For infill development, Council may consider above ground servicing of telecommunications and/ or mains power where it would be illogical or impractical to provide underground services given the nature of the existing network. Relative costs of different options shall not be considered as the sole justification for a lesser standard.

5) The location of services shall be considered in conjunction with other landscaping and infrastructure requirements within the road reserve and depicted on the sectional road reserve plan as required by Section 3.7.5 of this Chapter. Where possible, subdivision design should provide for common trenching of services. Note: this may require some level of prior consultation with relevant agencies in subdivision design.

3.8.7 Landscaping

As per requirements of Section 9.6.5 of Chapter 9 – Landscaping.

3.8.8 Indicative building envelope

Aim

To provide reasonable certainty as to the ability of a lot to accommodate a single dwelling having regard to the relative constraints of land.

Criteria

1) Applications for subdivision must include, for each proposed lot, an indicative building envelope that demonstrates that a suitable area exists for the erection of a single dwelling on the lot. The building envelope must have a minimum area of 20m x 20m and must be located having regard to all criteria contained within Section 3.8 of this Chapter and Chapter 1 – Single Dwellings.

2) Depending on the level of constraint for any particular lot, Council may require that the indicative building envelope be registered on the final plan of subdivision. In these circumstances, the accompanying Section 88B Restriction as to User will need to advise that any dwelling not located within the indicative building envelope may require the submission of revised assessments relating to bushfire hazard, flora and fauna impact, effluent

disposal, vehicular access, slope stability and any other matter that has been considered by Council in endorsing the indicative building envelope registered on the plan of subdivision.

3.8.9 *Split zoned land parcels*

The layout of any subdivision of any land that contains two zonings pursuant to BLEP 2010 must ensure that the indicative building envelope, as required by Section 3.8.8, is located within that portion of the land that is zoned R5 – Large Lot Residential.

3.9 Development Criteria – Subdivision of Rural Land

3.9.1 *Areas of application*

This section relates to permissible subdivisions or boundary adjustments in Zones RU1, RU2, RU4, E2, E3, E4, W1 and W2 pursuant to the provisions of Bellingen Local Environmental Plan 2010.

Note: Given the restrictive nature of subdivision controls for rural land throughout the Shire the provisions of this section will primarily apply when applications for boundary adjustments are received by Council.

3.9.2 *Land suitability*

Aim

a) To provide appropriate levels of protection for environmentally sensitive or constrained areas of land from development pressure.

b) To provide an appropriate level of protection to land with identified agricultural significance.

Criteria

1) To prevent clearing associated with fence lines, subdivision layouts shall avoid new boundaries running through vegetated areas. Where possible, vegetated portions of properties should be contained within single ownerships or boundaries should follow existing cleared internal fence lines.

2) Subdivision boundaries shall avoid further fragmentation of lands identified as Regionally Significant Farmland, unless adequate justification is provided that demonstrates that the net agricultural viability of the land will not be compromised.

3.9.3 *Infrastructure*

Electricity and Telephone Services

Aim

To ensure the provision of necessary services in a manner that does not adversely impact on the amenity of nearby residents or unfairly disadvantage the future development of adjoining and nearby land.

Criteria

As per Section 3.8.6 of this Chapter, with the exception of criteria 3) and 4).

3.9.4 *Facilities and infrastructure provision for existing dwellings*

Aim

a) To ensure continuity of access to existing facilities, services and infrastructure.

b) To ensure that documentation requirements are reasonable and commensurate with the scale and impact of the development.

Criteria

1) Applications for boundary adjustments shall indicate the location of existing facilities associated with dwellings (eg: on-site effluent management systems, driveways, Asset Protection Zones for bushfire, water tanks, dams) in order to determine the need for any necessary easements or alterations to ensure continuity of access to such facilities.

2) Unless a request for alternative power or phone supply is made and supported as part of the DA process, Council will require, as a condition of consent, the provision of written advices from Essential Energy and a telecommunications carrier licensed under the *Telecommunications Act 1997* that they are satisfied as to the adequacy of existing services or the need for alterations (as a result of the approved boundary adjustment).

3) Notwithstanding criteria 2) of this section, Council may not require provision of written advices from Essential Energy and a telecommunications carrier licensed under the *Telecommunications Act 1997* for boundary adjustments that will not result in any additional dwelling entitlements and where all newly created allotments are already developed with a lawful dwelling, provided that Council is satisfied that:

   i. The boundary adjustment does not affect existing electricity and telephone service provision, and

   ii. A new electricity easement will not be required to be provided on the subject land.

Note: If land is mapped as “bushfire prone land”, the subdivision will be classified as Integrated Development and will be required to be designed in accordance with the NSW Rural Fire Service’s “Planning for Bushfire Protection 2006” Guidelines. Upgrading of dwellings and enhanced bushfire protection measures may be required to be undertaken as a condition of the Bushfire Safety Authority and completed to Council’s satisfaction prior to the issue of the Subdivision Certificate.

3.9.5 *Indicative building envelope*

Aim

To provide reasonable certainty as to the ability of a lot to accommodate a single dwelling and associated structures and services, having regard to the relative constraints of land.

Criteria

Subdivision layouts shall indicate suitable building envelope areas (or the location of any existing dwellings) on each allotment. Building envelope areas shall be selected so that they:

1) Minimise the amount of clearing likely required to establish a dwelling (including asset protection zones, vehicular access and service provision eg: electricity supply) on the site,

2) Avoid creek crossings as much as possible. Note: Access requirements for flood liable land are also contained within Chapter 8 – Flood and Riverine Processes,

3) Maintain suitable buffers to adjoining properties that are productively used (eg: dairies, stockyards) and that have the potential to cause land use conflict, and

4) Avoid prominent ridgelines and steep slopes.

Depending upon the degree of constraint, Council may require formal registration of the indicative building envelope on the title of the land.

APPENDICES

There are no Appendices for this Chapter

Bellingen Shire Development Control Plan 2017

Chapter 4
Tourist Development

Table of Contents

Table of Amendments

Amendment	Date Adopted	Date Commenced
Minor review of DCP - DCP 2017 replaces DCP 2010	22 November 2017	6 December 2017

4.1 Aims

The aims of this chapter are to:

a) To ensure that certain tourist development is not subject to unacceptable hazards from bushfire, flooding or poor access by virtue of their isolation

b) To ensure that clearing and other environmental impacts are minimised by appropriate means such as requiring the clustering of buildings associated with any tourist development

c) To ensure that tourist development is compatible with the character and amenity of the locality

d) To ensure that tourist development is designed and operated in accordance with industry standards including energy efficiency and accessibility

e) To ensure that adequate and appropriate services are available for tourist development; and

f) To ensure that appropriate health and fire safety standards are satisfied and maintained.

4.2 Where This Chapter Applies

This chapter applies to all land within Bellingen Shire where "tourist and visitor accommodation" is permitted under the provisions of Bellingen Local Environmental Plan 2010, unless any site specific development controls included in later chapters of this DCP nominate alternative requirements. In this case, the provisions of the site specific development controls shall prevail.

4.3 When This Chapter Applies

This chapter applies when any Development Application is received by Council for new tourist and visitor accommodation or for alterations or additions to an existing facility that requires Development Consent.

It does not apply when the proposed development can be considered as "exempt" or "complying" development under the provisions of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 or any other Environmental Planning Instrument applying to the land.

4.4 Variations

Council may consider variations to the standards required of development in this chapter when the overall aims of this chapter and any specific aims that may be detailed for that particular standard can be achieved.

4.5 Definitions

Definitions of terms used within this chapter are the same as those contained within Bellingen Local Environmental Plan 2010.

Note: For the purposes of interpretation, self-contained or serviced tourist cabins are considered to fall within the group term definition of tourist and visitor accommodation rather than any specifically defined form of tourist and visitor accommodation and shall be permitted or prohibited accordingly with reference to the land use tables for particular zones.

4.6 Development Criteria

4.6.1 Accommodation

Criteria

General requirements

1) With the exception of serviced apartments and hotel or motel accommodation, the proprietor / operator of the tourist facility must be a permanent resident of the property;

2) Tourist accommodation must be for overnight and temporary accommodation, and shall not be utilised or let for long-term or permanent accommodation. Guests shall not be accommodated for more than 42 consecutive days with an interval of at least 14 days between occupancies, or for more than 100 days in any 12 month period; and

3) An accommodation register shall be maintained with details of guest names and addresses, dates of arrival and departure, receipt number for daily and/or weekly accommodation, and be made available for inspection when required by Council.

Additional requirements for tourist facilities (e.g. cabins, permanent tent structures):

1) Accommodation units should be clustered and located, generally, in the vicinity of the main dwelling so as to minimize the cumulative environmental impact the development may have on the site, and

2) May consist of self-contained accommodation units with facilities suitable for the preparation of meals by guests;

Additional requirements for bed and breakfast establishments:

1) Bed and breakfast establishments are to be contained within an approved dwelling;

2) Bed and breakfast establishments are not permitted to operate in a multiple dwelling development;

3) Not more than one (1) bed and breakfast establishment per allotment; and

4) Guest bedrooms in a bed and breakfast establishment shall accommodate a maximum of two (2) persons per room (excluding children under 5 years of age);

4.6.2 Guest Rooms

Criteria

Guest rooms must be designed to:

1) Provide adequate space and facilities for occupants to store clothes and travel gear;

2) Allow adequate natural light and ventilation into rooms;

3) Provide bedding and flooring which are easily cleaned and maintained;

4) Allow occupants to exit the room quickly and easily in emergencies, having regard to the configuration of beds and exit doors (no key locks for exit doors);

5) Ensure appropriate sound insulation from potential noise generating sources (e.g. kitchens, bathrooms, laundries, bedrooms, driveways and external appliances); and

6) Protect the occupants from internal and external entry and theft.

4.6.3 Toilet and bathroom facilities

Aim

The provision of an adequate number of toilets and bathrooms is a basic requirement for health and comfort of occupants, whether as en-suite or shared facilities. The construction and location of shared facilities must be convenient to the location of all guest bedrooms for which the facilities are provided.

Criteria

1) Bed and breakfast establishments must provide a minimum of two toilets and two bathrooms in total within the dwelling;

2) Toilets and bathrooms used by permanent residents shall be separate from those used by guests; and

3) Toilets and bathrooms shall be situated so as to maintain privacy (without the need to enter through another bedroom.

4.6.4 Kitchen and food handling facilities

Aim

To minimise risk of guests contracting food borne illnesses from food prepared or served on-site.

Criteria

1) All food preparation areas within the kitchen that is used by operators to prepare meals for guests are to comply with the Food Standards Australia New Zealand Food Standards Code, AS 4674 - 2004 and the *Food Act 2003.*

2) Those preparing meals for guests must have demonstrated skills and competencies in food hygiene. For new operations this will involve obtaining a Food Safety Supervisors Certificate from the NSW Food Authority.

4.6.5 Access for people with disabilities

Criteria

Access for people with disabilities must be provided in accordance with the Disability (Access to Premises – Buildings) Standards 2010, the Building Code of Australia (BCA) and Australian Standards AS 1428.1 – 2009, AS 1428.2 – 1992 and AS 2890.6 – 2009.

4.6.6 Access and parking

Aim

a) Access to tourist facilities and associated on-site parking is to be designed to be convenient for visitors without adversely affecting adjoining properties or other road users.

b) Entering and leaving the premises should also be safe for visitors, other road users and pedestrians who may be unfamiliar with the establishment.

Criteria

Off-street parking and access should be designed in accordance with Chapter 5– Parking and Access Requirements for Development.

4.6.7 Visual and acoustic privacy

Aim

Tourist facilities should be designed and operated in a manner which maintains the existing amenity of the locality. Potential for overlooking of adjoining properties and generation of excessive noise (e.g. from outdoor recreational areas) should be minimised. Measures to reduce such impacts can involve a combination of management / operational practices and site layout / design.

Criteria

1) Visitor common areas must not overlook the living areas of neighbours;

2) Physical works such as tree planting or structural screening shall be required to reduce potential impacts on visual privacy;

3) Potential noise generating sources must be located away from neighbour's living rooms and bedrooms, or appropriately sound insulated;

4) Where an existing building is being converted for use as tourist and visitor accommodation, Council may require that sound insulation measures are installed to preserve acoustic privacy; and

5) Where guest accommodation is proposed in a new dwelling or in attached cabins, sound transmission reduction must be provided in accordance with the requirements of the BCA.

4.6.8 Outdoor recreational facilities

Criteria

Outdoor recreational facilities associated with tourist facilities may include a pool, tennis court, BBQ area, outdoor deck, children's playground area or the like. Such items should be located and used during hours that will not detrimentally affect the amenity of neighboring properties.

1) The design and location of recreational facilities should have regard to preserving the amenity of surrounding lands and the locality generally

2) Details of proposed recreational facilities are to be submitted to Council as part of the Development Application; and

3) The use of recreational facilities should be limited to times that will not cause nuisance to adjoining properties. Council may impose conditions of consent to ensure that hours of use are appropriate to the situation.

4.6.9 Heritage

Criteria

Tourist facilities located on, or adjacent to the site of a heritage item, heritage conservation area or archaeological site must be designed to ensure that the development does not impact on, or detract from, the heritage significance of the item of significance.

Note: Clause 5.10 (Heritage Conservation) of BLEP 2010 provides the principal statutory control regarding heritage. Chapter 15 – Heritage of the DCP provides development objectives and criteria for development or works involving a Heritage Item, within the vicinity of a Heritage Item and within the Bellingen Conservation Area.

4.6.10 Signage

Criteria

Signage shall be in accordance with the provisions of Chapter 7 – Advertising Signage.

Note: Council will not permit the erection of advertising signs on any land other than that on which the tourist facility is located, unless temporarily in accordance with BLEP 2010, or in accordance with Council's Policy for the erection of Fingerboard signage.

4.6.11 Fire safety within buildings

Aim

To ensure, that clear emergency evacuation procedures are in place and fire-fighting equipment is provided to safeguard against a fire spreading, given that guests of a tourist facility will be staying in generally unfamiliar surroundings.

Criteria

Fire safety measures must be provided in accordance with the BCA for all new tourist and visitor accommodation. Developments involving use or adaption of existing buildings may also require fire safety measures to be installed.

4.6.12 Landscaping and vegetation

Criteria

Where additional landscaping is proposed, a landscaping plan must be submitted to Council as part of the Development Application and in accordance with the provisions of Chapter 9 – Landscaping.

4.6.13 Buffers to adjoining land uses, areas of environmental constraint or risk

Criteria

1) Where the development site adjoins or contains;

   a) Landuses that may have an adverse impact on the amenity of the future occupants (eg: agricultural operations, forestry operations, dairies, busy roads and railways),

   b) Areas of environmental constraint (eg: Threatened Ecological Communities), or

   c) Key fish habitat, or

   d) Areas of bushfire risk.

the Applicant will need to demonstrate that sufficient buffer zones, or mitigating measures, will be incorporated into the development site to avoid adverse impact.

Note: For the purposes of determining appropriate setbacks and means to address issues of landuse conflict, Council will have principal regard to the publication titled *Living and Working in Rural Areas – A handbook for managing land use conflict issues on the NSW North Coast, ISBN 978-0-646-48527-0*, as published by the NSW Department of Primary Industries, 2007.

For the purpose of determining appropriate buffers to key fish habitats, Council will have principal regard to the publication titled *Policy and guidelines for fish habitat conservation and management (Update 2013)*, as published by the NSW Department of Primary Industries, 2013.

Development Applications for tourist and visitor accommodation on bush fire prone land are normally defined as a 'special fire protection purpose' under Section 100B of the *Rural Fires Act*, 1997. Such applications are classified as 'integrated development' under Section 91 of the *Environmental Planning and Assessment Act 1979*, and must be referred by Council to the NSW Rural Fire Service for consideration and the issuing of a Bush Fire Safety Authority, prior to the issuing of Development Consent. Matters to be considered as part of this process are contained in the publication titled *Planning for Bushfire Protection, ISBN 0 9585987 8 9*, as produced by the NSW Rural Fire Service.

For properties adjoining Rail Corridors and Busy Roads, Council will have principal regard to the publication titled *Development Near Rail Corridors and Busy Roads - Interim Guideline, ISBN 978-0-7347-5504-9*, as published by The State Government of NSW through the Department of Planning, 2008.

4.6.14 Land suitability

Aim

To provide appropriate levels of protection for environmentally sensitive or constrained areas of land from development pressure.

Criteria

Watercourses

1) Further to the provisions of Clause 7.4 - Water of BLEP 2010, tourist and visitor accommodation developments shall avoid creating multiple crossings of watercourses for access purposes where possible.

Steep Lands

2) Development shall be sited to avoid land with slopes in excess of 25%.

3) Driveways and parking areas shall be located to ensure that the need for excessive cut and fill to facilitate construction is minimised.

Flood liable land

4) The filling of flood liable land to create suitable opportunities for tourist and visitor accommodation shall be avoided. Council may consider minor amounts of filling where the essential features of the landscape are not significantly altered and compliance with the provisions of Chapter 8 – Flooding and Riverine Processes is demonstrated.

Vegetated Land

5) Further to the provisions of Clause 7.5 - Biodiversity of BLEP 2010, development layouts shall be designed to minimise disturbance to existing areas of native vegetation. The degree of clearing necessary to develop accommodation includes that necessary for the construction of roads, the installation of infrastructure (eg: electricity supply) and clearing necessary for construction and bushfire Asset Protection Zones (APZ's).

Ridgelines

6) The development shall be designed to avoid building on prominent ridgelines..

Access

7) Further to the provisions of Clause 7.8 - Tourism Development in Rural and Environmental Zones of BLEP 2010 –access roads servicing the development must or will be adequate for the scale of the development. .

Aboriginal Cultural Heritage

8) If the site is in a rural area and an Aboriginal Heritage Impact Permit (AHIP) has not been obtained for the proposed development and lodged with the development application, applicants must demonstrate to Council that due diligence has been followed in accordance with the Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (2010) produced by the NSW Department of Environment, Climate Change and Water. This

information must be lodged as part of the supporting documentation for the development application.

4.6.15 Domestic facilities

Aim

To ensure that tourist and visitor accommodation developments are adequately serviced.

Criteria

Effluent Disposal

1) Tourist facilities must be connected to Council's reticulated sewerage system where available; and

2) Where connection to Council's reticulated sewerage system is not available, on-site effluent disposal requirements shall be determined having regard to the provisions of Chapter 10 – On Site Sewage Management.

Garbage Disposal

3) A proposed method for garbage collection from the site must be detailed in the application having regard to the requirements of Chapter 14 – Site Waste Minimisation & Management.

Water Supply

4) In urban areas tourist and visitor accommodation developments must connect to the reticulated water supply where available.

5) In rural areas, a potable water supply or rainwater tank will be necessary. The size of the tank will depend on the number of occupants, what the water will be used for and likely consumption rates. A water supply for fire fighting purposes, as well as domestic purposes, must also be available in rural areas.

Telephone

6) Telephone services must be available to at least the principal dwelling in the case of an emergency.

Appendices

There are no Appendices for this Chapter

Bellingen Shire Development Control Plan 2017

Chapter 5
Car Parking and Vehicular Access

Table of Contents

Table of Amendments

Amendment	Date Adopted	Date Commenced
Minor review of DCP - DCP 2017 replaces DCP 2010	22 November 2017	6 December 2017

5.1. Aims

The aims of this chapter are;

a) To encourage redevelopment within established town centres of the Bellingen Shire,

b) To remove obstacles for minor changes of use of premises located within established town centres of the Bellingen Shire,

c) To encourage walking and cycling and reduce car dependency,

d) To confirm the responsibilities of different development types to provide parking facilities and appropriate vehicular access and manoeuvering areas for the traffic that they are likely to generate.

e) To reduce the need for kerbside parking for certain types of developments by ensuring that these developments are self sufficient in the provision of off-street parking facilities.

f) To minimise the visual impact of on-site carparking.

5.2. Where This Chapter Applies

The provisions of this chapter apply throughout all areas of Bellingen Shire, unless any site specific development controls included in this chapter, or in later chapters of this DCP nominate alternative parking or access requirements. In this case, the provisions of the site specific development controls shall prevail.

(Note: CBD areas of Bellingen, Urunga and Dorrigo are exempted from the need for provision of parking facilities in most instances – See Section 5.6.1 for details)

5.3. When This Chapter Applies

This chapter applies when any Development Application is received by Council.

It does not apply when:

a) The proposed development can be considered as “exempt” or “complying” development under the provisions of State Environmental Planning Policy (Exempt and Complying Development Codes) or any other Environmental Planning Instrument applying to the land, or

b) The proposed development is for additions or alterations to an existing building and additional on-site car parking in accordance with Schedule 5.1 of this Chapter is not required to be provided.

5.4. Variations

Council may consider variations to the standards required of development in this chapter when the overall aims of this chapter and any specific aims that may be detailed for that particular standard can be achieved.

5.5. Definitions

Definitions of terms used within this chapter are the same as those contained within Bellingen Local Environmental Plan 2010.

Where there is uncertainty as to the correct parking requirement that should apply, Council planning staff should be consulted for clarification.

Above Ground carpark means a car park that is elevated above and does not occupy the ground floor of a building.

Below ground/basement/underground carpark means a car park that is built below ground level, either as a basement to a building or covered with structure above.

Ground level carpark – means a car park that is located at the street level.

Under croft carpark – means an unenclosed car park that occupies the area below the footprint of a building or plaza.

5.6. Development Criteria

5.6.1 Parking requirements within designated CBD areas of Urunga, Bellingen and Dorrigo

Criteria

1) With the exception of major new developments or major redevelopments that will draw additional vehicular traffic in their own right, provision of additional on-site car parking will not be required for development on land zoned B2 (Local Centre) in Urunga, Bellingen and Dorrigo.

   Note: This provision does not extend to the provision of adequate manoeuvering or loading areas for delivery vehicles if the circumstances of the development warrant consideration of this matter.

2) For the purpose of administering the provisions of Criteria 1), minor changes of use or minor additions involving shops, office premises, business premises, food and drink premises, health consulting rooms and the like would not normally be expected to provide additional on-site car parking.

3) Where car parking requirements within CBD areas are not able to be accommodated on site, separate Section 94 Contributions will normally be required to be paid to Council to contribute towards either alternative facilities that promote increased usability and accessibility of the CBD areas by pedestrians or bicycles, or the provision of strategically located and shared parking facilities for the benefit of all users of the CBD area.

   If such a Section 94 contribution plan is not in place at the time of lodgement of the development application, the developer would be expected to financially contribute towards the provision of car parking spaces elsewhere in the CBD via a planning agreement negotiated with Council.

5.6.2 Surface requirements for parking and driveway areas

Criteria

1) The minimum surfacing requirements shown in Table 5.1 shall apply for the listed categories of development.

Table 5.1 Minimum surfacing requirements

Development	Land Use Zone	Surfacing Requirement
Residential accommodation.	RU1, RU2, RU4	External driveway section (ie: in road reserve) – comparable surfacing to that of public road pavement. Internal driveway section – Minimum all weather 2 wheel drive surfacing (minimum 150mm compacted gravel).
Residential accommodation	R1	External driveway section – plain reinforced concrete. Internal driveway sections and parking areas – Mandatory Asphaltic Concrete, Bitumen Seal or Concrete surfacing.
Residential accommodation	R5	External driveway section - Asphaltic Concrete, Bitumen Seal or Concrete surfacing. Internal driveway sections and parking areas – minimum all weather 2WD.
Tourist and Visitor Accommodation and other traffic generating development	RU1, RU2, RU4 and E3	Minimum standard as for rural dwellings. Higher surfacing standards may be required having regard to the likely levels and types of traffic generation. For example, a more dispersed and low scale development accessed by private cars would normally have a lower surfacing requirement than an intensive development accessed by a wider range of vehicles such as buses.
Industry and other industrial uses permitted with consent in the 1N1 zone	IN1	All driveway sections and parking areas – Mandatory Asphaltic Concrete, Bitumen Seal or Concrete surfacing as determined by Council.
Commercial premises and other commercial uses permitted with consent in residential or business zones	R1, B1 and B2	All driveway sections and parking areas – Mandatory Asphaltic Concrete, Bitumen Seal or Concrete surfacing as determined by Council.

2) Minimum surface requirements for developments not described in Table 5.1 will be determined by Council following a merit assessment of the proposal.

5.6.3 Safe, legal and functional access requirements

Criteria

General

1) All driveways shall be restricted to a maximum grade of 25%. Steeper grades will only be supported in areas with extreme site constraints.

2) Any driveway section exceeding 15% in grade will be required to be sealed with asphaltic concrete, bitumen seal or concrete.

3) The location of the entry point of any driveway onto the public road network must achieve minimum site distance and safety requirements as stipulated in AS 2890.

Events

4) All events involving the generation of traffic and requiring development consent must lodge a traffic management plan (TMP). If the TMP recommends that a traffic control plan be developed for the event, this plan must be submitted and approved by Council prior to the issue of an approval under the Roads Act 1993.

Residential (R1, R5) zones

5) Dwellings in residential zones will require vehicular access to a sealed and dedicated Council road. If this does not exist at the time of application, the applicant will be required to construct this access at no cost to Council.

6) A standard concrete driveway crossover shall be required to be constructed within the road reserve as part of development in residential zones. This shall be completed prior to the issue of a Final Occupation Certificate for the dwelling.

Rural (RU1, RU2, RU4 and E3) zones

7) Dwellings in rural zones will require access to a dedicated Council road. In circumstances where the only legal and/or practical access is via an undedicated Crown road, the applicant will need to consider the following options, in consultation with both Council and Land and Property Information NSW:

   i) Where the Crown road benefits only one property owner and connects to a dedicated Council road, the property owner may apply to Land and Property Information NSW to purchase and close the road. Council would require this closed road to be amalgamated into the subject lot prior to issue of the final occupation certificate for the dwelling.

   ii) Where the Crown road benefits more than one property all benefiting property owners should consider undertaking a community title subdivision with the Crown road being made common property.

   iii) Despite the above, Council may consider taking on ownership of a Crown road provided that:

   - it is in the broader public interest for Council to accept ongoing maintenance responsibility for the length of road,
   - the asset has been constructed in accordance with Council's standards at the time including the construction of a cul-de-sac turning area where the road is not a through road, and
   - the road upgrade is undertaken by the benefiting property owners at no cost to Council.

   Note 1: All administrative and legal costs involved in the transfer of Crown land to Council or purchase and closure of a Crown road shall be borne by the applicant.

Note 2: In all instances where a Crown road is proposed to be closed, the closure must not adversely impact on the actual or potential ability of any other property to gain legal and practical access via that section of Crown road and the closure would not result in either a property, lot, parcel of land or a section of road becoming landlocked from the general public road network.

8) In circumstances where the only legal and/or practical access is through a State Forest or National Park, Council will not consent to any application for development unless an appropriate Right of Carriageway is obtained that guarantees continuity of access and confirms maintenance responsibilities.

9) In other circumstances, Council will not support new dwellings that propose vehicular access via the creation of a Right of Carriageway over an adjoining privately owned parcel of land. Instead, a boundary adjustment with an adjoining property that creates a legal frontage to a dedicated Council road for the subject property should be arranged.

10) In circumstances where access to a property is obtained via a road network that is within an adjoining local government area, Council will refer any application for development to the respective Council for comment. Conditions may be imposed upon an application should the need for upgrading work be identified.

11) As a general principle, dwellings shall be constructed so as to avoid the need for a river crossing as the primary point of vehicular access. If there is no other viable means of access and there are no alternative suitable dwelling sites on the subject property that would not require a crossing, Council may consider an application involving a river crossing subject to the following criteria;

- A survey plan of the crossing point must be prepared by a Registered Surveyor and submitted with any application to correctly define the position of property boundaries relative to the crossing point. Written proof of consultation with Land and Property Information NSW must be provided that confirms whether any Crown Land is involved (eg: bed of river) and if so, whether any objection is offered to the lodgment of the Development Application. (Note: Land and Property Information NSW will be required to sign any Development Application involving use of their land as owners and may also require ongoing lease arrangements with the beneficiaries of the access.)

- The proposed point of crossing must be at bed level and able to be demonstrated as relatively stable, having regard to the existence of bed rock (Note: Council may require the Applicant to obtain professional advice from an appropriately qualified Geomorphologist or similar and will have further regard to advice received from the Department of Primary Industries – Water and the Department of Primary Industries - Aquaculture in assessing suitability).

- For minor watercourses with small crossing distances, bridge structures are the preferred means for access so as to not unduly impede water movement or fish passage.

Industrial Zones

12) Industrial developments and subdivisions shall be designed to accommodate the standard design vehicle type, or types, appropriate to the use required by the operator of the facility.

    The classes of design vehicle are as follows:

    a) Small rigid vehicle (SRV)
    b) Medium rigid vehicle (MRV)
    c) Heavy rigid vehicle (HRV)
    d) Articulated vehicle (AV)

13) Any Development Application for development in industrial zones must clearly describe the anticipated vehicle types that will access the development and demonstrate, with reference to AS 2890.2-2002, that adequate manoeuvering areas exist to allow for all components of the development to function efficiently and independently.

5.6.4 Schedule of parking and access requirements

1) On-site car parking shall be provided at the rate specified in Appendix 5.1.

2) Additional vehicular access requirements shall be provided as specified for the proposed land use in Appendix 5.1.

3) Unless otherwise stated, all parking requirements are based upon peak usage requirements.

4) "Off peak" development is any development which may operate or carry out its business outside the "peak" demand periods for parking, that is between 9.00am and 5.00pm Monday to Friday (eg: churches, theatres, restaurants). For this type of application parking will be individually assessed by Council having regard to the;

    - Characteristics of the proposed development,
    - Hours of operation, and
    - Availability of kerbside and off-street parking in reasonable walking distance of the site.

5) Unless otherwise stated, all area based parking requirements are to be calculated on the basis of the Gross Floor Area (GFA) of the development.

6) Carparking calculations are to be rounded up to the nearest whole number.

7) For mixed use developments the number of parking spaces shall be calculated on the basis of each separate use e.g. shops with housing above would be calculated on the basis of the number of dwellings and GFA for the shop component.

8) Where development is subject to a parking study, applicants are required to undertake a parking study of a similar type of development in a similar location to determine the number of parking spaces required for the proposed development. Furthermore, the study must be prepared in accordance with AUSTROADS Guide to Traffic Management, Part 3, Traffic Studies and

Analysis by a suitably qualified professional and take into consideration the RMS *Guide to Traffic Generating Developments*.

5.6.5 Design standards

1) Parking spaces and aisle widths shall be dimensioned in accordance with Australian/New Zealand Standard Parking Facilities; Part 1: Off- street car parking (AS/NZS 2890.1:2004 (Amendment No. 1) that are specific to the intended use of the parking spaces.

2) Accessible parking spaces are to be provided in accordance with the Disability (Access to Premises – Buildings) Standards 2010.

3) Parking spaces shall be clearly delineated and signposted, constructed to the standard specified in Section 5.6.2 and designed to collect and drain stormwater to Council's stormwater system in accordance with Chapter 12 – Stormwater.

4) The minimum vertical clearance for parking areas is to accord with the relevant Australian Standard.

5) Development applications that propose Below ground/basement/underground carparking are to:

   - Be accompanied by a geotechnical report prepared by an appropriately qualified professional; and
   - Be accompanied by supporting information addressing any dewatering of the site and/or the disposal of contaminated/sediment laden water; and
   - Ensure that where the site is flood prone, the carparking area is located, designed and constructed in accordance with Chapter 8 - Flood and Riverine Processes.

6) Natural ventilation is to be provided to Below ground/basement/underground carparks , with ventilation grilles and structures to be:

   - Integrated into the overall facade and landscape design of the development;
   - Not located on the primary street façade; and
   - Orientated away from windows of habitable rooms and private open space areas.

7) Above ground and undercroft carparking structures are to be artistically and imaginatively screened from view from the public domain.

8) The visual impact of ground level carparks is to be minimised by:

   - Locating parking on the side or rear of the site away from the street frontage and behind the front building line; and
   - Use of landscaping to soften and partially screen the carparking area from the street and/ or public domain in accordance with Chapter 9 – Landscaping Requirements.

APPENDICES

Appendix 5.1 Parking and access requirements for development

Land use	Car parking requirement	Additional vehicular access requirements specific to land use
Agricultural produce industries	Comparisons should be drawn with similar developments elsewhere and a Parking Study submitted to Council for consideration.	
Agriculture	Comparisons should be drawn with similar developments elsewhere and a Parking Study submitted to Council for consideration (refer note1).	On site manoeuvering area to be demonstrated for maximum size delivery vehicles to allow forward ingress and egress.
Animal boarding or training establishments	1 space per 5 animals capable of being accommodated; overflow area to cater for 75% total capacity	Additional trailer parking area where necessary (e.g.; for horse floats)
Aquaculture	As for agriculture	
Attached dwelling,	Residents; 1 space per dwelling + 1 space for every 5 x 2 bed dwelling or part thereof + 1 space for every 2 x 3 bed dwelling or part thereof Visitors; 1 space for every 5 dwelling or part thereof Note: Visitors space to be separately accessible from resident spaces	For each dwelling, access must be provided to a lockable enclosure at ground floor level that is capable of storing one adult bicycle.
Backpackers accommodation	1 space per 5 beds	Must demonstrate either adequate area on site for bus unloading and manoeuvering or demonstrate that this is feasible on street
Bed and Breakfast accommodation	1 space per guest bedroom	
Boarding Houses	Refer to SEPP (Affordable Rental Housing) 2009	
Boat building and repair facilities	Comparisons should be drawn with similar developments elsewhere and a Parking Study submitted to Council for consideration (refer note1).	
Bulky Goods Premises	1 per 50m^2	

Land use	Car parking requirement	Additional vehicular access requirements specific to land use
Business Premises	1 per 40m^2 (unless separately defined)	
Caravan parks	Refer Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds & Moveable Dwellings) Regulation 2005.	
Cellar door Premises	As for retail premises	
Charter and tourism boating facilities	1 per boat available for hire; 1 per 40m^2 office area.	
Child Care Centres	1 space for every 4 children in attendance 1 space per 2 employees plus drop off/pickup area to Council's satisfaction	
Depots	1 per employee that routinely reports to depot for commencement of work. Visitors parking spaces separately signposted at rate of 1 per 40m^2 of office area associated with depot functioning. (Note: variations may be considered where it can be demonstrated that the functional characteristics of the depot do not warrant this number of spaces).	
Dual occupancies (attached and detached)	As per Dwelling House	
Dwelling House	1-4 bed dwelling – 1 space 5bd+ dwelling - 2 spaces	Must be behind front building line; may or may not be covered.
Educational establishments	Comparisons should be drawn with similar developments elsewhere and a Parking Study submitted to Council for consideration (refer note1).	Appropriate provision for bus delivery of students to and from school to be made
Entertainment facilities	1 per 10m^2	
Exhibition Homes	As per Dwelling House	If located on road with high traffic volumes and limited on street parking, additional provision shall be made for on-site parking in consultation with Council.

Land use	Car parking requirement	Additional vehicular access requirements specific to land use
Extractive industries / mines	Comparisons should be drawn with similar developments elsewhere and a Parking Study submitted to Council for consideration (refer note1).	On site manoeuvering area to be demonstrated for maximum size delivery vehicles to allow forward ingress and egress.
Farm stay accommodation	1 space per guest bedroom	
Food and Drink Premises	Dining; 1 per $10m^2$	Off peak provisions will apply
Function Centres	1 per $10m^2$	
Funeral Chapels	1 per $10m^2$.	
Group homes	Refer to SEPP (Affordable Rental Housing) 2009	
Health consulting rooms	2 spaces per consulting room and 1 for each reception employee.	
Home occupations/home industries/home businesses	Normal dwelling requirement plus: 1 space per 2 non-resident employees or part thereof, and 1 space for customers if business involves customers visiting site.	
Hospitals	Comparisons should be drawn with similar developments elsewhere and a Parking Study submitted to Council for consideration (refer note1).	
Hostels	As for Boarding House	
Hotel or motel accommodation	1 per unit. Bar/Dining Area (if open to general public): 1 per $10m^2$. Employees: At least 2 to be provided (for on-site manager and reception staff).	Must make provision for buses to enter and leave the site in a forward direction, unload and park
Industries	1 per $50m^2$ Note: where developments are to be subdivided, individual and proportional allocation of parking spaces should be considered.	Design vehicle requirements: Separation of manoeuvering, unloading and customer parking movements Employee parking; may

Land use	Car parking requirement	Additional vehicular access requirements specific to land use
		be stacked
Industry Retail outlets	1 per 20m^2 accessible to public	
Information and education facilities (e.g.: art gallery, museum, library, visitor information centre or the like)	Visitor information centre; Comparisons should be drawn with similar developments elsewhere and a Parking Study submitted to Council for consideration (refer note1). Other: 1 per 40m^2	Visitor Information Centres must provide parking areas for full range of vehicles likely to use the facility (e.g.: motor homes, caravans, buses, or the like).
Intensive livestock agriculture (e.g.: feedlots, restricted dairies)	As for agriculture	
Kiosks	As for retail premises	
Landscape and garden supplies	Retail Plant nurseries; 1 per 20m^2 accessible to public for building component, 1 space per 100m^2 site area for external display area. Landscape supplies; 1 per 50m^2 for built component 1 space per 100m^2 site area for external display area.	Provisions must be made for trailer access and pick up areas
Light industries	As for industries	
Liquid fuel depots	Comparisons should be drawn with similar developments elsewhere and a Parking Study submitted to Council for consideration (refer note1).	
Livestock processing industries	As for rural industry	
Marinas	0.6 spaces per wet berth 0.2 spaces per dry storage berth 0.2 spaces per swing mooring 0.5 spaces per marina employee	
Markets	2.5 spaces per stall	
Medical Centres	As per health consulting rooms.	
Moveable dwelling	As per Dwelling House or as per Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds & Moveable Dwellings) Regulation 2005, which ever applies.	

Land use	Car parking requirement	Additional vehicular access requirements specific to land use
Multi-dwelling housing	As for attached dwelling	
Neighbourhood shops	1 per $25m^2$ accessible to the public	
Office Premises	1 per $40m^2$	
Places of public worship	1 per $10m^2$	
Public Administration Building	As for Office Premises or as justified by a specific Parking Study.	Must provide bike racks and facilities for showering to encourage reduced reliance upon motor vehicles in getting to and from work
Recreation facilities (indoor)	Squash Courts – 3 spaces per court Bowling alleys – 3 spaces per alley Gymnasiums – 4.5 spaces per $100m^2$ GFA minimum Other activity types; default to requirement for Business Premises (e.g.: 1 per $40m^2$) or alternatively, submit a Traffic Study referring to comparable developments elsewhere.	
Recreation facilities (major)	Comparisons should be drawn with similar developments elsewhere and a Parking Study submitted to Council for consideration.	
Recreation facilities (outdoor)	Bowling Greens – 30 spaces for first green, 15 spaces for each additional green Tennis Courts – 3 spaces per court Other activity types; Building components shall default to requirement for Business Premises (e.g.: 1 per $40m^2$) or alternatively, submit a Parking Study referring to comparable developments elsewhere. Parking requirements for outdoor components shall be based upon an estimation of	

Land use	Car parking requirement	Additional vehicular access requirements specific to land use
	peak traffic generation, in consultation with Council Officers.	
Research stations	Comparisons should be drawn with similar developments elsewhere and a Parking Study submitted to Council for consideration (refer note1).	
Residential flat buildings	As for attached dwelling	
Restaurants	As for Food and Drink Premises	
Retail Premises	1 per 20m^2 accessible to public	
Roadside stalls	Waterfall Way and Pacific Highway; Minimum 5 spaces on private property Other local roads; minimum 2 spaces	Waterfall Way and Pacific Highway; Dedicated turning lanes required for use. Subject to RTA concurrence. Other local roads: Adequate off road area with compliant site distances, pavement surfacing etc.. Consideration may be given to use of road reserve for parking subject to safety issues and appropriate insurances being obtained.
Rural Industries	Comparisons should be drawn with similar developments elsewhere and a Parking Study submitted to Council for consideration (refer note1).	On site manoeuvering area to be demonstrated for maximum size delivery vehicles to allow forward ingress and egress.
Rural supplies	As for landscape supplies.	Provisions must be made for trailer access and pick up areas
Sawmill or log processing industries	As for rural industry	
Secondary dwellings	No mandatory requirement	
Self storage units	Parking area required for 1 vehicle in front of each storage	Aisle width adequate to accommodate standard

Land use	Car parking requirement	Additional vehicular access requirements specific to land use
	unit, 1 space for on-site manager and 1 Visitors space.	vehicle parked in front of unit and large rigid truck passing
Semi-detached dwelling	As per Dwelling House	
Seniors housing	Refer to SEPP (Housing for Seniors or People with a Disability) 2004.	
Service stations	6 per bay for service area 1 per 20m^2 accessible to public for shop component	Parking spaces for service bays may be stacked.
Serviced apartments	As for attached dwelling	
Shop top housing	None for single dwelling only. Multiple dwelling housing: 0.5 spaces per unit.	For each 1st floor dwelling, access must be provided to a lockable enclosure at ground floor level that is capable of storing two adult bicycles.
Shops	As for retail premises.	
Stock and sale yards	Parking study to be undertaken of similar development/s elsewhere. Must consider multiple vehicular types visiting yards (e.g.: large livestock carrying vehicles, domestic vehicles), the nature of movements that they undertake (e.g.: unloading, turning, parking) and appropriate surfacing requirements for different classes of vehicle (e.g.: hardstand for loading/manouvering of livestock carrying vehicles)	
Storage premises	1 per 100m^2	
Take away food and drink premises	As for retail premises unless for drive-in take-away food outlets in which case the following shall apply; 12 spaces per 100m^2 GFA + queuing area for 5-12 cars	
Timber and Building Supplies	As for landscape supplies.	Provisions must be made for trailer access and pick up areas
Tourist and Visitor accommodation	For Rural tourist cabins; 1 per apartment or cabin (Note; other tourist and visitor accommodation uses separately defined)	
Vehicle body repair workshops	As for Vehicle repair stations	

Land use	Car parking requirement	Additional vehicular access requirements specific to land use
Vehicle repair stations	6 per work bay	Half of the requisite work bay spaces may be stacked and/or within the workshop area
Vehicle sales or hire premises	1.5 per 200m^2 of GFA and outdoor display area; 6 per mechanical work bay for service area.	
Veterinary hospitals	3 spaces per veterinarian consulting room and one for reception staff.	
Warehouse or distribution centres	1 per 300m^2	
Wholesale supplies	1 per 50m^2	

Bellingen Shire Development Control Plan 2017

Chapter 6

Preservation of Trees & Vegetation in Urban Areas

Table of Contents

Table of Amendments

Amendment	Date Adopted	Date Commenced
Minor review of DCP - DCP 2017 replaces DCP 2010	22 November 2017	6 December 2017

6.1 Aims

The aims of this chapter are to:

a) To specify, pursuant to Clause 9 (2) of the State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017, when a permit is required to clear vegetation.

b) To preserve the biodiversity value of vegetation in urban areas of the Bellingen Shire,

c) To maintain the vegetated character and amenity of towns and villages whilst providing reasonable opportunity for the removal of vegetation that is undesirable given its species, location or other attributes that would warrant its removal.

6.2 Where this Chapter Applies

The provisions of this chapter apply to urban land within Bellingen Shire that is located within the following Zones:

- R1 General Residential
- R5 Large Lot Residential
- B1 Neighbourhood Centre
- B2 Local Centre
- IN1 General Industrial
- SP1 Special Activities
- SP2 Infrastructure
- RE1 Public Recreation
- RE2 Private Recreation.

This Chapter does not apply to land within rural or environmental protection zones.

6.3 When this Chapter Applies

6.3.1 Circumstances when a permit for clearing is required

Pursuant to State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017, a permit is required for *clearing native vegetation* below the Biodiversity Offset Threshold (BOS) on land to which this Chapter applies.

A permit is also required for clearing (non-native) vegetation on land to which both the SEPP (Vegetation in Non-Rural Areas) 2017 and this Chapter applies in all circumstances **except** for those outlined in Section 6.3.2.

6.3.2 Circumstances when a permit is not required

A permit for *clearing vegetation* as described in Section 6.3.1 is required in all circumstances except **for those outlined** below:

a) *Clearing vegetation* that:

- is less than 3 metres in height, and
- has a girth of less than 300 millimetres at a height of 1 metre above natural ground surface, and
- has a branch spread of less than 3 metres, and
- is not a *koala food tree* greater than 100mm in diameter that is located on land mapped as preferred koala habitat in Appendix 16.2 of Chapter 16 – Koala Habitat Protection and has an area 0.4ha or more,

b) *clearing vegetation* that is a biosecurity matter (a weed) as per Schedule 3 Weeds in the *Biosecurity Regulation 2017*, or

c) *clearing vegetation* that is listed as a priority weed for the North Coast that is found on the NSW Department of Primary Industries Weed Wise website, or

d) *clearing vegetation* that is a weed, as determined by Council from time to time (see Appendix 6.1 for list of Weeds current at time of DCP adoption which incorporates the species included in the lists detailed in b) and c)), or

e) *clearing vegetation* where the base of the trunk or stem is within 4 metres of the face of a lawful existing residential building; or

f) *clearing vegetation* where the base of the trunk or stem is within 4 metres of the face of a proposed residential building authorised by a current development consent under the *Environmental Planning and Assessment Act 1979*, or

g) *clearing vegetation* where it is essential to the carrying out of construction work authorised by a current approval under the *Local Government Act 1993* or development consent under the *Environmental Planning and Assessment Act 1979*, or

h) removal of a maximum of 10% of the canopy of a tree where the work is necessary for the health of the tree and is designed and carried out in accordance with AS 4373—2007, Pruning of amenity trees.

Note: Pursuant to Part 2 Clause 8 of the SEPP (Vegetation in Non-Rural Areas) 2017, a permit is not required for:

- the removal of vegetation that the Council or Native Vegetation Panel is satisfied is dying or dead and is not required as the habitat of native animals.
- the removal of vegetation that the Council is satisfied is a risk to human life or property.

In order to be satisfied of the above matters, Council will usually require written verification from an appropriately qualified person/s such as an Arborist, Registered Builder or Emergency Services Organisation. Persons acting upon these exemptions without prior consultation with Council and without adequate proof as to the condition of the vegetation removed may face subsequent legal action should it be determined that a permit was required.

6.3.3 *Qualifications to exemptions*

The following additional qualifications apply to Items a) to h) as listed in Section 6.3.2.

Vegetation within 50m of a waterway

For Item a;

If the vegetation to be removed is native to the Bellingen Local Government Area and within 50m of a "waterway", as defined by the BLEP 2010, a permit will be required for any proposal to damage vegetation regardless of its size.

Disturbance of soil

For Items b, c and d;

Weed removal techniques involving machines that disturb soil to dig up the target vegetation or remove roots will, in the opinion of Council, constitute excavation works within the meaning of BLEP 2010 Clause 7.3 (Earthworks) and depending upon the scale of the work, may require development consent pursuant to this provision.

Heritage Conservation Areas and Heritage Items

Clearing vegetation on land within a heritage conservation area or that is or forms part of a heritage item will require development consent pursuant to Clause 5.10(2) of BLEP 2010.

Note: Clause 5.10(3) of BLEP 2010 allows exemptions in certain circumstances, subject to written request being made to and provided by Council.

Exempt and Complying Development

A permit must be obtained for *clearing vegetation* that will occur in the undertaking of exempt or complying development in accordance with State Environmental Planning Policy (Exempt and Complying Development) 2008, unless that damage would be otherwise permissible without a permit pursuant to Section 6.3.2 of this chapter.

6.4 Definitions

Clearing vegetation has the same meaning as in *State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017.* It means to:

- cut down, fell, uproot, kill, poison, ringbark, burn or otherwise destroy the vegetation, or
- lop or otherwise remove a substantial part of the vegetation.

Clearing native vegetation has the same meaning as in Part 5A of the *Local Land Services Act 2013.* It means any one or more of the following:

- cutting down, felling, uprooting, thinning or otherwise removing native vegetation,
- killing, destroying, poisoning, ringbarking or burning native vegetation.

Koala food tree has the same meaning as in Chapter 16 – Koala Habitat Protection. These trees are Tallowwood (*Eucalyptus microcorys*), Swamp Mahogany (*Eucalyptus robusta*), Forest Red Gum (*Eucalyptus tereticornis*), Small-fruited Grey Gum (*Eucalyptus propinqua),* Flooded Gum (*Eucalyptus grandis*) and Sydney Blue Gum (*Eucalyptus saligna*).

Native vegetation has the same meaning as in Part 5A of the *Local Land Services Act 2013*. It means any of the following types of plants native to New South Wales:

- trees (including any sapling or shrub or any scrub),
- understorey plants,
- groundcover (being any type of herbaceous vegetation),
- plants occurring in a wetland.

a) A plant is native to New South Wales if it was established in New South Wales before European settlement. The regulations may authorise conclusive presumptions to be made of the species of plants native to New South Wales by adopting any relevant classification in an official database of plants that is publicly accessible.

b) For the purposes of this Part, native vegetation extends to a plant that is dead or that is not native to New South Wales if:

   - the plant is situated on land that is shown on the native vegetation regulatory map as category 2-vulnerable regulated land, and
   - it would be native vegetation for the purposes of this Part if it were native to New South Wales.

c) For the purposes of this Part, native vegetation does not extend to marine vegetation (being mangroves, seagrasses or any other species of plant that at any time in its life cycle must inhabit water other than fresh water). A declaration under section 14.7 of the *Biodiversity Conservation Act 2016* that specified vegetation is or is not marine vegetation also has effect for the purposes of this Part.

Other definitions of terms used within this chapter are as contained within BLEP 2010.

6.5 Variations

Council may consider variations to the standards required of development in this chapter when the overall aims of this chapter and any specific aims that may be detailed for that particular standard can be achieved.

6.6 Assessment Criteria

1) Any application received by Council must provide sufficient justification for the vegetation clearing. The following arguments will not normally be sufficient justification;

   a. Falling leaves, flowers, fruit or twigs,

b. Overshadowing, **unless** the vegetation is located north of the main living areas or a private open space area of an existing dwelling and is significantly affecting access to winter sunlight to these areas,
c. Fear of a healthy tree failing, or
d. View creation or preservation.

2) Applications arguing that a hazard exists will be assessed having regard to the likelihood of the vegetation failing and the risk that would be posed to life or property should that failure occur.

3) If a potential risk can be mitigated by the relocation of items (eg: seating, play equipment, parking areas) or restrictions on use then these options shall generally be given preference by Council in the assessment of applications.

4) Council may decide to approve an application in its entirety, allow for selective pruning or to refuse the application.

5) Council may impose conditions on the permit that require that any vegetation to be removed is replaced by a suitable species of plant given the characteristics of the site. In densely settled urban areas preference will be given to replacement species that are either fruit bearing for the human occupants of the house or provide fruits and/or nectar for native wildlife.

6) Council may request that the Applicant provide a professional report from an appropriately qualified Arborist, Registered Builder or similar to further justify a request for removal of the tree.

7) Council may request that the Applicant provide a professional report from an appropriately qualified flora and fauna consultant should it be considered that the removal of the vegetation is likely to have an adverse impact upon any threatened species of flora and fauna. Vegetation forming part of a threatened ecological community as defined by the *Biodiversity Conservation Act 2016* will be afforded maximum protection and will not be permitted to be removed except for in the most limited of circumstances where no other alternative exists to mitigate an immediate hazard to human life.

APPENDICES

APPENDIX 6.1 – Bellingen Shire Weeds

COMMON NAME	BOTANICAL NAME
African boxthorn	*Lycium ferocissimum*
African marigold	*Cineraria lyratiformis*
African olive	*Olea europaea* subsp. *cuspidata*
African tulip tree	*Spathodia campanulata*
Agapanthus	*Agapanthus praecox* subsp. *orientalis*
Aleman grass	*Echinochloa polystachya*
Alligator weed	*Alternanthera philoxeroides*
American cotton palm	*Washingtonia filifera*
American ratstail grass	*Sporobolus jacquemontii*
American sea-rocket	*Cakile edentula*
Anchored water hyacinth	*Eichhornia azurea*
Asparagus fern	*Asparagus virgatus*
Asparagus fern	*Asparagus macowanii* var. *zuluensis*
Asparagus weeds	*Asparagus* spp.
Athel pine	*Tamarix aphylla*
Balloon vine	*Cardiospermum grandiflorum*
Barleria, porcupine flower	*Barleria prionitis*
Bellyache bush	*Jatropha gossypiifolia*
Bird-of-Paradise shrub	*Caesalpinia gilliesii*
Bitou bush	*Chrysanthemoides monilifera* subsp. *rotundata*
Black knapweed	*Centaurea xmoncktonii*
Black locust	*Robinia pseudoacacia*
Black willow	*Salix nigra*
Blackberry	*Rubus fruticosus* agg.
Blue heliotrope	*Heliotropium amplexicaule*
Blue stars	*Aristea ecklonii*
Bog moss	*Mayaca fluviatilis*
Boneseed	*Chrysanthemoides monilifera* subsp. *monilifera*
Box-elder maple	*Acer negundo*
Boxing glove cactus	*Cylindropuntia fulgida var. mamillata*
Bridal creeper	*Asparagus asparagoides*
Bridal veil creeper	*Asparagus declinatus*
Brillantaisia	*Brillantaisia lamium*
Broad-leaf pepper tree	*Schinus terebinthifolius*
Broad-leaf privet	*Ligustrum lucidum*
Broomrape	*Orobanche* spp.(except *O. cernua* var. *australiana* and *O. minor*)
Bushman's poison	*Acokanthera oblongifolia*
Cabomba	*Cabomba caroliniana*
Camphor laurel	*Cinnamomum camphora*

Candle bush	*Senna alata*
Cane cactus	*Austrocylindropuntia cylindrica*
Cane needle grass	*Nassella hyalina*
Cape broom	*Genista monspessulana*
Cape daisy	*Dimorphotheca ecklonis*
Cape honeysuckle	*Tecoma capensis*
Cape ivy	*Delaria odorata*
Cat's claw creeper	*Dolichandra unguis-cati*
Cayenne snakeweed	*Stachytarpheta cayennensis*
Cecropia	*Cecropia* species
Chilean needle grass	*Nassella neesiana*
Chinese celtis	*Celtis sinensis*
Chinese knotweed	*Persicaria chinensis*
Chinese rain tree	*Koelreuteria elegans*
Chinese tallow tree	*Triadica sebifera*
Chinese violet	*Asystasia gangetica* ssp. *micrantha*
Climbing asparagus	*Asparagus africanus*
Climbing asparagus fern	*Asparagus plumosus*
Climbing nightshade	*Solanum seaforthianum*
Coast button grass	*Dactyloctenium aegyptium*
Cockscomb coral tree	*Erythrina crista-galli*
Cocos palm	*Syagrus romanzoffiana*
Coffee	*Coffea arabica, C. canephora*
Common pear	*Opuntia stricta*
Convolvulus creeper	*Merremia dissecta*
Coral berry	*Ardisia crenata*
Coral berry	*Barleria repens*
Creeping gloxinia	*Lophospermum erubescens*
Creeping pear	*Opuntia humifusa*
Crofton weed	*Ageratina adenophora*
Cumbungi	*Typha latifolia*
Cup & saucer vine	*Cobaea scandens*
Desmodium	*Desmodium intortum, D. uncinatum*
Devil's fig	*Solanum torvum*
Dolichos pea	*Dipogon lignosus*
Duranta	*Duranta erecta*
Dutchman's pipe	*Aristolochia elegans*
East Indian hygrophila	*Hygrophila polysperma*
Eurasian water milfoil	*Myriophyllum spicatum*
European hackberry	*Celtis australis*
Firethorn	*Pyracantha angustifolia*
Fireweed	*Senecio madagascariensis*
Flax-leaf broom	*Genista linifolia*
Foxglove tree	*Paulownia tomentosa*
Frogbit, spongeplant	*Limnobium laevigatum*
Gamba grass	*Andropogon gayanus*
Garden geranium	*Pelargonium alchemilloides*

German ivy	*Senecio macroglossus*
Giant bird-of-paradise	*Strelitzia nicolai*
Giant devil's fig	*Solanum chrysotrichum*
Giant false sensitive plant	*Mimosa diplotricha*
Giant Parramatta grass	*Sporobolus fertilis*
Giant rats tail grass	*Sporobolus pyramidalis*
Giant reed	*Arundo donax*
Glory lily, climbing lily	*Gloriosa superba*
Golden trumpet tree	*Handroanthus chrysotrichus*
Gorse	*Ulex europaeus*
Green cestrum	*Cestrum parqui*
Green shrimp plant	*Blechum pyramidatum*
Grey sallow	*Salix cinerea*
Ground asparagus	*Asparagus aethiopicus*
Groundsel bush	*Baccharis halimifolia*
Hairy sicklepod	*Senna hirsuta*
Hawkweeds	*Hieracium* spp.
Hawthorn	*Rhapiolepis* spp.
Himalaya ash	*Fraxinus griffithii*
Hiptage	*Hiptage benghalensis*
Honey locust	*Gleditsia triacanthos*
Horsetails	*Equisetum* spp.
Hudson pear	*Cylindropuntia rosea*
Hydrocotyl	*Hydrocotyle ranunculoides*
Hygrophila	*Hygrophila costata and H. polysperma*
Hymenachne	*Hymenachne amplexicaulis* and hybrids
Indian coral tree	*Erythrina x sykesii*
Indian fig, spineless cactus	*Opuntia ficus-indica*
Indian rosewood	*Dalbergia sissoo*
Japanese honeysuckle	*Lonicera japonica*
Japanese pagoda tree	*Sophora japonica*
Japanese walnut	*Juglans ailantifolia*
Jute	*Corchorus olitorius*
Karoo thorn	*Vachellia karroo*
Kei apple	*Dovyalis kaffra*
Kidneyleaf mud plantain	*Heteranthera reniformis*
Kochia	*Bassia scoparia (*excluding subsp. *trichophylla)*
Koster's curse	*Clidemia hirta*
Kudzu	*Pueraria lobata*
Lady of the night	*Cestrum nocturnum*
Lagarosiphon	*Lagarosiphon major*
Lantana	*Lantana camara, L madagascariensis*
Laurel clock vine	*Thunbergia laurifolia*
Lead tree, coffee bush	*Leucaena leucocephala*
Leaf cactus	*Pereskia aculeata*
Leucaena	*Leucaena leucocephala*

Lion's ear	*Leonotis nepetifolia*
Lippia	*Phyla canescens*
Liriope	*Liriope* spp.
Lobed needle grass	*Nassella charruana*
Long-leaf willow primrose	*Ludwigia longifolia*
Ludwigia	*Ludwigia peruviana*
Madeira vine	*Anredera cordifolia*
Mahonia, Chinese holly	*Berberis lomariifolia*
Mesquite	*Prosopis* spp.
Mexican bean tree	*Cecropia* spp.
Mexican feather grass	*Nassella tenuissima*
Mexican water lily	*Nymphaea mexicana*
Mickey mouse plant	*Ochna serrulata*
Miconia	*Miconia* spp.
Mikania vine	*Mikania micrantha*
Mimosa	*Mimosa pigra*
Ming asparagus fern	*Asparagus macowanii var. zuluensis*
Monkey's comb	*Pithecoctenium crucigerum*
Moon flower	*Ipomoea alba*
Moth vine	*Araujia sericifera*
Murraya	Murraya paniculata
White blackberry	*Rubus niveus*
Mysore thorn	*Caesalpinia decapetala*
Narrow-leaf privet	*Ligustrum sinense*
New Zealand flax	*Phormium tenax*
November shower	*Senna multijuga*
Olive	*Olea europaea*
Olive hymenachne	*Hymenachne amplexicaulis*
Opuntia	*Opuntia* spp, *Cylindropuntia* spp., *Austrocylindropuntia* spp. *(*excludes *O. ficus-indica)*
Oregon grape	*Berberis aquifolium*
Osage orange, bow-wood	*Maclura pomifera*
Pampas grass	*Cortaderia selloana*
Paper mulberry	*Broussonetia papyrifera*
Parkinsonia	*Parkinsonia aculeata*
Parrots feather	*Myriophyllum aquaticum*
Parthenium weed	*Parthenium hysterophorus*
Passionflower	*Passiflora filamentosa*
Passionfruit	*Passiflora* spp.
Patula pine	*Pinus patula*
Pigeon berry, coral berry	*Rivina humilis*
Pink orchid tree	*Bauhinia monandra*
Pink pampas grass	*Cortaderia jubata*
Pink trumpet vine	*Podranea ricasoliana*
Pond apple	*Annona glabra*
Pongamia	*Millettia pinnata*

Praxelis	*Praxelis clematidia*
Prickly acacia	*Vachellia nilotica*
Prickly pears - Austrocylindropuntias	*Austrocylindropuntia* species
Prickly pears - Cylindropuntias	*Cylindropuntia* species
Prickly pears - Opuntias	*Opuntia* species
Queensland maple	*Flindersia brayleyana*
Radiata pine	*Pinus radiata*
Red ludwigia	*Ludwigia repens*
Red trumpet vine	*Campsis radicans*
Red-flower prickly pear	*Opuntia elatior*
Rhus tree	*Toxicodendron succedaneaum*
Rope pear	*Cylindropuntia imbricata*
Rubber vine	*Cryptostegia grandiflora*
Rubbervine	*Cryptostegia madagascariensis*
Sagittaria	*Sagittaria platyphylla*
Salvinia	*Salvinia molesta*
Scotch broom	*Cytisus scoparius* subsp. *scoparius*
Sea spurge	*Euphorbia paralias*
Seeded banana	*Musa ornata* or *M. velutina*
Senegal palm	*Phoenix reclinata*
Senegal tea plant	*Gymnocoronis spilanthoides*
Serrated tussock	*Nassella trichotoma*
Sheda grass	*Dichanthium annulatum*
Shoebutton ardisia	*Ardisia elliptica*
Siam weed	*Chromolaena odorata*
Sicilian sea lavender	*Limonium hyblaeum*
Sicklethorn	*Asparagus falcatus*
Silver-leaf nightshade	*Solanum elaeagnifolium*
Skunk vine	*Paederia foetida*
Slash pine	*Pinus elliottii*
Small dropseed	*Sporobolus coromandelianus*
Smooth tree pear	*Opuntia monacantha*
Snakefeather	*Asparagus scandens*
Spanish broom	*Spartium junceum*
Spongeplant	*Limnobium spongia*
Spotted knapweed	*Centaurea stoebe* subsp. *micranthos*
Stinking passionflower	*Passiflora foetida*
Sweet viburnum	*Viburnum odoratissimum* var. *awabuki*
Telegraph weed	*Heterotheca grandiflora*
Texas needle grass	*Nassella leucotrica*
Tiger pear	*Opuntia aurantiaca*
Tipu tree, rosewood	*Tipuana tipu*
Tobacco weed	*Elephantopus mollis*
Tree-of-heaven	*Ailanthus altissima*
Tropical soda apple	*Solanum viarum*

Tussock paspalum	*Paspalum quadrifarium*
Umbrella tree	*Schefflera actinophylla*
Uruguayan rice grass	*Piptochaetium montevidense*
Velvet bean	*Mucuna pruiens*
Velvety tree pear	*Opuntia tomentosa*
Water caltrop	*Trapa* spp.
Water hyacinth	*Eichhornia crassipes*
Water lettuce	*Pistia stratiotes*
Water mimosa	*Neptunia oleracea* and *N. plena*
Water poppy	*Hydrocleys nymphoides*
Water soldier	*Stratiotes aloides*
Water star grass	*Heteranthera zosterifolia*
White blackberry	*Rubus niveus*
White trumpet vine	*Pithecoctenium crucigerum*
Willows	*Salix* species
Witchweed	*Striga* spp. *(except the native S. parviflora)*
Yellow bells	*Tecoma stans*
Yellow burrhead	*Limnocharis flava*

Bellingen Shire Development Control Plan 2017

Chapter 7
Advertising Signage

Table of Contents

Table of Amendments

Amendment	Date Adopted	Date Commenced
Minor review of DCP - DCP 2017 replaces DCP 2010	22 November 2017	6 December 2017

7.1 Aims

The general aims of this chapter are;

a) To allow reasonable opportunities for the display of signage that is restrained and appropriate to the architectural style, scale and location of the building or land use.

b) To discourage signage that by virtue of its scale or location is designed primarily to gain a relative advantage in business exposure, at the expense of the amenity of the area.

The heritage specific aims of this chapter are to:

a) To improve the overall visual quality of the streetscape by requiring signs and advertising which are; in appearance, number, placement and arrangement - appropriate to the significant historical and architectural character of the Bellingen Heritage Conservation Area and suitable for their commercial function.

b) To protect the heritage significance of Bellingen Conservation area and all other heritage items throughout the Shire.

7.2 Where This Chapter Applies

The provisions of this chapter apply throughout all areas of Bellingen Shire, unless any site specific development controls included in this chapter, or in later chapters of this DCP nominate alternative requirements. In this case, the provisions of the site specific development controls shall prevail.

7.3 When This Chapter Applies

Bellingen Local Environmental Plan 2010 allows for the placement of a wide range of low impact signage as “Exempt development”. This means that development consent is not required for the signage if it meets the specified criteria. Persons wishing to erect signage should consult Part 3 and Schedule 2 of BLEP 2010 in the first instance to determine whether or not consent is actually required.

State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 also provides additional exemptions for certain types of signage.

This DCP therefore regulates all signage that does not meet the criteria for exemption in either BLEP 2010, the SEPP (Exempt and Complying Development Codes) 2008 or any other environmental planning instrument applying to the land.

It also applies when applications are received for new commercial development, to the extent that coordinated provision must be made for signage opportunities on the external elevation/s of the building that are integrated with the design of the building.

Note: BLEP 2010 prohibits all signage except that which relates to the use of the land upon which it is erected and can be defined as either a building identification sign or a business identification sign.

7.4 Definitions

Definitions of development are the same as those contained within Bellingen Local Environmental Plan 2010.

7.5 Variations

Council may consider variations to the standards required of development in this chapter when the overall aims of this chapter and any specific aims that may be detailed for that particular standard can be achieved.

7.6 Assessment Criteria – Non Heritage Signage

7.6.1 General requirements for signage

1) All signage must be adequately affixed to the building or structure upon which it is to be mounted. Details must be provided with the Development Application. (Note: a Construction Certificate may be required to install signage).

2) In the case of side walls of buildings that are not on the primary street frontage of the business, signage should be focused towards the primary frontage and not distributed across the length of that particular elevation.

3) The total area of signs on a building shall not exceed 15m^2.

4) Any product advertising on business identification signage shall be secondary to the identification of the business.

5) Any Development Application to erect a new building from which business related purposes may be carried out must demonstrate how opportunities for advertising signage are to be incorporated into the building's design. In particular, any premises that does not have street frontage must have appropriate provision made on a street frontage for the advertising of that business premises.

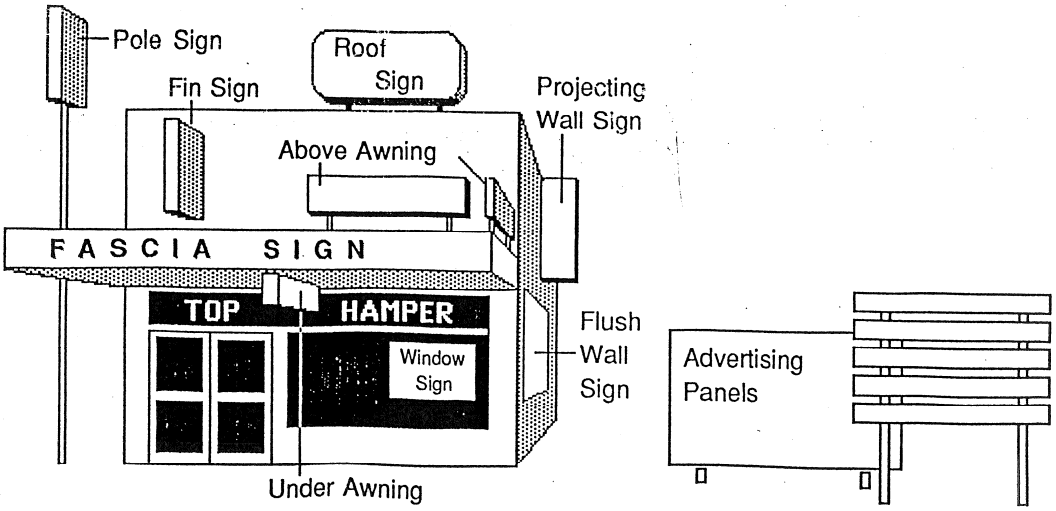
7.6.2 Signage types and standards for compliance

The following signage types, as depicted in Figure 7.1 below, will not be approved unless they can be appropriately justified against the objectives of this chapter.

- Fin sign
- Above awning sign
- Roof sign
- Projecting wall sign

For the remaining forms of signage that are not covered by the exemptions within the SEPP or the BLEP 2010, the following restrictions shall apply. Note that Council strongly advocates compliance with the signage restrictions stipulated for heritage building facades in Section 7.7 on traditional shopfronts where possible however recognises that alternative signage proposals may be acceptable in certain circumstances.

Figure 7.1 Signage Types



Freestanding signs (pole signs or advertising panels)

1) Must not exceed 8m in height, and
2) Maximum advertising area must not exceed 10m^2.

Flush wall sign

1) Only 1 per elevation,
2) Must not exceed cover more than 20% of the wall area, and
3) Must not cover any window, door or architectural feature.

7.7 Assessment Criteria – Heritage Signage

When this section applies

If signage is proposed within a heritage conservation area or on a heritage item, the provisions of this section shall prevail insofar as the desired locations, size and type of signage are concerned.

Owners of existing approved signs that do not comply with the provisions of this plan are encouraged to adopt the principles of this plan when upgrading or maintaining their signs.

7.7.2 Design objectives

Introduction

Bellingen Shire Council and Council's Heritage Advisor acknowledge and accept the essential functions of marketing and advertising. This Chapter seeks to enhance the opportunities to attract custom and promote goods and services in Bellingen.

Inappropriately designed and poorly located signs are likely to discourage customers, and as such advertising will reflect poorly on the quality of merchandise and level of service available.

Signs which are of inappropriate size and in dominant locations may provide unreasonable advantage or disadvantage to businesses within the commercial area.

Given the through traffic routes and level of street parking in the Bellingen Conservation Area, over scaled signs are rendered less visible to potential customers because too many compete for prominence within the retail area across a crowded street.

This Chapter seeks to provide guidance as to selecting appropriate advertising both for the individual property and for the historical character of the overall streetscape.

Appropriate Advertising Structures and Sign Opportunities

Opportunities for advertising, as well as acceptable media used, may be more limited on Heritage Items and in the Conservation Area than on other buildings and areas. They may also be more widely available when traditional opportunities on facades are examined, particularly on the basis of historic photographs.

Historically, signs were rarely placed on pilasters, architectural moulding or across rustication (incised decorative patterns). They were placed so as to allow the architectural details of buildings to remain prominent.

The starting point for any consideration of external advertising is the archive of early photographs of the particular building and its immediate surroundings.

Generally, sign panels can be determined by dividing a building up into a grid and identifying locations on:

a) a solid parapet above a cornice;

b) the horizontal entablature or panel below a cornice;

c) verandah (ground or upper floor) as well as the possible side valence panel formed by the roof profile

d) spandrel panels below windows

e) ground or first floor windows

f) notice boards or plaques on ground floor piers

g) string courses

h) small signs limited to individual elements such as a rendered block

i) on side upper-storey walls

j) party walls able to be viewed above adjacent buildings.

These locations are shown in figure 7.2.

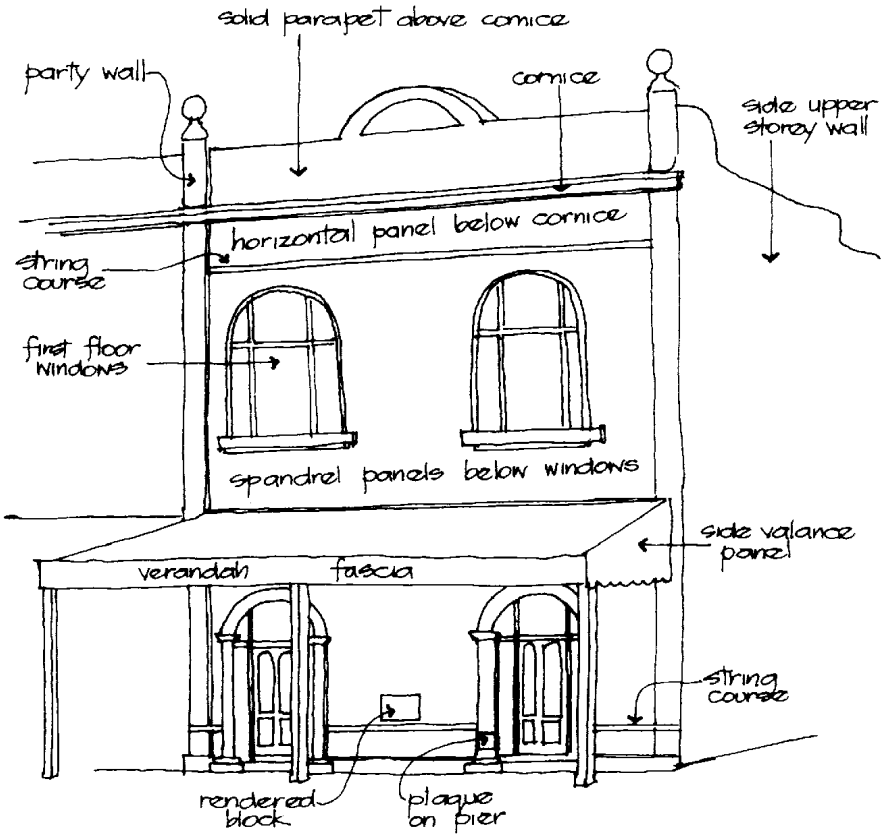


Figure 7.2 Identifying sign panels

Modern signs can, at times, be accommodated as follows:

a) projecting from a building at first floor window level

b) hanging beneath a verandah roof

c) projecting from a building without a verandah above the ground floor window head or on a ground or first floor pier

d) on windows

e) on a plaque beside the entrance door

f) as a free-standing pole sign or low level sign (below ground floor window sill level) in front of or beside the building

g) as a panel on a front fence.

7.7.3 *Performance standards: matters for consideration*

Signs should be discreet and should complement the building or area. The architectural characteristics of a building should always dominate. For example, signs should not be placed on cast-iron, first floor verandahs, balustrades or in front of cast- iron verandah frieze work.

Advertising should be placed in locations on the building or item which would traditionally have been used as advertising areas. If the building or item has no such locations available, advertising will usually be inappropriate (see figures 7.3 and 7.4).

Figure 7.3 Traditional Signs

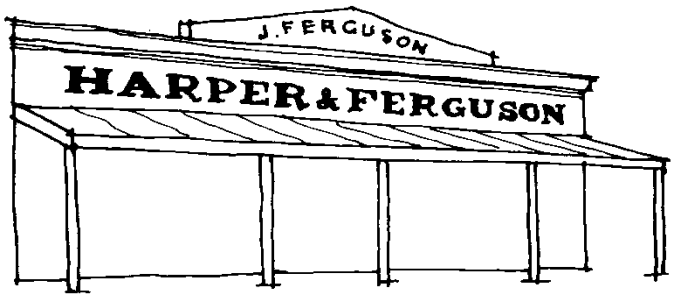


Figure 7.4 Traditional Sign Locations

Sky-sign opportunities will be rare. No signs should break an historic parapet or roofline of a building (see figure 7.5).

Sidewalls provide opportunities, but should be carefully considered (see figure 7.5). Painted signs on sidewalls are to be located at the top of the wall as a painted rectangle abutting the front corner or in some cases extending in a strip across the full depth of the building.

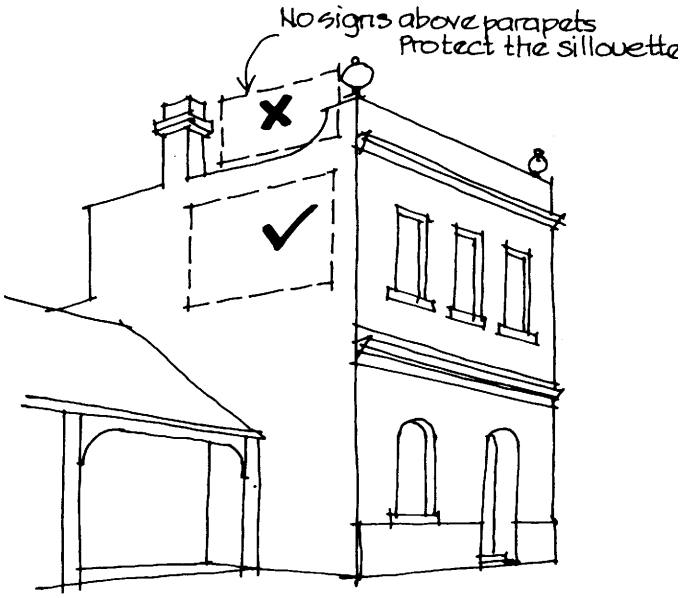


Figure 7.5 Upper Level Opportunities

It is not usually necessary to attempt to create or recreate an 'historic' character in the advertising, but modern standardised 'trademark' advertising will not usually be appropriate. This is unless the presentation is modified, by placing the modern sign in a panel with a perimeter margin and the surrounding wall surface painted in sympathetic heritage colours.

7.7.4 Maximum number of signs per premises

The general options and limits, as further illustrated in Figure 7.6 are as follows;

Ground floor facade

b1 awning fascia;

b2 one suspended under awning/verandah sign or cantilevered over-footpath sign at standard awning level where there is no verandah;

b3 above door head/above window transom;

b4 piers

b5 below window sill (not recommended)

b6 one sign on the window glass or masonry beside the door.

Permitted: b1, b2 and b6 plus numbers b3 or b4

In other words, on the ground floor facade there should be a maximum of four signs.

Note: A second under awning sign may be permitted on buildings with wide frontages in comparison to surrounding buildings. Such signs should be evenly spaced across the frontage of the building.

Upper level signs

c1 Wall face applied panel sign

c2 One projecting vertical sign

c3 Parapet panel sign.

Permitted: c3 and c1 or c2.

Conditions, restrictions and exemptions

The following conditions apply with regard to these restrictions and exceptions:

a) For non-standard facades the same principles apply.

b) Heritage photographs should be utilised to demonstrate specific applications.

c) Internally illuminated signs are restricted to the under awning location.

d) It is good retail practice to limit window signs in number and area, thus allowing customers to view the merchandise.

e) Corporate and Franchise colour schemes and signs will be considered in relation to the overall colour scheme of the building and must abide by the heritage principles.

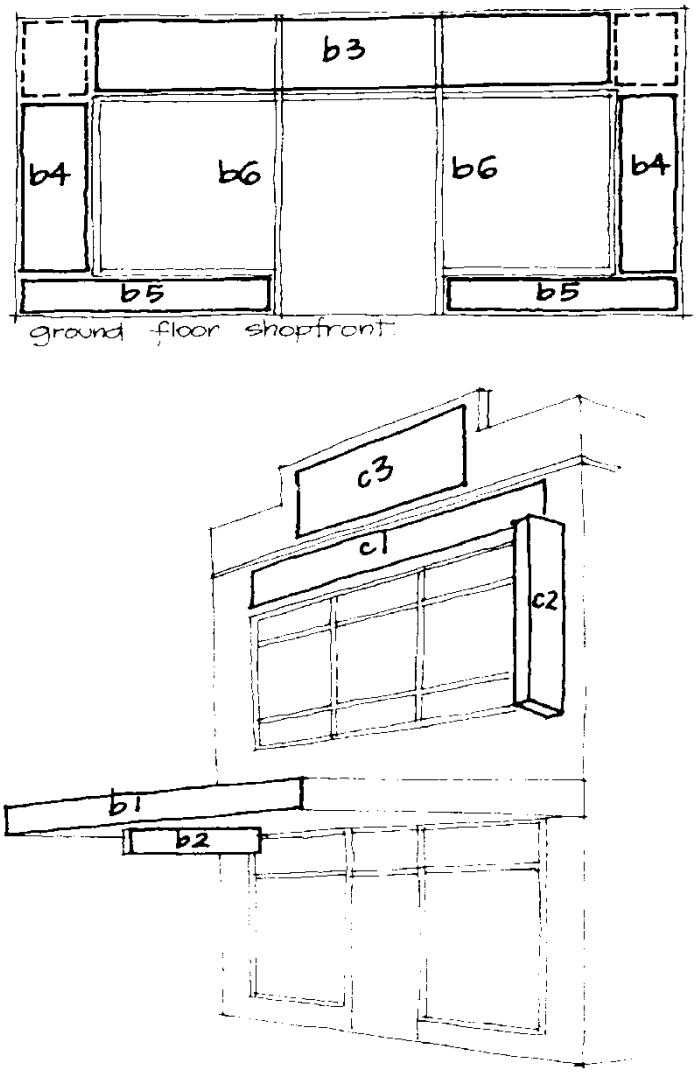
f) Any product advertising on business identification signage shall be secondary to the identification of the business.

g) Signs shall not be erected directly on top of an awning, roofline or verandah.

h) Signs that detract from the architectural appearance of the building will not be permitted.

i) All signs must be maintained in good condition.

Figure 7.6 Key Number Of Signs Per Site



7.7.5 Size of signs

In general, there are no standard sizes for signs in heritage areas. They may vary according to the design and history of the building or its environment (see Figure 7.7).

The following will be utilized for guidance in assessing applications for signage on buildings which are contemporary or in assessing existing signs:

1) The total area of advertisements mounted parallel to the face of a building will, in general be less than 4 square metres in area for smaller properties and not more than 6 square metres for larger properties.

2) Sigs suspended beneath awnings or verandahs will be less than one square metre in area per face.

3) The total area of signs on a building will be less than 8 square metres.

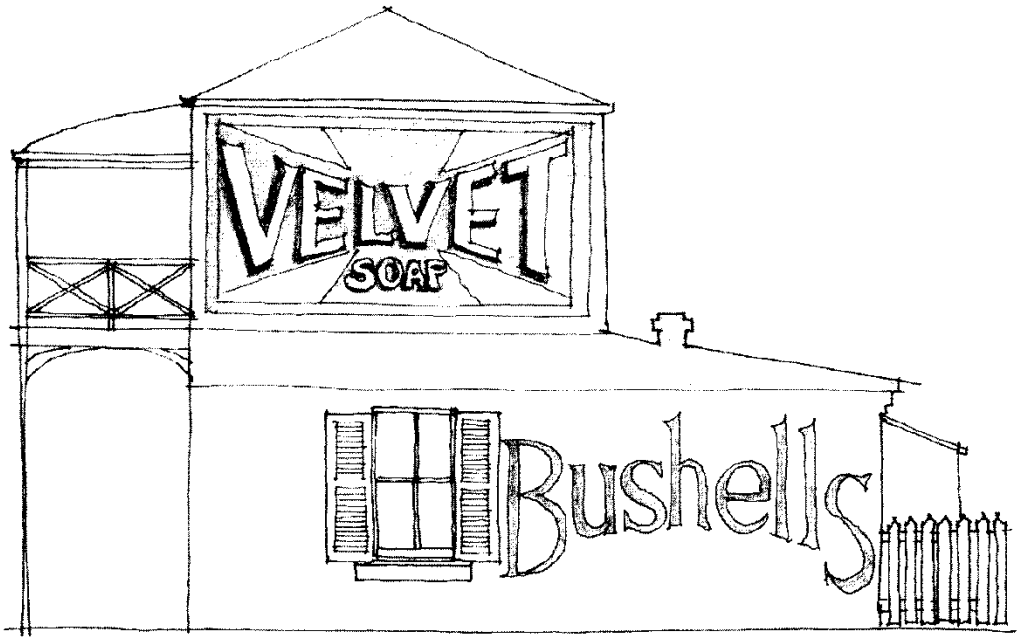


Figure 7.7 Historic Supergraphics

7.7.6 Specific sign type guidelines

Window signs

For heritage listed buildings, it is recommended that window signs involve painting of dark coloured letters onto the glass with a white translucent stipple background. Gold and silver edging is optional. Lettering faces should be restrained i.e. sans serif.

Awning fascia signs

Awning fascia signs are recommended to be painted in-situ and applied to all exposed fascia edges, thus reinforcing the role of the suspended awnings in providing a unifying element in the Conservation Area.

Wall face applied panel and parapet panel signs

Painted in situ signs on the pediments and parapets of the facades were a common feature, and are to be encouraged where appropriate, and historically accurate.

Where signs are new rather than reinstatements, they should be a painted panel with a border or edge moulding and mounted on the facade in one of the following locations, if not historically clear from photographs:

- Pediment block above cornice
- Frieze panel below cornice
- Defined panels above the verandah or awning.

Wall signs

Signs painted on the wall surface of the street or lane elevation were usually located at the top of the wall as a painted rectangle abutting the front corner or in some cases extending in a strip across the full depth of the building. Proposals for wall signs proposals on heritage listed buildings should take this information into consideration in the design phase.

7.7.7 Signwriting

Lettering

Photographs illustrate that the lettering most commonly used in the past was of a simple unembellished type set out as uniform capital letters.

The preferred lettering is that which reflects and interprets the lettering found in early photographs of the period. It is not expected that contemporary buildings copy original lettering. It is expected that the lettering reflects the period of the architecture of the building and this is particularly relevant for buildings which are listed as having individual significance.

Appropriate lettering types are detailed in Appendix 7.1

Layout

Lettering should be organised around an axis as shown in Appendix 7.2, cutting through the centre of the sign and be arranged to neatly fill the available space.

The space should suit the frame created by the building facade. This may be rectangular, triangular, triangular pedimented, or segmental pedimented with a curved cornice. The type will be horizontal or in an up-curved line.

Sign panels should be set within a “frame”. The colour of the “frame” should relate to the building colour scheme. The “frame” may be painted or it may be a "moulding”.

Corporate graphics and colours

The use of modern logos and colour schemes as used by many retail franchise chains will be considered on a case by case basis. All parties, prior to any manufacture or erection, should allow for an appropriate period of time for consultation and design, particularly where the proposal involves an individually heritage listed building.

APPENDICES

APPENDIX 7.1 – Traditional Sign Lettering

Lettering

The basic faces include:

- Egyptian (Antique): The boldest of faces
- Ionic (Fat Clarendon): A stylised bold face with flowing serifs
- Grotesque (sans serif): An expression of modernity with bold even strokes.

These are the most common nineteenth century faces based on a square section for each letter and used without compression. Other faces were used during the inter-war period to fit the Art Deco style. These faces should only be used on the appropriate architecture and carefully interpreted.

The following faces are more commonly available from computer based systems and are used to interpret traditional faces.

- Times New Roman
- Garamond
- Century Schoolbook;
- Cheltenham;
- Clarendon;
- Egyptian;
- Hellenic; and
- Ionic.

Mixed Faces

Generally capital letters were used in each word or phrase on a sign.
A variety may be used in circumstances such as one face for the Business and another for the Proprietor.

Compressed faces

Only sans serif faces appear to have been compressed, for use on small signs and to avoid abbreviation while retaining prominence without reducing height.

Spacing

In good quality signs, lettering was arranged to fill the space around a central axis. Lettering was visually spaced and not equally spaced.

Ornament

Traditional signs often incorporated ornamentation such as scrolls or illustrative figures. Lettering faces were also often given additional character by flaring letters, by presenting them as shaded faces, by highlighting parts of the letters or by giving them cast shadows. The lettering should be legible at a distance relative to its size and location.

Shading

The effect of raised lettering was created for key words such as the Business name, with all letters shaded at 45 degrees down to the right.

Highlighting

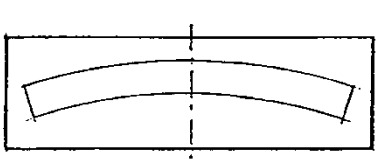
The reverse of shading with the effect of light falling on the raised parts of letters.

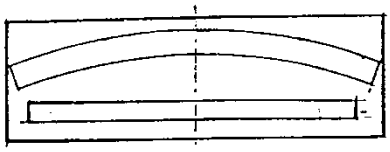
Traditional signs utilised light lettering on a dark background.

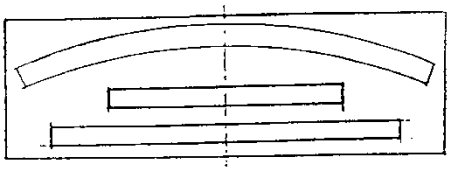
Use of these techniques is generally encouraged to promote variety where appropriate, with the proviso that it is always based on traditional forms.

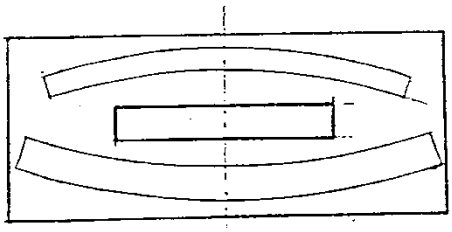
Fluorescent and iridescent paints are inappropriate and not permitted.

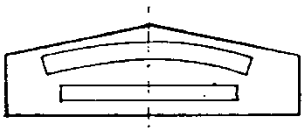
APPENDIX 7.2 – Traditional Sign Layouts

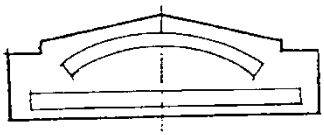


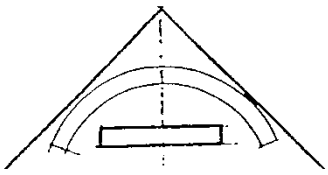


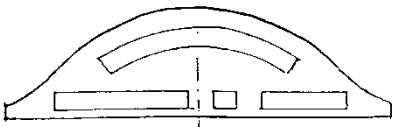












Bellingen Shire Development Control Plan 2017

Chapter 8
Flood & Riverine Processes

Table of Contents

Table of Amendments

Amendment	Date Adopted	Date Commenced
Minor review of DCP - DCP 2017 replaces DCP 2010	22 November 2017	6 December 2017

8.1 Introduction

Bellingen Shire Council, through its Floodplain Risk Management Committee, prepared and adopted a Floodplain Risk Management Study and Floodplain Risk Management Plan in 2002. Both documents were prepared in accordance with the NSW Government's Flood Prone Land Policy and the guidelines of the NSW Government's Floodplain Management Manual, 2001.

The Floodplain Risk Management Study comprises detailed consideration of viable floodplain risk management measures, while the Floodplain Risk Management Plan summarises and prioritises the recommended management strategies identified under the Study.

One of the most effective strategies for managing future flood risks is implementation of property modification measures, specifically through the implementation of appropriate zoning and development controls.

This Chapter has been prepared in response to recommendations of Council's Floodplain Risk Management Study and Floodplain Risk Management Plan. This Chapter provides an outline of appropriate control measures for development affected by flooding and land potentially affected by riverine processes. This Chapter should be read in conjunction with the requirements of Bellingen Local Environmental Plan 2010 and the Floodplain Risk Management Study and Plan, 2002.

8.2 Aims

The primary Objectives of this Chapter are to:

a) to reduce the impact of flooding and flood liability on individual owners and occupiers of flood prone property;

b) to reduce private and public losses resulting from floods utilizing ecologically positive methods wherever possible;

c) alert the community to the hazard and extent of flood prone land; and

d) inform the community of Council's policy in relation to the use and development on flood prone land.

An underlying principle of this Chapter is that any new development or modifications to existing development should always, as far as practical, result in an improvement to the existing flood risk and in no circumstances should the flood risk be made worse.

The aims of this Chapter are therefore to:

a) outline requirements for development and building on flood prone land identified under Council's Floodplain Risk Management Study;

b) identify requirements and matters to be considered for development and building on land potentially affected by flooding and riverine processes;

c) prevent inappropriate development occurring on flood prone land;

d) encourage the development and use of land which is compatible with the likely flood hazard;

e) increase public awareness of flood hazards and appropriate responses to development on flood prone land.

8.3 Where This Chapter Applies

This Chapter applies to land affected by flooding and land affected by or potentially affected by Riverine processes to which *Bellingen Local Environmental Plan 2010* applies. It normally applies where the development is on *flood prone land*, however there are instances, such as provision of safe access to flood refuges for subdivisions, where even though the development is on flood free land, this Chapter still applies.

The extent of *flood prone land* is determined from flood studies. Council has adopted flood studies and associated mapping of flood prone land along the more intensively populated reaches of the rivers within the local government area (see Section 8.8 Flood Risk Categories).

In other areas a proponent shall undertake a flood study where the proposed development is within *potentially flood prone land* as determined in Appendix 8.1 and this flood study shall be used to determine the extent of flood prone land and flood behaviour at the subject site.

The Bellinger River Morphological Study by Cameron McNamara 1985 maps areas affected by *riverine processes* downstream of Bellingen to the ocean on the Bellinger River and from the ocean to 1.5km upstream of Newry Island (Barnett's Ruins) on the Kalang River. For areas outside the study undertaken by Cameron McNamara the proponent shall undertake a riverine processes study where the development is potentially affected by *riverine processes* (refer to section 8.12.2).

8.4 When This Chapter Applies

This Chapter applies when a development application is received by Council for development on land to which this Chapter applies. It does not apply when proposed development can be considered as exempt" or "complying" development under the provisions of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 or any other Environmental Planning Instrument applying to the land.

8.5 Relationship with other Plans

This Chapter provides an outline of the development controls adopted in Council's Floodplain Risk Management Study (2002). The provisions of this Chapter should be read in conjunction with Flood Maps contained in the Floodplain Risk Management Study, any additional approved flood studies prepared by Council for the Shire and the Bellinger River Morphological Study by Cameron McNamara 1985.

The requirements of this Chapter are additional to, and complimentary to, the provisions of Bellingen Local Environmental Plan 2010. Where there is an inconsistency between this Chapter and another environmental planning instrument, the provisions of the environmental planning instrument shall prevail.

8.6 Variations

Ad-hoc variations of any of the provisions of this Chapter may be inconsistent with the guidelines provided in the Government's 2005 Floodplain Development Manual. Any such variations may result in Council no longer being afforded the indemnity provisions as outlined in Section 733 of the Local Government Act, 1993.

Therefore this Chapter should only be varied following adoption of an amendment to Council's Floodplain Risk Management Study and Plan. Reference should be made to Section 2.7 of the 2005 Floodplain Development Manual for triggers which may lead to an amendment of the Floodplain Risk Management Study and Plan.

8.7 Acronyms & Definitions

AEP - Annual Exceedance Probability (1%)
AHD - Australian Height Datum
DCP - Development Control Plan
EP and A Act - Environmental Planning and Assessment Act, 1979
EP and A Regulation - Environmental Planning and Assessment Regulation, 2000
FPL - Flood Planning Level
GFPL - General Flood Planning Level
LEP - Local Environmental Plan
Local Policy - Local flood risk management policy
Management Committee - Floodplain Risk Management Committee
Management Plan - Floodplain Risk Management Plan FRMP
Management Study - Floodplain Risk Management Study FRMS
Manual - Floodplain Development Manual, 2005
NSW - New South Wales
PMF - Probable Maximum Flood
Policy - NSW Government's Flood Prone Land Policy
SES - State Emergency Service
ARI - Average recurrence interval (yrs)

Above ground carpark means a car park that is elevated above and does not occupy the ground floor of a building.

Annual Exceedance Probability (AEP) refers to the chance of a flood of a given or larger size occurring in any one year, usually expressed as a percentage (eg 1% AEP = 1 in 100 year event).

Appropriately qualified person means a Charted Professional Engineer, CPEng or a Registered Professional Engineer, RPEng with a minimum of 5 years' experience relevant to the works. For flood modelling such experience is considered to be hydrologic and hydraulic investigations and design relating to larger scale whole-of-catchment investigations. For drainage such experience is considered to be hydrologic and hydraulic investigations and design relating to stormwater management plans and subdivision drainage design.

Australian Height Datum (AHD) is a common national surface level datum corresponding approximately to mean sea level.

Below ground/basement/underground carpark means a car park that is built below ground level, either as a basement to a building or covered with structure above.

Carport is a structure used to house motor vehicles that has a minimum of two open sides and not less than one third of its perimeter being open.

Community of support refers to a cluster of four (4) or more residential dwellings located and interconnected by roads/driveways, all above the PMF, which would be a position to supply support to each other or nearby flood affected residents. A suitably cleared helicopter landing area shall also be identified within the community of support (see also flood refuges and evacuation centres).

Conceded Flood Planning Level (Conceded FPL) represents a flood planning level equivalent to the General Flood Planning Level minus 1.0metre.

Critical Facilities include buildings and services used for emergency purposes or reducing social disruption during or after a flood where inundation or loss of function in an extreme flood would represent an unacceptable level of risk, eg SES headquarters, hospital, police station, fire station (including rural bush fire brigade), ambulance station, public halls (where used for evacuation centres), intensive/critical aged care accommodation, nursing homes, telephone exchange, telecommunication repeaters, flooding evacuation centres, flood refuges, Council Chambers, critical service facility components (e.g., essential components of sewerage and water supply infrastructure).

Critical Facilities Flood Planning Level (Critical Facilities FPL) represents a flood planning level equivalent to the probable maximum flood (PMF).

Development is defined in Part 4 of the EP&A Act.

- ***infill development*** refers to development of vacant land that is generally surrounded by developed properties.

- ***minor development*** (non habitable) refers to development such as garden sheds, pergolas, non-enclosed verandas and patios, bus shelters, advertising signs, carports, amenity blocks and the like.

- ***new development*** refers to development of a different nature to that of the former land use, or development at another location that is not on the same footprint or immediately adjacent to former development, e.g. the urban subdivision of any area previously used for rural purposes, rebuilding at a different location, dual occupancy, change of use eg conversion of a dwelling to bed and breakfast establishment.

- ***redevelopment*** refers to rebuilding on the same footprint as previously or immediately adjacent to the previous development site and generally involves replacement of a structure with something similar without a change of use or extension of services. It also includes raising of the finished floor level of an existing building.

Evacuation centres are areas where flood affected residents can assemble and receive assistance under the coordination of the SES. The locations of these areas and their intended function in a flood emergency are to be determined by the SES and Council and identified in The Bellingen Local Flood Plan. Refer to Appendix 8.6 Evacuation Centres for location of evacuation centres (see also flood refuges and “community of support”).

Extension is a modification to an existing structure where it provides for an area that is a secure, lockable enclosure.

Extreme flood is often used as an approximate estimate of the PMF based on a less rigorous analysis of flood behaviour. For the purposes of this Chapter the PMF and extreme flood are synonymous

Flood refers to a relatively high stream flow that overtops the natural or artificial banks in any part of a stream, river, estuary, lake or dam. It is also the local overland flooding associated with major drainage before entering a watercourse, and/or coastal inundation resulting from superelevated sea levels and/or waves overtopping coastal defense (excluding tsunami).

Flood free area is land above the height of a probable maximum flood.

Flood fringe area is the remaining area of flood prone land after floodway and flood storage areas have been defined

Flood immunity - the level at which a road, accessway or structure becomes inundated

Flood liable land is land susceptible to flooding by a probable maximum flood. It is synonymous with flood prone land. Note that the term flood liable land covers the whole floodplain, not just that part below the FPL (see flood planning area).

Flood maps are the maps attached to Council's Floodplain Risk Management Study as amended or extended from time to time as additional approved flood data becomes available.

Flood Management Strategy is a strategy prepared for individual owners to identify the level of flood risk and a proposed response to minimise potential flood damages and risk to life. (See also Appendix 8.7 Flood Management Strategy Requirements)

Floodplain is the area of land which is subject to inundation by floods up to and including the probable maximum flood event, that is, flood prone land.

Flood Plan (local) is a sub-plan of a disaster plan that deals specifically with flooding. They can exist at State Division and local levels. Local flood plans are prepared under the leadership of the State Emergency Service.

Flood Planning Level (FPL) is the combination of flood levels (derived from significant historical flood events or floods of specific AEPs) and freeboards selected for flood planning purposes, as determined in floodplain risk management studies. A list of FPL's used in this Chapter appears in Section 8.8 under "Flood Planning Levels".

Flood prone land is land susceptible to flooding by the PMF event. Flood prone land is synonymous with flood liable land.

Flood proofing refers to a combination of measures such as filling of a site to elevate the structure or the design, construction (and alteration) of buildings or structures with appropriate water resistant materials to reduce or eliminate flood damage to the building or structure, and its contents, and the risk to occupants.

Flood refuges are publicly accessed buildings above the PMF where flood displaced residents can assemble and receive shelter. They may include a community shelter, pubic hall, school or the like. A suitably cleared helicopter

landing area shall also be identified adjacent to the flood refuge (see also evacuation centres and “community of support”).

Flood risk is the potential danger to personal safety and potential damage to property resulting from flooding. The degree of risk varies with circumstances across the full range of floods.

Flood storage area an area of the floodplain that is important for reducing flood severity by providing temporary detention/storage of floodwater during the passage of a flood.

Flood Study/ Assessment refer to Appendix 8.2 and 8.3 Flood Assessment Requirements and Flood Study Requirements.

Floodway is the area of a floodplain where a significant discharge of floodwater occurs during floods. Floodways are often aligned with naturally defined channels. Floodways are areas that, even if only partially blocked, would cause a significant redistribution of flood flow, or a significant increase in flood level. Area specific definition of floodways is provided in Section 8.8 under “Flood Risk Categories”.

Freeboard is a factor of safety to provide reasonable certainty that the risk exposure selected in deciding on a particular flood chosen as the basis for the particular FPL is actually provided, and is incorporated into the FPL. The freeboard is the difference between the particular FPL and the flood used to derive it and may vary with different land uses, parts of the floodplain or types of mitigation works.

Garage is a private building or part of a building used to park or keep a motor vehicle and that is not defined as a carport.

General Flood Planning Level (GFPL) represents a flood planning level derived for a particular precinct based on the 1% AEP flood plus a freeboard.

Ground level carpark means a car park that is located at the street level.

Habitable (room) means:

- in a residential situation; a living or working area, such as a lounge room, dining room, rumpus room, kitchen, bedroom or workroom.
- in an industrial or commercial situation; an area used for offices or to store possessions susceptible to flood damage.

Land use categories refers to specific land uses and/or activities applicable to this Chapter. More than one type of land use and/or activity may be applicable to a development application. The categories (include but not limited to) are:

- **Caravan Parks and Manufactured Home Estates** refers to all types of development within the site including offices, managers residence, workshops, amenities, mobile homes, cabins, caravans (with and without rigid annexes), camp sites and the like.
- **Commercial** refers to shops, offices, clubs, recreation facilities and the like.
- **Critical Facilities** refers to uses where any inundation or loss of function in an extreme flood would represent an unacceptable level of risk. It includes SES HQ, Police Stations, Fire Stations (including rural bushfire), Ambulance Stations, Hospitals, Public Halls (where used for flood evacuation centre), Intensive Aged Care, Nursing Homes, Telephone Exchanges, Telecommunication Repeaters, Flood Evacuation Centres and Flood Refuges,

and Critical Service Facility Components (e.g. essential components of sewage treatment works, essential water supply reservoirs).

- **Industrial** refers to industrial related activities including factories, engineering workshops, warehouses and the like.
- **Minor Development** refers to non-habitable development such as domestic swimming pools, garden sheds, non enclosed verandahs and patios, pergolas, bus shelters, advertising signs, carports, picnic shelters, amenity blocks, change rooms and the like.
- **Residential development including units, dual occupancy, tourist accommodation and the like** refers to residential dwellings, including houses, duplexes, flats, units and motels.
- **Special Purpose Facilities** applies to development such as infrastructure where use of the General FPL is considered to represent an unacceptable level of risk for the type of development. Included in this category are developments such as generating works, sub stations, liquid fuel depots, units for aged persons (other than self-care), retirement villages (other than self-care), schools, and hazardous industries.

Mainstream Flooding - inundation of normally dry land when water over flows the banks of a river. It excludes consideration of minor tributaries and local drainage paths.

Measurable means, in relation to effect on flood behaviour, 0.01m for flood heights and 0.1m/sec for average channel and overbank velocities.

Potentially Flood Prone Land refer to Appendix 8.1 Potentially Flood Prone Land.

Probable Maximum Flood (PMF) is a flood calculated to be the maximum which is likely to occur at a particular location. The PMF defines the extent of flood prone land, that is, the floodplain.

Riverine processes refers to the effect of flowing water on the riverbank and surrounding landscape, and can include impacts such as river bank erosion, river bank slumping, meandering migration of the main stream bed and the like.

Safe access refers to the safe velocity and depth relationships for pedestrians and vehicles as shown in Figure L1 of the NSW Governments Floodplain Management Manual 2005 (copy shown in Appendix 8.4 Safe Access)

Undercroft carpark means an unenclosed car park that occupies the area below the footprint of a building or plaza.

8.8 Development Criteria - General

General

The criteria for determining applications potentially affected by flooding are structured in recognition that different controls are applicable to different levels of flood inundation and flood risk, and different land uses.

The procedure to determine which controls apply to proposed development involves:

a) Determination of which part of the floodplain the land is located within (Section 8.8 “Flood Risk Categories”)

b) Identification of the land use category/categories associated with the development
c) Determination of the flood planning level(s) applicable to the development
d) Application of the prescriptive controls as outlined at Sections 8.10 or 8.11 as applicable.

Flood Risk Categories

For the purposes of this Chapter, flood prone land within the local government area is divided up into three hydraulic categories, each reflecting different hydraulic behaviour and function. They are:

- Flood Fringe,
- Flood Storage, and
- Floodway

Different development controls apply to each of these categories in order to preserve their function and in recognition of their respective flood risks.

A flood assessment or flood study is required to determine the hydraulic categories and provide mapping of these categories. Council has adopted flood studies for the following areas:

- Lower Bellinger River (flood level and indicative mapping for mainstream flooding from Bellingen to the mouth of the Bellinger)
- Lower Kalang River (flood level and indicative mapping of mainstream flooding from Picket Creek to the confluence of the Bellinger)
- Upper Bellinger River (flood levels and indicative mapping of mainstream flooding (in preparation) from The Dardanelles to Bellingen)
- Lower Never Never River (flood levels and indicative mapping of mainstream flooding (in preparation) from Capararo's Bridge to the confluence with the Bellinger River)
- Upper Kalang River (flood levels and indicative mapping of mainstream flooding (in preparation) from Picket Hill Creek to Kopsens Bridge
- Bielsdown River through Dorrigo and an unnamed tributary to the Bielsdown River (flood levels and indicative mapping of mainstream flooding)

The hydraulic category applicable for a particular development shall be determined according to its locality as follows:

Lower Bellinger and Lower Kalang Rivers

Flood Fringe	the area shown on mapping held by Council which generally reflects those parts of flood prone land that are not Floodway nor Flood Storage.
Flood Storage	the area shown on mapping held by Council which generally reflects those parts of flood prone land below the 1% AEP flood extents that are not Floodway and that are important for the temporary storage of floodwaters during the passage of a flood.
Floodway	the area shown on mapping held by Council which generally reflects those parts of flood prone land below the 1% AEP flood extents where significant discharge of floodwater occurs during floods.

Upper Bellinger and Lower Never Never Rivers

Flood Fringe	the indicative area shown on mapping held by Council (in preparation) which generally reflects those parts of flood prone land that are not Floodway.
Floodway	those parts of flood prone land where, in a 1% AEP flood event, the product of flood depth and velocity exceeds 1 m^2/s as determined from site specific survey and the flood study held by Council

Upper Kalang River

Flood Fringe	the indicative area shown on mapping held by Council (if available) which generally reflects those parts of flood prone land which are not Floodway.
Floodway	those parts of flood prone land where, in a 1% AEP flood event, the product of flood depth and velocity exceeds 1 m^2/s as determined from site specific survey and the flood study held by Council.

Bielsdown River at Dorrigo

Flood Fringe	the area shown on mapping held by Council which generally reflects those parts of flood prone land which are not Flood Storage nor Floodway.
Flood Storage	the area shown on mapping held by Council which generally reflects those parts of land below the 1% AEP flood level that are not Floodways and that are important for the temporary storage of floodwaters during the passage of a flood.
Floodway	the area shown on mapping held by Council which generally reflects those parts of land below the 1% AEP flood level where significant discharge of floodwater occurs during floods.

Elsewhere in the Local Government Area

Flood Fringe	those parts of flood prone land that are not Flood Storage nor Floodway.
Flood Storage	those parts of flood prone land that are not Floodway and where, in a 1% AEP flood event, the depth of flooding exceeds 1m as determined from site specific survey and a Flood Study.
Floodway	those parts of flood prone land where, in a 1% AEP flood event, the product of flood depth and velocity exceeds 1 m^2/s as determined from site specific survey and a Flood Study

If Council holds adopted Flood Assessments or Flood Studies at the locality of the proposed development they may be used in the above category determination.

Where Council does not hold an adopted Flood Assessment or Flood Study of the subject land, the proponent shall undertake the following procedure:

a) Determine if any part of the proposed development or its intended evacuation route, is Potentially Flood Prone (see Appendix 8.1 Potentially Flood Prone Land). If not, this Chapter does not apply.
b) If Potentially Flood Prone, undertake a Flood Assessment or Flood Study (see Appendix 8.1 Potentially Flood Prone Land or Appendix 8.2 Flood Assessment Requirements respectively) to determine if any part of the proposed development or its intended evacuation route, is within Flood Prone Land. If not, this Chapter does not apply.
c) If flood prone submit a certified Flood Assessment or Flood Study as applicable with the development application.

Note: Under normal circumstances, a Flood Assessment would be undertaken in the first instance. If after completing the Flood Assessment it is found that all proposed development and access/ evacuation route is above the 1% AEP flood level there is no need to proceed with a more detailed Flood Study.

Land Use Categories

For the purposes of this Chapter, the following land use categories have been identified. It should be noted that more than one land use category may be associated with a development application:

- Residential development including units, dual occupancy, tourist accommodation and the like
- Commercial, Industrial and Other Non-Habitable Development
- Critical Facilities
- Special Purpose Facilities
- Minor Development
- Filling
- Fencing
- Subdivisions
- Boundary Adjustments, and
- Caravan Parks and Manufactured Home Estates.

Different development controls apply to each land use. Definitions have been provided in the Glossary for land use categories unique to this Chapter or not otherwise included in other Environmental Planning Instruments.

Flood Planning Levels

The following flood planning levels (FPL's) are applicable to this Chapter:

- Critical Facilities FPL
- Special Purpose FPL
- General FPL or GFPL
- Conceded FPL
- Non Specified FPL

The **Critical Facilities FPL** is the probable maximum flood (PMF) level or other approved extreme flood event level.

The **Special Purpose FPL** is the GFPL plus 1.0 metre.

The **General FPL** (also referred to as GFPL) is based upon the 1% AEP flood level plus freeboard. Where Council has mapping depicting the GFPL, that mapping shall be used. In other areas, the General FPL shall be equivalent to the 1% AEP flood level plus freeboard applicable to that area.

The **Conceded FPL** is the GFPL minus 1.0 metre.

The **Non Specified FPL** has no specific level requirement and shall be assessed on practical site constraints for each specific development.

The **freeboard** shall be 0.5 metres unless noted otherwise below:

- 1.0 metre for the Upper Bellinger River from Thora Bridge to the Dardanelles in the area covered by Council's adopted Preliminary Flood Assessment, Upper Bellinger River 2005.
- 0.75 metre for the Never Never River upstream of Buffer Creek in the area covered by Council's adopted Preliminary Flood Assessment, Upper Bellinger River 2005.
- 0.75 metre for the Fitzroy Street catchment in Urunga

Prescriptive Controls

The prescriptive controls which apply to particular flood risk category and land use are detailed in Sections 8.10 and 8.11. They include:

- Floor Level
- Flood Proofing
- Flood Effect on Others, and
- Access, Management and Design.

8.9 Development Criteria for Determining Applications for Land Affected by Riverine Processes

8.9.1 General

The Bellinger River Morphological Study by Cameron McNamara 1985 maps areas affected by riverine processes and depicts area of projected erosion and accretion in the next 100 years. The mapping extends downstream of Bellingen to the ocean on the Bellinger River and from the ocean to 1.5km upstream of Newry Island (Barnett's Ruins) on the Kalang River.

Due to a lack of data outside the Bellinger River Morphological Study proponents are required to undertake a riverine process study for individual development proposals in areas potentially affected by Riverine processes.

8.9.2 What land is potentially affected by riverine processes?

Areas identified on the Soil Landscapes - Alluvial and Swamp Landscapes mapping (plus 100m), undertaken by the Department of Land and Water Conservation, is considered to be *potentially affected by riverine processes* and will generally require further assessment as outlined below. The Alluvial and Swamp Landscapes mapping is available for inspection at Council's office.

(Council may grant exemption to undertake a detailed assessment if it considers the site would not be affected by riverine processes. Such exemption would be merit based and determined by site inspection, and tests as necessary, by a suitably qualified person. The site inspection must, amongst other things, clearly demonstrate that the site is not an Alluvial and Swamp Landscape or have similar propensity to riverine erosion.)

Outside these areas, further investigation will generally not be required unless there is a history of bank erosion in the area.

8.9.3 Prescriptive controls

Section 8.12 details the prescriptive controls for land that is identified as being affected or potentially affected by riverine processes.

8.10 Development in Flood Fringe and Flood Storage Area

Development in Flood Fringe Areas generally has no effect on flood behaviour. The main consideration in these areas is the minimisation of flood damages and risk to life. Structures may be subject to uplift forces due to buoyancy or settling / subsidence associated with inundation in flood fringe areas.

Flood Storage Areas require additional consideration as any loss of storage has the potential to increase flood levels elsewhere in the catchment. Development in Flood Storage Areas is therefore subject to the same general provisions for development in Flood Fringe Areas, along with additional specific requirements as detailed herein.

The requirements for specific land uses in Flood Fringe and Flood Storage Areas are outlined below.

8.10.1 Residential development (including units, dual occupancy, tourist accommodation and the like)

New Development and Redevelopment

Floor levels
With the exception of applications for voluntary house raising, floor levels, including non-habitable rooms, shall be equal to or above the GFPL.

Consent will not be granted to convert existing sheds, garages or the like that are sited below the GFPL for habitable purposes unless the floor level is above the GFPL.

Flood Proofing
Flood proofing shall be provided to all parts of the structure up to the GFPL. Flood proofing shall be achieved by filling the site if practical or by the provision of other approved flood proofing measures (see Appendix 8.5 Flood Proofing Guidelines).

Flood Effect on Others
In **Flood Storage Areas** there shall be no net loss of flood storage at any level below the GFPL from any works associated with the development. Compensatory works such as excavation will be considered if practical and where there is no increase in flood levels over the full range of floods.

Access, Management and Design
Flats, unit type development, detached dual occupancies and tourist accommodation and the like involving a more intensive habitation of the site shall have safe access at minimum General FPL minus freeboard to land above the PMF.

Attached dual occupancies shall, as far as practical, have safe access at minimum of General FPL minus freeboard to land above the PMF.

New dwellings on rural properties shall be sited, where practical or desirable, to have safe pedestrian or vehicular access at General FPL minus freeboard to land above the PMF. In addition, the internal road access shall be at a minimum level of the flood immunity (the level the road gets cut) of the adjoining public road (or its proposed upgrade level). This last provision does not apply where the only possible (and normal) access to the site is by aircraft or watercraft and this form of access remains safe and viable during flooding (eg, island access in the lower estuary sections of the Bellinger and Kalang Rivers).

Redevelopment shall be sited to provide safe access (vehicular and pedestrian) at the highest level practical for the site.

Infill Development

Floor Levels
Floor levels, including non-habitable rooms, shall be equal to or above the GFPL.

Flood Proofing
Flood proofing shall be provided to all parts of the structure up to the GFPL. Flood proofing shall be achieved by filling the site if possible or by the provision of other approved flood proofing measures (see Appendix 8.5 Flood Proofing Guidelines).

Flood Effect on Others
In **Flood Storage Areas** there shall be no net loss of flood storage at any level below the GFPL from any works associated with the development. Compensatory works such as excavation will be considered if practical and where there is no increase in flood levels over the full range of floods.

Access, Management and Design
Infill residential development for a single residence (including Bed and Breakfast establishments) in existing residential/village zones shall be sited to provide access from the dwelling to the adjoining public road at a level that is no lower than the flood immunity of the public road.

Flats, unit type development, detached dual occupancies and tourist accommodation and the like involving a more intensive habitation of the site shall have safe access at minimum of the General FPL minus freeboard to land above the PMF.

Attached dual occupancies shall, as far as practical, have safe access at minimum of the General FPL minus the freeboard to land above the PMF.

Extensions

Floor Levels
Other than as provided below, floor levels shall be equal to or above the GFPL.

Consideration will be given to floor levels for minor extensions or modifications below this level provided:

- the floor level of the extension or modification shall be as high as practical without modifying the existing roofline;
- the extension or modification being no lower than the Conceded FPL; and
- the extension or modifications being no more than 15% of the existing floor level (as at 2 April 2002) or 30m^2, whichever is the greater, or 60m^2 where above the 1% AEP.

Flood Proofing
Flood proofing shall be provided to all parts of the structure up to the GFPL. Flood proofing for shall be achieved by filling the site if possible or by the provision of other approved flood proofing measures (see Appendix 8.5 Flood Proofing Guidelines).

Flood Effect on Others
In **Flood Storage Areas** there shall be no net loss of flood storage at any level below the GFPL from any works associated with the development. Compensatory works such as excavation will be considered if practical and where there is no increase in flood levels over the full range of floods.

8.10.2 Commercial and Industrial Development

New Development and Redevelopment

Floor Levels
Floor levels for **Commercial and Industrial Development** shall be equal to or above the GFPL.

Flood Proofing
Flood proofing shall be provided to all parts of the structure up to the GFPL. Flood proofing shall be achieved by filling the site if practical or by the provision of other approved flood proofing measures (see Appendix 8.5 Flood Proofing Guidelines).

Furthermore, if a **floor level below the GFPL** is justified, a storage area of 10% of the total floor area for urban areas, and 20% of the total floor area for rural areas, shall be provided at or above the GFPL. Consideration shall also be given for the provision of equipment to lift heavy or bulky items to this storage area.

Flood Effect on Others
In **Flood Storage Areas** there shall be no net loss of flood storage at any level below the GFPL from any works associated with the development. Compensatory works such as excavation will be considered if practical and where there is no increase in flood levels over the full range of floods.

Access, Management and Design
As far as practical, development shall be sited to provide safe vehicular access at the GFPL minus freeboard to land above the PMF.
Where the access is over land that is lower than GFPL minus freeboard a Flood Management Strategy shall be prepared for the site in accordance with Appendix 8.7 Flood Management Strategy Requirements.

Infill Development

Floor Levels
Other than as provided below, floor levels shall be equal to or above the GFPL.

Consideration will be given to floor levels below the GFPL provided it is no lower than the Conceded FPL and no lower than the floor level of adjoining development.

Flood Proofing
Flood proofing shall be provided to all parts of the structure up to the GFPL. Flood proofing shall be achieved by filling the site if possible or by the provision of other approved flood proofing measures (see Appendix 8.5 Flood Proofing Guidelines).

Furthermore, if infill development with a **floor level below the GFPL** is permitted, a storage area of at least 20% of the final floor area (below the GFPL) shall be provided at or above the GFPL. Consideration shall also be given for the provision of equipment to lift heavy or bulky items to this storage area.

Flood Effect on Others
In **Flood Storage Areas** there shall be no net loss of flood storage at any level below the GFPL from any works associated with the development. Compensatory works such as excavation will be considered if practical and where there is no increase in flood levels over the full range of floods.

Access, Management and Design
Development should be sited to provide safe vehicular access as far as practical at the GFPL minus freeboard to land above PMF.

A Council approved Flood Management Strategy (see Appendix 8.7 Flood Management Strategy Requirements) shall be provided where the extension has a floor level below the GFPL and where access from the development traverses land that is lower than the GFPL minus freeboard to land above the PMF.

Furthermore, where a Flood Management Strategy is required, appropriate measures shall be investigated for notification of the existence of the Strategy (for example notification on the Certificate of Title for the property, Section 149 or Flood Certificate advice).

Extensions

Floor Levels
Other than as provided below, floor levels shall be equal to or above the GFPL.
Floor levels below the GFPL are permitted provided:

- the floor level of the extension is as high as practical; and
- the floor level of the extension is no lower than the existing floor level.

Flood Proofing
Flood proofing shall be provided to all parts of the structure up to the GFPL. Flood proofing shall be achieved by filling the site if possible or by the provision of other approved flood proofing measures (see Appendix 8.5 Flood Proofing Guidelines).

Furthermore, if an extension with **floor level below the GFPL** is permitted, a storage area of at least 20% of the final floor area (below the GFPL) shall be provided at or above the GFPL. Consideration shall also be given for the provision of equipment to lift heavy or bulky items to this storage area.

Flood Effect on Others
In **Flood Storage Areas** there shall be no net loss of flood storage at any level below the GFPL from any works associated with the development. Compensatory works such as excavation will be considered if practical and where there is no increase in flood levels over the full range of floods.

Access, Management and Design
As far as practical, development shall be sited to provide safe vehicular access.

A Council approved Flood Management Strategy (see Appendix 8.7 Flood Management Strategy Requirements) shall be provided where the extension has a floor level below the GFPL and where access from the development traverses land that is lower than GFPL minus freeboard to land above the PMF.

Furthermore, where a Flood Management Strategy is required, appropriate measures shall be investigated for notification of the existence of the Strategy (for example notification on the Certificate of Title for the property, Section 149 or Flood Certificate advice).

8.10.3 Below ground/basement/underground carparking

Ingress level

All possible ingress points into the car park such as vehicle entrances and exits, ventilation ducts, windows, light wells, lift shaft openings, risers and stairwells shall be constructed to or above the GFPL.

Additional requirements

Carparks that will accommodate more than 3 vehicles with a floor level below the Conceded Flood Planning Level (Conceded FPL) shall have adequate warning systems, signage, exits and drainage pumping systems.

8.10.4 Ground level, undercroft and above ground carparks

Floor levels

The minimum surface level of enclosed car parks shall be at or above the GFPL minus freeboard.

The minimum surface level of open carparks shall be at or above the Conceded FPL.

8.10.5 Critical Facilities

New Development, Infill Development and Redevelopment

Floor Levels
Floor levels shall be at or above the Critical Facilities FPL.

Flood Proofing
Flood proofing shall be provided to all parts of the structure up to the Critical Facilities FPL. Flood proofing shall be achieved by filling the site if possible or by the provision of other approved flood proofing measures (see Appendix 8.5 Flood Proofing Guidelines).

Flood Effect on Others
In **Flood Storage Areas** there shall be no loss of flood storage at any level below the GFPL from any works associated with the development. Compensatory works such as excavation will be considered if practical and where there is no increase in flood levels over the full range of floods.

Access, Management and Design
Safe access shall be provided at the PMF.

A structural engineers report shall be provided certifying that the structure can withstand the force of floodwater, debris and buoyancy in a PMF flood.

Extensions

Floor Levels
Floor levels for attached extensions should be at or above the Critical Facilities FPL if practical, and at a minimum of height of the GFPL.
The floor level for detached extensions shall be at the PMF.

Flood Proofing
Flood proofing shall be provided to all parts of the extension up to the Critical Facilities FPL. Flood proofing shall be achieved by filling the site if possible or by the provision of other approved flood proofing measures (see Appendix 8.5 Flood Proofing Guidelines).

Flood Effect on Others
In **Flood Storage Areas** there shall be no loss of flood storage at any level below the GFPL from any works associated with the development. Compensatory works such as excavation will be considered if practical and where there is no increase in flood levels over the full range of floods.

Access, Management and Design
Where practical, safe access shall be provided above the Critical Facilities FPL to land above the PMF level.

A structural engineers report shall be provided certifying that the structure can withstand the force of floodwater, debris and buoyancy in a PMF flood.

8.10.6 Special Purpose Facilities

New Development, Infill Development and Redevelopment

Floor Level
Floor levels shall be at or above the Special Purpose FPL.

Flood Proofing
Flood proofing shall be provided to all parts of the structure up to the Special Purpose FPL. Flood proofing shall be achieved by filling the site if possible or by the provision of other approved flood proofing measures (see Appendix 8.5 Flood Proofing Guidelines).

Flood Effect on Others
In **Flood Storage Areas** there shall be no loss of flood storage at any level below the GFPL from any works associated with the development. Compensatory works such as excavation will be considered if practical and where there is no increase in flood levels over the full range of floods.

Access, Management and Design
Safe access shall be provided at the Special Purpose FPL to land above the PMF level.

A structural engineers report shall be provided certifying that the structure can withstand the force of floodwater, debris and buoyancy in a PMF flood.

Extensions

Floor Levels
Floor levels for attached extensions shall be at or above the Special Purpose FPL if practical, and at a minimum of height of the GFPL.
The floor level for detached extensions shall be at or above the Special Purpose FPL.

Flood Proofing
Flood proofing shall be provided to all parts of the structure up to the Special Purpose FPL. Flood proofing shall be achieved by filling the site if possible or by the provision of other approved flood proofing measures (see Appendix 8.5 Flood Proofing Guidelines).

Access, Management and Design
Where practical, safe access shall be provided above the Special Purpose FPL to land above the PMF level.

A structural engineers report shall be provided certifying that the structure can withstand the force of floodwater, debris and buoyancy in a PMF flood.

8.10.7 Minor Development

Floor Level
Minor development has a Non-Specified FPL. Floor levels shall be as close as practical to the GFPL and will be assessed on site specific practical constraints for each specific type of development.

Flood Proofing
Flood proofing appropriate to the type of development shall be provided to all parts of the structure up to the GFPL. Flood proofing should be achieved by filling the site if possible or by the provision of other approved flood proofing measures (see Appendix 8.5 Flood Proofing Guidelines).

Flood Effect on Others
In **Flood Storage Areas** there shall be no loss of flood storage at any level below the GFPL from any works associated with the development. Compensatory works such as excavation will be considered if practical and where there is no increase in flood levels over the full range of floods.

Access, Management and Design
Minor development has no specific access requirements however it is to be provided with the highest level of flood immunity practical for the site.

8.10.8 Filling

Flood Effect on Others
Filling requires the development consent of Council. If filling of land is proposed (as a development in its own right, or as a flood proofing measure required for other types of development discussed in this DCP), an assessment shall be carried out by an appropriately qualified person to ensure that the fill:

a) does not affect drainage or surface run-off, or

b) have a measurable impact on flood behaviour beyond the property boundary, and

c) that appropriate compaction can be achieved.

This assessment shall be submitted to Council with the supporting documentation for the development application.

In **Flood Storage Areas** there shall be no net loss of flood storage at any level below the GFPL from filling. Compensatory works such as excavation will be considered if practical and where there is no increase in flood levels over the full range of floods.

8.10.9 Fencing

There are no flood related development controls relating to fencing in Flood Fringe and Flood Storage Areas.

8.10.10 Subdivisions

Flood Proofing
Each lot shall have, unless as provided through application to Council, a minimum area of 400m^2 (residential/urban) or 1000m^2 (rural) above a level of the GFPL minus freeboard.

Note: Where Chapter 3 (or similar) allows for subdivision of land below 600m^2 (in conjunction with an approved dwelling design) and the development application demonstrates that the house, the required car parking area, and a suitable area of land for relocation of children's play equipment, garden tools etc… will be above the GFPL, then subdivision shall not be restricted by this provision.

Flood Effect on Others
In **Flood Storage Areas** there shall be no net loss of flood storage at any level below the GFPL from any works associated with the development. Compensatory works such as excavation will be considered if practical and where there is no increase in flood levels over the full range of floods.

Access, Management and Design
Safe vehicular access shall be provided at a minimum level of the GFPL minus freeboard to each allotment within the subdivision.

Safe access shall be provided from the subdivision to a designated flood evacuation centre, flood refuge or community of support. Access shall be such that it will not create an isolated area of development as floodwaters continue to rise above the GFPL minus freeboard, i.e. all sections of the access route are to be higher than the development. If safe vehicular access cannot be achieved, consideration may be given to safe pedestrian access provided the evacuation centre, flood refuge or community of support is within a 500 metre walking route from each such development, and that the walking route is sufficiently cleared and at a grade where an able bodied person can negotiate the route without fear of slipping or falling in wet conditions.

Furthermore, safe vehicular access must be provided from each development to a suitable helicopter landing site located above the PMF, which shall remain permanently cleared - such as a road cul-de-sac.

Filling associated with the subdivision must comply with the Filling requirements above.

For commercial and industrial subdivision the internal road access shall be at a minimum level of the flood immunity (the level the road gets cut) of the adjoining public road (or its proposed upgrade level).

8.10.11 Boundary Adjustments

Flood Proofing
As far as practical each lot shall have a minimum area of 400m^2 (residential/urban) or 1000m^2 (rural) above a level of the GFPL minus freeboard.

For an allotment that has land above the GFPL, a boundary adjustment shall not create any allotment without a functionally useful area of land above the GFPL.

For rural land, the boundary adjustment shall retain raised land or access to stock in times of flood. Where land above the GFPL or PMF is available, such land shall be partially retained on any allotment resulting from the boundary adjustment.

Access, Management and Design
The boundary adjustment shall not reduce the flood immunity of existing vehicular or pedestrian flood access to any allotment.

8.10.12 Caravan Parks and Manufactured Home Estates

New Development, Infill Development and Redevelopment

Floor levels
Floor levels, including non-habitable rooms, shall be equal to or above the GFPL.
NB: Consent will not be granted to convert existing sheds, garages or the like that are sited below the GFPL for habitable purposes.

Flood Proofing
Flood proofing appropriate to the type of development shall be provided to all parts of the structure up to the GFPL. Flood proofing should be achieved by filling the site if possible or by the provision of other approved flood proofing measures (see Appendix 8.5 Flood Proofing Guidelines).

Flood Effect on Others
In **Flood Storage Areas** there shall be no net loss of flood storage at any level below the GFPL from any works associated with the development. Compensatory works such as excavation will be considered if practical and where there is no increase in flood levels over the full range of floods.

Access, Management and Design
All development, including caravans (if permitted), shall have safe pedestrian and vehicular access at minimum of the GFPL minus freeboard within the park. Furthermore, safe access is required from the GFPL to a designated flood evacuation centre or refuge.

Consideration may be given to reducing access requirements for short term tourist accommodation where appropriate management and evacuation strategies are approved and Council is satisfied the development is not for long term residential accommodation.

All caravans and habitable structures (if permitted) that are sited below the GFPL shall be capable of being moved at short notice to storage areas above the GFPL.

Rigid annexes, landscaping and enclosures around and beneath a caravan or mobile home are not permitted below the GFPL.

On land between the GFPL and PMF new permanent vans and structures should be designed (tied down) to prevent uplift and flotation in floods that exceed the GFPL.

An Approved Flood Management Strategy, prepared in accordance with Appendix 8.7, shall be lodged with all development applications where development is proposed to be sited below the GFPL.

Extensions

Floor Levels
Other than as provided below, floor levels for extensions should be equal to or above the GFPL.

Consideration will be given to floor levels for minor extensions or modifications below this level provided:

the floor level of the extension or modification shall be as high as practical without modifying the existing roofline;

- the extension or modification being no lower than the Conceded FPL; and
- the extension or modifications being no more than 15% of the existing floor level (as at 2nd April 2002) or 30m2 whichever is the greater.

Flood Proofing
Flood proofing appropriate to the type of development shall be provided to all parts of the structure up to the GFPL. Flood proofing for should be achieved by filling the site if possible or by the provision of other approved flood proofing measures (see Appendix 8.5 Flood Proofing Guidelines).

Flood Effect on Others
In **Flood Storage Areas** there shall be no loss of flood storage at any level below the GFPL from any works associated with the development. Compensatory works such as excavation will be considered if practical and where there is no increase in flood levels over the full range of floods.

8.11 Development in Floodways

Development in floodways has the potential to have an adverse effect on flood levels and velocities due to the potential to block or divert flow. There is also the potential for structures to be damaged or undermined due to the flow of water. In general, it is preferable that structures not be located in a floodway.

The requirements for specific land uses in Floodways are outlined below.

8.11.1 Residential development (including units, dual occupancy, tourist accommodation and the like)

New Development and Infill Development

New development and infill development is not permitted in floodways (unless the site has been filled to a minimum level of the GFPL minus freeboard and in accordance with the provisions below, in which case the provisions for development in Flood Fringe areas shall apply).

Redevelopment

Redevelopment will only be permitted for legal / authorised structures.
Consideration will be given to redevelopment where it can be demonstrated that there is a net public benefit or net reduction to existing potential damages or risk of life (see Appendix 8.8).

Floor levels
With the exception of applications for voluntary house raising, floor levels, including non-habitable rooms, shall be equal to or above the GFPL.
Consent will not be granted to convert existing sheds, garages or the like that are sited below the GFPL for habitable purposes.

Flood Proofing
Flood proofing shall be provided to all parts of the structure up to the GFPL by the provision of approved flood proofing measures (see Appendix 8.5 Flood Proofing Guidelines).

Flood Effect on Others
As far as practical redevelopment shall be elevated to allow free flow of floodwaters beneath the structure. The underside shall not be enclosed except

with open mesh of sufficient openings to minimise accumulation of debris (see conditions for fencing). Open stairways are required to minimise any measurable impact on flood behaviour.

Any filling of the site or enclosed foundation may be permitted where it can be demonstrated there will be no change to flood behaviour beyond the property boundary.

Where filling or enclosed sides are proposed below the GFPL the proposal shall be accompanied by a certified flood study report (see Appendix 8.3), which demonstrates that there will be no measurable adverse affect on flood behaviour, over the full range of floods, beyond the property boundary.

Furthermore, the flood study report shall demonstrate that there will not be measurable adverse affects to drainage or surface runoff of adjoining properties.

Access, Management and Design
A structural engineer's report shall be provided certifying that the structure/s can withstand the force of floodwater, debris and buoyancy in a PMF flood and that cladding and other non-structural components are designed to cater for the force of floodwater, debris and buoyancy up to the GFPL.

Redevelopment shall be sited to provide safe access (vehicular and pedestrian) at the highest level practical for the site.

Extensions

Extensions will only be permitted for legal / authorised structures.
Consideration will be given to extensions where it can be demonstrated that there is a net public benefit or net reduction to existing potential damages or risk of life (see Appendix 8.8).

Floor Levels
Floor levels shall be equal to or above the GFPL.
Consideration will be given to extensions *at a lower level* where it can be demonstrated that there is a net public benefit or net reduction to existing potential damages or risk of life (see Appendix 8.8).

Flood Proofing
Flood proofing shall be provided to all parts of the structure up to the GFPL by the provision of approved flood proofing measures (see Appendix 8.5 Flood Proofing Guidelines).

Flood Effect on Others
As far as practical extensions to development shall be elevated to allow free flow of floodwaters beneath the structure. The underside shall not be enclosed except with open mesh of sufficient openings to minimise accumulation of debris (see conditions for fencing). Open stairways are required to minimise any measurable impact on flood behaviour.

Any filling of the site or enclosed foundation may be permitted where it can be demonstrated there will be no change to flood behaviour beyond the property boundary.

Where filling or enclosed sides are proposed below the GFPL the proposal shall be accompanied by a certified flood study report (see Appendix 8.3), which demonstrates that there will be no measurable adverse affect on flood behaviour, over the full range of floods, beyond the property boundary.

Furthermore, the flood study report shall demonstrate that there will be not measurable adverse affects to drainage or surface runoff of adjoining properties.

Access, Management and Design
A structural engineer's report shall be provided certifying that the structure can withstand the force of floodwater, debris and buoyancy in a PMF flood and that cladding and other non-structural components are designed to cater for the force of floodwater, debris and buoyancy up to the GFPL.

8.11.2 Commercial and Industrial Development

New and Infill Development

New and infill development is not permitted in floodways, except on Crown or Council land for public purposes such as public amenities, pump stations, building associated with public purposes and the like (unless the site has been filled to a minimum level of the GFPL minus freeboard and in accordance with the provisions below, in which case the provisions for development in Flood Fringe areas shall apply).

Floor Levels
Other than as provided below, development of Crown or Council land for public purposes shall have floor levels equal to or above the GFPL.

The floor level requirements may be lowered where it can be demonstrated that it is not practical to build at a higher level.

Flood Proofing
Flood proofing shall be provided to all parts of the structure up to the GFPL by the provision of approved flood proofing measures (see Appendix 8.5 Flood Proofing Guidelines).

If the floor level is below the GFPL, consideration shall be given to a storage area at or above the GFPL (and provision of lifting equipment if appropriate).

Flood Effect on Others
Where practical, the development shall be elevated to allow free flow of floodwaters beneath the structure. The underside shall not be enclosed except with open mesh of sufficient openings to minimise accumulation of debris (see conditions for fencing). Open stairways are required to minimise any measurable impact on flood behaviour.

Any filling of the site or enclosed foundation may be permitted where it can be demonstrated there will be no change to flood behaviour beyond the property boundary.

Where filling or enclosed sides are proposed below the GFPL the proposal shall be accompanied by a certified flood study report (see Appendix 8.3), which demonstrates that there will be no measurable adverse affect on flood behaviour, over the full range of floods, beyond the property boundary.

Furthermore, the flood study report shall demonstrate that there will be not measurable adverse affects to drainage or surface runoff of adjoining properties.

Access, Management and Design
A structural engineer's report shall be provided certifying that the structure can withstand the force of floodwater, debris and buoyancy in a PMF flood and that

cladding and other non-structural components are designed to cater for the force of floodwater, debris and buoyancy up to the GFPL.

The development shall be sited to provide safe access (vehicular and pedestrian) at the highest level practical for the site.

A Council approved Flood Management Strategy (see Appendix 8.7) shall be provided where the development has a floor level below the GFPL and where access from the development traverses land that is less than the GFPL minus freeboard to land above the PMF.

Redevelopment

Redevelopment will only be permitted for legal / authorised structures.

Consideration will be given to redevelopment where it can be demonstrated that there is a net public benefit or net reduction to existing potential damages or risk of life (see Appendix 8.8).

Floor Levels
Floor levels for **Commercial and Industrial Redevelopment** shall be equal to or above the GFPL.

Flood Proofing
Flood proofing shall be provided to all parts of the structure up to the GFPL by the provision of approved flood proofing measures (see Appendix 8.5 Flood Proofing Guidelines).

If the floor level is below the GFPL, consideration shall be given to a storage area at or above the GFPL (and provision of lifting equipment if appropriate).

Flood Effect on Others
Where practical, the redevelopment shall be elevated to allow free flow of floodwaters beneath the structure. The underside shall not be enclosed except with open mesh of sufficient openings to minimise accumulation of debris (see conditions for fencing). Open stairways are required to minimise any measurable impact on flood behaviour.

Any filling of the site or enclosed foundation may be permitted where it can be demonstrated there will be no change to flood behaviour beyond the property boundary.

Where filling or enclosed sides are proposed below the GFPL the proposal shall be accompanied by a certified flood study report (see Appendix 8.3), which demonstrates that there will be no measurable adverse affect on flood behaviour, over the full range of floods, beyond the property boundary.

Furthermore, the flood study report shall demonstrate that there will be not measurable adverse affects to drainage or surface runoff of adjoining properties.

Access, Management and Design
A structural engineers report shall be provided certifying that the structure can withstand the force of floodwater, debris and buoyancy in a PMF flood and that cladding and other non-structural components are designed to cater for the force of floodwater, debris and buoyancy up to the GFPL.

The development shall be sited to provide safe access (vehicular and pedestrian) at the highest level practical for the site.

A Council approved Flood Management Strategy (see Appendix 8.7) shall be provided where the development has a floor level below the GFPL and where access from the development traverses land that is less than the GFPL minus the freeboard to land above the PMF.

Furthermore, where a Flood Management Strategy is required, appropriate measures shall be investigated for notification of the existence of the Strategy (for example notification on the Certificate of Title for the property, Section 149 or Flood Certificate advice).

Extensions

Extensions will only be permitted for legal / authorised structures.

Consideration will be given to extensions of development where it can be demonstrated that there is a net public benefit or net reduction to existing potential damages or risk of life (see Appendix 8.8).

Floor Levels
Floor levels shall be equal to or above the GFPL.

Flood Proofing
Flood proofing shall be provided to all parts of the structure up to the GFPL by the provision of approved flood proofing measures (see Appendix 8.5 Flood Proofing Guidelines).

If the floor level is below the GFPL, consideration shall be given to a storage area at or above the GFPL (and provision of lifting equipment if appropriate).

Flood Effect on Others
Where practical, the development shall be elevated to allow free flow of floodwaters beneath the structure. The underside shall not be enclosed except with open mesh of sufficient openings to minimise accumulation of debris (see conditions for fencing). Open stairways are required to minimise any measurable impact on flood behaviour.

Any filling of the site or enclosed foundation may be permitted where it can be demonstrated there will be no change to flood behaviour beyond the property boundary.

Where filling or enclosed sides are proposed below the GFPL the proposal shall be accompanied by a certified flood study report (see Appendix 8.3), which demonstrates that there will be no measurable adverse affect on flood behaviour, over the full range of floods, beyond the property boundary.

Furthermore, the flood study report shall demonstrate that there will be not measurable adverse affects to drainage or surface runoff of adjoining properties.

Access, Management and Design
A structural engineer's report shall be provided certifying that the structure can withstand the force of floodwater, debris and buoyancy in a PMF flood and that cladding and other non-structural components are designed to cater for the force of floodwater, debris and buoyancy up to the GFPL.

The development shall be sited to provide safe access (vehicular and pedestrian) at the highest level practical for the site.

A Council approved Flood Management Strategy (see Appendix 8.7) shall be provided where the development has a floor level below the GFPL and where access from the development traverses land that is lower than the GFPL minus freeboard to land above the PMF.

Furthermore, where a Flood Management Strategy is required, appropriate measures shall be investigated for notification of the existence of the Strategy (for example notification on the Certificate of Title for the property, Section 149 or Flood Certificate advice).

8.11.3 Critical Facilities

New Development and Infill Development

New development and infill development is not permitted in floodways (unless the site has been filled to a minimum level of the GFPL minus freeboard and in accordance with the provisions below, in which case the provisions for development in Flood Fringe areas shall apply).

Redevelopment

Redevelopment will only be permitted for legal / authorised structures.

Consideration will be given to redevelopment where it can be demonstrated that there is a net public benefit or net reduction to existing potential damages or risk of life (see Appendix 8.8).

Floor Levels
Floor levels shall be at or above the Critical Facilities FPL.

Flood Proofing
Flood proofing shall be provided to all parts of the structure up to the Critical Facilities FPL by the provision of approved flood proofing measures (see Appendix 8.5 Flood Proofing Guidelines).

Flood Effect on Others
Where practical, the development shall be elevated to allow free flow of floodwaters beneath the structure. The underside shall not be enclosed except with open mesh of sufficient openings to minimise accumulation of debris (see conditions for fencing). Open stairways are required to minimise any measurable impact on flood behaviour.

Any filling of the site or enclosed foundation may be permitted where it can be demonstrated there will be no change to flood behaviour beyond the property boundary.

Where filling or enclosed sides are proposed below the GFPL the proposal shall be accompanied by a certified flood study report (see Appendix 8.3), which demonstrates that there will be no measurable adverse affect on flood behaviour, over the full range of floods, beyond the property boundary.

Furthermore, the flood study report shall demonstrate that there will be not measurable adverse affects to drainage or surface runoff of adjoining properties.

Access, Management and Design
Safe access shall be provided at the PMF level.

A Council approved Flood Management Strategy (see Appendix 8.7) shall be provided where access from the development traverses land below the PMF level. Furthermore, appropriate measures shall be investigated for notification of the existence of the Strategy (for example notification on the Certificate of Title for the property, Section 149 or Flood Certificate advice).

A structural engineers report shall be provided certifying that the structure can withstand the force of floodwater, debris and buoyancy in a PMF flood and that cladding and other non-structural components are designed to cater for the force of floodwater, debris and buoyancy up to the GFPL.

Extensions

Floor Levels
Floor levels for attached extensions should be at or above the Critical Facilities FPL if practical, and at a minimum of height of the GFPL.

The floor level for detached extensions shall be at or above the Critical Facilities FPL.

Flood Proofing
Flood proofing shall be provided to all parts of the extension up to the Critical Facilities FPL by the provision of approved flood proofing measures (see Appendix 8.5 Flood Proofing Guidelines).

Flood Effect on Others
Where practical, the development shall be elevated to allow free flow of floodwaters beneath the structure. The underside shall not be enclosed except with open mesh of sufficient openings to minimise accumulation of debris (see conditions for fencing). Open stairways are required to minimise any measurable impact on flood behaviour.

Any filling of the site or enclosed foundation may be permitted where it can be demonstrated there will be no change to flood behaviour beyond the property boundary.

Where filling or enclosed sides are proposed below the GFPL the proposal shall be accompanied by a certified flood study report (see Appendix 8.3), which demonstrates that there will be no measurable adverse affect on flood behaviour, over the full range of floods, beyond the property boundary.

Furthermore, the flood study report shall demonstrate that there will be not measurable adverse affects to drainage or surface runoff of adjoining properties.

Access, Management and Design
Safe access shall be provided at the Critical Facilities FPL to land above the PMF level where practical.

A Council approved Flood Management Strategy (see Appendix 8.7) shall be provided where access from the development traverses land below the PMF level. Furthermore, appropriate measures shall be investigated for notification of the existence of the Strategy (for example notification on the Certificate of Title for the property, Section 149 or Flood Certificate advice).

A structural engineers report shall be provided certifying that the structure can withstand the force of floodwater, debris and buoyancy in a PMF flood and that cladding and other non-structural components are designed to cater for the force of floodwater, debris and buoyancy up to the GFPL.

8.11.4 *Special Purpose Facilities*

New Development and Infill Development

New development and infill development is not permitted in floodways (unless the site has been filled to a minimum level of the GFPL minus freeboard and in accordance with the provisions below, in which case the provisions for development in Flood Fringe areas shall apply).

Redevelopment

Redevelopment will only be permitted for legal / authorised structures.

Floor Level
Floor levels shall be at or above the Special Purpose FPL.

Flood Proofing
Flood proofing shall be provided to all parts of the structure up to the Special Purpose FPL by the provision of approved flood proofing measures (see Appendix 8.5 Flood Proofing Guidelines).

Flood Effect on Others
Where practical, the development shall be elevated to allow free flow of floodwaters beneath the structure. The underside shall not be enclosed except with open mesh of sufficient openings to minimise accumulation of debris (see conditions for fencing). Open stairways are required to minimise any measurable impact on flood behaviour.

Any filling of the site or enclosed foundation may be permitted where it can be demonstrated there will be no change to flood behaviour beyond the property boundary.

Where filling or enclosed sides are proposed below the GFPL the proposal shall be accompanied by a certified flood study report (see Appendix 8.3), which demonstrates that there will be no measurable adverse affect on flood behaviour, over the full range of floods, beyond the property boundary.

Furthermore, the flood study report shall demonstrate that there will be not measurable adverse affects to drainage or surface runoff of adjoining properties.

Access, Management and Design
Safe access shall be provided at the Special Purpose FPL to land above the PMF level where practical.

A Council approved Flood Management Strategy (see Appendix 8.7) shall be provided where access from the development traverses land below the Special Purpose FPL. Furthermore, appropriate measures shall be investigated for notification of the existence of the Strategy (for example notification on the Certificate of Title for the property, Section 149 or Flood Certificate advice).

A structural engineers report shall be provided certifying that the structure can withstand the force of floodwater, debris and buoyancy in a PMF flood and that cladding and other non-structural components are designed to cater for the force of floodwater, debris and buoyancy up to the GFPL.

Extensions

Floor Levels
Floor levels for attached extensions shall be at or above the Special Purpose FPL if practical, and at a minimum of height of the GFPL.

The floor level for detached extensions shall be at or above the Special Purpose FPL.

Flood Proofing
Flood proofing shall be provided to all parts of the structure up to the Special Purpose FPL. Flood proofing shall be achieved by filling the site if possible or by the provision of other approved flood proofing measures (see Appendix 8.5 Flood Proofing Guidelines).

Flood Effect on Others
Where practical, the development shall be elevated to allow free flow of floodwaters beneath the structure. The underside shall not be enclosed except with open mesh of sufficient openings to minimise accumulation of debris (see conditions for fencing). Open stairways are required to minimise any measurable impact on flood behaviour.

Any filling of the site or enclosed foundation may be permitted where it can be demonstrated there will be no change to flood behaviour beyond the property boundary.

Where filling or enclosed sides are proposed below the GFPL the proposal shall be accompanied by a certified flood study report (see Appendix 8.3), which demonstrates that there will be no measurable adverse affect on flood behaviour, over the full range of floods, beyond the property boundary.

Furthermore, the flood study report shall demonstrate that there will be not measurable adverse affects to drainage or surface runoff of adjoining properties.

Access, Management and Design
Safe access shall be provided at the Special Purpose FPL to land above the PMF level where practical.

A Council approved Flood Management Strategy (see Appendix 8.7) shall be provided where access from the development traverses land below the Special Purpose FPL. Furthermore, appropriate measures shall be investigated for notification of the existence of the Strategy (for example notification on the Certificate of Title for the property, Section 149 or Flood Certificate advice).

A structural engineers report shall be provided certifying that the structure can withstand the force of floodwater, debris and buoyancy in a PMF flood and that cladding and other non-structural components are designed to cater for the force of floodwater, debris and buoyancy up to the GFPL.

8.11.5 Minor Development

Floor Level
Minor development has a Non-Specified FPL. Floor levels shall be as close as practical to the GFPL and will be assessed on site specific practical constraints for each specific type of development.

Flood Proofing
Flood proofing appropriate to the type of development shall be provided to all parts of the structure up to the GFPL by the provision of other approved flood proofing measures (see Appendix 8.5 Flood Proofing Guidelines).

Flood Effect on Others
Where practical, structures shall be designed and sited in locations where they are unlikely to adversely affect flood behaviour.

Other than as exempted below, the proposal shall be accompanied by a certified flood study report (see Appendix 8.3), which demonstrates that there will be no measurable adverse affect on flood behaviour, over the full range of floods, beyond the property boundary.

Furthermore, the investigation report shall demonstrate that there will be not measurable adverse affects to drainage or surface runoff of adjoining properties.

The following forms of development in floodways are exempt from the foregoing flood study requirements:

- Car parks where the site is not filled and curbs and landscaping does not exceed 150 mm height.
- Enclosed oyster depuration sheds, boat sheds, pump houses, garden sheds, amenity blocks, change rooms and the like less than 20 sq m in rural areas or 10 sq m for urban. These structures are to be oriented to minimise any hydraulic impact.
- Boat ramps where filling and landscaping are less than 150 mm.
- Wharves, jetties and boardwalks and the like where supported on piles and the substructure is open for the free flow of floodwater.
- Access roads to private property where the fill is less than 150 mm.
- Swimming pools where the height of the pool and surrounds does not exceed 150 mm above the natural surface.
- Landscaping and garden beds and the like where the height does not exceed 150 mm above the natural surface.
- Minor development (non-habitable) such as pergolas, non enclosed bus shelters, elevated advertising signs, carports, non-enclosed picnic shelters and the like.

Access, Management and Design

Minor development has no specific access requirements however it is to be provided with the highest level of flood immunity practical for the site.
A structural engineer's report shall be provided certifying that the structure can withstand the force of floodwater, debris and buoyancy in a PMF flood and that cladding and other non-structural components are designed to cater for the force of floodwater, debris and buoyancy up to the GFPL.

8.11.6 Filling

Flood Effect on Others

Filling requires the development consent of Council.

Filling can cause a significant redistribution of flood flow or a significant increase in flood levels. Therefore, unless compensatory works are undertaken, no fill is permitted in floodways.

Where fill and or associated compensatory works are proposed, the development application shall be accompanied by a certified flood study report (see Appendix 8.3), which demonstrates that there will be no measurable adverse affect on flood behaviour, over the full range of floods, beyond the property boundary, unless it can be demonstrated that there is no adverse impact for floods less then 1% on existing buildings and infrastructure.

Furthermore, the flood study report shall demonstrate that there will be no measurable adverse affects to drainage or surface runoff of adjoining properties.

8.11.7 Fencing

Fencing in floodways shall be permeable to the flow of flood water and designed to minimise the accumulation of debris.

Post and wire or collapsible fencing is preferred. Alternatively, fencing shall have a maximum obstruction at 90^0 to the flow of 15%, openings of no less than 125mm and a maximum height of 1.2m (the use of open mesh with 100mm minimum openings is permitted for swimming pool fences).

8.11.8 Subdivisions

Subdivisions in floodways are generally undesirable. Notwithstanding, where the floodway represents the residual portion of lots and the following provisions are complied with, subdivisions in floodways is permitted.

Flood Proofing
Each lot shall have a minimum area of $400m^2$ (residential/urban) or $1000m^2$ (rural) above the GFPL minus freeboard.

Note: Where Chapter 3 (or similar) allows for subdivision of land below 600m2 (in conjunction with and approved dwelling design) and the development demonstrates that the house, the required car parking area, and a suitable area of land for relocation of children's play equipment, garden tools etc… will be above the GFPL, then subdivision shall not be restricted by this provision.

Flood Effect on Others
Where applicable, the provisions of other sections apply. For example, fill in floodways.

Access, Management and Design
Safe vehicular access shall be provided at a minimum level of the GFPL minus freeboard to each of the allotments within the subdivision.

Safe access shall be provided from the subdivision at a minimum level of the GFPL minus freeboard to a designated flood evacuation centre, flood refuge or community of support. Access shall be such that it will not create an isolated area of development as floodwaters continue to rise, i.e. all sections of the access route are to be higher than the development. If vehicular access cannot be achieved, consideration may be given to pedestrian access is to be provided as above provided the evacuation centre, flood refuge or community of support is within a 500 metre walking route from each such development, and that the

walking route is sufficiently cleared and at a grade where an able bodied person can negotiate the route without fear of slipping or falling in wet conditions.

Furthermore, safe vehicular access must be provided from each development to a suitable helicopter landing site located above PMF, which shall remain permanently clearly - such as a road cul-de-sac.

Filling associated with the subdivision must comply with the Filling requirements above.

For commercial and industrial subdivision the internal road access shall be at a minimum level of the flood immunity (the level the road gets cut) of the adjoining public road (or its proposed upgrade level).

8.11.9 Boundary Adjustments

Flood Proofing
As far as practical each lot shall have a minimum area of 400m^2 (residential/urban) or 1000m^2 (rural) above a level of the GFPL minus freeboard.

For an allotment that has land above the GFPL, a boundary adjustment shall not create any allotment without land above the GFPL.

For rural land, the boundary adjustment shall retain raised land or access to stock in times of flood. Where land above the GFPL or PMF is available, such land shall be partially retained on any allotment resulting from the boundary adjustment.

Access, Management and Design
The boundary adjustment shall not adversely impact (eg reduce flood immunity) on existing vehicular or pedestrian flood access to any allotment.

8.11.10 Caravan Parks and Manufactured Home Estates (includes extensions)

New Development and Infill Development

New development and infill development is not permitted in floodways (unless the site has been filled to a minimum level of the GFPL minus freeboard and in accordance with the provisions below, in which case the provisions for development in Flood Fringe areas shall apply).

Redevelopment

Redevelopment will only be permitted for legal / authorised caravan parks, manufactured home estates and structures.

Consideration will be given to redevelopment where it can be demonstrated that there is a net public benefit or net reduction to existing potential damages or risk of life (see Appendix 8.8).

Floor levels
Floor levels, including non-habitable rooms, shall be equal to or above the GFPL.

NB: existing sheds, garages or the like sited below the GFPL shall not be converted for habitable purposes.

Flood Proofing
Flood proofing appropriate to the type of development shall be provided to all parts of the structure up to the GFPL by the provision of approved flood proofing measures (see Appendix 8.5 Flood Proofing Guidelines).

Flood Effect on Others
As far as practical redevelopment shall be elevated to allow free flow of floodwaters beneath the structure. The underside shall not be enclosed except with open mesh of sufficient openings to minimise accumulation of debris (see conditions for fencing). Open stairways are required to minimise any measurable impact on flood behaviour.

Where filling or enclosed sides are proposed below GFPL the proposal shall be accompanied by a certified flood study report (see Appendix 8.3), which demonstrates that there will be no measurable adverse affect on flood behaviour, over the full range of floods, beyond the property boundary.

Furthermore, the flood study report shall demonstrate that there will be no measurable adverse affects to drainage or surface runoff of adjoining properties.

Access, Management and Design
A structural engineer's report shall be provided certifying that the structure can withstand the force of floodwater, debris and buoyancy in a PMF flood and that cladding and other non-structural components are designed to cater for the force of floodwater, debris and buoyancy up to the GFPL.

Redevelopment shall be sited to provide safe access (vehicular and pedestrian) at the highest level practical for the site.

All caravans and habitable structures (if permitted) that are sited in floodways shall be capable of being moved at short notice to storage areas above the GFPL.

Rigid annexes, landscaping and enclosures around and beneath a caravan or mobile home are not permitted below the GFPL.

An Approved Flood Management Strategy, prepared in accordance with Appendix 8.7, shall be lodged with all development applications.

Extensions

Floor Levels
Floor levels shall be equal to or above the GFPL.

Flood Proofing
Flood proofing shall be provided to all parts of the structure up to the GFPL by the provision of approved flood proofing measures (see Appendix 8.5 Flood Proofing Guidelines).

Flood Effect on Others
Extensions to development shall be elevated to allow free flow of floodwaters beneath the structure. The underside shall not be enclosed except with open mesh of sufficient openings to minimise accumulation of debris (see conditions for fencing). Open stairways are required to minimise any measurable impact on flood behaviour.

The proposal shall be accompanied by a certified flood study report, prepared by a professional civil/hydraulic engineer with qualifications suitable for admission as a corporate member of the Institution of Engineers, Australia, which demonstrates

that there will be no measurable adverse affect on flood behaviour, over the full range of floods, beyond the property boundary.

Furthermore, the flood study report shall demonstrate that there will be not measurable adverse affects to drainage or surface runoff of adjoining properties.

Access, Management and Design
A structural engineers report shall be provided certifying that the structure can withstand the force of floodwater, debris and buoyancy in a PMF flood and that cladding and other non-structural components are designed to cater for the force of floodwater, debris and buoyancy up to the GFPL.

8.12 Development of Land Affected by Riverine Processes

8.12.1 Development in areas affected by riverine processes (projected erosion areas)

In the absence of a site specific investigation or the construction of appropriate protective works, it is considered that development should not be sited in areas identified in the Bellinger River Morphological as a projected area of erosion".

Extensions to existing development, redevelopment and infill development in areas of projected erosion hazard will be considered on merit.

Any protective works proposed will require a detailed assessment to demonstrate to the satisfaction of Council that there will be no adverse affect to the riverine processes including the property in question and land beyond the property boundary.

It should be noted that other issues such as environmental considerations and statutory requirements may also apply.

8.12.2 Development in areas potentially affected by riverine processes

Development proposals in areas *potentially affected by riverine processes* shall require a site specific assessment of riverine processes based on the following guidelines:

- a minimum setback of 40m is generally recommended from the top of the riverbank to any structure. Exceptions may include community infrastructure, minor development, landscaping, wharves, jetties, boardwalks, pump houses, riverbank restoration works, etc.
- the riverine processes assessment shall be undertaken by an experienced Geo-technical Engineer or Geomorphologist
- a report shall be prepared that recommends an appropriate setback from the river bank, along with other conditions as appropriate, to reasonable ensure the proposed development will not be adversely affected by river bank erosion, land slip or subsidence
- the assessment is to include consideration of structures and access routes associated with the development
- an analysis of historical aerial photography should be undertaken to identify trends in riverbank movement
- consideration of short-term fluctuations and long-term trends in riverbank movement and meandering over an appropriate stream length, and the possibility of the river bypassing bends and isolating the development
- details on the nature of materials at the site including the existence of bedrock or other controls

- consideration of the possibility of man-made structures or activities affecting historical trends
- a management plan should be prepared for land within 40m of the riverbank to identify proposed activities and management strategies to minimise bank erosion associated with use of the site, including consideration of stormwater and sewage disposal, controlled access for pedestrians, control of animals and vegetation management.

APPENDICES

APPENDIX 8.1- Potential Flood Prone Land

The extent of flood prone land is determined from flood studies. Council has adopted flood studies and associated mapping of flood prone land along the more intensively populated reaches of the rivers within the local government area (see Section 8.8).

In areas outside those covered by Council's adopted flood studies, the proponent shall undertake the following process to determine if the subject site is Potentially Flood Prone, and if it is, undertake a Preliminary Flood Assessment to determine the extent of flood prone land at the subject site.

What is Potentially Flood Prone Land?

In localities not covered by Council's adopted flood studies and associated mapping of flood prone land, land is considered to be Potentially Flood Prone if:

i. the subject land is adjacent to or under the influence of flooding from any 3rd order or higher order watercourse (refer below) and is either:

   a) less than 20m above the normal water level of the watercourse (when measured perpendicular to the direction of flow), or

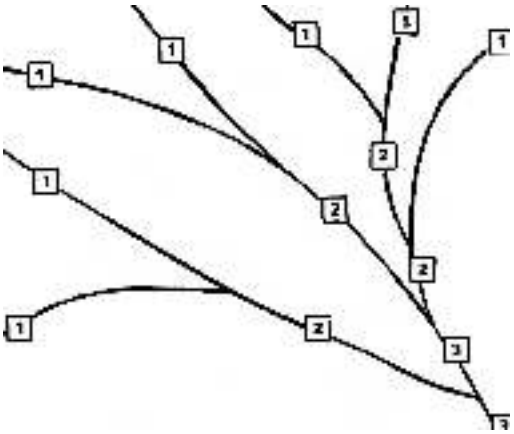
   b) less than 10m above the normal level of the watercourse where the catchment area is less than 100 square kilometres, or;

ii. the subject land is less than 5.0m above any adjacent 1st or 2nd order watercourse.

The Strahler System of Ordering Watercourses

Watercourses are shown on NSW Land and Property Information's topographic maps as broken or continuous blue lines.

- starting at the top of a catchment, any watercourse which has no other watercourses flowing into it is classed as a 1st order watercourse (1)
- where two 1st order watercourses join, the watercourse becomes a 2nd order watercourse (2)
- if a 2nd order is joined by a 1st order watercourse, it remains a 2nd order watercourse
- when two or more 2nd order watercourses join, they form a 3rd order watercourse (3)
- a 3rd order watercourse does not become a 4th order watercourse until it is joined by another 3rd order watercourse, and so on as illustrated on the following diagram.



This Plan does not apply if it can be shown that the subject site is not Potentially Flood Prone.

If the above assessment determines that the subject site is Potentially Flood Prone, a preliminary Flood Assessment shall be undertaken to determine if the site is Flood Prone (see Appendix 8.2).

APPENDIX 8.2 - Flood Assessment Requirements

A Flood Assessment shall be undertaken where development lies within Potentially Flood Prone land or where required otherwise by this Plan.

The primary objective is to determine a reasonable assessment of the extent of flood prone land and the 1% AEP flood level, to identify what development controls may apply and whether a more detailed Flood Study is required (see Appendix 8.3).

Flood Assessment Requirements

Unless instructed otherwise, site specific Flood Assessments shall be prepared under the following guidelines:

- the assessment shall be undertaken and certified by a professional Civil / Hydraulic Engineer with qualifications suitable for admission as a corporate Member of Engineers Australia.
- all levels shall be relative to Australian Height Datum (AHD).
- topographic levels shall be to an accuracy of 0.1m, structures and the like shall be to an accuracy of 0.01m.
- rainfall intensity/frequency/durations shall be determined from Australian Rainfall and Runoff (ARR) 1987 or later.
- flows shall be assessed using a rainfall-runoff hydrologic model and compared to peak flows using the Rational Method from ARR for urban or rural catchments as appropriate.
- the 1% AEP and the PMF (or other similar extreme event) flood events shall be assessed using a steady state backwater analysis technique (or better) with a sensitivity analysis on assumed or assessed parameters.
- flood heights shall be reported in metres to two (2) decimal places, while flood velocity shall be reported in metres per second to one (1) decimal place.
- the assessed flood levels shall be compared to historic flood levels in the vicinity, if available.
- anecdotal data and assessments based on extrapolating levels or flows from other parts of the catchment or adjacent catchment will generally not be accepted unless it can be demonstrated that such an assessment is clearly conservative and results in an upper bound design level.
- developers shall be requested / required to make data available to Council, free of cost, to form part of a Shire wide database.
- the Flood Assessment report shall:
    - clearly set out the objectives of the assessment, the methodology adopted and provide sufficient detail to enable easy checking of calculations and validity of assumptions used.

- present all historical rainfall and flood height data.
- present complete model results including those for sensitivity testing.
- include maps/figures of the catchment, site, model layout and cross section locations.
- include tabulations and/or figures model parametres and results.
- present the findings in sufficient detail to support the validity of the conclusions.
- identify appropriate access routes and emergency management procedures over the full range of flood up to the PMF.
- provide survey data including DTM model on MapInfo (if available) and model data files arranged in an orderly file structure.
- clearly demonstrate the flood impacts associated with the development (if applicable).

This Plan applies to Flood Prone Land as determined by this Flood Assessment.

Where development is proposed below the 1% AEP flood level or where required otherwise by this Plan, a more detailed Flood Study shall be undertaken in accordance with Appendix 8.3.

APPENDIX 8.3 - Flood Study Requirements

A Flood Study shall be undertaken in accordance with these requirements where called for by this Plan.

Flood Studies are generally required to identify the flood behaviour in the vicinity of the development; to identify what impacts the development would have upon flood storage or flood flow, adjacent properties and the like; and/or to assess the impact of the development and/or the cumulative impacts associated with further similar developments.

Flood Study Requirements

Unless instructed otherwise, Flood Studies shall be prepared under the guidelines of the NSW Government's Floodplain Development Manual 2005 and the following:

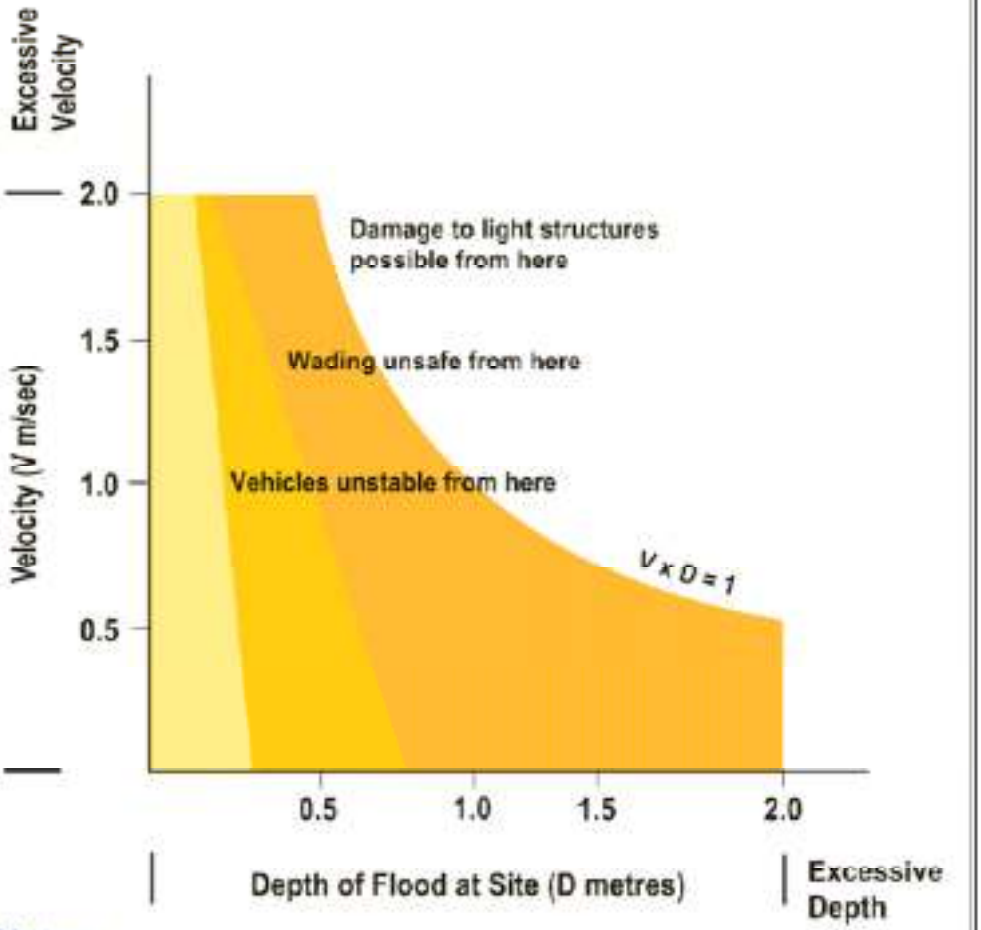
- the study shall be undertaken and certified by a professional Civil / Hydraulic Engineer with qualifications suitable for admission as a corporate Member of Engineers Australia.
- all levels shall be relative to Australian Height Datum (AHD).
- topographic levels shall be to an accuracy of 0.1m, structures and the like shall be to an accuracy of 0.01m.
- rainfall intensity/frequency/durations shall be determined from Australian Rainfall and Runoff (ARR) 1987 or later.
- flows shall be determined using an appropriate computer based hydrologic model and compared to peak flows derived from the Rational Method of ARR for rural and urban catchments as appropriate (contemporary models such as RAFTS, RORB or WBNM would be acceptable).
- local flood behaviour shall be determined using an appropriate computer based hydraulic model (steady state backwater analysis models such as HEC-RAS are acceptable where loss of flood storage is not an issue, otherwise the unsteady version of HEC-RAS or other 1D or 2D unsteady state models such as MIKE 11, ESTRY, Rubicon, RMA-2, SOBEC or TUFLOW shall be used).
- flood heights shall be reported in metres to two (2) decimal places, while flood velocity shall be reported in metres per second to one (1) decimal place.
- where sufficient historical information is available, the hydrological and hydraulic models shall be calibrated and verified.
- for the purposes of the study, design floods shall include the 5% AEP, 2% AEP, 1% AEP and PMF (or other similar extreme event) flood events.
- sensitivity analysis shall be carried out to assess the how much influence the model parametre values have on the results of the calibration, verification and design events (sensitivity analysis would normally include but not limited to variations in flow, friction, infiltration and energy losses at structures).
- where development is proposed below the 1% AEP flood level, a hydraulic quantification of the impacts of the development shall be assessed over the full

range of flood events.

- developers shall be requested / required to make data available to Council, free of cost, to form part of a Shire wide database.
- the flood study report shall:
    - clearly set out the objectives of the study, the methodology adopted and provide sufficient detail to enable easy checking of calculations and validity of assumptions used.
    - present all historical rainfall and flood height data.
    - present complete model results including flood heights (levels), flow distributions, velocities and flood storage variations for all calibration, validation and design events.
    - where development is proposed below the 1% AEP flood level, present the changes in hydraulic behaviour at the structure, at the property boundaries and all sites across the floodplain affected by the development.
    - include maps/figures of the catchment, site, model layout, cross section location, flood profiles, flood extents, flood contours, flow and velocity distribution.
    - include tabulations and/or figures depicting the spatial distribution of model parametres, flow and velocity at each section.
    - information on preliminary hydraulic categories and preliminary hazard categories.
    - present the findings in sufficient detail to support the validity of the conclusions.
    - identify appropriate access routes and emergency management procedures over the full range of flood up to the PMF.
    - provide survey data including DTM model on MapInfo (if available) and model data files arranged in an orderly file structure.
    - clearly demonstrate the flood impacts associated with the development (if applicable).

APPENDIX 8.4 - Safe Access Velocity and Depth Relationships

The following chart shall be used to determine safe access for pedestrians and vehicles.



Notes

1. At velocities in excess of 2.0 m/s, the stability of foundations and poles can be affected by scour. Also, grass and earth surfaces begin to scour and can become rough and unstable
2. The velocity of floodwaters passing between buildings can produce a hazard, which may not be apparent if only the average velocity is considered. For instance, the velocity of floodwaters in a model test has risen from an average of 1 m/sec to 3 m/sec between houses.
3. Vehicle instability is initially by buoyancy.
4. At floodwater depths in excess of 2.0 meters and even at low velocities, there can be damage to light-framed buildings from water pressure, flotation and debris impact.

Derived from laboratory testing and flood conditions which caused damage.

Source: NSW Government Floodplain Development Manual 2005

This Page is Intentionally Blank

APPENDIX 8.5 - Flood Proofing Guidelines

Flood proofing refers to any combination of measures incorporated in the design, construction and alteration of individual buildings or structures subject to flooding, to reduce or eliminate flood damages.

Flood proofing by filling of the site is generally preferable where

- practical;
- if below the GFPL, compensatory works are provided to ensure there is no net loss in flood storage at any flood level;
- if in a floodway, compensatory works are provided to ensure there is no increase in adjacent flood levels nor redistribution of flow; and
- otherwise permitted.

Retrofitting removable shutters and the like to doors and windows may be a viable option for existing development however this form of flood proofing is generally not viable for new development or extensions to development as it relies of ongoing maintenance of the equipment and timely intervention by the building occupiers. Notwithstanding, removable shutters and the like would be a valuable adjunct to the measures described below.

Therefore, when flood proofing is specified in this Plan and flood proofing by filling is not suitable, the following basic guidelines shall be complied with.

The guidelines provide an outline of basic construction standards for development below the applicable Flood Planning Level. It should be noted that compliance with these guidelines does not guarantee the performance of a structure under flood conditions. Further structural details and certification may be required by Council for specific proposals.

Electrical and Mechanical Materials
For buildings (or those parts thereof) constructed below the applicable FPL, the electrical and mechanical materials, equipment and installation shall comply with the following:

- mains power supply (subject to approval of Country Energy)
    - incoming main commercial service equipment, including metreing equipment, should be located above the applicable FPL
    - buildings must be able to be easily disconnected from the main power supply
    - all circuits below the applicable FPL should be connected to Residual Current Devices
- wiring
    - wiring, power outlets, switches, etc. must be, to the maximum extent possible, located above the applicable FPL
    - all electrical wiring installed below the applicable FPL should be suitable for continuous submergence in water and is to contain no fibrous components
    - only submersible type splices are to be used below the applicable FPL

- all conduits located below the applicable FPL should be installed so that they will be self draining if subject to flooding

- equipment
    - all equipment installed below, or partially below, the applicable FPL should be capable of disconnection by a single plug and socket assembly

HEATING AND AIR CONDITIONING SYSTEMS

Heating and air conditioning systems should, to the maximum extent possible, be installed in areas and spaces of the building above the applicable FPL. Where this is not possible, every precaution is to be taken to minimise the damage caused by submersion in accordance with the following points:

- fuel
    - heating systems using oil or gas should have a manually operated valve located in the fuel supply line to enable fuel cut-off

- installation
    - heating equipment and fuel storage tanks are to be mounted on and securely anchored to a foundation pad of sufficient mass to overcome buoyancy and prevent movement that could damage the fuel supply line
    - all storage tanks are to be vented to an elevation of not less than 600mm above the applicable FPL

- ducting
    - all ductwork located below the applicable FPL is to be provided with openings for drainage and cleaning
    - self draining may be achieved by construction the ductwork on a suitable grade
    - where ductwork must pass through a watertight wall of floor below the applicable FPL, the ductwork is to be protected by a closure assembly operated from above the applicable FPL.

CONSTRUCTION MATERIALS

Construction materials are graded into four classes according to their resistance to flood waters. These grades are:

1. **most suitable** - materials or products which are relatively unaffected by submersion and unmitigated flood exposure and are the best available for the particular application

2. **second preference** - where the 'most suitable' materials are unavailable or economic considerations prohibit their use, these materials or products are considered the next best choice to minimise damage caused by flooding

3. **to be avoided** - as for 'second preference' but considered to be more liable to damage under flood conditions

4. **not permitted** - these materials or products are seriously affected by flood waters and in general have to be replaced if submerged

Buildings should be constructed using the 'most suitable' materials as far as practical - see Table 1. Second and lower class materials will only be considered where circumstances are warranted.

TABLE 1

ORDER OF PREFERENCE

component	most suitable	second preference	to be avoided	not permitted
flooring and sub-floor structure	• concrete slab-on-ground monolithic construction Note: clay filling is not permitted beneath slab-on-ground construction which could be inundated suspension reinforced concrete slab	• timber floor (T&G boarding, marine plywood) full epoxy sealed on joints	• timber floor (T&G boarding, marine plywood) with ends only epoxy sealed on joints and provision for side clearance for board swelling	• timber floor close tog round with surrounding base • timber flooring with ceilings or soffit linings • timber flooring with seal on top only
floor covering	• clay tile • concrete, precast or in situ • concrete tiles • epoxy, formed-in-place • mastic flooring formed-in-place • rubber sheets with chemical set adhesives • silicone floors formed-in-place • vinyl sheets with chemical set adhesives	• cement/bituminous formed-in-place • cement/latex formed-in-place • rubber tiles, with chemical set adhesive • terrazzo • vinyl tile with chemical set adhesive • vinyl tiles asphaltic adhesive • loose rugs • ceramic tiles with acid and alkali resistant grout	• asphalt tiles with asphaltic adhesive • loose fit nylon or acrylic carpet with closed cell rubber underlay	• asphalt tiles • carpeting, glue-down type or fixed with smooth-edge or jute felts • ceramic tiles • chipboard / particleboard • cork • linoleum • PVA emulsion cement • rubber sheets or tiles • vinyl sheets or tiles • vinyl sheets or tiles coated on cork or wood backings fibre
wall structure (up to GFPL)	• solid brickwork, blockwork, reinforced concrete or mass	• two skins of brickwork or blockwork with inspection	• brick or blockwork veneer construction with inspection	• inaccessible cavities • large window openings

roof structure (where GFPL is above the ceiling level)	• reinforced concrete construction • galvanised metal construction	• timber trusses with galvanised fittings	• traditional timber roof construction	• inaccessible flat roof construction • ungalvanised steelwork e.g lintels, arch bay tie rods, beams, etc. • unsecured roof tiles
doors	• solid panel with water proof adhesives • flush door with marine ply filled with closed cell foam • painted metal construction • aluminium or galvanised steel frame	• flush panel or single panel with marine plywood and water proof adhesive • T&G lined door, framed ledged and braced • painted steel • timber frame fully epoxy	• flywire screens • standard timber frame	• hollow core ply with PVA adhesive and honeycomb paper core
wall and ceiling linings	• villaboard • brick - face or glazed in waterproof mortar • concrete • concrete block • steel with waterproof application • stone - natural, solid or veneer • waterproof grout • glass blocks • glass • plastic sheeting or walls with	• brick - common • plastic wall tiles • metals - non ferrous • rubber mouldings and trim • wood - solid or exterior grade plywood fully sealed	• chipboard - exterior grade • hardboard - exterior grade • wood - solid (boards and trim) with allowance for swelling • wood, plywood - exterior grades • fibrous plaster board	• chipboard • fibreboard panels • minerar boards • paperboard • plasterboard, gypsum plaster • wall coverings - paper, burlap cloth types • wood - standard plywood strawboard
insulation	• foam or closed cell type	• reflective insulation	• bat or blanket types	• open cell fibre types
windows	• aluminium frame with stainless steel or brass rollers	• epoxy sealed timber waterproof glues with stainless steel or brass fittings • galvanised or painted steel		• timber with PVA glues, mild steel fittings
nails, bolts, hinges and fittings	• brass, nylon or stainless steel • removable pin hinges		• mild steel	

APPENDIX 8.6 - Evacuation Centres

The usual purpose of evacuation centres is to meet the immediate needs of victims, not to provide them with accommodation. Evacuees will be advised to go to or be taken to the nearest accessible evacuation centre, which may initially be established at the direction of the Bellingen Shire SES Local Controller but managed as soon as possible by the Department of Community Services. At the date of making this Plan any or all of the following sites may be used as evacuation centres:

Evacuation Centre	Address	Remarks	Sector
Bellingen High School	East End, Bellingen	Note this site may be affected during extreme flooding greater than the 1% AEP flood.	East Bellingen
Bellingen Public School	William St, Bellingen	This site is the most appropriate during extreme flooding.	Bellingen
Bellingen Uniting Church Complex	Hyde St, Bellingen	Note this site may be affected during extreme flooding greater than the 1% AEP flood.	Bellingen
North Bellingen Children's Centre	Off Sunset Ridge, North Bellingen		North Bellingen
Urunga Public School	Bellingen St, Urunga		Urunga
Urunga Bowling Club	Bonville St, Urunga		Urunga
Bellingen Valley North Beach Surf Club	Beach Pde, Mylestom		Mylestom / North Beach
Bonville Public School	Gleniffer Road, Bonville		Repton
Raleigh Road House	Pacific Hwy, Raleigh		Raleigh

It should be noted that subsequent to the adoption of this Plan the designated Evacuation Centres may be amended by the SES or Council. Reference should be made to the Bellingen Local Flood Plan prepared by the SES for the most current list of Evacuation Centres.

This Page is Intentionally Blank

APPENDIX 8.7 - Flood Management Strategy Requirements

The flood management strategy is used as a management measure in some circumstances to deal with the increased risks associated with development or access is lower than otherwise desirable.

A site specific flood management strategy identifies appropriate responses when floodwaters are predicted to reach a particular height.

Issues to be addressed/identified in the Flood Management Strategy include:

- existing flood behaviour including the levels and velocities of the 5%, 2%, 1% AEP and PMF. As far as practical levels should be related to both AHD and local flood gauges (e.g. Bellingen Bridge) where predictions are issued by the BOM;
- the level at which access to other centres and/or high land is cut;
- an estimate of the expected rate of rise of floodwater and warning times;
- a description of the premises, it's proposed use and details of property that may need to be lifted or moved to minimise flood damage;
- details of any personnel proposed to remain and manage the site during the flood;
- details of where stock and other property is to be moved to and how and when it will be raised or transported;
- details of other flood proofing measures proposed including disconnection or power, and management of other services such as water supply and sewerage;
- measures to minimise damage to the property and its contents including the securing of loose articles to minimise both losses and the creation of flood debris;
- management of hazardous chemicals or other substances likely to have an adverse effect on the environment or personal well being;
- measures for removal or safe storage of motor vehicles, caravans, plant, equipment, etc;
- procedures for clean up following the flood including disposal of silt and debris deposited and disinfection of inundated areas;
- procedures for reoccupation of the premises including safety and health issues. (e.g. management of hazardous materials displaced during the flood);
- the plan should include details of how tenants or temporary occupants are to be advised and kept informed of the proposed procedures;
- a sunset clause specifying a period of validity is to be included requiring the plan to be regularly reviewed (every 2 years is recommended) and resubmitted for approval by Council;
- contact details of Police, SES, Council, BOM etc;

- Sources of flood intelligence eg Manly Lab, BoM, Council SES; and
- the plan is to be made available at the premises and displayed in a prominent location(s). The location(s) is to be specified in the plan.

The Flood Management Strategy prepared by a professional with experience in floodplain management shall be acceptable to Council.

APPENDIX 8.8 - Guidelines for Net Reduction in Flood Risks

The objectives of Council's **flood policy** are to reduce the impact of flooding and to reduce the public and private losses resulting from flooding.

Note: It is usually better to encourage redevelopment than to persist with the continued use of an existing development which may impede flow, be structurally unsound and/or likely to incur considerable flood losses.

Application of these Guidelines

Floodways – for redevelopment, extensions and minor development only.

Section 5.2.3 (3) of Council's adopted Floodplain Risk Management Study stated that *"Consideration will be given to these types of developments where it can be demonstrated there is a net public benefit or net reduction to existing potential damages or risk to life.*

The relevant provisions of this Plan state that *"Consideration will be given to redevelopment where it can be demonstrated that there is a net public benefit or net reduction to existing potential damages or risk of life".*

The following explanation and/or examples of net reduction in flood risks are provided for guidance purposes only. Council will consider each application on merit.

Net Public Benefit

- Provides social/economic/tourist benefits to area (eg, Golf Club extension, redevelop part of the Butter Factory, even at a lower floor level, The Yellow Shed, amenities buildings associated with parks, sporting fields etc)
- Improved public access (eg, development may include access ramps for disabled, safety improvements etc)
- Public Infrastructure

Net Reduction to Existing Potential Damages

- Redevelopment of structurally sound building replacing inferior structure, therefore less likely to incur flood damage
- Raised floor level (equates less damage to property)
- Greater storage at GFPL (eg, extension at higher level than existing, storage provisions at GFPL)
- Less restrictions to flow conveyance (equates to reduced afflux and velocity in vicinity which may equates to less damage at adjoining property, eg redevelopment as elevated structure with open structure at lower levels, redevelopment with improved orientation building footprint offering less restriction to flow)

Net Reduction to Existing Risk to Life

- Redeveloped (higher) building or storage offers greater protection to property, therefore owner/occupier may be more inclined to safely evacuate in a timely manner.
- If the occupier fails to evacuate, a development with higher floor levels and structurally sound may be safer than existing development.

- Proposal may offer improved flood access and evacuation as part of development eg, raise low sections of evacuation route, raised bridge/walkway connecting to higher ground, guide posts along inundated evacuation route.

This Page is Intentionally Blank

Bellingen Shire Development Control Plan 2017

Chapter 9
Landscaping Requirements

Table of Contents

Table of Amendments

Amendment	Date Adopted	Date Commenced
Minor review of DCP - DCP 2017 replaces DCP 2010	22 November 2017	6 December 2017

9.1 Aims

a) To preserve and encourage landscaped settings for development throughout the Bellingen Shire that are appropriate to their location, context and intended use.

b) To conserve and reinforce the existing natural and cultural landscape character and identity of the three distinct geographical and climatic zones of the Bellingen Shire.

c) To encourage the use of plant species that provides food sources and habitat for native fauna.

d) To promote the use of plant species appropriate to the development site's conditions, climate and context.

e) To encourage the planting of fruit, vegetable and herb gardens in order to contribute towards local food production and raise awareness of local food issues.

f) To appropriately tailor development application and landscaping requirements to the scale of the development.

g) To provide landscape solutions that complement the built form, minimise the bulk and scale of large buildings and improve the visual amenity of the site.

h) To encourage energy efficient landscape design solutions for development across the Bellingen Shire considering on site water use, reuse, solar access, site microclimate and appropriate plant and material selections.

9.2 Where This Chapter Applies

The provisions of this chapter apply throughout all areas of Bellingen Shire, unless any site specific development controls included in this chapter, or in later chapters of this DCP nominate alternative requirements. In this case, the provisions of the site specific development controls shall prevail.

9.3 When This Chapter Applies

The provisions of this Chapter shall apply when Development Consent is required for any of the following:

a) The erection of multiple dwellings

b) The subdivision of land for industrial purposes or the erection of industrial buildings

c) The subdivision of land for residential or rural residential purposes

d) Commercial developments

e) Tourist and Visitor Accommodation

f) Any other development that may require landscaping for visual screening purposes or similar.

It does not apply when the proposed development can be considered as "exempt" or "complying" development under the provisions of State Environmental Planning Policy (Exempt and Complying Development Codes) or any other Environmental Planning Instrument applying to the land.

9.4 Definitions

Definitions of development are the same as those contained within Bellingen Local Environmental Plan 2010, unless otherwise noted.

Appropriately qualified person *means:*

- A Landscape Architect or Landscape Designer who is to be engaged to prepare documentation for multiple dwelling construction developments, commercial developments, tourism development, industrial development and subdivision development.
- A qualified Horticulturist who may be engaged for dual occupancy developments.
- A qualified Arborist / Arborculturist who may be engaged to prepare vegetation survey and assessment plans

  Note: Appropriately qualified persons must have Professional Accreditation as per the following.

- Landscape Architects are to be members of the Australian Institute of Landscape Architects (AILA).
- Landscape Designers are to be members of the Australian Institute of Landscape Designers and Managers (AILDM).
- Horticulturists are to be members of the Australian Institute of Horticulture (AIH).
- Arborists and Arborculturalists are to be Members of either the:
  National Arborists Association of Australia (NAAA),
  Institute of Australian Consulting Arborculturists (IACA) or the
  International Society of Arborculturists Australia (ISAAC).

Detailed Landscape Documentation means a plan that indicates, in detail, the proposed landscape and illustrates the final layout of the site and provides details of hard and soft landscape materials, treatments, plant species and groupings. The plan drawings should be of a standard suitable for tendering and construction.

The plan is to contain the following information to a standard that that would permit construction:

- any proposed building envelopes, buildings, structures, vehicular access points, driveways and car parking areas,
- existing and proposed levels (ground and floor),
- locations of underground and overhead infrastructure,
- locations of garden areas, lawns, trees, fences, walls, planters, pavements and all other hard and soft landscape elements,
- heights, materials and levels of all walls and fences,
- planting plan indicating layout, arrangement and densities of all trees, shrubs, groundcovers, vines and grasses and all existing trees to be retained, removed or relocated,
- a plant schedule indicating common and botanical names, quantities, container size and spacing,
- construction details and planting details at appropriate scale, and
- additional information may be required in the form of sections and elevations.

Two (2) sets of documentation are to be submitted and the plans are to contain the following standard information:

- project name and location address,
- client/applicants name, address and contact details,
- consultants name, address and contact details,

- date of submission and amendment/review schedule,
- scale, and
- north point.

A Specification is to accompany the landscape plan. Depending on the scope of works the Specification may be in A4 format or included as notes on the detailed plans and drawings.

The Specification should include the following information:

- tree protection and transplanting details,
- soil preparation, mixes and depths,
- hard landscape – wall and paving types and construction methods, special surfaces, edges, water features, lighting, etc,
- soft landscape – lawns and turf areas, plant materials, planting, mulching and staking,
- establishment and maintenance details, and
- any other information that is relevant to the development, such as irrigation systems

Multiple Dwelling Construction means any Development Application that proposes, or would result in, the erection of more than one dwelling on a parcel of land.
(Note: differs from definition of "multi-dwelling housing" in BLEP 2010).

Schedule of Finishes means a schedule that should include a materials sample palette and colour scheme of pavements and other hard landscape elements.

Site Analysis Plan means a plan that identifies the opportunities and constraints a site will offer, and demonstrates an overall appreciation of the site. They are usually best presented as a combination of graphic and written information, and depending on a sites complexity, should indicate the following as a minimum:

- scale and north point,
- property boundaries,
- physical characteristics – slope, drainage, etc,
- existing trees, buildings and other structures,
- existing service infrastructure,
- access,
- adjacent land use,
- relationship to street,
- views into and away from site, and
- items identified as heritage or protected under other Local, State or Commonwealth legislation

Vegetation Survey and Assessment Plan means a plan undertaken by a suitably qualified person, either an Arborist or Horticulturist, with experience in preparing reports of this type. On remnant native vegetation a qualified ecological consultant will be required to provide a full description of the ecological community and condition of vegetation.

As a minimum the plan is to contain the following information:

- the surveyed location of trees on site, street trees and trees on adjoining properties within 3 metres of the boundary,
- tree height and spread of canopy,
- basal diameter (calliper) at 1.0 m above ground,
- botanical name,

- age, condition and SULE (Safe Useful Life Expectancy),
- critical root zone (CRZ),
- evident habitat conditions, e.g. tree hollows,
- weed species on site, extent and strategy to manage,
- trees to be retained and protected,
- trees to be removed,
- trees to be relocated (if applicable), and
- tree and vegetation measures to be employed on site prior to and during construction

9.5 Variations

Council may consider variations to the standards required of development in this chapter when the overall aims of this chapter and any specific aims that may be detailed for that particular standard can be achieved.

Note: The retention of existing vegetation may be considered as one factor that would warrant a variation.

9.6 Development Criteria

9.6.1 General requirements

This section shall apply for all development types regardless of scale or type.

Plant Selection

1) Plant species must be appropriate to the context in which it is being used. Selection criteria for plant material must consider the proposed relationship within the development site, the streetscape and neighbourhood, and includes the following:
    - the likely form and scale of tree at maturity,
    - whether the plant is deciduous or evergreen,
    - the rate of growth (fast/slow),
    - tolerance of prevailing site conditions. (drought/wind/frost/wet/etc),
    - site proximity to underground and overhead infrastructure and neighbouring properties,
    - natural environmental suitability – (is the plant likely to create an environmental problem),
    - cultural environmental suitability – (is the plant suitable for the location in a cultural context. This is particularly critical in areas of heritage significance),
    - behaviour- some species have been identified as being frequent limb droppers, or having an invasive root system or an inherent structural weakness which would limit their use in certain situations,
    - whether the plant has been identified as a known asthma irritant species or skin allergen. These species should not be used in or in close proximity to schools, childcare centres, public buildings and street plantings, and
    - plant species classified as weeds in Appendix 6.1 of this DCP are not to be used in any landscape proposal.

Plant Size, Quality and Planting Densities

2) The plant material to be used should be of a size capable of providing scale and contrast to new developments.

As a rule the following container sizes are appropriate for most development situations.

Residential Development
Trees: minimum 25lt
Shrubs: 5 lt
Groundcovers: 140mm – 5 ltr
Mass Plantings: 100mm tubes

Commercial Development
Trees: 75 lt– 100lt
Shrubs: 5 lt
Groundcovers: 140mm – 5 ltr
Mass Plantings: 100mm tubes

Subdivisions - Street Plantings and Entry Treatments
Trees: 75lt – 100lt
Shrubs: 5 lt
Groundcovers: 140mm – 5 ltr

3) Planting plans should be restricted to a simple plant palette to provide an uncomplicated yet effective visual impact.

4) Planting densities should be designed to provide a tight and consolidated appearance, however it is critical to take into account the likely mature size of the plant material in order to avoid overcrowding. Where screen planting is called for, closer densities may be required.

5) Good quality plant material, with uniform characteristics, good foliage, form and structure, free of disease and insect damage and true to species type shall be used.

Retention of Existing Trees

6) Steps should be taken to plan developments to retain and incorporate existing trees into the design for the site. Landscape plans submitted as part of the DA process must clearly identify existing trees on a vegetation survey and clearly indicate trees to be retained and trees to be removed.

7) Trees being retained on site must be subject to the provisions under AS4970-2009: Guidelines for the planning and protection of trees on development sites.

Landscape Proposals

8) All landscape proposals must:

   i. correspond with the conditions of the site and those of neighbouring properties,

   ii. have regard to the location of existing trees on the site and adjoining properties,

   iii. use plant species and materials appropriate to the sites context and setting,

   iv. provide a fitting scale to the site's built elements,

   v. contribute to the solar efficiency of the site through careful selection and positioning of plant material to provide shade in warmer months and sun in cooler months,

   vi. facilitate retention of existing significant trees or vegetation on the site, where possible,

vii. promote security and safety of building occupants,

viii. provide screening to private open space areas,

ix. minimise the visual impact of massed built form,

x. reduce storm water overland flow from the site,

xi. provide a unifying landscape theme for the development,

xii. minimise overlooking into windows of adjoining residential buildings, and

xiii. ensure that all planting beds are mulched sufficiently to provide moisture retention and suppress weed growth.

Documentation Requirements

9) Documentation required to be submitted as part of the development application for all developments to which this Chapter applies is as follows:

- site analysis plan,
- vegetation survey and assessment,
- schedule of finishes,
- detailed landscape documentation, and
- where any of the landscaping is located on Council's road reserve or a proposed public reserve or park, a landscape maintenance schedule.

9.6.2 Multiple dwellings

Criteria

1) Further to Section 2.6.3 of this DCP (Permissible Densities), a Detailed Landscape Plan is required that demonstrates how the required landscaped area is to be provided as part of the proposed development.

The following principles shall be observed in the development of the plan.

i. The proposed plan shall allow for casual surveillance of public roads and shall not totally obscure the view of the street from any windows on the front elevation. Plantings are to be selected to provide an unrestricted line of sight between the street and dwelling entrance and front windows.

ii. The landscaped area may be individually allocated to dwellings, incorporated into a common area accessible to all occupants, or be a combination of both. (Note: Council will look favourably upon any proposal to consolidate landscaped area into a single garden area that can be used collectively by residents for the purpose of growing their own fruit and vegetables).

iii. Energy efficient landscape practices along with the principles embodied in Ecologically Sustainable Development (ESD) are to be incorporated in the design, construction and maintenance of the landscape. These practices should take into regard the management of storm water; the provision of solar access to open space areas and the selection of planting material with low water and maintenance requirements.

9.6.3 *The subdivision of land for industrial purposes or the erection of industrial buildings*

Criteria

1) Where the access driveway is located adjacent to the side boundary or where battle axe lots are created, a continuous planting bed is to be provided between that side boundary and the driveway. The planting bed is to be planted with medium height screen species that retain foliage to the ground and that will have a minimum spread dimension of 0.5 metres wide.
2) Landscape proposals for industrial buildings shall incorporate planting beds at the façade line and the front boundary.
3) Mass planted areas should have three planting tiers of tree, shrub and groundcover layer to provide for shade, screening and weed suppression.
4) For industrial building development applications, a usable open space area is to be provided for employees.
5) All planter beds must be contained within a 150mm high concrete kerb.
6) Canopy trees are to be provided in car parking areas to provide shade and minimise visual impact. The selected species are to provide at least 50% shade coverage to the car parking area with a 6 metre diameter spread at maturity.
7) Trees should be utilised throughout the design to reduce the bulk and scale of the development and to increase canopy cover.
8) Trees are to be planted at the rate of 1 tree per 4 car parking spaces.
9) Street trees are to be planted at the approved size at the rate of 1 tree per 10 metres of street frontage. Trees shall be selected from the list of suitable species attached to Appendix 9.1 of this DCP.

9.6.4 *The subdivision of land for residential purposes*

Criteria

1) Where battle axe lots are created, the entire length of the access corridor will have a minimum 0.5 metre wide landscape area on each side or a landscaped blister.
2) Street trees are to be planted at the approved size at the rate of 1 tree per 10 metres of street frontage. Trees shall be selected from the list of suitable species attached to Appendix 9.1 of this DCP.
3) Specific documentation required in accordance with this provision must include the following:
4) detailed landscape masterplan for the road reserve of all proposed roads, any proposed public parks and/ or reserves.

9.6.5 *The subdivision of land for large lot residential purposes*

Criteria

1) Where battle axe lots are created, the entire length of the access corridor will have a minimum 1.0 metre wide landscape area on each side.
2) Landscape proposals shall make reference to and reinforce the existing rural setting and landscape character of the area.

3) Street trees are to be planted at the approved size at the rate of 1 tree per 10 metres of street frontage. Trees shall be selected from the list of suitable species attached to Appendix 9.1 of this DCP.
4) Specific documentation required in accordance with this provision must include the following:
    i. detailed landscape masterplan for the road reserve of all proposed roads, any proposed public parks and/ or reserves.

9.6.6 Commercial purposes

Criteria

1) New commercial development should incorporate landscaping to complement the building design and positively contribute to the amenity and character of the established streetscape.
2) Where Council has adopted an urban landscape master plan or similar, landscaping will need to be undertaken in accordance with this or an appropriate contribution levied.

9.6.7 Tourism development

Criteria

1) Landscape proposals for tourism and related developments should:
    i. consider the existing setting and landscape character of the area, precinct or neighbourhood,
    ii. provide screening and planted buffer zones along boundaries with adjoining properties to maintain privacy and reduce visual and noise impacts on neighbours, and
    iii. provide effective screening to car parking areas.

APPENDICES

APPENDIX 9.1 – Indicative Schedule of Trees Suitable for the Bellingen Shire

Table 1: Introduced Species

Botanical Name	Common Name	Scale /Growth R	Type	Area	Suitability
Acer buergeranium	Trident Maple	Medium	WD	V/P	Residential
Alnus jorullensis	Evergreen Alder	Med-Lge/Fast	EG	V/P	Residential
Araucaria columnaris	Cook Pine	Large/fast	EG	S/V	Large Lot/ Landmark
Arbutus unedo	Strawberry Tree	Med/Med	EG	S/V/P	Residential
Calodendron capense	Cape Chestnut	Med-Large/Med	EG	S/V	Residential
Ceanothus arboreus.cv	California Lilac	Sml-Med/Med	EG	S/V/P	Residential
Cedrus deodara	Himalayan Cedar	large/Med	EG	P	Large Lot
Fraxinus pennsylvanica	Ash	Med/Med	WD	S/V/P	Residential
Ginko biloba	Maidenhair Tree	Medium / slow	WD	V/P	Large Lot
Gordonia axillaris (Franklinia axillaris)	Gordonia	Medium/slow	EG	S/V/P	Residential
Harpephyllum caffrum	Kaffir Plum	Med/Med	EG	S/V	Residential
Hovenia dulcis	Japanese Raisin Tree	Med/Med	WD	S/V/P	Residential
Jacaranda mimosafolia	Jacaranda	Large/Med	EG	S/V	Large Lot/ Street Tree
Laegerstromia indica	Crepe Myrtle	Medium/Fast	WD	S/V/P	Residential
Liquidamber styraciflua	Liquidamber	Large/Fast	WD	S/V/P	Large Lot
Liriodendron tulipifera	American Tulip Tree	Large/slow	WD	V/P	Large Lot
Magnolia grandiflora	Evergreen Magnolia	Large/Slow	EG	S/V/P	Large Lot
Malus sp	Crabapple cv	Med/Med	WD	P	Residential
Michelia figo	Port Wine Magnolia	Sml-Med/Med	EG	S/V/P	Residential
Nyssa sylvatica	Tupelo	Large/Slow	WD	V/P	Large Lot
Photinia glabra	Japanese Photinia	Medium/Medium	EG	V/P	Residential
Pittosporum eugenoidies	Pittosporum	Medium/Fast	EG	S/V/P	Residential
Platanus digitata	Cut Leaf Plane	Large	WD	V/P	Large Lot/Street Tree
Platanus orientalis	Oriental Plane Tree	Large'Medium	WD	V/P	Large Lot/ Street Tree
Plumeria sp	Frangipani var	Sml-Med/Med	WD	S/V	Residential
Populus deltoidies	Cottonwood	Large/Fast	WD	V/P	Large Lot
Populus simonii	Chinese Poplar	Large/Fast	WD	V/P	Large Lot/Street Tree
Populus yunnanensis	Yunnan Poplar	Large/Fast	WD	V/P	Large Lot/ Street Tree
Prunus lusitanica	Portugese Laurel	Med-Large/Med	EG	V/P	Residential
Pyrus sp	Flowering Pear cv	Med/Med	WD	P	Residential
Quercus coccinea	Scarlet Oak	Large/Slow	WD	V/P	Large Lot/ Street Tree
Quercus palustrus	Pin Oak	Large/Slow	WD	V/P	Large Lot/ Street Tree
Ulmus x hybrid	cv. 'Sapporo Gold'	Large/Med	WD	V/P	Large Lot/ Street Tree

Table 2: Australian Species

Botanical Name	Common Name	Scale /Growth R	Type	Area	Suitability
Alphitonia excelsa	Red Ash	Large/Fast	EG	S/V	Large Lot/Street Tree
Araucaria cunninghamia	Hoop Pine	Large/Med	EG	S/V/P	Landmark
Araucaria heterophylla	Norfolk Island Pine	Large/Med	EG	S/V/P	Landmark
Archontophoenix alexandrae	Alexandra Palm	Large/Med	EG	S/V	Large Lot
Archontophoenix cunninghamiana	Bangalow Palm	Med/Med	EG	S/V	Residential
Backhousia citriodora	Lemon Myrtle	Med/Med	EG	S/V	Residential
Backhousia myrtifolia	Myrtle	Med/Med	EG	S/V/P	Residential
Banksia integrifolia	Coast Banksia	Sml-Med/Fast	EG	S/V/P	Residential
Callistemon citrinus	Crimson Bottlebrush	Sml-Med/Med	EG	S/V/P	Residential
Callistemon salignus	Willow Bottlebrush	Sml-Med/Med	EG	S/V/P	Residential
Callistemon viminalis	Weeping Bottlebrush	Sml-Med/Med	EG	S/V/P	Residential
Callitris columellaris	White Cypress Pine	Sml-Med/Med	EG	S/V/P	Residential
Cupaniopsis anachrinoidies	Tuckeroo	Med-Lge/Med	EG	S/V	Residential
Elaeocarpus reticulatis	Blueberry Ash	Sml-Med/Med	EG	S/V	Residential
Eucalyptus sideroxylon	Red Ironbark	Large/Med	EG	S/V/P	Large Lot/Street Tree
Ficus macrophylla	Morton Bay Fig	Large/Med	EG	S/V	Large Lot/Landmark
Ficus microphylla v hillii	Hills Small Leaf Fig	Large/fast	EG	S/V	Large Lot/Landmark
Ficus rubiginosa	Port Jackson Fig	Large/Med	EG	S/V	Large Lot/Landmark
Flindersia australis	Native Teak	Large/Med	EG	S/V	Large Lot
Hymenosporum flavum	Native Frangipani	Sml-Med/Med	EG	S/V	Residential
Jagera pseudorhus	Foambark Tree	Sml-Med/Med	EG	S/V	Large Lot
Lophostemon confertus	Brush Box	Large/Med	EG	S/V	Large Lot
Melicope elleryana	Pink Euodia	Sml-Med/Med	EG	S/V	Residential
Podocarpus elatus	Plum Pine	Med-Lge/Med	EG	S/V/P	Large Lot
Syzigium anisata	Aniseed Myrtle	Med-Lge/Med	EG	S/V	Residential
Syzigium francisii	Giant Water Gum	Large/Slow	EG	S/V	Large Lot
Tristaniopsis laurina	Water Gum	Sml-Med/Med	EG	S/V	Residential
Waterhousia floribunda	Weeping Lilly Pilly	Large/Med	EG	S/V	Large Lot

Notes:
EG - Evergreen
WD - Winter deciduous
S - Seaboard
V - Valley
P - Plateau

Bellingen Shire Development Control Plan 2017

Chapter 10
On-site Sewage Management

Table of Contents

Table of Amendments

Amendment	Date Adopted	Date Commenced
Minor review of DCP - DCP 2017 replaces DCP 2010	22 November 2017	6 December 2017

10.1 Introduction

a) To ensure that adequate consideration is given to the ability of a particular site to dispose of the effluent generated by a particular development at the Development Application stage.

b) To confirm the key regulatory documents that will inform Council's assessment of site suitability and to reduce the duplication of regulatory controls.

c) To confirm the level of information needed for Council to make informed assessment of development applications that will ultimately involve the installation of new or revised on-site sewage management systems.

d) To prevent risks to public health and to protect waters and land resources from adverse impacts related to effluent treatment and disposal.

10.2 Where This Chapter Applies

The provisions of this chapter apply throughout all areas of Bellingen Shire, unless any site specific development controls included in this chapter, or in later chapters of this DCP nominate alternative requirements. In this case, the provisions of the site specific development controls shall prevail.

10.3 When This Chapter Applies

The provisions of this chapter apply when any application for development is received by Council that will involve the installation of a new or altered onsite sewage management facility. It does not apply in respect of development identified as complying or exempt development in an environmental planning instrument applying to the land.

10.4 Definitions

Definitions of development are the same as those contained within Bellingen Local Environmental Plan 2010, unless otherwise noted.

Domestic wastewater means wastewater originating from household or personal activities including water closets, urinals, kitchens, bathrooms (including shower, washbasins, bath, spa bath but not spa) and laundries. Includes such wastewater flows from facilities serving staff/employees/residents in institutional, commercial and industrial establishments, but excluding commercial and industrial wastes, large scale laundry activities and any stormwater flows.

Suitably Qualified Person means a person who is currently listed on the Bellingen Shire Council OSMS Designers Register.

10.5 Variations

Council may consider variations to the standards required of development in this chapter when the overall aims of this chapter and any specific aims that may be detailed for that particular standard can be achieved.

10.6 Development Criteria

10.6.1 Relevant regulatory documents

Council will have regard to design guidelines and standards contained within the following documents in making an ultimate assessment of site suitability for any proposed on-site sewage management system.

Environmental Health and Protection Guidelines – On-site Sewage Management for Single Households, *NSW Government* (1998) ISBN: 0 7310 9496 4

Australian/New Zealand Standard AS/NZS 1547:2012 On-site domestic wastewater management ISBN: 0 7337 3439 1

10.6.2 Development application requirements - single dwellings and ancillary structures

In order for Council to make an informed assessment of the suitability of a dwelling site for On-site Sewage Management, the following information must be submitted to Council as part of the Development Application process.

a) A detailed site plan identifying the location of all components of the proposed On-site Sewage Management System (OSMS). The site plan must also show the location of all of the following features on the site:

- The distance of the OSMS to any waterway as defined by the BLEP 2010,
- The slope of the land in the vicinity of the OSMS,
- The location of the proposed dwelling and ancillary structures,
- Existing vegetation in the vicinity of the OSMS,
- Any geological features such as rocky outcrops, and
- A reserve effluent management area.

b) An investigation of soil characteristics in the proposed location for the OSMS, carried out in accordance with the provisions of AS/NZS 1547:2012.

c) The required information need not be submitted by a suitably qualified person, provided that the level of detail is sufficient to inform Council's consideration of the Development Application.

d) Upon consideration of the required information, Council may proceed with making a determination of the application or may determine that additional information is required to properly determine whether the site is suitable for the development as proposed.

10.6.3 Development application requirements – all other development types

This section applies to any development type that will generate domestic wastewater, including subdivision of land for residential purposes.

In order for Council to make an informed assessment of the suitability of a site for On-site Sewage Management, a comprehensive report from a suitably qualified person must be submitted to Council as part of the Development Application process. The report must;

a) Reference all relevant components of the documents detailed in Section 10.6.1 of this chapter,

b) Demonstrate that the site is suitable for the proposed development in terms of its wastewater generating qualities,

c) Nominate a suitable OSMS having regard to the development and site characteristics, and

d) Demonstrate that there is sufficient reserve area for effluent disposal.

Bellingen Shire Development Control Plan 2017

Chapter 11
Advertising & Notification of Development Applications - Deleted

Table of Amendments

Amendment	Date Adopted	Date Commenced
1 - Minor review of DCP - DCP 2017 replaces DCP 2010	22 November 2017	6 December 2017
2 - Amendment to DCP 2017 to remove Chapter 11 – Advertising & Notification of Development Applications Note: The Bellingen Shire Community Participation Plan was adopted by Council on 27 November 2019 and commenced operation upon 28 November 2019 when it was uploaded to the NSW Planning Portal. The Community Participation Plan supersedes Chapter 11 in terms of the advertising & notification of Development Applications in Bellingen Shire.	27 November 2019	5 December 2019

Bellingen Shire Development Control Plan 2017

Chapter 12
Stormwater

Table of Contents

Table of Amendments

Amendment	Date Adopted	Date Commenced
Minor review of DCP - DCP 2017 replaces DCP 2010	22 November 2017	6 December 2017

12.1 Aims

a) To maintain the high ecological, recreational and agricultural values of waterways.

b) To ensure stormwater systems are carefully planned, designed and located to prevent the disturbance, redirection, reshaping or modification of watercourses and associated vegetation and to protect the quality of receiving waters

c) To ensure that stormwater harvesting (source controls) measures are implemented to maximise stormwater reuse and prevent increases in the quantity of stormwater discharge from the development site which can impact on downstream environments.

d) To ensure that any stormwater facilities installed on Council property are appropriate having regard to Council's ongoing ability to manage and maintain those facilities.

12.2 Where This Chapter Applies

The provisions of this chapter apply throughout all areas of Bellingen Shire unless any site specific development controls included in this chapter, or in other chapters of this DCP nominate alternative requirements. In this case, the provisions of the site specific development controls shall prevail.

12.3 When This Chapter Applies

The provisions of this chapter apply when any application for a development described in Table 12.1 is received by Council.

It does not apply in respect of development identified as complying or exempt development in an environmental planning instrument applying to the land.

Where the provisions of any environmental planning instrument conflict with those contained within this DCP, the provisions of the environmental planning instrument shall prevail.

12.4 Definitions

Annual Exceedance Probability (AEP): The probability that a given storm or flood event will be exceeded in any one year. An Average Recurrence Interval (ARI) may be calculated as the inverse of the AEP.

Integrated Watercycle Management (IWM): IWM is a philosophy of design for water supply and disposal systems which aims to minimise negative ecological effects and improve the sustainability of the overall water system. IWM includes consideration and integration of the design of stormwater conveyance and treatment systems, potable and non-potable water supply, wastewater treatment and disposal/re-use and waterway health.

Water Sensitive Urban Design (WSUD): WSUD is an alternative to the traditional conveyance approach to stormwater management. WSUD is a philosophy which aims to mitigate environmental impacts particularly on water quantity, water quality and receiving waterways, conventionally associated with urbanisation.

Stormwater: Water arising as a result of rainfall falling over a specific catchment.

Stormwater Management Plan: A report, usually submitted at Development Application stage, detailing the major stormwater conveyance and treatment systems, and demonstrating compliance with Council's stormwater treatment criteria and including all assumptions and design parameters as used in any modelling. The report should also identify the maintenance responsibility for each stormwater treatment device.

Stormwater Treatment Device: A structure designed and constructed to treat stormwater in some manner so that its post treatment characteristics differ from its pre-treatment characteristics. Examples of stormwater treatment devices are rain water tanks, infiltration basins, bioretention basins and gross pollutant traps.

12.5 Variations

1) In general, Council may consider variations to the standards required of development in this chapter when the overall aims of this chapter and any specific aims that may be detailed for that particular standard can be achieved.

2) Variations may also be considered in the following specific instances.

   i. Where Council excludes an area or type of development from full or partial compliance with this Plan on the basis of an alternative integrated water cycle management strategy or specific site characteristics appropriate to the particular circumstances applying to that land, as identified in a Schedule attached to this Plan; or

   ii. Where a masterplan has been endorsed by Council, or the Minister under SEPP 71, which adopts an integrated water cycle management plan for that land; or

   iii. Where Council is of the view that any variation is minor and that the aims of this Chapter are met.

12.6 Criteria for Compliance

Council requires that all development be designed to minimise the impact of stormwater on the natural and built environment and employ water sensitive urban design and integrated water cycle management techniques where possible.

12.6.1 Water quality

1) Council has three minimum levels of water quality treatment that are considered appropriate for different types of development. The three levels of treatment and their requirements are outlined in this section.

Table **12.1** shows the required level of treatment for particular types of development.

Table 12.1. Stormwater quality treatment levels for development types

Development Type	Treatment Required		
	Level 1	Level 2	Level 3
Individual dwellings, dual occupancy, alterations, additions, sheds or development increasing impervious areas in any non-rural zonings	✓		
Residential or large lot residential subdivision involving a new public or community title road			✓
Multiple dwelling development - 2 extra dwellings to 5 extra dwellings (excluding dual occupancy)		✓	
Multiple dwelling development - more than 5 extra dwellings			✓
New Commercial or industrial development			✓
Alterations or additions to commercial or industrial development/buildings resulting in increase of less than 50% in impervious area.		✓	
Alterations or additions to commercial or industrial development/buildings resulting in increase of 50% or more in impervious area.			✓
Non domestic rural development	Discuss with Council. Dependent upon scale of development, amount of impervious area and sensitivity of receiving environment.		

Level 1 – No mandatory stormwater requirements

There are no mandatory stormwater quality controls applying to Level 1 developments. Council may, in certain instances, require the installation of stormwater quality controls should the individual circumstances of the development warrant such controls.

Level 2– Deemed to comply solution

Level 2 developments are required to install stormwater capture and treatment/reuse or infiltration controls with a storage volume of a minimum of $2m^3$ per $100m^2$ of impervious area.

Controls are to be installed within the lot boundary of the benefitting lot and identified and protected on the title plan for the property through the s88b instrument. Suitable controls are:

- Roof water tanks,
- Formed void absorption trench,
- Gravel filled absorption trench, and
- Rain gardens or bio-retention systems.

In the event that building works will impact on the stormwater control device, Council may allow deferment of the installation of the stormwater control devices to after building is complete. In this case, the device must be installed prior to the issue of Final Occupation Certificate.

Water quality treatment features must not be shared by multiple properties unless subdivisions are designed to have common areas (eg: common property as part of a Strata Plan, Community lot as part of a Community Title subdivision) and the shared water quality features are located within the common property.

Level 3 – Performance based solution

Level 3 developments are required to develop a Stormwater Management Plan that demonstrates compliance with either Option A or Option B below, depending upon which option provides the greatest level of treatment, as demonstrated through the use of computer based water quality modelling.

For either option, where Council or an appointed expert deems the receiving water for a development to be sensitive to wetting and drying cycles, Council may require the developer to demonstrate that the existing wetting and drying regime of the receiving water is maintained for up to, and including, the 12 month recurrence interval rainfall event.

Option A

No net increase in the average annual pollutant load of stormwater entering the stormwater systems and receiving waters, above that occurring under pre-development conditions based on the following indicators:

- Total Suspended Solids
- Total Phosphorus Load
- Total Nitrogen Load
- Gross Pollutant Load

Option B

Demonstrate compliance with the following minimum treatment criteria:

- 90% reduction in Total Suspended Solids
- 65% reduction in Total Phosphorus
- 45% reduction in Total Nitrogen
- 90% reduction in Average Annual Gross Pollutant load (>5mm)

12.6.2 Water quantity

Peak Discharge

1) For any development falling within Level 2 or Level 3 of Table 1 of the water quality guidelines (with the exception of large lot residential or rural subdivision) the applicant must demonstrate, through the use of hydrologic and hydraulic modelling software and submission of a Stormwater

Management Plan, that adequate stormwater controls (such as detention basins/tanks) have been installed to ensure that the development does not create any increase in peak discharges at the downstream property boundary for the 100%, 20%, 10% and 1% Annual Exceedance Probability storm event.

2) Any habitable dwelling must be a minimum of 500mm above the 1% AEP peak water level within any major drainage structure.

Conveyance

3) Council adopts the major/minor approach for conveyance of stormwater in accordance with Australian Rainfall and Runoff: A guide to flood estimation, 2016 (ARR). Any subdivision of land resulting in greater than 2 lots must demonstrate through design calculations and drawings in accordance with ARR that adequate provision has been made to convey the peak discharge for up to and including the 1% Annual Exceedance Probability storm including allowance for pit blockage.

12.6.3 Demonstration of compliance

1) Demonstration of compliance with Level 3 requirements for water quality, or the requirements for control of water quantity must be by a qualified and practicing Civil or Environmental Engineer with qualifications suitable for admission to Engineers Australia and who is actively practicing in the field of stormwater design. Demonstration of compliance must be in the form of a Stormwater Management Plan.

2) All modelling parameters, assumptions, calculations and/or output files must be submitted as part of the development documentation

12.6.4 Assets to be dedicated to Council

Where Stormwater Controls are to be situated on Council Land and/or are to be ultimately maintained by Council, the developer must:

1) Prepare and submit to the satisfaction of the Manager of Asset Management and Design , a Stormwater Device Maintenance and Management Plan which gives a description of each device, it's function and outlines the frequencies and types of maintenance to be undertaken for the stormwater device;

2) Undertake maintenance in accordance with the Stormwater Device Maintenance and Management Plan for no less than 24 months from the date of issue of the subdivision certificate, at no cost to Council;

3) At completion of the maintenance period, ensure that the device is functioning as intended with all landscaping in good order and take action to remedy any defects; and

4) At completion of the maintenance period produce a verified maintenance costing from the preceding 24 months as well as an estimated annual maintenance costs for the future maintenance of the stormwater treatment device.

Note: Only Level 3 treatment systems will be considered for acceptance by Council.

12.6.5 Erosion and sediment control

1) Erosion and Sediment Control Measures for the construction and site stabilisation phases of Level 1 developments must be provided as necessary in accordance with the provisions of Landcom's brochure entitled "Planning for Erosion and Sediment Control on Single Residential Allotments" (2004).

2) Erosion and Sediment Control Plans that cover the extent of the construction and site stabilisation phases of Level 2 and 3 developments must be prepared in accordance with the provisions of the following publication:

3) Managing Urban Stormwater: Soils and Construction – Volume 1,4th Edition (reprinted July 2006) *Landcom.*

Bellingen Shire Development Control Plan 2017

Chapter 13
Universal Housing

Table of Contents

Table of Amendments

Amendment	Date Adopted	Date Commenced
Minor review of DCP - DCP 2017 replaces DCP 2010	22 November 2017	6 December 2017

13.1 Aims

a) To recognise changes in housing needs over time and to plan for the future housing needs of the people of Bellingen Shire.

b) To increase the supply of universal housing in the Bellingen Shire.

c) To promote ageing in place by extending the usability of dwellings to meet ‘”whole of life” needs of the community.

13.2 Where This Chapter Applies

The provisions of this chapter apply throughout the Bellingen Shire.

13.3 When This Chapter Applies

The provisions of this Chapter apply when a development application for a new attached dwelling, dual occupancy, dwelling houses, multi-dwelling housing, residential flat building, secondary dwelling, semi-detached dwelling and shop top housing development is received by Council.

13.4 Variations

Council may consider variations to the standards required of development in this chapter when documentation is submitted that demonstrates that:

a) The overall aims of this chapter can be achieved, and

b) The performance statement for the particular design element in the Livable Housing Australia’s Livable Housing Design Guidelines (2012) can be achieved.

13.5 Development Criteria

13.5.1 Development application requirements

Full compliance with the criteria specified in this Chapter must be demonstrated at the development application stage.

13.5.2 Universal housing requirements

1) All new attached dwelling, ground floor dual occupancy (attached), dual occupancy (detached), dwelling house, multi-dwelling housing, ground floor secondary dwelling and semi-detached dwelling developments must be designed and constructed so that each dwelling meets the **Silver Level** requirements of Livable Housing Australia’s *Livable Housing Design Guidelines (2012).* This will involve incorporating the following seven core design elements into each dwelling as further detailed in the *Livable Housing Design Guidelines (2012)*:

   i) A safe and continuous and step free path of travel from the street entrance and/ or parking area to a dwelling entrance that is level,

   ii) At least one, level (step-free) entrance into the dwelling,

   iii) Internal doors and corridors that facilitate comfortable and unimpeded movement between spaces,

   iv) A toilet on the ground floor (or entry) level that provides easy access,

v) A bathroom that contains a hobless (step-free) shower recess,

vi) Reinforced walls around the toilet, shower and bath to support the safe installation of grab rails at a later date, and

vii) A continuous handrail on one side of any stairway where there is a rise of more than 1 metre.

2) Provision 1) of Section 13.5.2 a) does not apply:

i) where the average slope of the ground where the path would feature is steeper than 1:14 **unless** the garage is incorporated into the dwelling design, or

ii) in circumstances where the land is flood prone and Chapter 8 of DCP 2017 requires that the finished floor level of the dwelling is constructed at 0.3 metres or more above ground level **unless** the garage is incorporated into the dwelling design.

3) 20% of all new multi-dwelling housing, residential flat building and shop top housing developments that involve the construction of 5 or more dwellings must be designed and constructed to meet the **Gold Level** requirements of Livable Housing Australia's *Livable Housing Design Guidelines (2012).* This will involve incorporating the previously described seven core design elements into each dwelling as well as provision for more generous dimensions for most of the core livable housing elements and additional design elements in areas such as the kitchen and bathroom.

Note: When the calculation for the numbers of dwellings required to be constructed to meet the Gold level requirements results in a fraction less than 0.5, the number may be rounded down to the next whole number.

13.5.3 Certification requirements

Formal certification of compliance with the specified performance level of the Livable Housing Design Guidelines (2012) undertaken by an accredited LHA Design Guideline Assessor must be provided to Council prior to issue of the final occupation certificate.

Bellingen Shire Development Control Plan 2017

Chapter 14
Site Waste Minimisation & Management

Table of Contents

Table of Amendments

Amendment	Date Adopted	Date Commenced
Minor review of DCP - DCP 2017 replaces DCP 2010	22 November 2017	6 December 2017

14.1. Aims

The aims of this chapter are to:

a) Facilitate sustainable waste management in a manner consistent with the principles of Ecologically Sustainable Development.

b) Minimise waste generated as part of the construction process and ensure its legal disposal.

c) Effectively manage, store and legally dispose of waste generated in the ongoing operation of a development.

14.2. Where This Chapter Applies

The provisions of this chapter apply throughout all areas of Bellingen Shire, unless any site specific development controls included in this chapter, or in later chapters of this DCP nominate alternative requirements. In this case, the provisions of the site specific development controls shall prevail

14.3. When This Chapter Applies

The provisions of this Chapter shall apply when Development Consent is required for any of the following:

a) Demolition of buildings or structures,

b) Construction of buildings or structures,

c) Commercial and Industrial developments, and

d) Changes of Use

14.4. Variations

Council may approve variations to the provisions herein in accordance with the principles of merit-based assessment.

Any request for variation to the provisions must be in writing and comprise part of the application. The request shall clearly demonstrate that:

a) The aims of the DCP are met, and

b) Compliance with the standard is unreasonable or unnecessary in the circumstances of the case.

14.5. Definitions

Definitions of terms used within this chapter are the same as those contained within Bellingen Local Environmental Plan 2010. Additional terms not defined in BLEP 2010 are included below.

Multiple dwelling construction means any Development Application that proposes, or would result in, the erection of more than one dwelling on a parcel of land.

Site Waste Minimisation & Management Plan (SWMMP) is a plan that outlines measures to minimise and manage waste generated during demolition, construction or by the ongoing operations of a site or premises.

In doing so, the SWMMP nominates:

a) Volume and type of waste and recyclables to be generated,

b) Storage and treatment of waste and recyclables on site,

c) Disposal of residual waste and recyclables, and

d) Operational procedures for ongoing waste management once the development is complete.

The SWMMP highlights the method of recycling or disposal and the waste management service provider.

Note: Appendices to this chapter provide templates for the compilation of a SWMMP.

14.6. Assessment Criteria

14.6.1 Site waste minimisation & management plan (SWMMP)

All applications for development must be accompanied by a SWMMP.

The prescribed format for a SWMMP for;

- ***Demolition*** is attached as Appendix 14.1
- ***Construction of Single Dwelling Houses, Secondary Dwellings and Alterations / Additions*** is attached as Appendix 14.2.
- ***Construction & Ongoing Operation of all other Residential Accommodation, Mixed use developments, Commercial Premises & Industries*** is attached as Appendix 14.3.
- ***Changes of use requiring development consent*** is attached as Appendix 14.4.

Note:

- Potential opportunities for re-use or recycling of demolition materials are documented in Appendix 14.5.
- Indicative Waste & Recycling Generation rates for both Construction Waste and Ongoing operation are documented in Appendix 14.6.

14.6.2 Retention of evidence regarding disposal of waste

Construction and Demolition

Written evidence of records demonstrating lawful disposal of waste shall be retained and kept readily accessible for possible inspection by relevant regulatory authorities. Volumes of lawful waste disposal shall generally reconcile with relevant estimated volumes of waste documented in the SWMMP.

Note: An example of a Tax Invoice that would demonstrate lawful disposal of waste at an EPA licensed facility is included as Appendix 14.7.

Ongoing operation

Where estimated waste generation documented in the SWMMP is demonstrated as capable of being disposed of through the normal operation of Council's Kerbside Collection System and an ongoing Waste Charge is levied and paid, no further information will be required.

Where estimated waste generation documented in the SWMMP is not demonstrated as capable of being disposed of through the normal operation of Council's Kerbside Collection System or the operators elect to dispose of waste via alternative means, written evidence of a valid contract with a licensed waste contractor for the regular collection and disposal of waste and recyclables generated on site must be retained and kept readily accessible for possible inspection by relevant regulatory authorities.

14.6.3 Design features to facilitate effective waste minimisation and management

Aims

a) To provide for the nuisance free storage and collection of waste from the site.

b) To facilitate effective waste minimisation and recycling

Multiple dwelling construction

Having regard to the number of dwellings, the layout of the development and the length of the property frontage, a proposed method for garbage collection from the site must be detailed in the development application. This may involve the use of a standard residential service for each dwelling (i.e.: 3 x 240 litre bins) or the communal use of bulk bins for the overall facility (i.e.: 1100 litre bins). The following criteria shall inform the selected method/s for garbage removal;

1) On street collection of garbage bins shall not be permitted where the width of the total number of bins to be placed in a single row for collection would exceed the frontage of the site.

2) Areas used for the collective storage of garbage bins must be located so as to minimise adverse impacts on occupants and adjoining residents relating to noise and odour. Collective storage areas must be suitably screened from view from public places and other habitable areas, covered, bunded and drained to the Council sewer (with stormwater prevented from draining to this point), and constructed from materials that integrate with the design for the overall development. Where communal storage areas are provided, they shall be designed in accordance with Appendix 14.8 – Waste Recycling Storage Rooms in Multi-Unit dwellings).

3) Any proposal for garbage collection vehicles to enter private land to collect garbage shall not be permitted unless:
   - Adequate on site turning area is provided for the design collection vehicle,
   - The pavement in areas utilised by the collection vehicle is strengthened to account for the increased loading of the vehicle,
   - There is adequate vertical and horizontal clearance for the collection arm to deposit waste into the collection vehicle,

- The onsite manoeuvering and collection areas do not conflict with any required on-site parking spaces, and
- Confirmation has been received from the service provider that they will enter the site for garbage collection purposes prior to determination of the development application

4) Developments shall be designed so that residents do not need to wheel garbage bins for a distance greater than 50 metres from the storage area to the collection point. Grades shall not be excessive so as to allow for the wheeling of bins by the typical resident. Note: The Better Practice Guide for Waste Management in Multi-Unit Dwellings (DECC, 2008) recommends a maximum grade of 1:14.

5) Residential flat buildings must provide communal waste / recycling storage facilities designed generally in accordance with The Better Practice Guide for Waste Management in Multi-Unit Dwellings (DECC, 2008).

6) For multi storey developments with 10 or more dwellings, a dedicated room / caged area is to be provided to store non-recyclable bulky items which are awaiting removal.

Commercial premises, industries, mixed use developments and changes of use

1) Every development must include a designated waste storage area and recycling room/s. These must be generally in accordance with the NSW EPA's "Better Practice Guidelines for Commercial and Industrial Facilities (2012)".

2) There must be convenient access from each tenancy and/or waste producing area to the required waste/ recycling storage areas or room/s.

3) Industrial developments should also specify designated storage areas for likely industrial waste streams, designed in accordance with specific waste laws / protocols.

APPENDICES

APPENDIX 14.1 - Site Waste Minimisation And Management Plan Template - Demolition

Applicant Details	
Name	
Address	
Phone Number	
Email	
Project Details	
Address of development	
Existing buildings & other structures currently on the site	
Description of proposed development	
This development achieves the waste objectives set out in the DCP. The details on this form are the provisions and intentions for minimising waste related to this project. All records demonstrating lawful disposal of waste will be retained and kept readily accessible for inspection by regulatory authorities such as Council, DECC or Work Cover NSW.	
Name	
Signature	
Date	

Objectives Regarding Demolition Waste

- Optimise adaptive reuse opportunities of existing building / structures
- Maximise reuse & recycling of materials
- Minimise waste generation
- Ensure appropriate storage & collection of waste
- Minimise environmental impacts associated with waste management
- Avoid illegal dumping
- Promote improved project management

	Most favourable ←		Least favourable	
	Reuse	**Recycling**	**Disposal**	
Type of waste generated	**Estimate volume (m3) or weight (t)**	**Estimate volume (m3) or weight (t)**	**Estimate volume (m3) or weight (t)**	**Specify method of on site reuse, contractor and recycling outlet and / or waste depot to be used**
Excavation material				
Timber (specify)				
Concrete				
Bricks / pavers				
Tiles				
Metal (specify)				
Glass				
Furniture				

Fixtures & fittings				
Floor coverings				
Packaging (used pallets, pallet wrap)				
Garden organics				
Containers (cans, plastic, glass)				
Paper / cardboard				
Residual waste				
Hazardous/special waste eg: asbestos (specify)				
Other (specify)				

Plans & Drawings required with applications	**Tick where provided**
Size & location(s) of waste storage area(s)	
Access for waste collection vehicles	
Types & numbers of storage bins likely to be required	
Signage required to facilitate correct use of storage facilities	

APPENDIX 14.2 - Site waste minimisation and management plan template – construction of single dwelling houses, secondary dwellings and alterations / additions

Applicant Details	
Name	
Address	
Phone Number	
Email	
Project Details	
Address of development	
Existing buildings & other structures currently on the site	
Description of proposed development	
This development achieves the waste objectives set out in the DCP. The details on this form are the provisions and intentions for minimising waste related to this project. All records demonstrating lawful disposal of waste will be retained and kept readily accessible for inspection by regulatory authorities such as Council, DECC or Work Cover NSW.	
Name	
Signature	
Date	

Objectives Regarding Construction

- Maximise reuse & recycling of materials
- Minimise waste generation
- Ensure appropriate storage & collection of waste
- Minimise environmental impacts associated with waste management
- Avoid illegal dumping

	Most favourable ←		Least favourable	
	Reuse	**Recycling**	**Disposal**	
Type of waste generated	**Estimate volume (m3) or weight (t)**	**Estimate volume (m3) or weight (t)**	**Estimate volume (m3) or weight (t)**	**Specify method of on site reuse, contractor and recycling outlet and / or waste depot to be used**
Excavation material				
Timber (specify)				
Concrete				
Bricks				
Tiles				
Metal (specify)				

Glass				
Plasterboard (off cuts)				
Fixtures & fittings				
Floor coverings				
Packaging (used pallets, pallet wrap)				
Garden organics				
Containers (cans, plastic, glass)				
Paper / cardboard				
Residual waste				
Hazardous/special waste eg: asbestos (specify)				

Construction Design

Outline how measures for waste avoidance have been incorporated into the design, material purchasing and construction techniques of the development.
Eg:

- Estimate volumes of materials to be used and incorporate these volumes into a purchasing policy so that correct quantities are purchased (See **Appendix 14.6 Waste/Recycling Generation Rates** for a guide.
- Incorporate use of prefabricated components and recycled materials
- Identify potential reuse / recycling opportunities for excess construction materials
- Consider organising to return excess materials to supplier or manufacturer
- Arrange for delivery of materials 'as needed' to prevent degradation of materials trough weathering & moisture damage.

Plans & Drawings for <u>construction process only</u> required with applications	**Tick where provided**
Size & location(s) of waste storage area(s)	
Access for waste collection vehicles	
Types & numbers of storage bins likely to be required	
Signage required to facilitate correct use of storage facilities	

APPENDIX 14.3 - Site waste minimisation and management plan template – construction and ongoing operations of all other residential accommodation, mixed use developments, commercial premises and industries

Applicant Details	
Name	
Address	
Phone Number	
Email	
Project Details	
Address of development	
Existing buildings & other structures currently on the site	
Description of proposed development	
This development achieves the waste objectives set out in the DCP. The details on this form are the provisions and intentions for minimizing waste related to this project. All records demonstrating lawful disposal of waste will be retained and kept readily accessible for inspection by regulatory authorities such as Council, DECC or Work Cover NSW.	
Name	
Signature	
Date	

Objectives Regarding Construction

- Optimise adaptive reuse opportunities of existing building / structures
- Maximise reuse & recycling of materials
- Minimise waste generation
- Ensure appropriate storage & collection of waste
- Minimise environmental impacts associated with waste management
- Avoid illegal dumping
- Promote improved project management

Most favourable ← Least favourable				
	Reuse	**Recycling**	**Disposal**	
Type of waste generated	**Estimate volume (m3) or weight (t)**	**Estimate volume (m3) or weight (t)**	**Estimate volume (m3) or weight (t)**	**Specify method of on site reuse, contractor and recycling outlet and / or waste depot to be used**
Excavation material				
Timber (specify)				
Concrete				
Bricks / pavers				
Tiles				

Metal (specify)				
Glass				
Furniture				
Fixtures & fittings				
Floor coverings				
Packaging (used pallets, pallet wrap)				
Garden organics				
Containers (cans, plastic, glass)				
Paper / cardboard				
Residual waste				
Hazardous/special waste eg: asbestos (specify)				
Other (specify)				

Ongoing Operation – show the total volume of waste expected to be generated by the development and the associated waste storage requirements

	Recyclables		***Organics***	***Residual waste****	***Other***
	Paper, cardboard	***Metals plastic glass***			
Amount generated (l per unit per day)					
Amount generated (l per development per week)					
Any reduction due to compacting equipment					
Frequency of collections (per week)					
Number & size of storage bins required					
Floor area required for manoeuvrability (m2)					
Height required for manoeuvrability					

Construction Design

Outline how measures for waste avoidance have been incorporated into the design, material purchasing and construction techniques of the development.
Eg:

- Estimate volumes of materials to be used and incorporate these volumes into a purchasing policy so that correct quantities are purchased (See **Appendix 14.6 Waste/Recycling Generation Rates** for a guide.
- Incorporate use of prefabricated components and recycled materials
- Identify potential reuse / recycling opportunities for excess construction materials
- Consider organising to return excess materials to supplier or manufacturer
- Arrange for delivery of materials ‘as needed’ to prevent degradation of materials trough weathering & moisture damage.

Measures	
Plans & Drawings required with applications; Construction Details	**Tick where provided**
Size & location(s) of waste storage area(s)	
Access for waste collection vehicles	
Types & numbers of storage bins likely to be required	
Signage required to facilitate correct use of storage facilities	
Plans & Drawings required with applications; Ongoing Operation	**Tick where provided**
Space	
Size & location(s) of waste storage area(s)	
Recycling bins placed next to residual waste bins	
Space provided for access to and the manoeuvering of bins / equipment	
Any additional facilities	
Access	
Access route(s) to deposit waste in storage room	
Access route(s) to collect waste from storage room / area	
Bin carting grade	
Location of final collection point	
Clearance, geometric design and strength of internal access driveways and roads	
Direction of traffic flow for internal access driveways and roads	
Amenity	
Aesthetic design of waste storage areas	
Signage – type & location	
Construction details of storage rooms/area (including floor, walls, doors, ceiling design, sewer connection, lighting, ventilation, security, wash down provisions etc..)	

* Current “non-recyclables” waste generation rates typically include food waste that might be further separated for recycling.

APPENDIX 14.4 - Site waste minimisation and management plan template – change of use requiring development consent

Ongoing Operation – show the total volume of waste expected to be generated by the development and the associated waste storage requirements					
	Recyclables		***Organics***	***Residual waste****	***Other***
	Paper /cardboard	***Metals /plastic/ glass***			
Amount generated (l per unit per day)					
Amount generated (l per development per week)					
Any reduction due to compacting equipment					
Frequency of collections (per week)					
Number & size of storage bins required					
Floor area required for manoeuvrability (m2)					
Height required for manoeuvrability					

APPENDIX 14.5 – Examples of demolition materials and potential reuse/recycling opportunities

(based on the *Combined Sydney Regional Organisation of Councils Model DCP 1997)*

Material	**Reuse/recycling potential**
Concrete	Reused for filling, levelling or road base
Bricks & Pavers	Can be cleaned for reuse or rendered over or crushed for use in landscaping or driveways
Roof Tiles	Can be cleaned and reused or crushed for use in landscaping or driveways
Untreated timber	Reused as floorboards, fencing, furniture, mulched or sent to second hand timber supplies
Treated timber	Reused as formwork, bridging, blocking and propping, or sent to second hand timber suppliers
Doors, windows, fittings	Sent to second hand suppliers
Glass	Reused as glazing or aggregate for concrete production
Metals (fittings, appliances and wiring)	Removal for recycling
Synthetic rubber (carpet underlay)	Reprocessed for use in safety devices and speed humps
Significant trees	Relocated either onsite or offsite
Overburden	Power screened and used as topsoil
Garden waste	Mulched, composted
Carpet	Can be sent to recyclers or reused in landscaping
Plasterboard	Removal for recycling, return to supplier

APPENDIX 14.6 – Waste/Recycling generation rates

Construction Waste

'Rule of thumb' for renovations and small home building.

- Timber 5-7% of material ordered
- Plasterboard 5-20% of material ordered
- Concrete 3-5% of material ordered
- Bricks 5-10% of material ordered
- Tiles 2-5% of material ordered

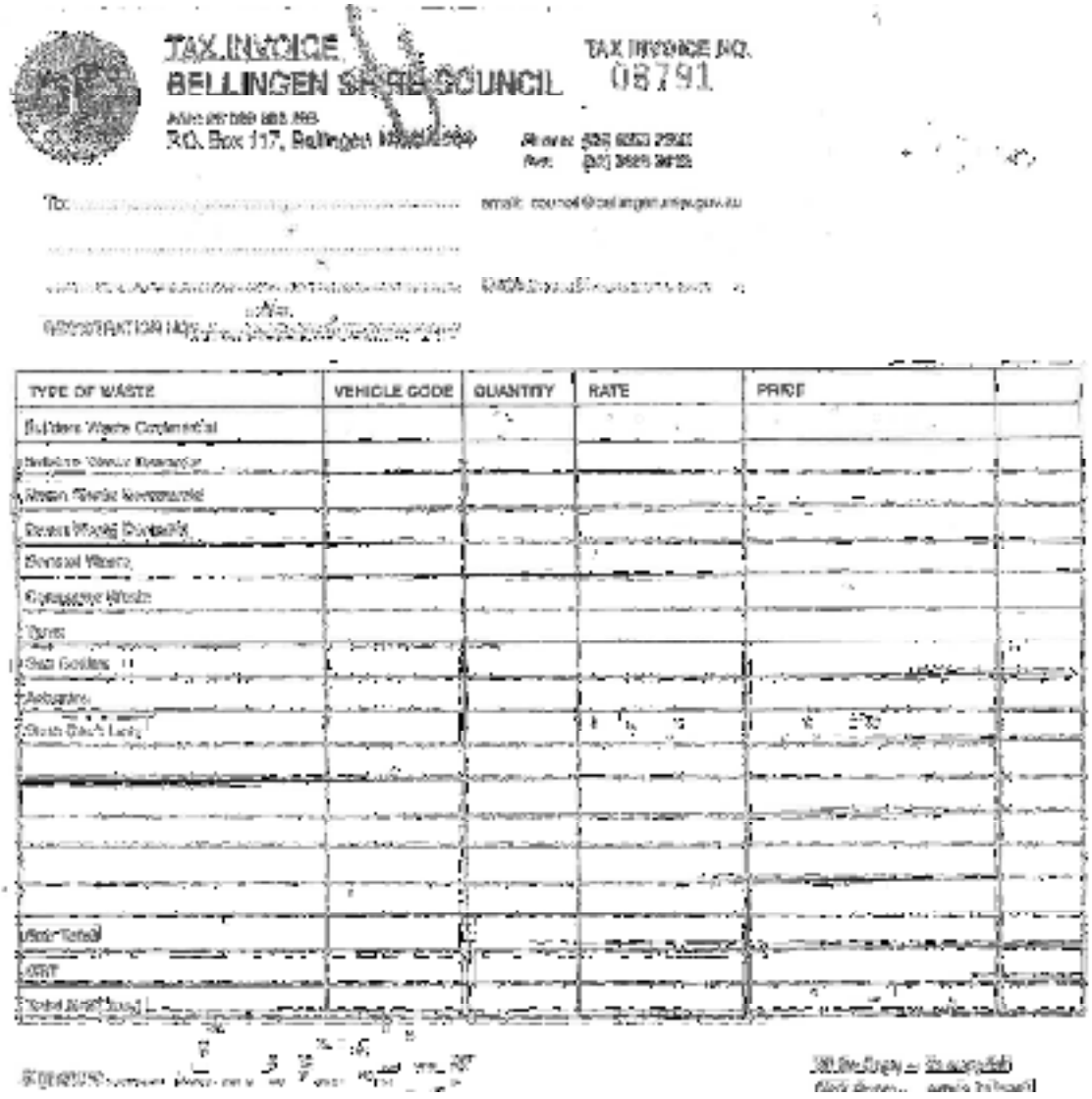
Source: *Waste Planning Guide for Development Applications, Inner Sydney Waste Board, 1998.*

Ongoing Operation Waste/Recycling Generation Rates

Premises type	Waste Generation	Recyclable material generation
Backpackers Hostel		
Boarding House, Guest House		
Food premises: Butcher Delicatessen Fish shop Greengrocer Restaurant, Café Supermarket Takeaway food shop	 80L/100m2 floor area/day 80L/100m2 floor area/day 80L/100m2 floor area/day 240L/100m2 floor area/day 10L/1.5m2 floor area/day 240L/100m2 floor area/day 80L/100m2 floor area/day	 Variable Variable Variable 120L/100m2 floor area/day 2L/1.5m2 floor area/day 240L/100m2 floor area/day Variable
Hairdresser, Beauty Salon	60L/100m2 floor area/week	Variable
Hotel, Licensed Club, Motel	5L/bed space/day 50L/100m2 bar area/day 10L/1.5m2 dining area/day	1L/bed space/day 50L/100m2 bar area/day 50L/100m2 dining area/day
Offices	10L/100m2 floor area/day	10L/100m2 floor area/day
Shop<100m2 floor area Shop>100m2 floor area	50L/100m2 floor area/day 50L/100m2 floor area/day	25L/100m2 floor area/day 50L/100m2 floor area/day
Showroom	40L/100m2 floor area/day	10L/100m2 floor area/day
Multi-Unit Dwellings	80L/unit/week	40L/unit/week

Source: Adapted from *Waverley Council Code for the Storage & Handling of Waste* & Appendix A of *Better Practice Guide For Waste Management in Multi-Unit Dwellings 2007*.

APPENDIX 14.7 – Example of tax invoice demonstrating lawful disposal of waste at a Council facility



TAX INVOICE
BELLINGEN SHIRE COUNCIL
TAX INVOICE NO. 08791
P.O. Box 117, Bellingen

To:

TYPE OF WASTE	VEHICLE CODE	QUANTITY	RATE	PRICE
Builders Waste Commercial				
Household Waste Commercial				
Green Waste Commercial				
Green Waste Domestic				
Special Waste				
Polystyrene Waste				
Tyres				
Skip Bin Hire				
Asbestos				
Waste Oil/Fuel Tank				
Total				
GST				
Total Amount Paid				

Bellingen Shire Development Control Plan 2017

Chapter 15
Heritage

Table of Contents

Table of Amendments

Amendment	Date Adopted	Date Commenced
Minor review of DCP - DCP 2017 replaces DCP 2010	22 November 2017	6 December 2017

15.1 Aims

The aims of this chapter are to:

a) To encourage the conservation of the environmental heritage of the area;

b) To establish the controls for development affecting places of heritage significance within Bellingen Shire;

c) To ensure that development related to heritage items and the conservation area is sympathetic to their heritage significance;

d) To prevent the undertaking of development that results in poor visual, vehicular and environmental outcomes which are not sympathetic with the heritage significance;

e) To ensure that conservation meets the design principles of the Burra Charter.

15.2 Where This Chapter Applies

This Chapter applies to heritage items and conservation areas, and to places within the vicinity of such items and areas, within Bellingen Local Government Area as identified in Schedule 5 (Environmental Heritage) of the Bellingen Local Environmental Plan 2010 (BLEP 2010).

This chapter may also apply to land that has not been formally identified as containing a heritage item, however nonetheless contains items of potential heritage value that are worthy of protection

15.3 When This Chapter Applies

This chapter applies when any Development Application is received by Council that proposes works to or in the vicinity of a heritage item or within a Conservation Area.

Note: Works that require development consent are specified in Clause 5.10(2) of BLEP 2010 and would generally include excavation, demolition, the removal of trees, the erection of a new structure, alterations or additions to a structure or the erection of structures that are normally ancillary to the use of the land such as sheds, detached garages or the like.

Note: Clause 5.10(3) of BLEP 2010 specifies that consent may not be required for certain minor works if confirmed in writing by Council. The Bellingen Shire Council “Heritage Listed Weeds Policy” provides one avenue for use of these provisions.

Note: State Environmental Planning Policy (Exempt & Complying Development Codes) 2008 may allow for certain works to occur without the need for development consent.

15.4 Variations

Council may consider variations to the standards required of development in this chapter when the overall aims of this chapter and any specific aims that may be detailed for that particular standard – such as the protection and enhancement of heritage significance, can be achieved.

15.5 How To Use This Chapter

This chapter is designed to ensure ease of use by applicants and consent authorities. The relevance of certain subsections to certain works is confirmed in the table below.

Subsection	Relevance
Subsection 15.7 – Design & Practice Principles	All works
Subsection 15.8 – Heritage Items - Development Objectives & Controls	Works affecting Heritage Items including those within the Conservation Area.
Subsection 15.9 – Development in the vicinity of heritage items and the Bellingen Conservation Area	Works in the vicinity of Heritage Items and the Bellingen Conservation Area
Subsection 15.10 - Development in the Bellingen Conservation Area	Works within the Bellingen Conservation Area (Including works affecting individually listed heritage items within the Bellingen Conservation Area)
Subsection 15.11 – Shire wide Conservation Issues	Works affecting items listed as cultural plantings, street trees, avenue plantings, windbreaks, Natural vegetation, remnant vegetation, scenic views, riverbank vegetation and the like.

15.6 Definitions

Definitions of terms used within this chapter are the same as those contained within Bellingen Local Environmental Plan 2010. Key terms used within this chapter, and extracted from BLEP 2010, are reprinted below and identified accordingly. Where relevant, additional definitions are included from the Australian ICOMOS Charter for the Conservation of Places of Cultural Significance 1999 (Burra Charter).

Adaptation means modifying a *place* to suit the existing *use* or a proposed use.

Burra Charter and its guidelines, means the charter adopted by Australia ICOMOS which establishes the nationally accepted principles and process for the conservation of places of cultural significance.

Compatible use means a *use* which respects the *cultural significance* of a *place*. Such a use involves no, or minimal, impact on cultural significance.

Conservation means all the processes of looking after a *place* so as to retain its *Cultural significance*.

Fabric means all the physical material of the *place* including components, fixtures, contents and objects.

Heritage conservation area means an area of land of heritage significance:

a) shown on the Heritage Map as a heritage conservation area, and

b) the location and nature of which is described in Schedule 5, and includes any heritage items situated on or within that area. **(BLEP 2010)**

Heritage conservation management plan means a document prepared in accordance with guidelines prepared by the Division of the Government Service responsible to the Minister administering the *Heritage Act 1977* that documents the heritage significance of an item, place or heritage conservation area and identifies conservation policies and management mechanisms that are appropriate to enable that significance to be retained. **(BLEP 2010)**

Heritage impact statement means a document consisting of:

a) statement demonstrating the heritage significance of a heritage item or heritage conservation area, and

b) an assessment of the impact that proposed development will have on that significance, and

c) proposals for measures to minimise that impact. **(BLEP 2010)**

Heritage item means a building, work, place, relic, tree, object or archaeological site the location and nature of which is described in Schedule 5. **(BLEP 2010)**

> **Note:** An inventory of heritage items is also available at the office of the Council.

Heritage management document means:

a) a heritage conservation management plan, or

b) a heritage impact statement, or

c) any other document that provides guidelines for the ongoing management and conservation of a heritage item, Aboriginal object, Aboriginal place of heritage significance or heritage conservation area. **(BLEP 2010)**

Heritage map means the Bellingen Local Environmental Plan 2010 Heritage Map. **(BLEP 2010)**

Heritage significance means historical, historical – association, scientific, cultural, social, archaeological, architectural – aesthetic or natural value. **(BLEP 2010)**

Maintenance means the continuous protective care of the *fabric* and *setting* of a *place*, and is to be distinguished from repair. Repair involves *restoration* or *reconstruction*.

Preservation means maintaining the *fabric* of a *place* in its existing state and retarding deterioration.

Reconstruction means returning a *place* to a known earlier state and is distinguished from *restoration* by the introduction of new material into the *fabric*.

Restoration means returning the existing *fabric* of a *place* to a known earlier state by removing accretions or by reassembling existing components without the introduction of new material.

State Heritage Inventory means the standard format established by the Heritage Division of the Office of Environment and Heritage for use by Councils in recording the details of properties, buildings and items having heritage significance. The copy of the Inventory held by Council reflects the results of the 1991 base Heritage Study (revised 2009).

Use means the functions of a place, as well as the activities and practices that may occur at the place.

15.7 Design and Practice Principles

The aim of this DCP is to retain the cultural significance of heritage items and conservation areas, their settings and curtilage. The following design and practice principles are to be observed, where relevant, for all development requiring consideration pursuant to this chapter.

15.7.1 Authenticity

Original fabric that contributes to the significance of a heritage place will:

1) Be retained in situ;

2) Be maintained in a sound and stable condition, however maintenance should not remove signs of wear and tear;

3) Be removed only when there is a firm proposal to restore or replace something in the same location or where specifically identified for removal

after a heritage assessment. Original fabric which is removed should be kept on site for future reference or possible reinstatement and must be adequately recorded before removal, in accordance with the Heritage Division Guidelines;

4) Be accurately reconstructed based on historic research of a particular building;

5) Not be fundamentally altered by new work.

Traditional materials and techniques such as lime mortar and timber should be used for the repair and alterations wherever possible, with modern materials such as steel used only where supported through good conservation and structural practice.

15.7.2 Streetscape

Development should be designed to minimise any effect on the heritage significance of the heritage item or the conservation area and ensure that the significant character is maintained. The design of new buildings and structures should complement the existing streetscape.

Development should be consistent with the heritage themes of the streetscape. The following components of a streetscape are to be considered to ensure development complements the character and heritage significance of established streetscapes:

a) front setback;

b) materials, colours and textures;

c) roof form and pitch;

d) scale, height and proportion of buildings;

e) landscaping and garden treatment;

f) spaces between buildings;

g) façade treatment, verandahs and window placement;

h) height and design of fences;

i) placement and design of garages, carports and driveways;

j) existing street trees; and

k) balance between solid walls and openings.

Where a new building or an extension to an existing building is proposed in a street which is predominantly single storey, the proposal should also be single storey. Where the land is sloping, split levels will be considered. In some instances, the utilisation of roof space for a second storey will be considered where it can be satisfactorily accommodated.

Driveway treatments for new development should be similar to that which is characteristic of the streetscape.

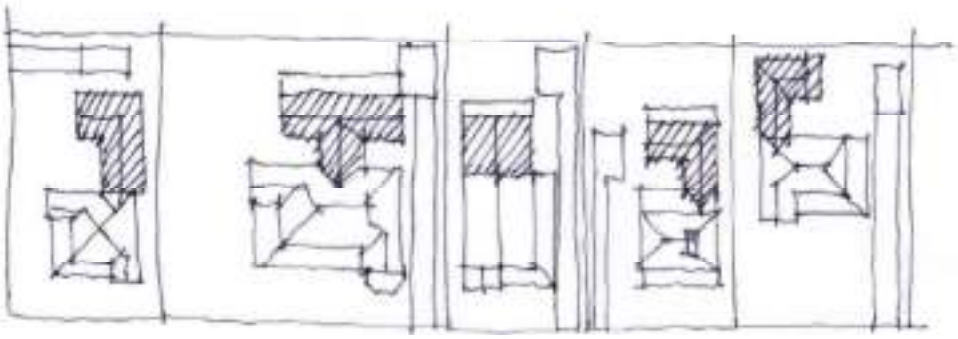


Figure 15.1: Extensions to existing buildings are best placed to the rear using linked pavilions, skillions and sympathetic formal construction.

15.7.3 Infill

New development, including new buildings and landscaping should respond to the significant patterns and significant character of the Conservation Area and sites adjoining heritage items and contributory items.

Character and Style
New development should reflect the character and style of adjacent and surrounding significant development to achieve visual continuity and harmony.

Scale
New development should be designed to reflect the scale of adjacent and surrounding significant development in terms of height, size and proportions to ensure that new buildings do not dominate significant buildings and items.

The average height in the street should therefore be used to determine height limits.

Form and Massing
New development should identify and reflect the predominant form and massing of existing development within the streetscape in particular significant heritage items.

Close attention should be paid to the shape, pitch and form of the roof. A traditional roof pitch is typically 35 degrees. Consideration should be given to the siting in terms of ridge or parapet lines and patterns such as the size and shape of openings, chimneys, verandahs and other architectural elements.

Setback and Orientation
New development should be a sympathetic addition to the streetscape in terms of setback and orientation. New buildings should not be orientated within sites contrary to the established alignment patterns.

Where there is no identifiable setback pattern, new buildings should be setback at the same distance from the street as the adjoining properties or achieve a transitional setback between the two properties on either side. This principle can also be applied to the rear of infill development and additions to the rear of existing properties.

Details

New development should reflect the characteristic materials, colours, details and decorations used locally and in surrounding development. Materials and details of existing development should not be copied.

Modern materials can be used if their proportions and details match and colour and tonal contrast can be used as unifying elements.

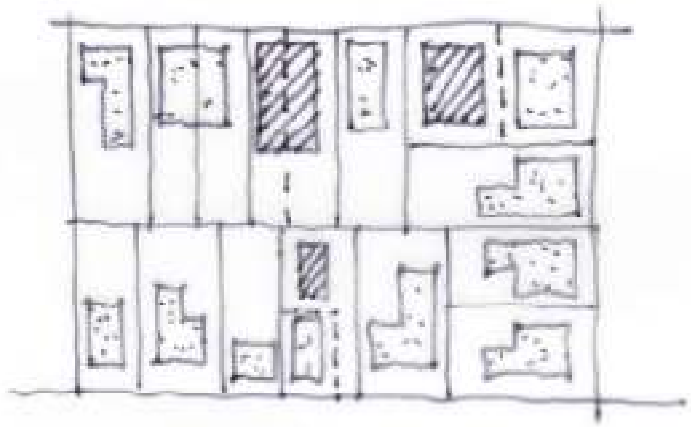


Figure 15.2: New buildings as infill and also as part of a subdivision should respect the scale and character of the streetscape.

15.7.4 Reconstruction

For heritage items, reconstruction should be based on accurate historic information to allow accurate replication of details for heritage items.

For non-heritage items, reconstruction should be based on typical details of the period of the original construction; however the preference is for the accurate replication of details specific to that building. When work is reconstructed, the work should be clearly distinguished from the original. This may be achieved through minor alterations in details plus the stamping, engraving or marking the construction date in a sympathetic location.

15.8 Heritage Items Development Objectives & Controls

Heritage items have been identified in Heritage Studies across the Bellingen Shire as places that should be retained and conserved for future generations. The heritage significance of these places should be respected and understood when designing future development. In many cases, the significance of heritage items will be established in the relevant copy of the Heritage Inventory. The following controls assist in designing changes in the form of alterations and additions to places with heritage significance.

15.8.1 Setting

Setting is the area around a heritage item that contributes to its heritage significance and may include the visual catchment of a heritage item which is external to the site. Topography, trees, gardens, fencing and pavement may all contribute to the setting of a heritage item. Where a heritage item has aesthetic significance as a landmark, it is particularly important that new development does not obscure its visual presence in the streetscape and/or townscape.

Objectives

a) To provide an appropriate visual setting for heritage items, including landscaping, fencing and car parking.

b) To ensure that new development respects the contribution of a heritage item to the streetscape and/or townscape.

Controls

1) Elements with heritage significance that contribute to the setting of a heritage item such as landscaping, fences, driveways, retaining structures, earthworks, seawalls etc. are to be conserved.

2) Additions, alterations and new structures are located so that they do not impact on the setting of the heritage item.

3) Cut and fill or other works that change the land form around the heritage item shall be avoided.

15.8.2 Siting, orientation and setbacks

Objectives

a) To ensure that the qualities of streetscapes and townscapes are not eroded by new development,

b) New development should respond to the established development patterns such as subdivision layout, setbacks, and spaces between buildings.

c) Development should not obscure existing views to or from heritage buildings nor inhibit their appreciation.

d) Site amalgamation is discouraged where the original subdivision pattern is intact.

e) Development should respect and utilise the topography of the area.

Controls

1) New development should be aligned to the predominant building line and should be sited in a similar location to development that exists on neighbouring properties.

2) Either maintain the existing street setback or increase the setback to reinforce the principal street setback of adjoining principal buildings.

3) Ensure the quality and quantity of street front garden landscaping is not eroded or degraded.

4) Where development is part of a row, group or pair, setbacks should match those of the adjacent buildings.

5) Otherwise, setbacks shall not be altered unless it can be demonstrated that the change in setback will represent an equal or greater contribution to the character of the area.

6) Façade alignments should not be stepped or curved in plan without precedent.

7) Locate new garages/carports behind the front building alignment of existing dwellings

15.8.3 Scale

Scale is the size of a building and its relationship with the surrounding buildings and landscape. It is important that new development at places with heritage significance respects the scale of the existing buildings and/or landscape elements that contribute to the significance of the place.

Objective

a) To ensure that additions to a heritage item and new buildings on the site of a heritage item are of a scale consistent with the heritage item.

Controls

1) Alterations and additions to a heritage item should not be larger in scale than the heritage item

2) Development of a larger scale than the heritage item is allowable only if it can be demonstrated that the new development will not detract from the aesthetic significance and important views to and from the heritage item.

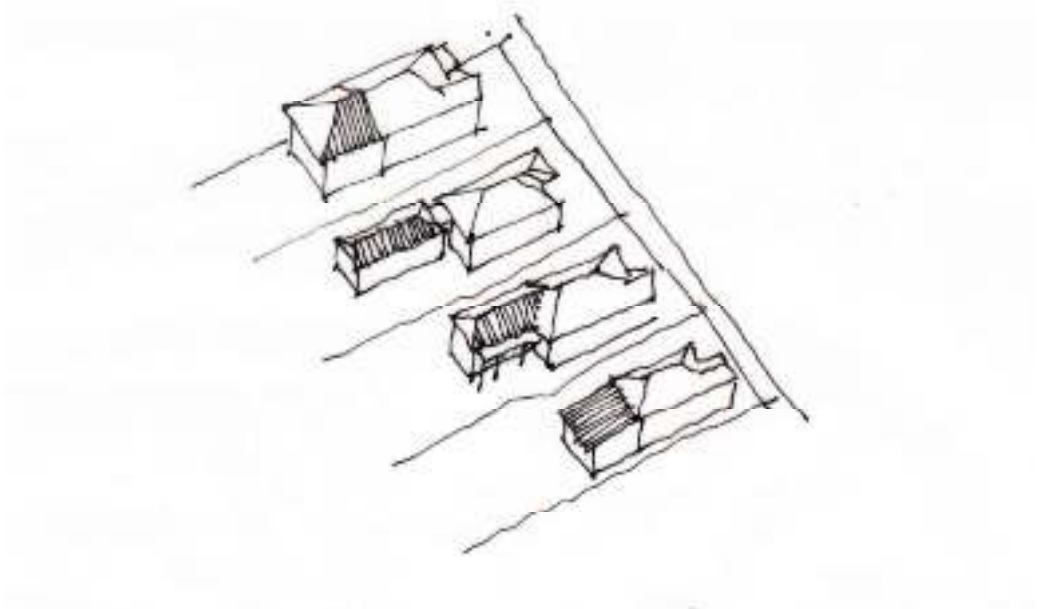


Figure 15.3: Additions and extension to traditional structures generally take one of the three types and respect the scale of the existing building.

15.8.4 Form

The form of a building is its overall shape and volume and arrangement of its parts. The rooflines of buildings and elements such as chimneys, parapets, walls and verandahs etc. are often significant elements within the form of a heritage item.

Objectives

a) To ensure that significant elements of the form of a heritage item are not obscured or destroyed by alterations and additions.

b) To ensure that the form of a heritage item retains its importance in the streetscape and/or townscape.

Controls

1) Significant elements of the form of a heritage item such as roof forms, chimneys, walls, verandahs and parapets etc. should not be demolished or obscured by alterations and additions.

2) Verandahs on the front and side elevations of a heritage item should not be filled or enclosed.

3) Additions and alterations to a heritage item should not detract from important aspects of the form of the heritage item.

15.8.5 Building Design

Objectives

a) To ensure that alterations and additions to a significant building relate to the architectural qualities of the existing building and/or structure.

b) To ensure that changes to the building as a result of an adaptive reuse can be interpreted in the future as belonging to the relevant historical period/s.

c) To retain both original and significant building structure and fabric.

Controls

1) Additions and alterations to a building as the result of an adaptive reuse should be designed to respect the original architectural qualities of the building/structure such as form, façade articulation, patterns of fenestration, parapet and wall profiles, roofs, details, verandahs, materials and colour schemes.

2) Facade retention in the form of a wall only, will not be permitted.

3) Significant internal elements such as original or historically or aesthetically important fabric including fireplaces, ceilings, staircases and distinctive joinery should be retained.

4) New work required for the adaptive reuse should be sympathetic with the significance but capable of being interpreted and distinguished from the retained works.

5) Fire engineered solutions should be sought to allow for the retention of original structure and fabric that would otherwise not meet relevant 'deemed to comply' requirements of the Building Code of Australia.

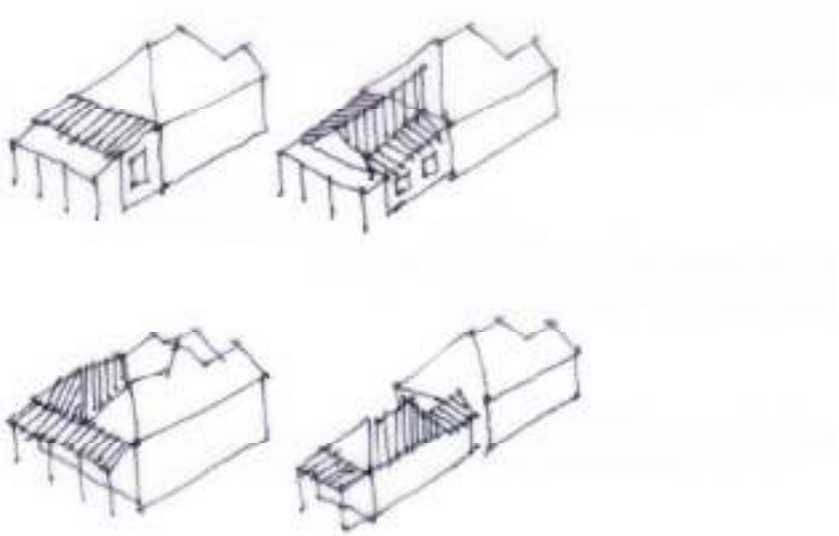


Figure 15.4: Reflecting the character of traditional building should include interpreting without replication, typical design characteristics and details.

15.8.6 Adaptive reuse

Adaptive reuse of heritage buildings is a change where a new use is introduced as the building is no longer suitable for the original function. It is desirable both for environmental sustainability and heritage conservation. Typical examples include redundant Churches, Industrial sites and rural structures adapted to provide dwellings.

All buildings have 'embodied energy' defined as the energy that is consumed during the processes of sourcing materials, delivering them to site and construction process.

Reusing heritage buildings allows the retention of history for future generations through the retention of significance and the adaptation of elements of the site and structure to allow for a new use.

Adaptive reuse of a heritage building should:

a) only occur where the original use is no longer viable. A range of tests may be requested in considering viability including building costs, property values, engineering and architectural design;

b) retain all significant fabric of heritage listed buildings. If significant fabric is unavoidably removed it will be stored on site for possible future reinstatement;

c) retain the general appearance of the building such that its original role can be readily interpreted.

Objectives

a) To encourage the adaptive reuse of buildings and structures which are no longer suitable for their original uses.

b) To ensure that adaptive reuse respects the significance of the place.

c) To ensure that the impacts of the changes on heritage significant elements is minimized.

Controls

Adaptive reuse and the associated changes to the site and building:

1) should retain the significant architectural qualities of the building and structure and particularly features that contribute to the streetscape and townscape.

2) should involve minimal change to the significant fabric of the place

3) should respect significant associations and meaning of the place

4) must be readily reversible and should not compromise the inherent flexibility of the place and its potential for other uses;

5) must be designed so as to be sympathetic to the character of the existing significant building, though should reflect the specific layout and requirements of their use rather than arbitrarily replicate historic forms;

6) where incorporating additions, plant and equipment or services which are required to facilitate adaptive reuse, should be concealed from view within the broader streetscape.

15.8.7 Demolition

Demolition of any heritage listed building requires Development Consent from Council.

Demolition of a heritage item is unlikely to be permitted unless it can be demonstrated that the item is not reasonably capable of repair. Specifically, demolition of any building is unlikely to be permitted unless:

a) the item is intrusive to the overall significance of the area; or

b) the item is structurally unsound beyond the point of repair and represents a public danger; or

c) there is a concurrent Development Consent for the replacement structure, except where demolition is proposed on the basis that the item is structurally unsound.

Where a heritage item or building is proposed to be demolished, a Heritage Impact Statement should justify why this is the preferred action after the consideration of options for retention. The Statement should include historical information on the property, an assessment of the quality and physical condition of the building (clearly outlining any alterations which have occurred over time and whether these contribute or detract from the building's significance) and a comparative analysis of the building in relation to others of its kind in the Shire. The recommendations of the report should be based on the heritage significance of the item, not on the development potential of the land it is situated on.

Council will consider not only the external appearance and condition of the structure but will weigh up the heritage significance of the property, its contribution to the history and identity of the street and setting, its rarity and its importance to Bellingen Shire as a whole.

If approval is granted for the demolition of a heritage item, the applicant will be requested to provide an archival recording with measured drawings and

photographs of the item for Council's records, in accordance with the NSW Heritage Office Guidelines.

Objectives

a) To retain heritage buildings and structures or elements which contribute to the significance of the item.

b) To retain a valuable and useful record of places where consent is provided by council for demolition.

Controls

1) Buildings that are listed as heritage items or contribute to the significance of an item should not be demolished.

2) Partial demolition of a heritage item will only be permitted when it can be established in a Statement of Heritage Impact that the loss will not have a substantial impact on the significance of the heritage item.

3) Outbuildings associated with heritage items can only be demolished where a Statement of Heritage Impact can establish that the structure does not contribute to the significance of the heritage item.

15.8.8 Subdivision

Land associated with a heritage building is often important in providing a setting to a heritage item. The grounds of a heritage item can often ensure that important views to and from a heritage building are available. Subdivision is permitted where an adequate curtilage can be established to protect the setting.

If a property to be subdivided has been identified as a heritage item, the following Design Principles need to be observed:

a) the integrity of the original main building and its surrounds should be conserved by ensuring an adequate curtilage is retained;

b) on rural properties this curtilage should include any front landscaped areas or tree-lined driveways;

c) original outbuildings on rural properties should be considered as should any site of possible archaeological interest; and

d) any important views to and from the remaining original complex should be conserved.

Objectives

a) To ensure that subdivision of heritage items does not result in a loss of appropriate curtilage to the heritage item.

b) To ensure that subdivision of heritage items does not result in development that would obscure important views to and from the heritage item.

Controls

1) Subdivision of an allotment that includes a heritage item is unlikely to be permitted unless it can be demonstrated, in a Heritage Impact Statement, that an adequate curtilage for the heritage item is retained.

2) Subdivision of land that includes a heritage item is unlikely to be permitted unless it can be demonstrated in a Statement of Heritage Impact that proposed or future development on the created allotments will not impact on important views to and from the heritage item.

3) Subdivision will be required to demonstrate, through the use of indicative building envelopes that development of buildings and landscaping will not impose constraints such as fire protection or other measures which could detract from the heritage significance.

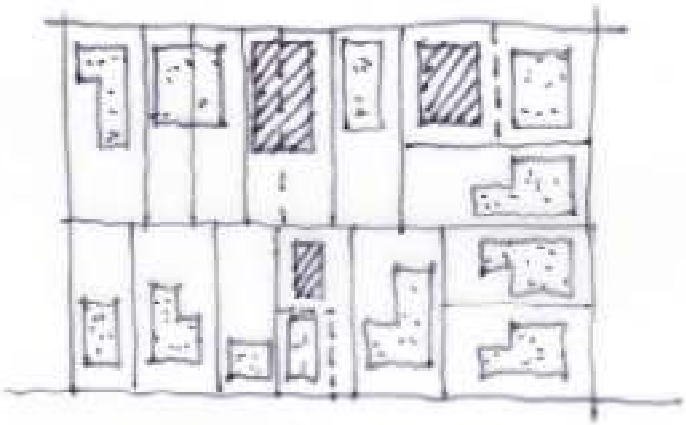


Figure 15.5: Length ways subdivisions reflect traditional lots and forms and dividing large corner lots makes good use of a site while rear lot subdivision requires careful use of access handles and good building design.

15.8.9 Materials and Colours

The selection of materials and colours is important to the aesthetic qualities of heritage items. Development that includes changing roofing materials, re-finishing brickwork, rendering or painting brick and stone, over-cladding timber and brick walls and the use of textured finishes without relevant historic precedent can degrade the historic significance of a heritage item.

Alterations and additions on the site of a heritage item should consider the original design and materials of the heritage item. While it is not always necessary to match the materials and colours of the original building, new materials and colours should be carefully selected to ensure that they complement the original building and that the historic elements continue to dominate the character.

Objectives

a) To ensure that original materials that contribute to the significance of heritage items are not obscured.

b) To ensure that paint colours on heritage items are consistent with the significance of the heritage item

c) To ensure that the external materials and colours on alterations and additions to heritage items relate well to the materials and colours of the heritage item

d) To ensure that external colours and associated signs and advertising do not detract from or visually dominate the heritage item and significance.

Controls

1) Original materials of heritage items should not be replaced with different materials, finish or materials of different colour.

2) Non-original materials of heritage items that are being replaced shall, if possible, be replaced with material that matches the original material or is sympathetic with the change being distinguished.

3) Painting, rendering, over-cladding or bagging of original face brickwork and stonework is not permitted.

4) The colour, detail and texture of original material should not be altered.

5) Materials for alterations and additions to heritage items should be sympathetic with the original materials of the heritage item.

6) Colour schemes for heritage items should have a hue and tonal relationship with traditional colour schemes for the period and style of the heritage item.

7) The use of fluorescent paint and bright primary colours on heritage items is not permitted.

8) The use of modern finishes including stenciled concrete for driveways associated with heritage items is not permitted

9) Corporate colours should be used in specific signs and advertising and not applied broadly to the building elevations.

15.8.10 Roof forms and materials

The roof form of a building is often its most prominent “public” feature, especially within the broader townscape, and will often largely conceal other less sympathetic aspects of the design. Typical roof forms within historic areas are:

a) hipped roofs for residential buildings, the older ones being higher pitched than the more recent hipped or gabled roofs for commercial buildings, with the gable often at the street frontage only;

b) gabled roofs for ancillary buildings like garages and sheds;

c) verandah roofs that are a direct extension of the main roof though at a lower pitch;

d) simplicity of overall form, usually having a consistent main ridge line and with few secondary projections;

e) forms with chimneys and fireplaces to living and kitchen areas.

Roofs are a dominant element in proportion with the other elements that make up the building, such as the base and walls, and it is important that the materials used are in style and character. Gable, barge, gutter, downpipe, finial and other details should be interpreted without replication.

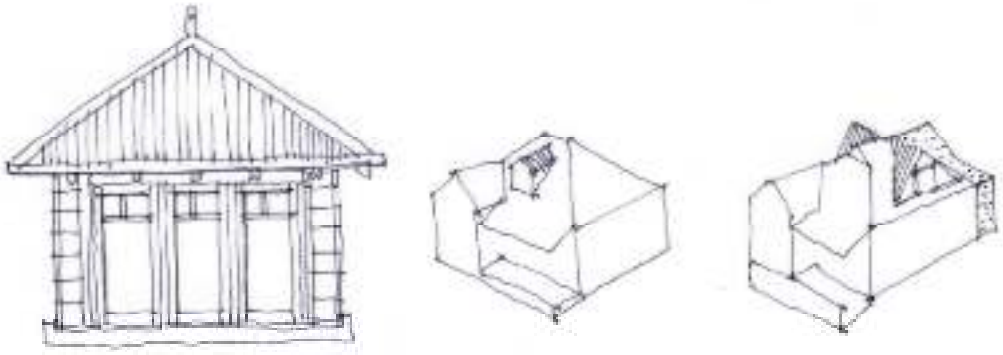


Figure 15.6: Roof extensions provide light and ventilation and use traditional details without overwhelming the scale and from of the main building.

Objectives

a) Roof extensions and alterations should complement the massing, form and materials of the roof form of the existing building.

b) Ensure that the form of the roof retains the importance within the streetscape and townscape.

c) Ensure that significant elements of the roof are not destroyed or obscured through unsympathetic alterations and additions.

d) To ensure that significant roof materials and details are conserved and new work is sympathetic.

Controls

1) Roofs must be in proportion and scale with the rest of the principal building and not overwhelm its architectural integrity.

2) Roofs must not dominate the elements that make up the principal building. They should have a simple overall form, with a consistent main ridge line and with few secondary projections.

3) Original roofing materials should be retained wherever possible. Second hand materials may be appropriate to repair damaged or broken tiles or slate. Where significant repairs are required, it is desirable to maintain the original presentation to the street. In these circumstances, good tiles or slates from near or side elevations of buildings should be transferred to the front elevation of the building. Corrugated, galvanized steel in a compatible colour can then be installed on the rear parts of the building.

4) Roofs must retain the details of the original roof such as gables and chimneys.

5) The retention of chimneys is essential on heritage items even if their function is no longer required.

6) Traditional roofing materials of the area must be used, such as corrugated galvanised custom orb steel roofing and associated elements including the appropriate gutter profile, downpipe and rolled flashings.

7) Rare details such as astragals, acroteria and spear points should be conserved and new work in the vicinity should be sympathetic.

8) Colorbond roofing and associated elements is acceptable when replacing previously painted steel roofing where the paint colour was original dating from the design and construction.

9) Zincalume is not an acceptable roofing material due to the bright reflective appearance which is not appropriate on heritage items.

10) Terra-cotta tiles in appropriate profiles relating to particular periods including the Federation and Inter-war periods may be acceptable on buildings from such periods or on infill and new buildings in the vicinity of such buildings.

11) The use of roof space is preferred to complete floor extensions which alter the overall design of the building.

12) Re-roofing on heritage items will only be acceptable where it is proven that the roofing materials are significantly deteriorated and beyond repair.

13) Roof extensions, alterations and extensions should not impact on the principal elevation of a heritage item.

14) Roof extensions and alterations on heritage items should relate to the form, pitch, eaves, ridge heights and materials of the original building.

15) The use of corrugated, galvanized steel in an unpainted finish or similar grey tones is the preferred roofing material for the replacement of corrugated iron.

16) Skylights, solar water heaters, solar panels, ventilators, heat exchangers, satellite dishes, antennae and other similar contemporary ancillary services should not be located on the principal elevation and roofs of heritage & contributory items or on areas of the items visible from the public domain. Refer to Section 15.8.18 for additional information.

17) Dormers and their windows should be contained within the existing roof plane, below the ridge line and, generally, be of a traditional design and proportion.

18) The insertion of a dormer may not be appropriate in a highly significant item.

19) The roof form for new residential development should:

    i. be consistent with the character of any adjacent heritage items and of the immediate streetscape (as defined by reference to at least two lots to either side);

    ii. be of simple overall form i.e. consistent main ridge line and with few secondary projections and without multiple steps in alignment;

    iii. be hipped between 30 and 35 degrees, with minimal use of projecting gables to the street.

iv. include a verandah roof (or awning for commercial properties) as an extension of the main roof, either at the same or a lower pitch.

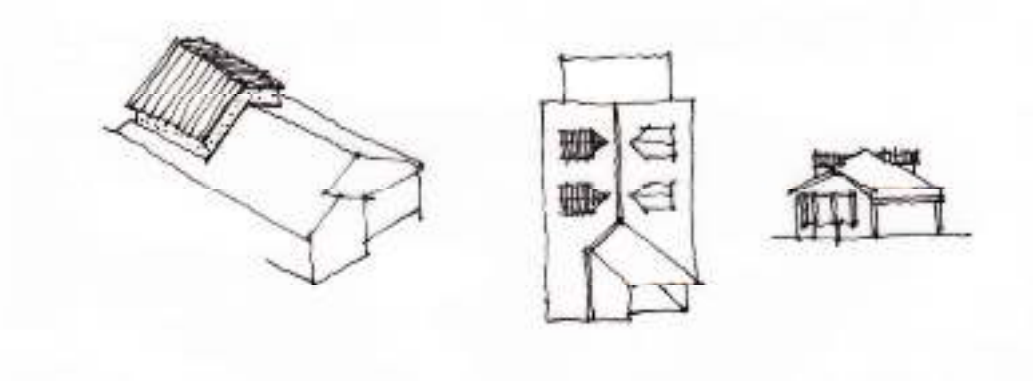


Figure 15.7: Roof extensions which provide additional space should be confined to the rear and not dominate the building form and streetscape while traditional dormers provide light and ventilation only.

15.8.11 Shopfronts and commercial premises

Retail and commercial buildings are generally built to the street boundary and have a strong orientation to the street, awnings over the footpath, corner splays, and access directly from street level. Facades have a consistent vertical expression that is articulated, often comprising recessed pedestrian entries in chamfered alcoves and display windows. Similarly, entries to the residential component of mixed-use buildings tend to be recessed.

Commercial buildings included both lightweight timber framed weatherboard clad structures and masonry buildings clad in face brickwork with rendered detail. Many are now painted. They include parapets with concealed sloping metal roofs behind, and awnings over the footpaths. Some shops have pitched roofs corrugated metal cladding. Windows and doors were timber framed and have distinct proportions and rhythm, which are integral to the overall design of the building.

Some have distinguishing detailing, wall tiling, window bays or false balconies on the upper level.

Objective

a) Alterations and additions to existing commercial buildings should maintain their existing and/or historic style, while new commercial buildings should follow the basic pattern of development that characterises, maintains and enhances existing streetscapes.

Controls

Commercial buildings

1) As a general principle, commercial buildings should be constructed to the street alignment.

2) If, in Council's opinion, an existing setback makes a positive contribution to the streetscape then it shall be retained.

3) The front façade of buildings shall be orientated towards the street.

4) Corner buildings should ‘turn’ the corner with their main point of entry either on the corner itself or on street to which it fronts Road.

5) Facade alignments should not be stepped or curved in plan. An exception to this requirement is that ground-floor shopfronts that follow the traditional pattern of a stepped-in entrance between window bays are encouraged.

6) Original characteristic architectural elements are to be retained. Alterations to these elements or the use of materials or Architectural styles which detract from this character will not be permitted.

7) The reinstatement of original characteristic architectural elements that have been removed is encouraged. Where a building is part of a ‘set’, other, more intact, buildings in that set can provide guidance as to appropriate reinstatement works.

8) Alterations and additions to buildings within a ‘set’ are not to diminish the coherency of that set.

9) Openings to verandahs and balconies of new developments are to be of small scale in relation to the facade of the building. Balcony and verandah railings and supports should not be a dominant feature. Metal railings, glazing and concrete supports are inconsistent with the character of the Conservation Area.

10) Retail/commercial buildings shall generally have awnings. The materials, height and architectural styling should match traditional adjacent awnings.

11) Retain existing awnings on all commercial buildings, encouraging their conservation and reconstruction of missing details where appropriate.

12) Awnings on all new buildings, or alterations and additions to existing buildings must avoid modern or pseudo-historic materials and details, such as aluminium lace, metal pipe framing or tightly rolled bull nosed iron.

13) Awnings on new buildings must correspond to the building by extending to adjacent awnings to provide continuous weather protection for pedestrians beneath.

14) Awnings should not run unbroken across adjacent buildings where they are clearly of different construction, even though they may now function as one.

15) New or reinstated awnings must be set back from the kerb by approximately 300-600mm, or otherwise as required by Council policy, to minimise the risk of damage by motor vehicles.

16) Where the base of posts has rotted, galvanised steel brackets or straps may be used to support the post, however these should be no more than 5-10cm high and clad in a skirting type profile. If the post has rotted beyond retention it should be replaced with one of a similar timber species, size and detailing to match.

17) Alterations and additions to existing buildings must be of an appropriate style and detail for the design of the building where the original awning is reconstructed.

18) New commercial buildings should include a traditional shopfront arrangement and provide for mobility access.

19) Cantilevered and suspended awnings must not be adapted with posts to imitate a traditional verandah.

20) Sun blinds as a traditional attachment and sign opportunity are encouraged in appropriate locations.

Facades should be detailed to provide texture, relief, and shadow.

21) The design of windows and doors in new development should be drawn from traditional characteristic door and window patterns.

22) Replacement windows and doors must match the original characteristic pattern and materials.

23) Roofs should be gabled, hipped or hidden from the street by parapets. Where there is no parapet, roof pitch shall be between 30 and 35 degrees or similar to the significant streetscape.

24) Retain and restore parapets to existing commercial buildings where they exist.

25) Packaged air conditioners and mechanical exhaust fans and grills shall not be placed on street facades or on any part of the building that can be seen from the street.

26) Storm and wastewater removal from buildings shall be discharged in accordance with Council requirements using materials and details typical of the period.

27) Skylights, solar heating panels, satellite dishes and other non-traditional elements are considered to be intrusive and should not be located where visible from the street and other public spaces.

28) Maintenance, reinstatement work and alterations and additions to existing buildings are to be of a material matching the original construction or contemporary equivalent acceptable to Council.

Shop-fronts

29) Original shop-fronts are to be retained.

30) Individual architectural features are not to be removed or obscured.

31) Restoration and reinstatement of original shop-fronts is encouraged.

32) Alterations to glazed area, fixed canopies, awnings, blinds or security screens are to maintain the narrow-fronted, vertical proportions of the building facades in the Conservation Area, heritage item or contributory item.

33) Shop-fronts or fascias of new development are not to extend across two or more separate buildings.

34) Security screens, where considered necessary, are to be placed behind the glass shop-front and should be in an architectural style and materials

sympathetic to the style of the building. Only open grill type security screens will be considered under exceptional circumstances.

35) Original shopfront glazing or tiling is not to be painted out or obscured.

36) Exposed vents, pipes and the like should not be visible from the street.

37) Alterations and additions to existing buildings should incorporate remnants of original shopfronts into new layouts.

38) New shopfronts should reflect the typical details and finishes which set the significant character of the streetscape.

39) Alterations and additions to existing buildings should retain non-typical shopfronts which indicate the former use of a place, unless there is sufficient historic information to allow accurate reconstruction of an earlier form.

40) The use of traditional dark coloured gloss ceramic tiles to the lower dado areas of shop fronts is encouraged.

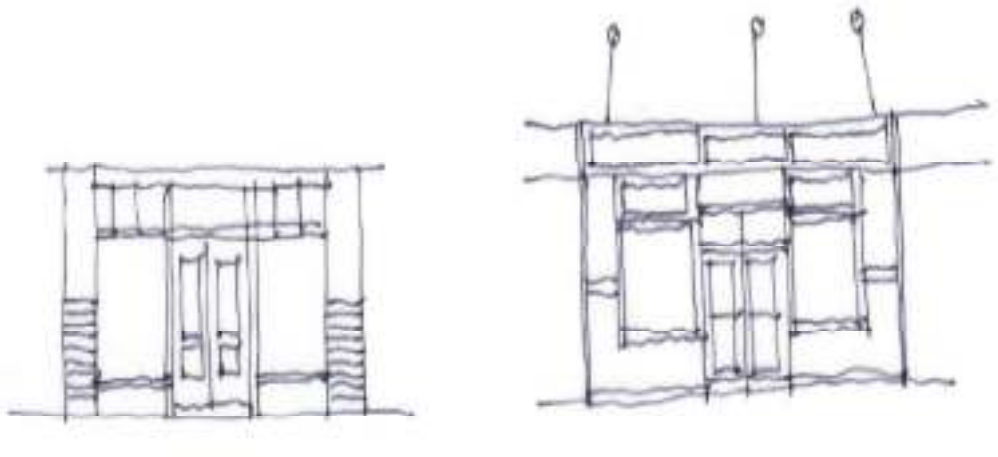


Figure 15.8: Traditional shopfronts have four key elements which should be retained while new work should interpret these items: Side walls, fine glazed windows, doors and hamper panels and sign.

15.8.12 Verandahs and Awnings

Verandahs are a typical feature of traditional Australian architecture and are important for their aesthetics, for control of sunlight and for providing outdoor living space. Suspended awnings and cantilevered awnings replaced many traditional verandahs although the facades were unsuited to the structural loadings and the façade designs. In many cases traditional verandahs may be reinstated in the appropriate circumstances. Suspended and cantilevered awnings were introduced during the Inter war period on new commercial and retail buildings as integrated design and amenity elements. Details of verandahs vary considerably with the age of the building, and the use of appropriate details, materials and proportions is crucial. The addition of an inappropriate verandah to a significant building will greatly reduce its heritage value.

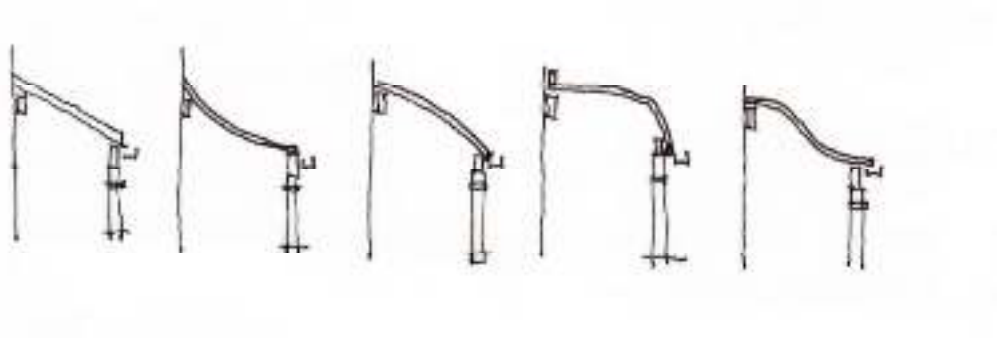


Figure 15.9: Traditional verandahs include the skillion, Concave, Convex, Bull nose and Ogee. New work should generally interpret the skillion type.

Objectives

a) Where there is a pattern of development that incorporates verandahs, new buildings should include a verandah or awning, to create an appropriate street frontage and to enhance the amenity of the premises.

b) Where there is evidence that a heritage item originally included a verandah or awning which was removed, then reinstatement based on photographic and physical evidence should be considered.

Controls

1) Original verandahs must be kept, including the retention of original details and materials.

2) When reinstating a traditional verandah or awning, traditional materials, finishes and details appropriate for the design and period should be adopted;

3) Suspended awnings should not be converted into verandahs through the addition of posts and decorative details.

4) All development within the heritage conservation area, including new buildings and alterations to the frontages of existing buildings must have a verandah to the street frontage and/or over the front door and stretch across the full width or at least the majority of the facade.

5) Framing for verandahs should include posts and beams that are in simple timber sections, have little if any ornamentation (though dressed timber stop chamfering is common and is appropriate for new houses) and must not include modern or pseudo- historic materials and details (such as aluminium lace, metal pipe framing or tightly rolled bull nosed iron).

6) Where required, balustrades should comprise simple timber details e.g. plain rails, pickets or criss-cross panels.

7) Verandah roofs for new developments:

   i. should preferably be a direct extension of the main roof, either at the same or a slightly lower pitch;

   ii. may include or be a separate skillion roof located below the main eaves where appropriate to the design and only where the eaves are high enough to accommodate it (about 3m internal ceiling height);

iii. may be a bullnosed roof but should only be used on new houses or commercial buildings where appropriate to the design. They must only be used where internal ceiling height is 3m and have a traditional profile with a moderate radius.

iv. For contemporary designs the use of suspended or cantilevered awnings may be acceptable subject to appropriate scale, materials and details.

Figure 15.10: A traditional verandah provides shade, weather protection and a well-placed sign

15.8.13 Doors and windows

The spacing, proportions and detailing of doors and windows of heritage items are a major contributing factor to their aesthetic significance. Changing doors and windows or adding new openings can dramatically affect the character of a heritage item.

Objectives

a) To retain original doors and windows that contribute to the aesthetic significance of a heritage item.

b) To reinstate missing details that contributed to the aesthetic significance of a heritage item.

c) To retain the proportions of walls and openings that contribute to the aesthetic quality of the heritage item

Controls

1) Original door and window openings in the important elevations of a heritage item should be retained.

2) Where original doors and windows in visually prominent elevations have been removed and/or replaced with inappropriate materials and designs, and new joinery is proposed, it should be similar to the original in design and material.

New door and window openings in prominent elevations must be:

3) Sensitively located to retain the original relationship of solid and void; and

4) Of proportions, materials and details similar to existing doors and window openings.

5) New dormer windows should be located on the rear roof of the building and the design based on traditional local examples. The scale, details and proportions need to be sympathetic with the original design of the building.

6) Extensive glass areas will only be permitted in the visually prominent elevations where they were a feature of the original design of the building.

7) Roof lights will only be permitted in roofs not visible from the public realm.

15.8.14 Interiors

While formal heritage listing of places has typically only assessed the exterior, it is now recognised that the interior in many properties is often just as important to the significance of a place.

Interiors can change frequently with different decorative schemes reflecting changing fashions and different room layouts reflecting changing patterns of occupation. Thus, an interior decoration scheme will often be of a much younger period than the actual building, but that does not necessarily mean it is of lesser significance.

Despite changing decorative schemes including modified kitchens and bathrooms, many properties retain significant elements including fireplaces, ceilings, joinery and timber floors.

Objectives

a) It is important to recognise that the interiors of heritage listed buildings are often an integral part of the heritage significance of the item, or may be significant in their own right, and their conservation, restoration and integration should be supported.

b) In many but not all cases, the Heritage Inventory may describe significant elements and should be used a reference document in addition to material available from the Museum, private collections and newspaper records.

Controls

1) Internal alterations should relate to the external design of the building, particularly floor levels and window openings.

2) Where possible:

   i. relatively intact decorative schemes (e.g. wallpapers, paint, curtains, floor coverings etc.) from a given period should be preserved.

   ii. care must be taken to address structural problems, such as rising damp, cracked walls or leaking roofs, in order to preserve existing schemes and to minimise disturbance caused by those works.

   iii. the reconstruction of an earlier decorative scheme is only appropriate where the existing scheme has little or no significance, and where there is sufficient historic evidence to allow for authentic reconstruction of all elements of the scheme.

iv. Significant items of joinery, cabinetry or other built-in furniture which are associated with past uses of a heritage listed building (e.g. shop counters) should be retained within their original space, but may be adapted for a new use as appropriate. If removed, these items must be appropriately stored for later restoration.

v. Prior to making changes, a record should be made of the existing interior scheme, which may include photographs, reference to standard paint colours, and samples of materials.

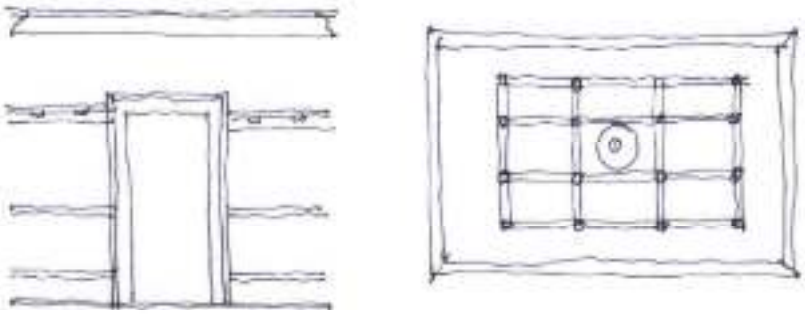


Figure 15.10:: Key traditional internal details may include high skirtings, a dado rail or plaster detail, a picture rail and bold cornice while ceilings may include panels and central pendant lights

15.8.15 Carparking

Vehicles, garages and carports can have a detrimental effect on the aesthetic significance of a heritage item as they generally obscure views to and from the prominent elevations. The structures change the pattern of the streetscape while the scale, proportions and materials of contemporary structures are unsympathetic with traditional materials and associated elements.

Objective

a) To ensure that garages and carports are designed to minimize the detrimental impact on visually prominent elevations and the streetscape.

Controls

1) Garages and carports are to be located as far behind the front building line as possible.

2) Garages should generally be freestanding and not connected to the main building.

3) Where a new garage or carport adjoins a verandah, the front of the new structure is to be located entirely behind the verandah.

4) Garages will generally not be permitted in the front setback of a property;

5) On sloping sites, garages may be incorporated into a retaining wall so as to reduce the visual impact of the structure on the streetscape.

6) Controls specified in this chapter are to be considered in conjunction with general controls on garage location contained within Chapter 1 of

Bellingen Shire Development Control Plan 2010. In the event of any inconsistency, heritage specific provisions should prevail.

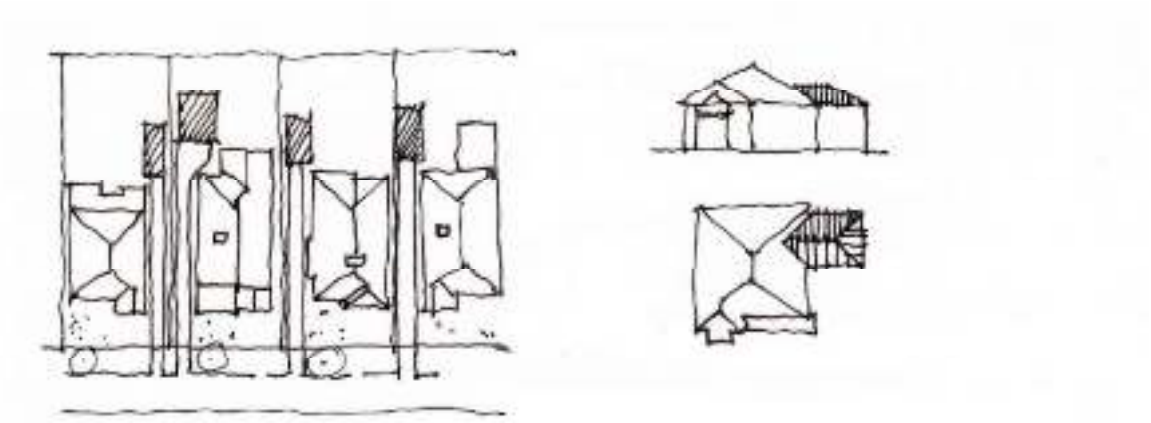


Figure 15.11: Garages are best placed to the rear of a dwelling as an ancillary building like a traditional shed while side car ports should be sympathetic in scale and detail.

15.8.16 Fences and gates

Front fencing establishes the setting of a heritage item within the streetscape. Side fencing can be visually prominent from the public realm and in views within the site of the heritage item. The style and materials of gates and fences should be sympathetic with the style and period of the structure.

Objectives

a) To conserve gates and fences that are significant and appropriate for the heritage item.

b) To ensure that new gates and fences are sympathetic with the significance of the heritage item.

c) To ensure that the aesthetic significance of the heritage item is not diminished by new inappropriate gates and fencing

Controls

1) Fencing and gates that are appropriate for the significance of a heritage item should be retained.

2) New fencing and gates should be of a style, scale and in materials that are consistent with the significance of the heritage item.

3) Unless documentary or physical evidence is produced to establish a greater height, fencing forward of the building line constructed of masonry should not be greater than 900mm in height above the footpath.

4) Unless documentary or physical evidence is produced to establish a greater height, fencing forward of the building line constructed of timber palings and pickets, metal palisade or wrought iron or some combination, should not be greater than 1200mm in height above the footpath.

5) Original or appropriate face brick, stone or rendered feature masonry should not be removed or painted unless previously painted.

6) Controls specified in this chapter are to be considered in conjunction with general controls on fencing contained within Chapter 1 of Bellingen Shire Development Control Plan 2010. In the event of any inconsistency, heritage specific provisions should prevail.

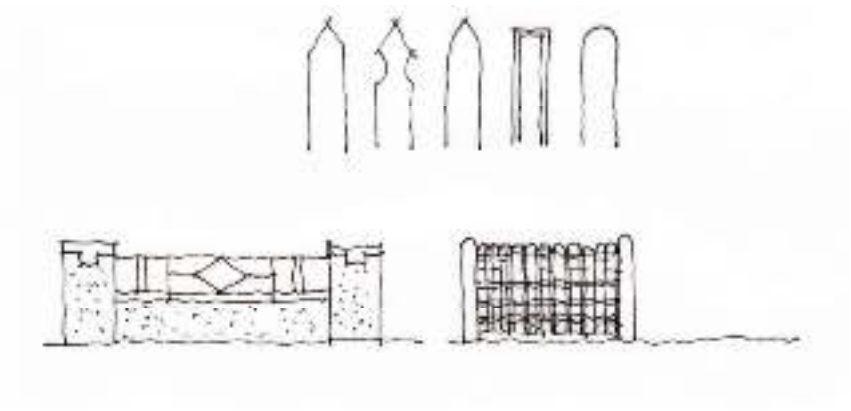


Figure 15.12: Paling types within Bellingen, steel railings and woven wire suit different periods.

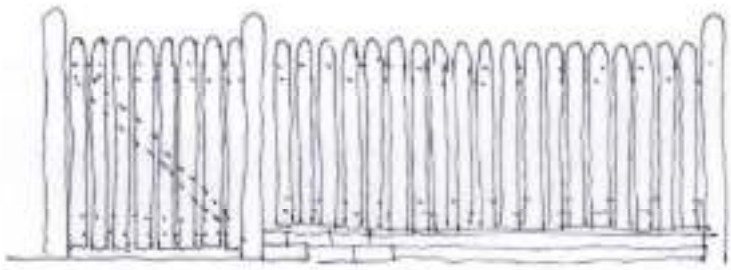


Figure 15.13: Picket fencing should generally be a simple interpretation and include a matching gate

15.8.17 Landscaping and gardens

Landscape elements are of importance in contributing to the aesthetic significance of heritage items. The design of front gardens including the layout and selection of planting and materials provides a setting for the building and enhances the significance of the heritage item.

Objectives

a) To retain significant elements that contribute to the significance of the heritage item

b) To enhance the qualities of the heritage item through appropriate landscaping.

Controls

1) Original driveways and footpath crossings that relate to a heritage and contributory item are to be retained.

2) Double width driveways and crossings will not be permitted for heritage and contributory items.

3) Original or early garden layouts that contribute to the significance of the heritage item should be retained and altered sympathetically.

4) Significant gardens should not be sacrificed for the provision of driveways where a rear lane or side access is an alternative.

5) Established trees and plants that contribute to the significance of the heritage item should be retained unless an arborist establishes that the tree health is such that it should be removed.

6) Swimming pools and spas and associated elements should not have a detrimental impact upon the significant landscape and views to and from the heritage item.

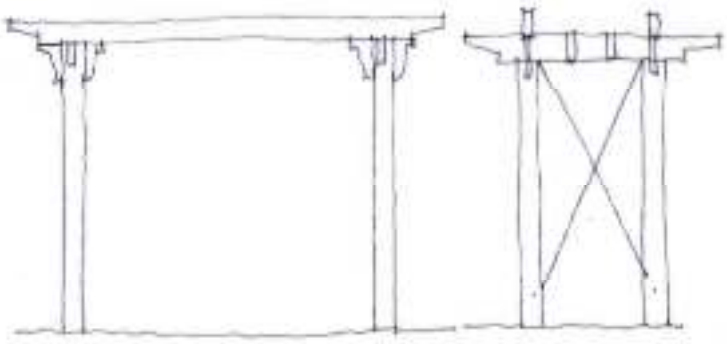


Figure 15.14: Garden structures should be timber and interpretations of traditional details for providing shade and amenity.

15.8.18 Modern technology

Modern technology can include fixtures such as air-conditioning, solar panels and hot water systems, photovoltaic panels, aerials, wind turbines and satellite dishes with associated cabling and equipment.

Objective

a) To ensure that modern technologies do not impact on significant building elements, fabric and views to and from the heritage item and setting.

Controls

1) Modern technologies are to be located so that they are not visible from the public realm.

2) New devices are located on ancillary buildings such as sheds, garages and carports, where possible.

3) Install solar panel and plate devices on the plane of roofs and avoid supplementary structures to orient the panels and devices to another angle

4) Modern technologies are to be no higher than the ridge line of the main roof of a heritage item.

5) Independent structures such as aerials and wind turbines can be located in rear gardens where they can be screened with planting and the scale will not dominate the heritage significance.

6) Locate supplementary devices such as compressors and meters at ground level in a screened location and to suit reasonable access.

7) Ensure that the devices are generally dark in colour and that the colour is uniform across the device.

8) Ensure that cables and associated devices are a suitable colour and screened from the public realm.

9) Solar hot water tanks are to be located at ground level with their associated flat plate collectors located on the plane of the roof.

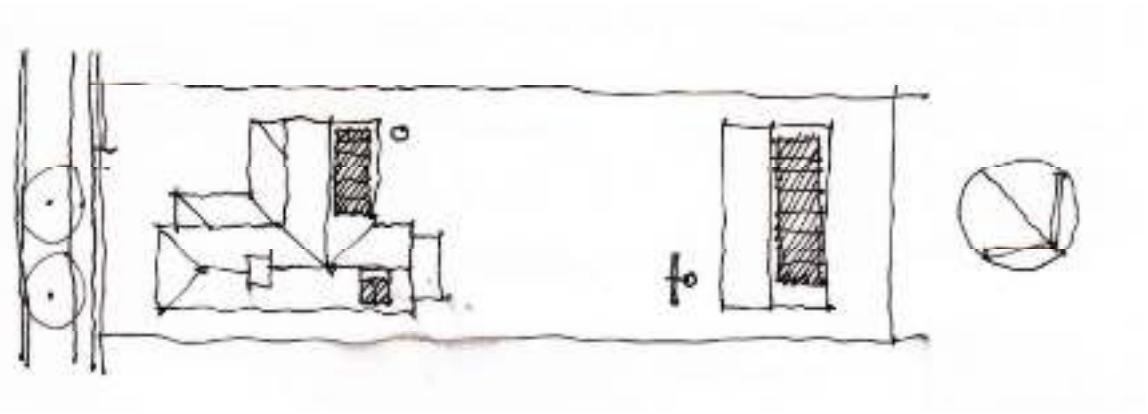


Figure 15.15: Solar panels should be located away from the front elevations and use ancillary buildings where possible. Solar tanks to be located at ground level and wind structures away from key elevations.

15.8.19 Outbuildings

Outbuildings such as garden sheds, outhouses, gazebos, pool pavilions and pergolas can detract from the setting of heritage items. The location and design of ancillary structures is to be considered to ensure that there is no detrimental impact on the heritage item and/or setting.

Objective

a) To minimise visual intrusion on views of heritage items due to outbuildings.

Controls

1) Outbuildings are located to the rear of heritage buildings.

2) Outbuildings are single storey and designed so that they have minimal impact on views to and from significant heritage buildings and be no higher than the main roof of the heritage building.

3) Materials, finishes and colours for outbuildings reflect their ancillary nature and not that of the main heritage building.

Landscaping is used to minimise the visual impact of outbuildings on the setting and significance of heritage items.

15.8.20 Signs

Commercial buildings from the late nineteenth and early twentieth centuries incorporated elements on their facades designed for locating signs to identify the

business operating within. This integrates successful advertising within the building design, allows for equity within the streetscape and adds vitality to the commercial precinct.

Refer to Chapter 7 of this DCP (Section 7.7; Assessment Criteria – Heritage Significance) for Objectives and Controls.

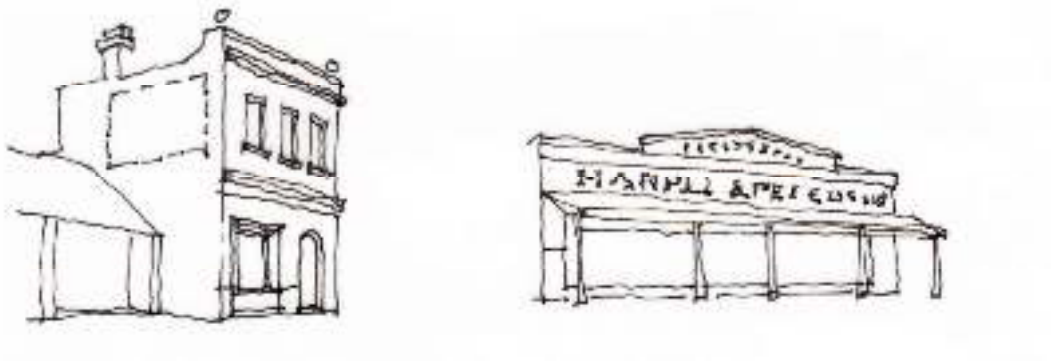


Figure 15.16: Early photos of Bellingen show the use of bold signs on side elevations and the use of key façade places for signs. These are supported while contemporary signs detract from the streetscape.

15.9 Development in the Vicinity of Heritage Items and the Bellingen Conservation Area

Development near a heritage item can have adverse impacts on the item. This may be as a result of blocking views to and from the item, affecting trees or landscape elements that are part of the item. It can also have an adverse impact by obscuring the landmark qualities of an item.

New development in the vicinity of an item should take into consideration the importance and contribution of the item to the local streetscape or townscape. It should also ensure that important views to and from the item are not compromised and that the heritage item remains the visually dominant element within the streetscape or townscape.

In most cases, development in the vicinity of a heritage item will only affect properties that share a boundary with or are opposite a heritage item. In some cases, development in the vicinity of an item may have broader impacts. Common examples of this would be important views to and from Church spires and building elevations designed to reflect their locations on axes or view lines which may be lost by new development.

15.9.1 Setting

Setting is the area around a heritage item that contributes to its heritage significance and may include the visual catchment of a heritage item which is external to the site. Topography, trees, gardens, fencing and pavement may all contribute to the setting of a heritage item. Where a heritage item has aesthetic significance as a landmark, it is particularly important that new development does not obscure its visual presence in the streetscape and/or townscape.

Objective

a) To ensure the setting of heritage items is not compromised by development in the vicinity of the heritage item.

b) To ensure that new development respects the contribution of a heritage item to the streetscape and/or townscape.

Controls

1) The setbacks of new development in the vicinity of a heritage item should generally be equal to or greater than that of the heritage item.

2) Development in the vicinity of a heritage item should not be of such bulk or height that it visually dominates the heritage item.

3) Important views to and from a heritage item not be obscured by new development.

4) Where a heritage item is part of a streetscape of buildings of consistent style, form and materials, development in the vicinity of the heritage item should incorporate or interpret elements of the dominant style, form and materials in the streetscape.

5) Where trees are integral to the significance of the heritage item, development should not be allowed beneath the drip zone of the trees

15.9.2 Scale

Scale is the size of a building and its relationship with the surrounding buildings and landscape. Buildings of inappropriate scale in the vicinity of a heritage item can detract from its significance and contribution to the streetscape and townscape. It is important that new development at places with heritage significance respects the scale of the existing buildings and/or landscape elements that contribute to the significance of the place.

Objective

a) To ensure that new development in the vicinity of a heritage item is of a scale that does not undermine the significance of the heritage item.

Controls

1) The scale of new development in the vicinity of a built heritage item should not be substantially greater than that of the heritage item.

2) Development of a larger scale than the heritage item is allowable only if it can be demonstrated that the new development will not detract from important views to and from the heritage item from the public realm.

3) New development must not obscure important views of a heritage item

15.9.3 Siting

Siting relates to the position of a building on the site and includes the orientation of the building in relation to the street as well as the setbacks of the building from the boundaries.

Setbacks define the overall footprint of a building and the outer extremities of that building in relation to the front, side and rear boundaries.

Setbacks of development in the vicinity of heritage items can be of importance in ensuring the retention of important views to and from the heritage item. In some

cases it will also be necessary to consider the potential impact of the building on important landscape elements associated with the heritage item and streetscape.

Objective

a) To ensure that new development in the vicinity of a heritage item is sited so that it does not obscure important views to or from the heritage item.

b) To ensure that new development in the vicinity of a heritage item does not adversely impact landscape elements that are associated with a heritage item.

Controls

1) The setback of new development, including alterations and additions, in the vicinity of a heritage item should ensure that important views to or from the heritage item are not adversely affected.

2) The setback of new development in the vicinity of a heritage item should ensure that landscape elements associated with or listed as a heritage item are adversely affected.

15.9.4 Materials and Colours

New development should take into consideration the dominant original materials of heritage items in the vicinity of the development. Materials should be selected so that attention is not drawn away from the heritage item to the new development and the heritage item remains visually dominant.

Objective

a) To ensure that materials and colours for new development in the vicinity of a heritage item does not detract from the significance of the heritage item in the streetscape.

Control

1) Materials and colours for development in the vicinity of a heritage item shall be selected to avoid stark contrasts with the adjacent development where this would result I the visual importance of the heritage item being reduced.

15.10 Development in the Bellingen Conservation Area

The Conservation Area has a strong streetscape and townscape character resulting from development of a consistent style, scale, form and materials during relatively short periods. It is important to appreciate the significance of the character when considering development in the form of additions, alterations, adaptive re-use or infill. A Map of the Conservation Area documents the levels of significance of individual buildings within the Conservation Area. Heritage Inventory forms may also refer to the streetscape contribution made by individual buildings.

Bellingen Conservation Area Significance

The Bellingen Conservation Area is considered to have State significance for the distinctive qualities of the town which represent those features typical of a North Coast settlement which evolved as a river port to serve the needs of the timber

getting industry followed by dairying and light industry. The buildings within the town demonstrate the social structure of the community at the height of prosperity and convey a sense of the various elements, functions, businesses and institutions of the period. The individual distinctive characteristics of the timber and masonry buildings erected by the owners, builders and architects produced the traditional streetscape while the social history of the evolving commercial and retail uses produces a valuable social and civic record.

Components within the Conservation Area have been identified as being either 'contributory', 'neutral' or 'infill' to the significance and character of the area. Each property within the Conservation Area is mapped accordingly on Map 1. The assessment was made based on an analysis of the significance of the area and a review of the fabric within the area. The review was undertaken via a visual survey of each property located within the area.

Council property in the form of roadways, street-trees, original kerbs, public reserves, letterboxes and the like similarly contribute to the significance of the Conservation Area and will be maintained accordingly when development consent is required for works in the Conservation Area.

Categories of Significance

Controls for listed Heritage items are set out in Section 15.8. The following outlines the criteria that were used to determine if a non-listed place within the Bellingen Conservation Area may be classified as a 'contributory', 'neutral' or 'infill' place.

Contributory

The place was constructed during a period directly relating to the significance of the conservation area as identified in the statement of significance for the conservation area. The original form of the building is substantially intact or where additions have been made to the building that are visible in the main streetscape, the additions that are sympathetic with the original style and from of the building.

Neutral

The place was built during a period directly relating to the significance of the conservation area as identified in the statement of significance for the conservation area but has been substantially altered so that the original style and character of the building has been lost and the changes are unlikely to be reinstated.

Infill

The place was built in a later period than that which directly relates to or is sympathetic with the significance of the conservation area or is a detracting element from the significance of the conservation area.

A Map of the Conservation Area that documents the levels of significance of individual buildings within the Conservation Area is included at Appendix 15.1.

15.10.1 Special controls for Contributory Items

The following applies to properties that are identified as 'contributory' as shown on the map in Appendix 15.1. These buildings represent an integral component of the conservation area and generally date from the key periods of development. They generally have a high level of intactness, but may have been subject to

unsympathetic modifications that are reversible. The objective of all new work should have a focus on restoring the building's original elements and features. Guidance may be needed for material choice and colour. The objective of all new work is to be the maintenance of the building's heritage value, scale, form, significant physical fabric and character and to retain and enhance the contribution of the place to the overall character and cultural significance of the conservation area.

Performance Criteria

New work to buildings identified as 'contributory' should demonstrate the following:

a) a focus on the restoration of original elements and features visible from the public domain;

b) the retention of significant fabric;

c) the removal of unsympathetic alterations and additions;

d) the appropriate use of materials and colours;

e) a high degree of restraint in the level of alteration to contributory fabric.

Controls

1) Development proposals should recognise, and where possible, enhance, the contribution of these places to the overall character and cultural significance of the conservation area.

2) Contributory items should not be substantially altered or demolished unless the applicant can demonstrate that the loss of the existing building will not erode the overall character and significance of the conservation area or have a cumulative effect on similar properties.

3) Alterations to Contributory Items should retain the character and scale of the existing building which contributes to the character and significance of the conservation area.

4) The original form of the building is to be respected.

15.10.2 Special Controls for Neutral Items

The following applies to buildings identified as 'neutral' as shown on Map 1. These are buildings that neither contribute nor detract from the character of the conservation area. This grouping includes buildings that may relate to the areas historic development, but have been substantially altered. In such cases restoration may be preferable to new development, depending on the building's context and significance. The objective of all new work should to be to enhance these buildings where appropriate and feasible. Removal is to be justified where restoration is not proposed.

Performance Criteria

Alterations and additions to buildings identified as 'neutral' should demonstrate the following:

a) the removal of unsympathetic alterations and additions;

b) the appropriate use of materials and colours;

c) a degree of restraint in the level of alteration to the buildings form.

Controls

1) Individual buildings as 'neutral' are to be retained and enhanced unless it can be demonstrated that their removal will not compromise the significance of the area;

2) Where retention is proposed the original form of the building is to be respected. Alterations and additions are not to dominate the original building form, but enhance it;

3) Where demolition is proposed, justification for the removal of the building is to be demonstrated in accordance with Section 15.8.7 of this chapter.

15.10.3 Special Controls for Infill Items

The following applies to buildings identified as 'infill' on Map 1. These buildings present an aesthetic intrusion to the streetscape and conservation area due to their scale, bulk, setback, setting and/or inappropriate material choice. Redevelopment of these sites is highly desirable. New development should respond to the surrounding context and generally not seek to emulate the features of the detracting building it is proposed to replace. New development that is sensitive to the heritage values and intrinsic character of the Conservation Area is encouraged.

Performance Criteria

Alterations and additions to buildings identified as 'non-contributory' should demonstrate the following:

a) the removal of detracting elements;

b) the enhancement of the building.

New development should:

a) maintain opportunities for new buildings which address the character of the streetscape and Conservation Area generally;

b) maintain the scale of existing buildings, where appropriate, or the predominant scale in the vicinity.

Controls

1) Any demolition application shall be accompanied by an application for the development of an appropriate replacement building.

2) Enhancement or replacement development is to involve the removal of detracting elements and not the repetition of them, so that the site is more responsive to the surrounding context;

3) New development of the site is to respond to the character and significance of the conservation area by complying with the guidelines for Infill Development in Section 15.7.3 of this Chapter. In particular:

i. The design of new buildings should complement and not adversely impact on the design characteristics of existing heritage items and contributory items in the street, particularly adjacent to the site;

ii. In the case of new retail/commercial buildings, the bulk of the building should be divided into narrow and vertical elements reflecting the width of traditional shopfronts and parapets. On corner lots buildings should be splayed to address the corner;

iii. In the case of new residential buildings, these should be sympathetic to the height, proportions, roof pitches and materials of Heritage Items and Contributory Items in the streetscapes in which they appear; and

iv. New buildings should not mimic traditional styles but rather be sympathetic in design to their context, through appropriate scale, form and materials.

15.10.4 Objectives and Controls for development in the Bellingen Conservation Area

Included in this section are a series of objectives for development in the Conservation Area and a series of specific controls setting out how to achieve them. These need to be observed in conjunction with any special controls for an item included as a result of its categorization as a listed, contributory, and neutral or infill item.

Significant buildings and settings

Objective

To provide for the retention of all the buildings that contribute to the history and significance of the area as both a commercial and residential town centre from the original plan up to circa 1945 and for the existing subdivision pattern.

Residential use

Objectives

a) To encourage the continued use of dwellings for residential purposes and for the re-establishment of residential use within buildings originally built as dwellings;

   To support the adaptive re-use of buildings for residential or other sympathetic uses where the change is supported by a Heritage Impact Statement.

Commercial use

Objectives

a) To encourage the continued use of commercial buildings for commercial purposes and for the re-establishment of commercial use within buildings originally built as such;

b) To support the adaptive re-use of buildings for commercial or other sympathetic uses where the change is supported by a Heritage Impact Statement.

Demolition

Objective

To enable demolition of post 1945 infill buildings in certain circumstances

Control

1) Any development application for demolition of a commercial building in Hyde Street must be accompanied by an application for the replacement building and a Heritage Impact Statement.

2) New buildings proposed in the Bellingen Conservation Area must be designed to comply with the relevant provisions of this Chapter,

Landform

Objective

To retain the dominant early topography within the conservation area and ensure that new development does not disrupt planting and drainage within the conservation area and vicinity.

Controls

1) Maintain the shape of the natural landform

2) Avoid cut and fill in the erection of new buildings and landscaping unless the design is a traditional form of construction and the impacts are sympathetic

Subdivision pattern

Objective

To retain subdivision patterns that contribute to the history and rhythm of streetscapes and townscapes in the conservation area.

Controls

1) Keep the existing predominant pattern of subdivision in both the residential areas and the commercial area

2) Allow for the re-subdivision of lots that have been amalgamated previously or along boundaries shown in pre-1935 plans

3) Avoid re-subdivision across the line of subdivision or by amalgamation of rear garden space unless the built form will prove similar and complementary to the existing;

4) Avoid development that involves the amalgamation of lots and development that cross lot boundaries unless the built form will prove similar and complementary to the existing.

Existing buildings – listed and contributory

Objective

To ensure that heritage significance is retained and conserved.

Controls

1) Retain and protect all structures that explain the history and contribute to the significance of the area;

2) Maintain and protect original and early details of historic buildings

3) Consider reinstatement of missing original and early details

4) Consider removing elements such as verandah enclosures that are not original and detract from the historic significance of the building

5) Consider options for adaptive re-use of the building where appropriate to ensure a practical use for the building and site

6) Avoid the following:

- Painting or rendering original brick or timber walls which have not already been painted or rendered
- Removal of stucco from buildings that were originally finished with a stucco render
- Re-skinning brick walls
- Over-cladding weatherboards
- Additions to the front and sides of a building
- Removal of traditional details except where items need replacement due to decay
- Adding new period details where no evidence exists for such
- Re-roofing of main building except to match the original;
- Changing the roof form above the main building other than for reinstatement of an original form
- Extra rooms above the original house which require changes to the existing roof height or shape in particular to the front, side and visually dominant elevations other than can be accommodated with in-plane skylights

Figure 15.17: Traditional roof plumbing elements include rolled ridge and barge flashings with spear points, ogee or smooth quad gutters and circular downpipes with soldered elbows.

Siting, setbacks and gardens

Objective

To integrate new development in the conservation area into the established pattern of the streetscape and townscape.

Controls

1) Maintain the historical pattern of development including the building line setting for commercial and retail buildings and the setback for standard residential streetscapes

2) Maintain the amenity of garden and landscape settings around existing buildings

3) Maintain all the features considered to be part of the heritage significance of the property including ancillary structures, site layout and planting

4) Keep at least 40% of residential sites for soft landscape so as to complement the heritage setting and opportunity for deep rooted planting

5) Keep and protect mature trees and early planting layouts

6) Avoid alterations and additions to the front or side of heritage buildings

7) Do not install air-conditioning or similar contemporary services to significant external elevations capable of being seen for the public circulation or important elevations within the site

8) Avoid disturbing archaeological sites without prior investigation including foundations and wells in particular

Extensions

Objective

To ensure that additions do not detract from the significance and are sympathetic and visually recessive

Controls

1) Maintain the visual dominance of the heritage building

2) Keep a consistency of scale and materials in extensions so that the new work does not detract from the heritage building, the site amenity and the streetscape

3) Avoid disturbing archaeological sites without prior investigation including foundations and wells in particular

New development to the rear of heritage buildings

Objective

To ensure that new development does not detract from the significance and character of significant places and remains sympathetic and visually recessive.

Controls

1) Keep and repeat the existing scale to ensure the new allows the existing to dominate the streetscape

2) Single or two storey scale will depend upon the context and extent of the interpretation between new and existing

3) Roofs to reflect the context such as parapets for concealed roofs, hipped or gabled reflecting the traditional nominal 30 degrees

4) The setback between the new and existing to be 10m minimum

5) Materials to be consistent with the context including rendered brick/block, comparable face brick and weatherboard with galvanised iron roof and plumbing

6) Avoid disturbing archaeological sites without prior investigation including foundations and wells in particular

New buildings generally

Objective

To ensure that infill development is sympathetic with the significant character of the conservation area and does not detract from that significance.

Controls

1) Maintain traditional uses to complement the historic use pattern where appropriate;

2) Maintain a scale similar and in keeping with that in the vicinity and in particular to the adjoining properties;

3) Utilise a common median setback or that which is traditional for the streetscape

4) Provide front verandahs to buildings

5) Provide external materials and finishes which are sympathetic to the context and allow the traditional character to dominate the streetscape

6) Provide signs and details consistent with traditional practice and utilise early photos to develop and appropriate scale

7) Avoid replica or pseudo traditional materials and details

8) Avoid new rear buildings which visually dominate the streetscape or exceed the height of the dominant streetscape.

Materials and Colours

Objective

To ensure that development does not detract from the significance of the heritage item and the character of the Conservation Area.

Controls

1) Observe the general guidelines for materials and colours within this chapter;

2) In relation to commercial and retail premises, research the traditional character of external colour schemes and signs available through early photographs and interpret these when providing external alterations;

3) Ensure that elements within the external elevations such as parapet facades and verandahs intended for signs are utilised accordingly using similar and appropriate signs and colours

4) Avoid applying corporate colours to large building surfaces restricting these to the traditional areas where they will be visually distinctive and allow equitable visual prominence to other commercial businesses in the area;

5) Avoid applying graphics to the dominant visible areas of glazed shopfronts so that the interior remains prominent

6) External lighting of buildings is encouraged where the fittings are concealed and the lighting is subtle

Garages, carports and ancillary buildings

Objective

To ensure that garages and carports are designed to minimise their visual impact on the streetscape of the conservation area and vicinity.

Controls

1) Avoid garages and carports forward of a building line

2) Maintain the traditional pattern of vehicle accommodation towards the rear of the site

3) Utilise traditional materials and lightweight structures for garages and carports and ensure that they remain visually recessive

4) Do not use architectural decorative features on new structures

5) Do not attach to the building and do not prevent light and air into the building

6) Driveways are to use traditional materials such as stabilised gravel, exposed aggregate or dark coloured material.

Figure 15.18: The design and detailing of car ports should interpret with replication, traditional details and use traditional materials.

Fences

Objective

To conserve the streetscape of significance within the conservation area and vicinity.

Controls

1) Use timber paling fencing to side and front boundaries with designs based on early photos and/or types suitable for the period of the building;

2) For industrial and commercial sites, use traditional timber boarded fencing to side and rear boundaries or a combination of timber post and rail with galvanised iron or equal infill;

3) Where wire or other metal fences are appropriate use shrubs to cover the fence;

4) Avoid front fences higher than 1200mm

5) Avoid metal clad, aluminium, steel replica and swimming pool type fencing.

6) Conserve original gates and fencing through maintenance and restoration.

Public lands

Objective

To ensure that public lands retain their significance in terms of their character, accessibility and function.

Controls

1) Retain those elements of the street in form of traditional setbacks, parks and gardens that contribute to an understanding of the origins and evolution of the area;

2) Avoid change that will increase vehicular traffic.

3) Maintain the pattern of footpaths, verges, curbing, guttering and mature street trees and associated traditional planting.

4) Retain existing driveway crossovers and ensure that supplementary works to provide suitable gradients and finishes are visually recessive

5) Private paving treatments should not extend beyond the property boundary

6) Avoid planting that obscures views along streets for pedestrians;

7) Avoid planting that obscures traditional sight lines for commercial and retail premises and streetscapes

8) Avoid the use of modern segmental paving which is uncharacteristic of conservation areas

9) Avoid introducing planting in areas which traditionally was urban and without planting.

Traffic calming and civil works

Objective

To ensure that the original civil work retains its integrity and that essential new work does not detract from the authenticity and character evident within the streetscape.

Controls

1) Avoid measures that involve major changes to the street alignment, pavement, curb and guttering such as chicanes, blisters, wide paved speed bumps, false concrete finishes, bollards and planters.

2) Use materials and colours which are not visually dominant against other original materials and finishes

3) Avoid the loss of original materials such as curbing, survey marks, letter receivers, engraved and marked pavements etc.

Solar panels and communications devices

Modern technologies change frequently but can include fittings such as solar electricity panels, solar hot water panels and tanks, television aerials and satellite dishes. They can be large and visually intrusive within the streetscape.

Objective

To ensure that modern technologies do not detract from the streetscape and townscape in the Conservation area.

Controls

1) Locate new devices on ancillary buildings such as sheds, garages and carports where possible

2) Avoid locating devices on the roof planes which are visible from the streetscape and public realm

3) Install devices on the plane of the roof and avoid supplementary structures to orient the panels and devices to another angle

4) Locate supplementary devices such as compressors and meters at ground level in a screened location and to suit reasonable access

5) Ensure that the devices are generally dark in colour and that the colour is uniform across the device

6) Ensure that cables and associated devices are a suitable colour and screened from the public realm.

15.11 Shire Wide Conservation Issues

15.11.1 The Cultural Landscape

Cultural landscapes are highly valued resources which provide a range of experiences and add to our quality of life. A sustainable future extends to the

conservation and enhancement of heritage values, which can be made tangible through heritage, including cultural landscapes.

Cultural landscapes include homesteads and farmlands, as well as remnant native vegetation, Aboriginal sites and places, wetlands, early settlements, disused cemeteries, and defunct industrial complexes. These cultural landscapes preserve cultural values and ecological diversity, while offering economic gain through continued agriculture and tourism and scenic and amenity value to local areas and daily life.

Cultural landscapes often also extend beyond land tenure boundaries. The identification of values within a cultural landscape should be identified firstly through historical research, and then compared to the features on the ground.

Objectives

a) To ensure that structures associated with significant cultural landscapes in rural settings are retained and conserved,

b) To ensure that the settings of structures within rural settings are conserved and the curtilage of the significant elements are protected,

c) To support the adaptive re-use of structures in a sympathetic manner where the original use is no longer viable,

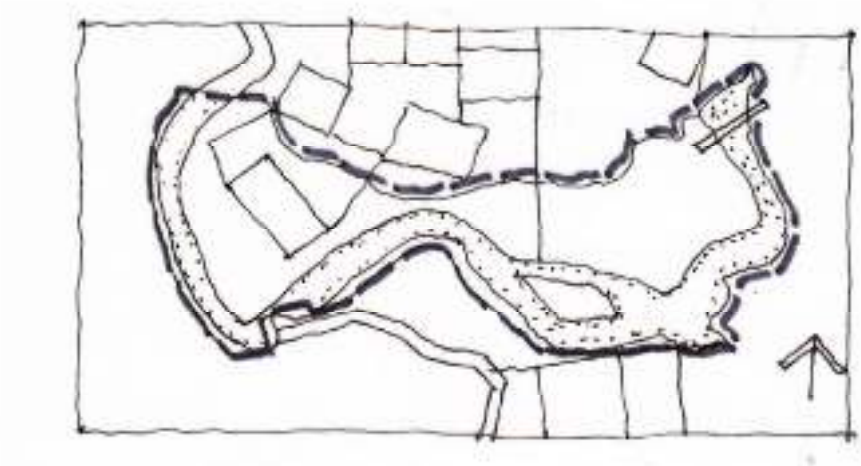


Figure 15.19*: A Curtilage plan may include a lot boundary, a reduced area within the Lot, an expanded area related to views and access and a composite of the above.*

Controls

1) Retain and conserve cultural landscape values through protecting heritage items, their associated settings and landscapes.

2) Consult with heritage specialists and the local community, who understand the landscape.

3) Use historical research to identify origins and establish significance.

4) Manage the setting through including relationships between heritage items, the landscape and the curtilage to ensure that cultural significance is protected.

15.11.2 Natural Heritage Principles

Natural heritage incorporates a spectrum of values, ranging from existence value at one end through to socially-based values at the other. The fundamental concept of natural heritage, which most clearly differentiates it from cultural heritage, is that of dynamic ecological processes, ongoing natural evolution, and the ability of ecosystems to be self-perpetuating. At the cultural end of the spectrum, clear separation of cultural and natural values can be difficult, and more than one layer of values may apply to the same place.

Objectives

a) To protect places identified as having natural heritage significance

b) To support the active conservation, sympathetic use and dynamic ecology within significant natural places

Controls

1) Utilise the Australian Natural Heritage Charter when dealing with an item or area that has been identified as being of natural heritage.

2) Address the impacts upon the significance of the place in terms of the four principles – intergenerational, existence, uncertainty and precautionary.

15.11.3 Aboriginal Heritage

Aboriginal heritage includes sites which show evidence of Aboriginal occupation as well as areas which are of contemporary, spiritual or mythological importance according to Aboriginal culture or custom, but which contain no physical remains These two types of Aboriginal Heritage in NSW are described as Aboriginal objects and declared or gazetted Aboriginal Places. Aboriginal objects include items and remnants such as stone tools, weapons, engraving sites, midden deposits, scarred trees and sharpening grooves. Declared Aboriginal places may include natural features such as creeks or mountains, as well as initiation, ceremonial or story places or areas of more contemporary cultural significance, such as Aboriginal Missions and post contact sites.

Aboriginal people are the primary determinants of the cultural significance of their cultural heritage. People who are given information about Aboriginal history and heritage by members of any Aboriginal community must treat it with respect. Therefore, notwithstanding the statutory requirements under Section 89A of the *National Parks and Wildlife Act 1974*, any confidentiality agreements between Aboriginal people and those receiving the information should be honoured.

The principal laws which deal with Aboriginal heritage in New South Wales are the *Environmental Planning and Assessment Act 1979*, the *National Parks and Wildlife Act 1974* and the *Heritage Act 1977.*

The *National Parks and Wildlife Act 1974* provides statutory protection for Aboriginal objects and declared Aboriginal places. Areas are declared or gazetted as Aboriginal places if the Minister is satisfied that there is enough evidence to show the area is or was of special significance to Aboriginal culture.

The *Heritage Act 1977* protects the State's natural and cultural heritage, including archaeological remains. Aboriginal sites and relics are primarily cared for under the *National Parks and Wildlife Act 1974*. If an Aboriginal site or place is of great significance, the Heritage Council can list it on the State Heritage Register.

Bellingen Council has not completed an Aboriginal Heritage Study; hence there are no places of Aboriginal cultural and heritage significance on the LEP schedule of heritage items.

The assessment of DA's will have regard to the outcomes of the future Aboriginal Heritage Study including any specific controls to be observed regarding development

Objectives

a) To support use of the LEP and Heritage Inventory for the identification and protection of places identified as having Aboriginal significance, after the significant places have been approved for listing by the aboriginal community

b) To support the interpretation of Aboriginal cultural significance and associated places within the community after the significant places have been approved for interpretation by the Aboriginal community

Controls

Aboriginal sites in NSW are primarily protected under the *National Parks and Wildlife Act 1974*. In cases where an Aboriginal heritage site is suspected, contact should be made with the relevant office of the NSW Office of Environment and Heritage (OEH) Heritage Division. If the site is under immediate threat, urgently contact the NSW Environment Line or contact the Aboriginal Heritage Conservation Office in Heritage Division or the Aboriginal Heritage Planning Officer at in the Regional Operations Division for further advice.

Where there is evidence of Aboriginal significance in relation to a site, consultation should be undertaken with the OEH and the relevant Aboriginal community in the assessment of significance. Interpretation of places of Aboriginal significance is to be informed and developed by the Aboriginal community.

15.11.4 Archaeology

There are 84 recorded archaeological sites within Bellingen Shire.

The *NSW Heritage Act 1977* requires that when excavation of a site is likely to reveal 'relics' an application to the Heritage Division of OEH for an Excavation Permit is required. A 'relic' is defined as any object which is more than 50 years old. There is also an obligation to stop work and contact the Heritage Division if relics are discovered unexpectedly or uncovered.

While the requirements of the Heritage Act are broad in relation to 'relics' there is only an obligation where the site has been listed as an archaeological site or where a site is likely to contain relics. As a precaution, owners of listed and contributory buildings should consult Council prior to commencing development.

For archaeological sites or places with the potential for relics, the advice of an archaeologist will be required. The Heritage Division provides guidelines for archaeological assessments which are predictive studies undertaken to:

- Evaluate the probable extent, nature and integrity of the archaeological resource at a site;
- Determine the significance of that resource;

- Define the appropriate management for that resource having regard to the significance and statutory requirements.

Archaeological assessments may recommend specific actions such as:

- No further action
- Archaeological monitoring
- Archaeological excavation
- In-situ conservation

The potential to reveal relics is greatest on sites known to have been occupied by earlier buildings or structures. Previous building foundations, wells, cisterns and site drainage are the most common form of relics.

15.12 Additional Guidelines to Consider

15.12.1 Guidelines for Archival Recording

The Heritage Division of OEH provides detailed guidelines for archival recording. The records are prepared by experienced professionals and may consist of several or all of the following depending upon the circumstances.

Three copies of the document in an appropriate archival binder are prepared and submitted to Council. The first copy is retained by Council, the second is retained by the Library or Historical Society and the third copy is returned to the Applicant.

- Measured drawings of the building or structure and associated elements and aspects of significance;
- Photographs of the site, structures and aspects of significance accompanied by drawings identifying the locations of the photographs; and
- A general history of the item including research of the appropriate resources and a statement of heritage significance for the item.

15.12.2 Heritage Impact Statements and Conservation Management Plans

The Heritage Impact Statement (HIS) is to be prepared generally in accordance with the Heritage Division guidelines, available on their website and should address the requirements of this chapter including:

a) The heritage significance of the building, place or feature, setting and contribution to the conservation area where relevant;

b) A description of the proposed works and whether or not they are sympathetic to the significance;

c) How any impacts of the proposal are to be reduced;

d) All the relevant standard questions to be answered as described in the Heritage Division pro-forma for the relevant type of change proposed: demolition, minor partial demolition, change of use, minor and major additions, new development adjoining a heritage item, subdivision, re-painting, re-roofing/cladding, new services, fire upgrading, landscape, signs

e) A contextual analysis, considering the setting and landscape and contribution to the significance of the area.

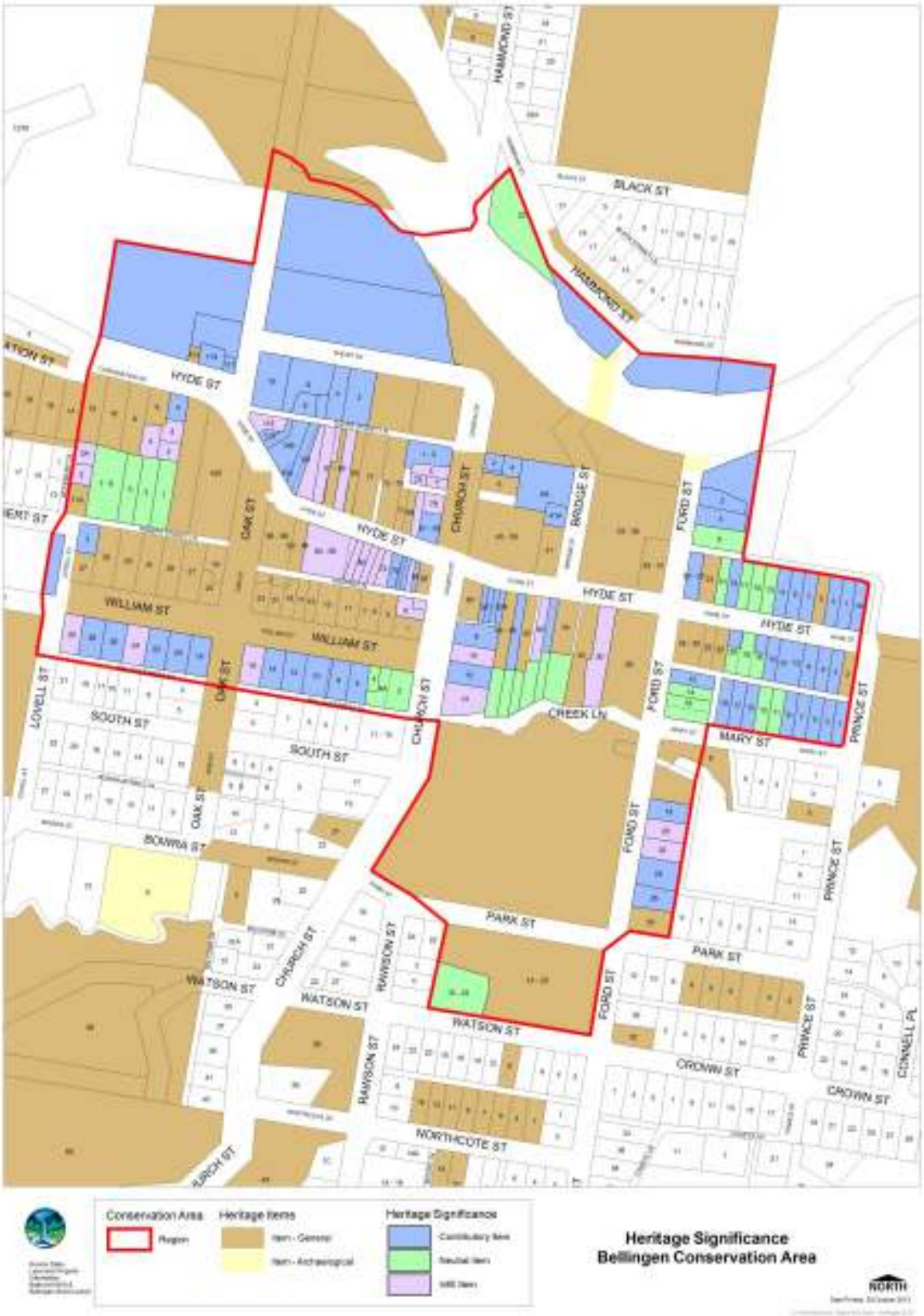
f) All proposals for total demolition should be supported with a justification consisting of the following:

- a report from a structural engineer detailing the structural condition of the building and the work required for an adaptive re-use;
- an estimate from an experienced heritage builder for the re-use of the building as an alternative to the demolition; and
- a Heritage Impact Statement

A Conservation Management Plan (CMP), where requested by Council, is to be prepared generally in accordance with the Heritage Division guidelines. The CMP states the conservation policy based on the established Heritage significance. It looks in greater detail at achieving the future viability of a heritage place and retaining the maximum heritage significance in future development proposals. A CMP would be required for projects where the significance is of a State level and for places of local significance where the project is substantial such as a large building, site or complex. It is intended that a CMP has the capacity to guide development through a number of stages.

APPENDIX

APPENDIX 15.1 – Heritage Significance Map



Bellingen Shire Development Control Plan 2017

Chapter 16

Koala Habitat Protection

Table of Contents

Table of Amendments

Amendment	Date Adopted	Date Commenced
Minor review of DCP - DCP 2017 replaces DCP 2010	22 November 2017	6 December 2017

16.1 Aims

The general aims of this chapter are;

a) Manage the long-term sustainability and recovery of koalas and their habitat.

b) Ensure that there is no net loss of preferred koala habitat (PKH) and, where appropriate, create, manage and/or restore koala habitat linkages to allow for safe koala movement across the landscape.

c) Minimise and manage threats affecting koalas and their habitat.

d) Provide consistent assessment criteria for the processing of development applications, including guidelines for koala habitat assessment, food tree and koala habitat retention and, where appropriate, compensation for the loss of food trees and koala habitat.

16.2 Where this Chapter Applies

The provisions of this Chapter apply to land within the Bellingen Shire Coastal Area Koala Planning Area (refer Appendix 16.1) that has an area of 0.4ha or more and has been identified as containing *preferred koala habitat* (refer Appendix 16.2).

The provisions of this Chapter do not apply to land identified as containing *core koala habitat* by the Bellingen Shire Council Coastal Area Comprehensive Koala Plan of Management (refer to Appendix 16.3) and that has an area in excess of 1ha. In such cases, the provisions of the CKOM apply in place of this Chapter.

The provisions of this Chapter also do not apply to land identified by an independent koala survey prepared in accordance with the requirements of State Environmental Planning Policy No. 44 – Koala Habitat Protection to contain *core koala habitat*. In this case, the provisions of SEPP 44 apply in place of this Chapter.

16.3 When This Chapter Applies

This Chapter applies when a development application for development on land that to which this Chapter applies is received by Council.

16.4 Definitions

Definitions of development are the same as those contained within Bellingen Local Environmental Plan 2010. Additional definitions relevant to this chapter are included below.

core koala habitat means an area of land with a resident population of koalas, evidenced by attributes such as breeding females (that is, females with young) and recent sightings of and historical records of a population. This is the same meaning as that defined by State Environmental Planning Policy 44 – Koala Habitat Protection.

development means:

(a) the use of land, and

(b) the subdivision of land, and

(c) the erection of a building, and

(d) the carrying out of a works, and

(e) the demolition of a building or works, and

(f) any other act, matter or thing referred to in section 26 (of the *Environmental Planning & Assessment Act 1979*) that is controlled by an environmental planning instrument, but does not include any development of a class or description prescribed by the regulations for the purposes of this definition.

development application means an application for consent under Part 4 of the *Environmental Planning & Assessment Act 1979* to carry out development but does not include an application for a complying development certificate. This is the same meaning as that defined by the *Environmental Planning & Assessment Act 1979*.

development area means the allotment(s) to which a development application applies.

koala food tree means a tree described in the definition of *Primary Koala Food Trees* or *Secondary Koala Food Trees* in this Section.

koala linkage area means an area or tract of land that is used, or could be used, by koalas when moving between different areas of their home range or habitat or used for dispersal to new habitat. Note: A Koala habitat linkage area may include land mapped in Appendix 16.4 or land identified as such as part of the KHAR process.

preferred koala habitat means any area identified as either Primary, Secondary A or Secondary B koala habitat on the map within Appendix 16.2 to this Chapter.

primary koala food trees are Tallowwood (*Eucalyptus microcorys*), Swamp Mahogany (*Eucalyptus robusta*), Forest Red Gum (*Eucalyptus tereticornis*) and Small-fruited Grey Gum (*Eucalyptus propinqua).*

primary koala habitat means vegetation associations and/or communities wherein “primary” food tree species form >50% of the canopy.

secondary A koala habitat means vegetation associations and/or communities wherein;

- “primary” food tree species form 30-50% of the canopy, or
- “primary” and “secondary” species combine to form >50% of the canopy.

secondary B koala habitat means vegetation associations and/or communities wherein “secondary” food tree species form >50% of the canopy.

secondary koala food trees are Flooded Gum (*Eucalyptus grandis*), Sydney Blue Gum (*Eucalyptus saligna*). Note: These species should be considered as Primary Food Trees where they occur as a co-dominant canopy species with Tallowwood.

suitably qualified person means a person with a minimum undergraduate qualification in ecology, environmental management, forestry or similar from a

recognised university and with experience in flora and fauna identification, survey and management, including experience in conducting koala surveys.

tree is defined in this Chapter as any plant which:

(a) is over 3 metres in height; and/or

(b) has a diameter at breast height above bark of more than 100mm

16.5 Variations

Council may consider variations to the standards required of development in this chapter when the overall aims of this chapter and any specific aims that may be detailed for that particular standard can be achieved.

16.6 Information Requirements

16.6.1 If no clearing of vegetation is necessary

If the proposed development does not involve the removal of any *tree* in an area mapped as *preferred koala habitat* then a statement that demonstrates that any likely indirect impacts of the development on PKH or koala activity will be minimised will be required to be submitted with the development application. This can be demonstrated though compliance with 16.7.2 of this Chapter.

In determining whether the proposal would result in the removal of any *tree* within an area mapped as *preferred koala habitat*, all consequential clearing likely to be associated with the development must be considered. For example, a development application for subdivision of land must consider not only the direct impacts associated with road construction and infrastructure supply, but must also address any consequential clearing of house sites and Bushfire Asset Protection Zones on lots created as a result of the approved subdivision.

16.6.2 If clearing of vegetation is necessary

If the proposed development involves the removal of a *tree* or trees in an area mapped as *preferred koala habitat*, a Koala Habitat Assessment Report (KHAR) must be undertaken. If the KHAR identifies that one or more *koala food trees* greater than or equal to 100 mm diameter at breast height over bark (dbhob) will be removed or isolated as a result of the development, a Koala Activity Report (KAR) must also prepared. These reports must be included in the documentation supporting the development application (DA).

1. KHAR (Koala Habitat Assessment Report) Requirements

The KHAR must include the following information:

a) an accurate plan and/or aerial photograph indicating the location of;

- the *development area*;
- the area of *preferred koala habitat* (if area >0.2Ha) or the number of koala food trees (if area <0.2Ha), including those that are proposed to be removed or isolated from koala use (e.g. fenced or isolated by a road);

b) a table detailing the area in hectares of *preferred koala habitat* classes being impacted;

c) a summary table detailing the number and size class (<100 mm dbhob, 100–300 mm dbhob and >300 mm dbhob) of *koala food trees* proposed to be removed or isolated from koala use.

d) Identification of likely indirect impacts on koalas, *preferred koala habitat* or *koala food trees*.

2. KAR (Koala Activity Report) Requirements

A KAR must be undertaken to determine the koala activity on the site where a development involves the removal of one or more *koala food trees* greater than or equal to 100 mm diameter at breast height over bark (dbhob)within an area mapped as *preferred koala habitat*. The documentation supporting the development application must be consistent with the following guidelines:

a) any *koala food tree* greater than or equal to 100 mm diameter at breast height over bark (dbhob) that occurs within the proposed development area must be assessed for evidence of koala activity in accordance with the Koala Habitat Survey Method in Appendix 16.5 and occur at the sampling intensities specified in Table 16.1;

b) the assessment must be undertaken by a *suitably qualified person*.

STEP 1

Table 16.1. Sampling intensities to determine appropriate site assessment

Area of study area	Survey sampling intensity
<15 ha	75 m x 75 m
15–50 ha	125 m x 125 m
>50 ha	175 m x 175 m

STEP 2

- Overlay a map/aerial photo of the development area with a square grid the dimensions of which correspond to the “survey sampling intensity” detailed in Table 16.1;

- Use the grid-cell intersections to identify sampling points that fall upon areas of land containing woodland or forest with trees ≥3m and ≥100mm dbhob .

- Disregard any sampling points that fall within areas such as water bodies or areas that do not have measurable forest cover or are a vegetation type not utilised by Koalas (eg: heathland or treeless wetlands).

STEP 3

- Sampling is to be undertaken at each sampling point using the Koala Habitat Survey Method in Appendix 16.5;

- Resulting koala activity levels at each field site are then interpreted as either “Low” (less than 6%) or “High” (equal to or greater than 6%).

STEP 4

- Where “low” koala activity levels are documented on all field sites as part of the Koala Activity Report process, the completed KHAR and KAR may be submitted to Council as part of the development application, together with a statement that documents compliance or otherwise with Sections 16.7.1 and 16.6.2 of this Chapter.

- Where “high” koala activity levels are documented on any field site as part of the Koala Activity Report process, an updated KHAR must be prepared that meets those additional specifications documented in Appendix 16.6 and submitted to Council with the development application, together with the KAR and a statement that documents compliance or otherwise with Sections 16.7.1 and 16.6.2 of this Chapter.

16.7 Development Criteria

16.7.1 Measures to avoid or minimise direct impacts on Koala Habitat

This section applies to all developments that involve removal of *trees* on land mapped as being *preferred koala habitat.*

Aim

To ensure that potential direct impacts of development on koala habitat, koala linkage areas and koalas are minimised.

Criteria

1) The development shall be located, designed, constructed and managed to avoid adverse impacts on *koala food trees* and/or *preferred koala habitat*. If adverse impacts cannot be avoided, it does not result in any overall net loss of *koala food trees* and/or *preferred koala habitat*.

   Note: This Chapter provides opportunities for habitat compensation as a Strategy for demonstrating compliance with this criterion. Refer Appendix 16.7 for the Habitat Compensation Policy;

2) The development shall maintain existing linkages between areas of *preferred koala habitat* across the *development area* and between areas;

3) The development shall not contribute to fragmentation and/or isolation of *preferred koala habitat* across the *development area*;

4) The development shall not impede safe koala movement across the development area;

5) The development shall consider the need and potential where appropriate to revegetate cleared land within koala movement corridors;

6) Proposed bushfire asset protection zone shall not result in the clearing of *koala food trees* and/or *preferred koala habitat* unless this clearing has been explicitly addressed and compensated for as part of the assessment of the application.

In assessing the proposed development, Council will give consideration to;

a) establishing no-build zones within the outline of the canopy of retained trees as to not damage or pose a future hazard to persons, property or tree;

b) precluding the construction of dwellings and buildings and the like within no-build zones;

c) identifying the location of any no-build zones on the deposited plan and registering them as a restriction on the land title.

16.7.2 Measures to avoid or reduce indirect impacts on Koala Habitat

This section applies to all development applications on land to which this Chapter applies.

In circumstances where direct impacts on koala habitat have been avoided, there remains the potential for indirect impacts on koalas. These impacts may occur elsewhere on land the subject of the development proposal, or on adjoining land that contains koala habitat. The key indirect impacts on koala populations relate to fencing, swimming pools, domestic dogs and road design.

Aim

To ensure that potential indirect impacts of development on koalas are minimised.

Criteria

1) Any new internal lot boundary fencing on land adjacent to *preferred koala habitat* shall be constructed to exclude koalas from the development area. Fences that exclude koala movement include:

    i. steel sheet metal at a minimum of 1.8m high or;

    ii. other flat surfaced fencing which does not allow a koala to climb up the fence (eg. not be constructed of timber or have timber posts) and which is a minimum of 1.8m high and less than 200mm from the ground.

    Note: Other potential alternatives which may be discussed with Council in different situations in order to minimise the visual impact of fencing options. This could include options such as part timber part metal, the use of swimming pool style fences (open steel bars) and potentially floppy top style fencing.

2) The installation of swimming pools on land containing or adjacent to *preferred koala habitat* shall comply with the following design criteria:

    i. notwithstanding the provisions of the Swimming Pools Act 1992, the pool fence shall exclude entry by koalas (eg. not be constructed of timber or have timber posts);

    ii. the pool design shall incorporate features that will allow a koala that mistakenly enters the pool area to easily escape from the pool, namely, a shallow ramp and/or a stout rope (minimum 50 mm diameter) that trails in the pool at all times and is secured to a stable poolside fixture;

    iii. the landscaping plan shall exclude shrubs and/or trees within 1 metre of the pool fence so that koalas do not use these to climb over the fence.

3) Subdivision developments on land containing or immediately adjacent to *preferred koala habitat* must be designed and constructed to ensure that the movement of domestic dogs is restricted by lot boundary fences that effectively contain dogs within each property and exclude koala entry.

   Any fence that is intended to contain dogs and exclude koalas should be located as far as practical (and no less than 2 metres away) from any tree that koalas could use to cross the fence.

4) Subdivision developments on land containing or immediately adjacent to *preferred koala habitat* shall be designed to make provision for:

   i. appropriate road design standards, warning signage, traffic calming devices, and roadside lighting which restrict motor vehicles to a maximum speed of 40 kilometres per hour within the development area where possible;

   ii. installation of appropriate measures to exclude koalas from roads and minimise the likelihood of impediments to safe koala movement across roads where the maximum speed of motor vehicles must be greater than 50 kilometres per hour in urban areas or greater than 60 kilometres per hour in rural areas; and

   iii. the maintenance of any mitigation measures detailed in the above.

   Note: The specifications for road design standards, signage, koala exclusion fencing, underpasses and associated fencing, traffic calming devices and any other mitigation measures are to be included with the documentation supporting the application.

16.8 The Habitat Compensation Policy*Application*

The Bellingen Shire Council Coastal Area Koala Habitat Compensation Policy is included in Appendix 16.7 of this Chapter. The Policy is designed to provide a system for determining appropriate compensation for the removal of *koala food trees* or habitat in association with development activities.

1) The minimum area required for compensation works for each class of *preferred koala habitat* and for each category of compensation works is to be calculated using the compensation multiplier formula detailed in the Habitat Compensation Policy.

2) Compensation for adverse impacts of a proposed development activity through the application of the Habitat Compensation Policy will only be approved if Council is satisfied that:

   i. all feasible strategies to avoid, minimise and mitigate clearing of *koala food trees* and/or *preferred koala habitat* have been fully exhausted;

   ii. there is substantial evidence that proposed compensation works will lead to an improvement in the environmental values of koala food trees and/or preferred koala habitat. In cases where compensation works are not feasible or there is a high risk that the works may fail, application of this framework is not appropriate and should not be considered; and

   iii. application of compensation works has been conducted in accordance with the principles outlined in the Habitat Compensation Policy.

Note: Where appropriate, habitat compensation works may be undertaken concurrently with other activities that protect, rehabilitate or establish habitat (i.e. on the same receiving land). These works may include the establishment of riparian corridors and rehabilitation of vegetated linkages or the restoration of vegetated buffers.

16.8.2 Receiving land for habitat compensation

1) For compensation works to be applied, Council requires that the:

   i. owners of the receiving land provide owners consent prior to the lodgement of the development application; and

   ii. receiving land is within and/or adjacent to the development area.

2) For habitat establishment to be applied as a compensation strategy, the proposed protection or rehabilitation strategies need to be investigated first. If these strategies have been found to be impractical, there must be sound ecological evidence and basis to justify establishment of habitat within the site, such as:

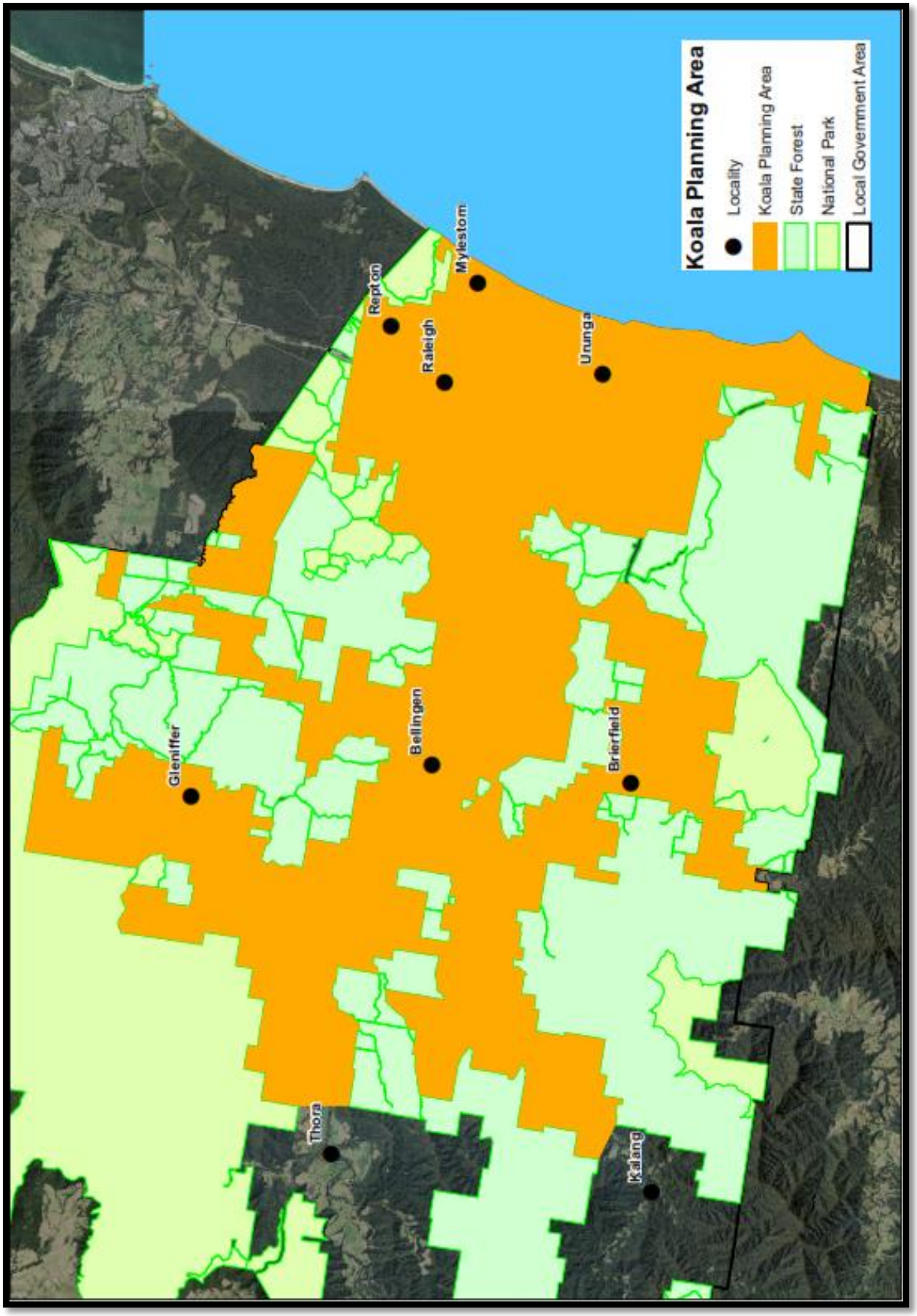
   - within gaps of contiguous *preferred koala habitat* or adjacent to preferred koala habitat;

   - on land determined to be a *koala linkage area*.

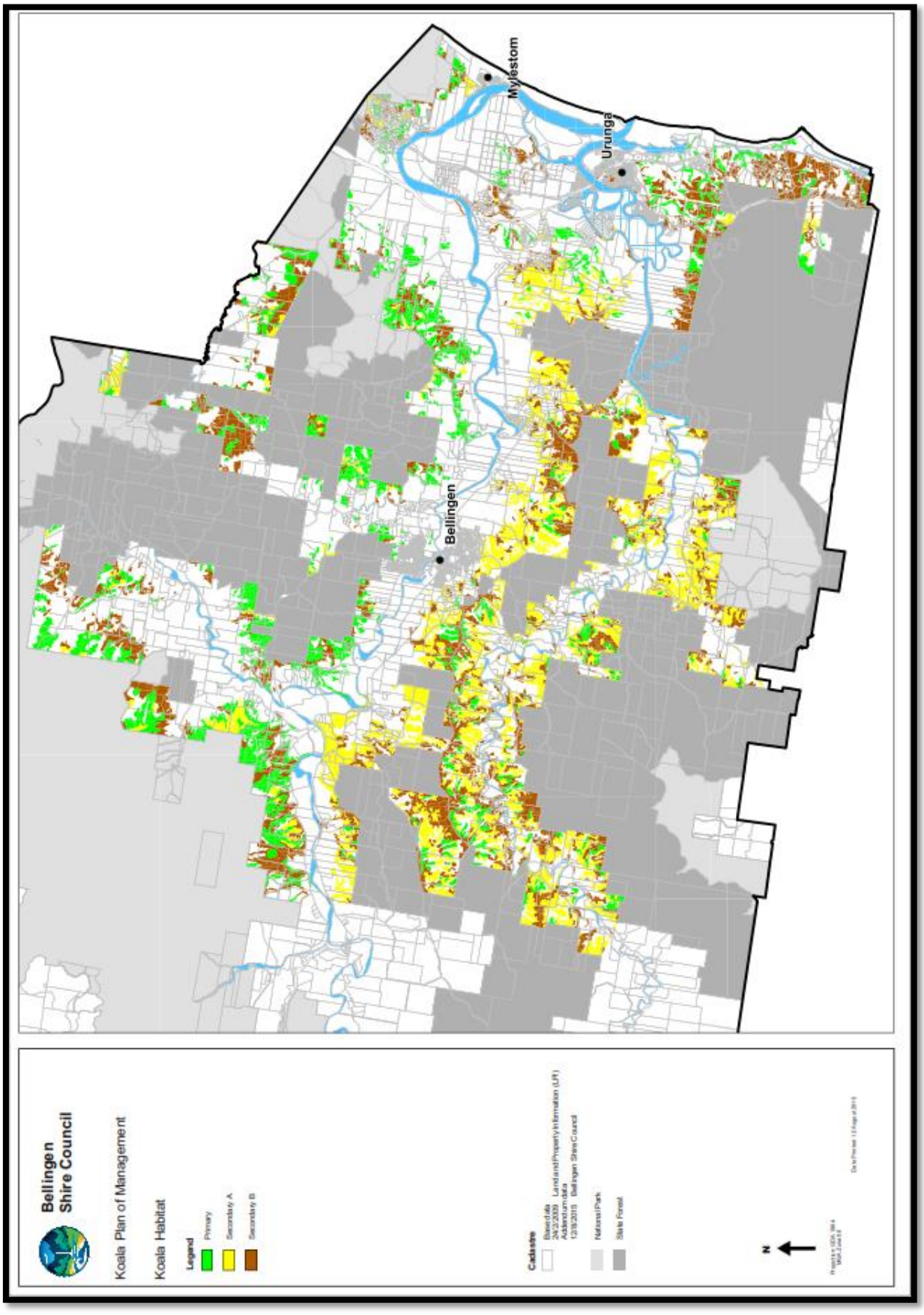
3) Where these are met and habitat establishment is proposed, an appropriate planting regime and mix of koala food trees and other local native plant species must be developed which mimics the structure and species mix of the surrounding native forest. This planting regime and mix of species is to be documented in the vegetation management plan and approved by council.

Appendices

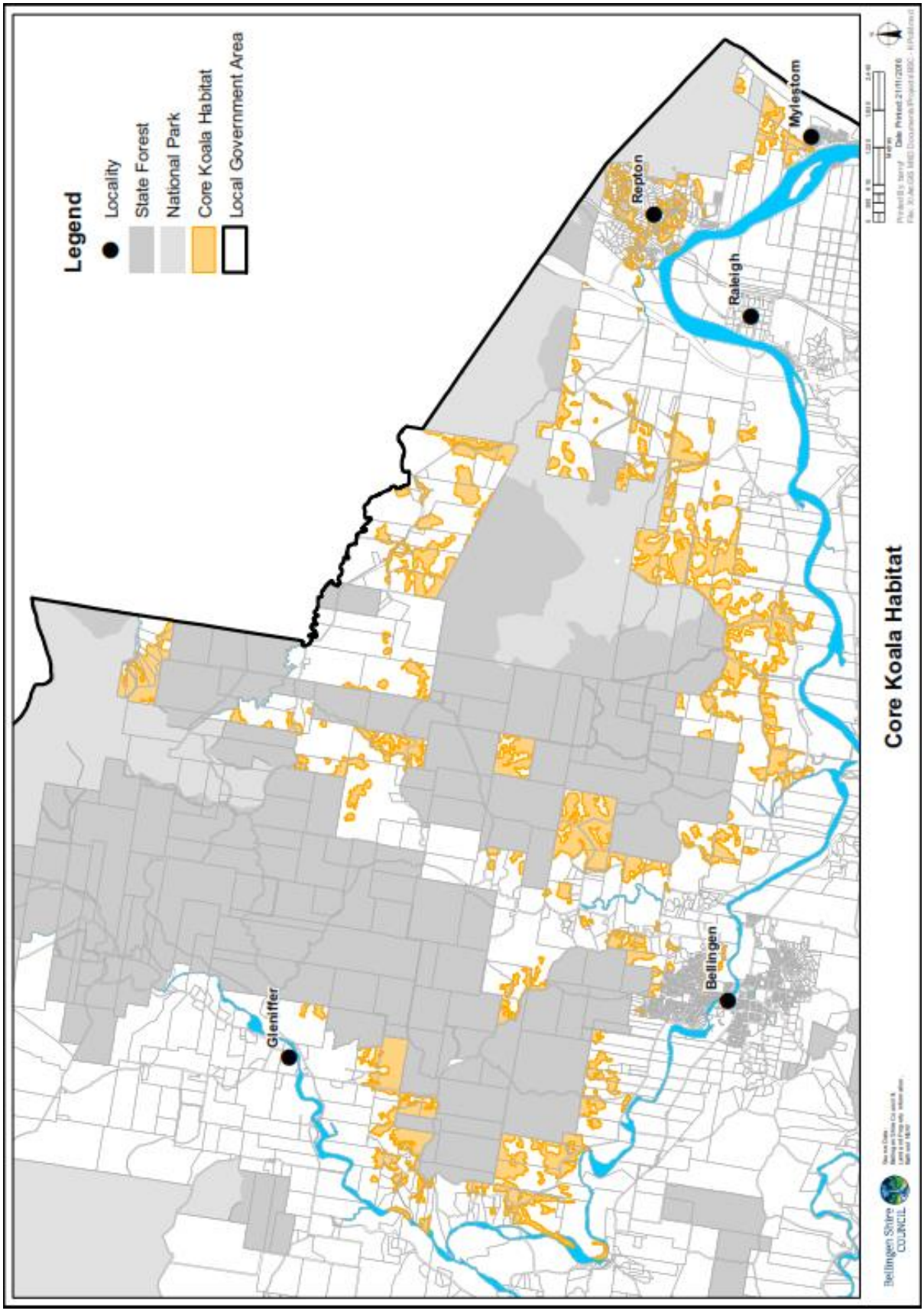
APPENDIX 16.1 – Bellingen Shire Coastal Planning Area (KPA)



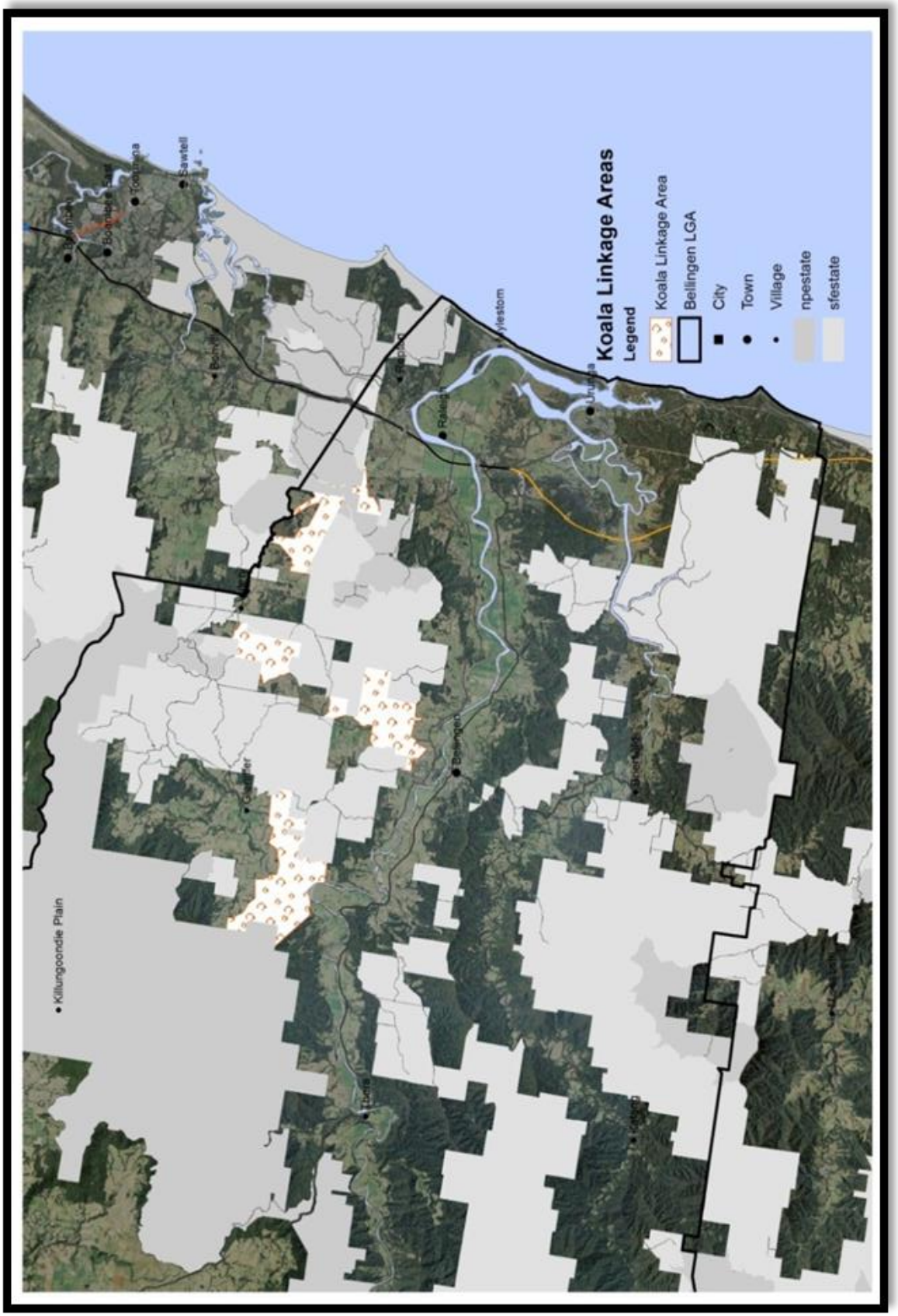
APPENDIX 16.2 – Preferred Koala Habitat Map



APPENDIX 16.3 – Core Koala Habitat Map



APPENDIX 16.4 – Koala Linkage Areas



APPENDIX 16.5 – Koala Habitat Survey Method

The following **koala habitat survey method** is based on the approach detailed in the Scat Assessment Technique (SAT) and Regularised, Grid-based SAT (RG-bSAT) approach by Phillips & Callaghan 2011. The **koala habitat survey method** detailed below will be adopted by council as the standardised sampling tool for determining koala activity and preparing *Koala Habitat Assessment Reports* in the koala planning area. For the purposes of this Plan, it is intended that this assessment be undertaken by a suitably qualified person with relevant experience and training in both the application and interpretation of the SAT and RG-bSAT approach. The sampling principles of RG-bSAT key elements of data analysis and modelling of associated koala activity data are currently the subject of a separate publication (Phillips, S., Hopkins, M. and Warnken, J. 2011).

Set out below are the steps to be undertaken in applying the **koala habitat survey method**. Any deviation from this approach must be fully justified and approved by council prior to lodgement of the *Koala Habitat Assessment Report.*

Koala Habitat Survey grid cell sampling intensities for three categories of land area

Area of study area	Survey sampling intensity
<15 ha	75 m x 75 m
15–50 ha	125 m x 125 m
>50 ha	175 m x 175 m

The assessment must be undertaken by a suitably qualified person with relevant experience in the application and interpretation of koala habitat surveys;

STEP 1

Determine appropriate sampling intensities for the site to be assessed using Table above.

STEP 2

Overlay a map/aerial photo of the development area with a square grid the dimensions of which correspond to the “survey sampling intensity” detailed above.

Use the grid-cell intersections to identify sampling points that fall upon areas of land containing woodland or forest with Eucalypt trees (≥3m and 100mm dbhob).

Disregard any sampling points that fall within areas such as water bodies or areas that do not have measurable forest cover or are a vegetation type not utilised by Koala (eg heathland or treeless wetlands).

STEP 3

Field site sampling for the presence / absence of koala usage is to be undertaken at each sampling point using the **Spot Assessment Technique (SAT) (Phillips & Callaghan, 2011).**

The resulting koala activity level at each field site within *PKH* are then interpreted as either “Low” (less than 6%) or “High” use (equal to or greater than 6%).

APPENDIX 16.6 KHAR requirements for sites with “high” koala activity levels

1. Background	
• Describe the nature of the proposed development.	□
• Identify the Bellingen LEP zoning(s) of the development area and adjacent areas.	□
2. Links to legislation, other plans and documents	
• Demonstrate how all required legislation, other plans and documents that relate to the proposed development have been addressed.	□
3. Study Area	
• Identify the location and extent of the development area to be covered by the KHAR including any other areas that may be directly or indirectly impacted by the proposed development.	□
• Describe the formation, extent and current condition of existing koala habitat at the development area.	□
• Describe the broader context of other vegetation in the adjoining landscape, including linkages.	□
• Detail any environmental constraints and any significant or sensitive environmental features of the development area.	□
4. Methods	
• Describe and provide justification for any variation in methodology to identify PKH classes or KFT within the development area.	□
5. Results	
• Include a map detailing the location of: ○ the proposed development and associated infrastructure and any requirement for an asset protection zone; ○ PKH classes and or KFT ○ any PKH *and or* KFT that are proposed to be directly and/or indirectly impacted, removed, regenerated and/or revegetated.	□
• Include a table detailing the: ○ area (Ha) of PKH classes proposed to be removed, regenerated and/or revegetated; ○ KFT species, diameter at breast height over bark (dbhob) and size class (<100 mm dbhob, 100–300 mm dbhob and >300 mm dbhob) proposed to be removed or isolated from koala use;	□
6. References	
• Include a list of all references cited in the report.	□
7. Appendices	
• Include any additional information or supplementary material pertinent to the DA proposal.	□

APPENDIX 16.7 – Koala Habitat Compensation Policy

Background

This policy is designed to provide a system for determining appropriate compensation for any activity associated with the removal of koala food trees and/or preferred koala habitat that has the potential to adversely impact koalas and/or impede safe koala movement.

The policy aims to achieve no net loss of koala food trees and/or preferred koala habitat as a basis for ecologically sustainable development, to protect and rehabilitate areas of existing preferred koala habitat and to restore preferred koala habitat where there is a sound ecological justification and reason to do so.

Guiding principles

The principles that underpin this policy are:

a) The primary objective of habitat compensation must be to:

1. protect,
2. rehabilitate or
3. restore

ecologically viable koala food trees and/or preferred koala habitat in this order of preference.

b) Compensation must only be considered once all options to:

1. avoid,
2. minimise and
3. mitigate

any adverse impacts have been applied in this order of preference and, exhausted.

c) Clearing must not be approved where the impact of clearing cannot be satisfactorily compensated. If a proposal is unable to meet the strict requirements of the compensation policy, Council may however consider alternative outcomes that are able to demonstrate satisfactory koala outcomes.

d) Habitat restoration compensation works should lead to a net gain in the area of preferred koala habitat, and an improvement in the condition of preferred koala habitat.

e) The receiving land on which compensation works are proposed must:
   i. have PKH of the same or higher class to that being removed,
   ii. be within, adjoining or as close as possible to the development area and;
   iii. be within the related Koala Precinct Area and;
   iv. be ecologically suitable and appropriate for protection, rehabilitation or restoration of preferred koala habitat.

f) An activity that leads to the loss of preferred koala habitat (especially clearing) should only proceed once the management arrangements on the receiving land are legally secure.

g) Compensation works must not lead to permanent adverse environmental impacts and must not be used as a justification for granting approval to a Development Application where the adverse environmental impacts of a development are greater than the benefit to be obtained from the compensation works;

h) Management and monitoring of habitat compensation activities should be undertaken over an ecologically meaningful timeframe (i.e. a minimum of five years).

i) Council should consider a register of receiving lands.

Components of the Habitat Compensation Policy

Where council gives approval to clear an area of preferred koala habitat, this policy requires the proponent to undertake compensation works to compensate for the loss of preferred koala habitat. The compensation works must benefit another area of preferred koala habitat or a koala linkage area to that being impacted by development. The policy is based on two main components:

a) the nature of and level of legal protection afforded an area of receiving land;

b) a loss / gain multiplier that takes into account:

i. the relative conservation value of the area of preferred koala habitat (Primary, Secondary A and Secondary B and koala linkage area) adversely impacted by the proposed development; and
ii. a time / risk factor that takes into account the time lag before ecological benefits are realised and the risk of the compensation works failing.

Koala Habitat Compensation Strategies

Based on the type of compensation works to be undertaken and the level of legal protection afforded an area of receiving land, this compensation policy recognises three category priorities of compensation works that can be applied to preferred koala habitat, namely:

- Protection,
- Rehabilitation and
- Restoration.

Habitat compensation works may be undertaken concurrently with other activities that protect, rehabilitate or restore habitat. For example, this may include the restoration of biological buffers, linkage areas or rehabilitation of riparian corridors.

This policy recognises four classes of Preferred Koala Habitat defined as Primary, Secondary A or Secondary B Habitat or koala linkage area as shown in Table 1 below.

Table 1: Four classes of Preferred Koala Habitat

Vegetation	Category	Definition
Vegetation classified as Preferred Koala Habitat	Primary	Vegetation associations and/or communities wherein “primary” food tree species form ≥ 50% of the canopy.
	Secondary A	Vegetation associations and/or communities wherein; “primary” food tree species form 30-50% of the of the canopy or wherein; “primary” and “secondary” species combine to form ≥50% of the canopy or wherein;
	Secondary B	Vegetation associations and/or communities wherein “secondary” food tree species form ≥ 50% of the canopy.
Koala Linkage Area	As above or where other tree species combine to link one area of extant native vegetation with another and therefore provide habitat for movement, linkage and dispersal.	

For receiving land, all compensation protection, rehabilitation and restoration works must be detailed with timelines, milestones and key performance indicators, in a Vegetation Management Plan (VMP) prior to

approval by council. All works are to be fully funded by the proponent with a minimum five-year management period following the completion of the initial phase of habitat enhancement works. Compliance with the VMP must be enforceable and secured by legal agreement (refer Table 2).

Where 'Protection' is proposed as the mechanism for compensatory habitat, this must also include enhancement works to improve the integrity and viability of habitat over time, which must be documented in the VMP.

Where 'Rehabilitation' or 'Restoration' are proposed as the mechanisms for compensatory habitat, these must be detailed, fully funded, and documented in the VMP.

Protection

Koala habitat protection is the priority 1 compensation Strategy to implement for any adverse impact of a development proposal. All classes of koala habitat can receive protection under this policy. There are four acceptable primary protection mechanisms for this category of habitat compensation works (Table 2).

It is acknowledged that whilst the mechanisms identified are all legally viable, the acquisition or eligibility guidelines of the agencies involved may not correspond with the lands in question. Accordingly, these mechanisms should not be proposed for compensation unless proof of prior discussion and agreement by these agencies is presented as part of the assessment of any Development Application.

Table 2: Potential protection mechanisms for each class of habitat compensation works

	Habitat Compensation Works		
	Protection	**Rehabilitation**	**Restoration**
Primary protection mechanisms			
Donation of land to the Crown for dedication as a conservation reserve (NPW Act)	Yes	No	No
Voluntary conservation agreement (NPW Act)	Yes	No	No
In perpetuity trust agreement under the Nature Conservation Trust Act 2001	Yes	No	No
Transfer of land to council for dedication as a reserve either as a donation and/or in lieu of Section 94 contributions (EP&A Act) (Note: limited likely potential)	Yes	No	No
Voluntary planning agreement (EP&A Act)	No	Yes	Yes
Incentive property vegetation plan (NV Act)	No	Yes	Yes
Land use protection mechanism			
Positive covenants or equivalent instrument (Section 88E, Conveyancing Act 1919)	Yes	Yes	Yes
Rezoning within the Bellingen LEP to zone E2 Environmental Conservation, E3 Environmental Management, RE1 Public Recreation (EP&A Act)	Yes	Yes	Yes
Management and funding mechanisms			
VMP/PoM fully funded with a minimum five-year management period as a condition of development consent (EP&A Act)	Yes	Yes	Yes
Environmental levy (Local Government Act 1993)	Yes	Yes	Yes

Another alternative to protect koala habitat is the implementation of a land use protection mechanism which can be applied to all three categories for compensation and are listed in the above table as follows:

- Positive covenants (Section 88E, Conveyancing Act 1919) or equivalent instrument; and/or
- Rezoning within the Bellingen LEP to zone E2 Environmental Conservation, E3 Environmental Management, RE1 Public Recreation (EP&A Act).

Rehabilitation

Rehabilitation is the next priority for compensation when all protection avenues on the property have been exhausted and/or justified as unsuitable. Adverse impacts of a development proposal may seek to be offset by managing an area of receiving land to improve the integrity and viability of preferred koala habitat and/or prevent/minimise threats to preferred koala habitat. (i.e. rehabilitation works and koala protection measures). Under this policy all classes of preferred koala habitat can be afforded rehabilitation.

Restoration

Restoration is the last resort to offset the adverse impacts of preferred koala habitat loss or degradation from a development proposal by restoring koala habitat on an area of receiving land (i.e. Restoration works). Habitat may be restored in an area of receiving land within the Koala Planning Area where there is a sound ecological justification and reason to do so (e.g. within gaps of contiguous preferred koala habitat, areas adjacent to preferred koala habitat, within a koala linkage area or a denuded riparian corridor). Appropriate works for an area of receiving land afforded Restoration works will depend on the individual features of the land and the type of ecological community to be created. It should be noted that for the purposes of this plan, restoration works do not require the establishment of an entire ecological community, but are focused upon the establishment of Preferred Koala Habitat only. Rehabilitation works and threat prevention (e.g. koala protection measures) all contribute to the restoration of preferred koala habitat. All classes of koala habitat can be afforded Restoration under this policy.

Determining Compensation Area

To ensure that the loss of preferred koala habitat caused by development activity does not lead to a net loss of habitat, the area to be secured by compensation works needs to be larger than the area of habitat that is impacted. The compensation multiplier presented in this habitat compensation policy takes into account all of the following ecological factors:

a) the relative conservation value of the area of koala habitat adversely impacted by development activity and consequently the net gain required for environmental improvement;
b) risk of all or some of the compensation works failing;
c) time lag before the positive ecological benefits of compensation works are realised;
d) area of clearing and the negative ecological impacts of the clearing;
e) area of the compensation works and the positive ecological impact of the compensation works.

The compensation multiplier can only be represented as a relative value as it is not possible to quantify the true value of preferred koala habitat impacted by development activity. The relative values detailed in Table 5, were chosen to ensure that this policy is workable and does not place an unreasonable or prohibitive cost burden on proponents. At the same time, the values need to be high enough to accommodate the inherent risks associated with compensation works.

Conservation value

The conservation value represents the relative ecological value of the area of preferred koala habitat adversely impacted by development activity. A relative value has been assigned to each of the four classes of koala habitat identified in this policy ranging from 2 (low) to 4 (high) (Table 5).

How do I calculate the habitat compensation works?

In determining the area of vegetation to be removed, the following methods for calculation shall be used.

- Single tree/s with no part of canopy overlapping another tree – area within the drip line of the trees Crown (see example for Trees A & B in Figure 1 below)

- Multiple trees with overlapping canopy – outer edge of total canopy (see example for Area A in Figure 1 below).

After calculating the area of vegetation to be removed, the “Single Tree” or “Area” compensation multipliers shall be used as follows;

- If the area of proposed tree removal is less than 0.2ha, apply the Single Tree multiplier;
- If the area of the proposed tree removal is greater than 0.2ha, apply the Area multiplier.

Figure 1: Example calculation of compensation areas

Single Tree Compensation provisions

Where removal of koala food trees is proposed, any koala food trees removed must be replaced according to the ratio detailed in Table 3, or, at council’s discretion the applicant may conduct enhancement works which improve the integrity and viability of koala food trees and/or preferred koala habitat or a koala linkage area within the development area.

Table 3: Replacement ratios for three size classes of koala food trees.

Food tree size class (dbhob)	Replacement ratio (loss:gain)
<100 mm	1:6
100–300 mm	1:8
>300 mm	1:10

Note: these ratios only apply to the koala food tree species listed in Table 4

* replacement ratios are higher than 1:1 because of the time lag before the ecological benefits of compensatory plantings are realised and risk of compensatory plantings failing.

Table 4: Koala food trees

Primary koala food trees
Tallowwood *(Eucalyptus microcorys*)
Swamp Mahogany (*Eucalyptus robusta*)
Forest Red Gum (*Eucalyptus tereticornis*)
Small-fruited Grey Gum (*Eucalyptus propinqua*)
Secondary koala food trees
Flooded Gum (*Eucalyptus grandis*)
Blue Gum (*Eucalyptus saligna*)
Note: Flooded Gum & Blue Gum should be considered as Primary Food Trees where they occur as a co-dominant canopy species with Tallowwood.

Where habitat establishment is proposed, an appropriate planting regime and mix of koala food trees and other plant species must be developed which mimics the structure and species mix of the surrounding native forest. This planting regime and mix of species is to be documented in the vegetation management plan and approved by council. Plantings should be targeted:

- within gaps of contiguous preferred koala habitat or adjacent to preferred koala habitat;
- on land determined to be a koala linkage area;

All plant stock must be sourced from local provenance seed.

Area Compensation

The compensation multiplier used for each class of koala habitat and each type of compensation works identified in this policy is detailed in Table 5 and is calculated by the following formula:

Compensation Multiplier = Conservation Value x Time/Risk Factor

Table 5: Compensation Multiplier values based on the formula

		Compensation Multiplier			Conservation Value1
		Protection	Rehabilitation	Restoration	
Class of koala habitat impacted by development activity	Primary	4	8	12	4
	Secondary A	3	6	9	3
	Secondary B	2	4	6	2
	Koala linkage area	2	4	6	2

Time/Risk Factor	1 (low)	2 (medium)	3 (high)

1 This policy is based on the Habitat Offsets Policy Framework detailed in Eco Logical Australia (2003).

Time/risk factor

The time/risk factor recognises that for any area of receiving land there is an inherent risk in the habitat compensation works failing and/or a time lag before the positive ecological benefits of the activity are realised. Each of the three classes of habitat compensation works (i.e. Protection, Rehabilitation and Restoration) was ranked as having either low, medium or high time lag and/or risk of failure (i.e. time/risk factor). The three types of compensation works were then assigned a numerical value to represent time lag and/or risk of failure (Table 5).

Worked example

Within a 50 hectare proposed subdivision, there are 20 hectares of degraded primary koala habitat located on undevelopable land on the development area. After all efforts to avoid, minimise and mitigate the adverse impacts of the proposed subdivision on koala habitat have been exhausted, clearing of 0.46 hectares of primary koala habitat is proposed to upgrade an existing road servicing the proposed development.

Should the development proposal process apply Protection as the measure to compensate for clearing of 0.46 hectares of primary koala habitat, the area of receiving land required is calculated as follows.

Area of Habitat Compensation Works = Area impacted x Compensation Multiplier

= 0.46 ha x 4

= 1.88 hectares

Similarly, should the development proposal be suited to Rehabilitation or Restoration as the measure to compensate for proposed clearing, the area of receiving land required is therefore, 3.76 hectares and 5.64 hectares respectively as follows.

Table 6: Example of the Area of Habitat Compensation Works required

Based on an area of 0.46 ha of primary koala habitat proposed to be impacted by development activity.

Class of Habitat Compensation Works chosen by proponent	Area Impacted (ha)	Compensation Multiplier (from)	Area of Habitat Compensation Works (ha)
Protection	0.46	4	1.88
Rehabilitation	0.46	8	3.76
Restoration	0.46	12	5.64

Bellingen Shire Development Control Plan 2017

Chapter 17

North Bellingen Urban Release Area

Table of Contents

Table of Amendments

Amendment	Date Adopted	Date Commenced
Minor review of DCP - DCP 2017 replaces DCP 2010	22 November 2017	6 December 2017

17.1 Aims

The general aims of this chapter are;

a) To encourage the timely and efficient release of urban land that makes provision for necessary infrastructure,

b) To ensure that a simple and safe movement system for pedestrians, cyclists, private vehicles and public transport is provided as part of all subdivision development,

c) To protect and enhance significant riparian areas and remnant vegetation where possible,

d) To ensure that a safe and accessible network of both passive and active recreational areas suitable for the projected population are provided within the URA,

e) To ensure that adequate stormwater and water quality management controls are incorporated into all subdivision developments in this area,

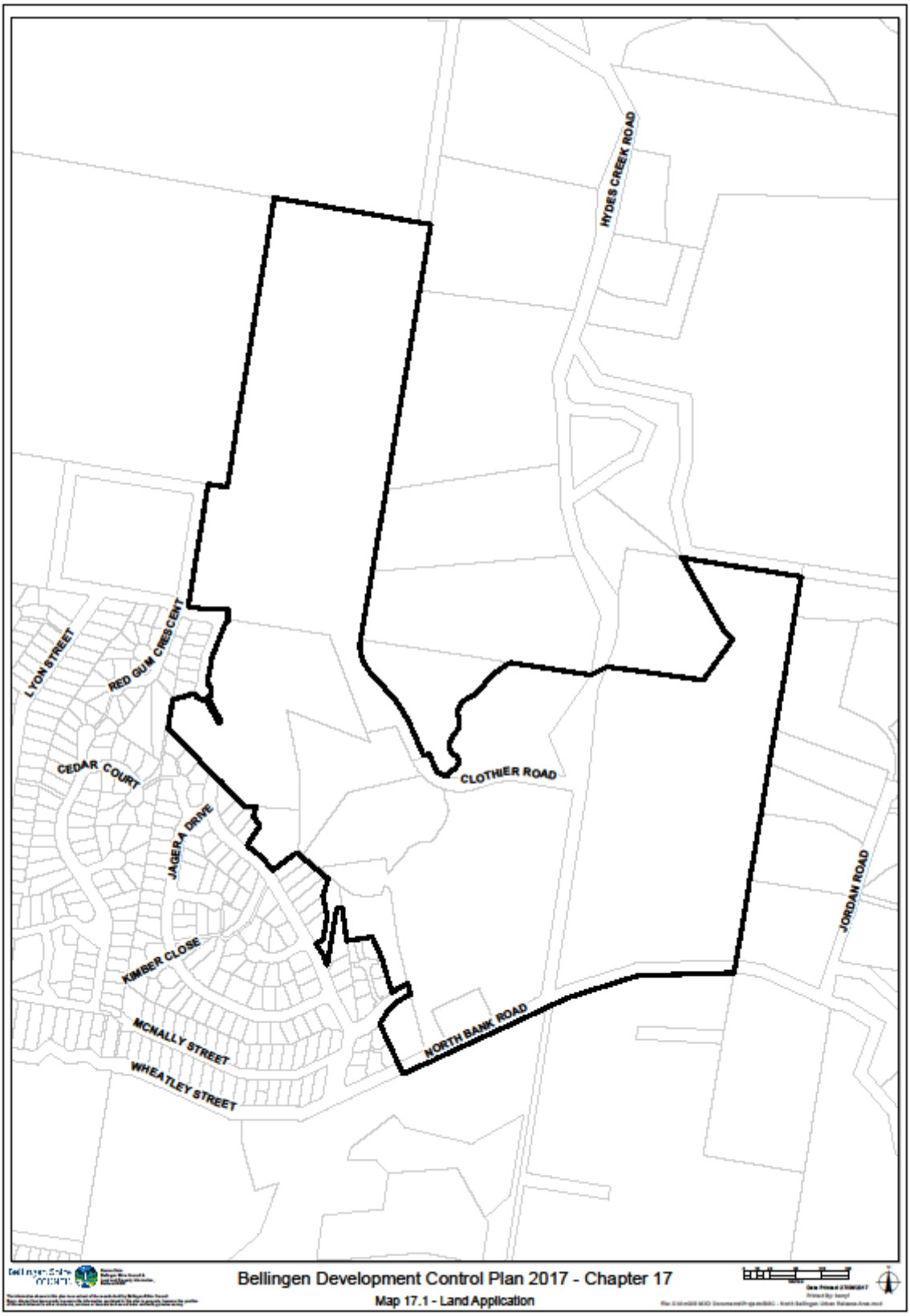
f) To ensure that subdivision layout and design minimises the potential risk posed by natural and environmental hazards to people and property,

g) To ensure that future residents of land located within the de-rated buffer around the Bellingen Sewerage Treatment Plant are made aware of the potential for occasional offensive odours from the Plant, and

h) To satisfy the requirements of Clause 6.2 of the BLEP 2010.

17.2 Where This Chapter Applies

The provisions of this Chapter apply to land within the area delineated by the thick black border in Map 17.1.



Map 17.1 Land Application

17.3 When This Chapter Applies

This chapter applies when a development application for subdivision of land to which this chapter applies is received by Council.

17.4 Definitions

Definitions of development are the same as those contained within Bellingen Local Environmental Plan 2010.

17.5 Variations

Council may consider variations to the standards required of development in this chapter when the overall aims of this chapter and other chapters referenced in that standard can be achieved.

17.6 Development Criteria

17.6.1 Staging

1) Subdivision developments must accord with the staging requirements specified for each of the precincts, as shown on Map 17.2.

   Stage 1: Precinct 1 or 3

   Stage 2: Precinct 2 or remaining precinct

   Stage 3: Precinct 2 or remaining precinct

17.6 2 Land suitability

1) Subdivisions are to be designed to comply with Section 3.6.1 of Chapter 3 – Subdivision.

17.6.3 Buffers to adjoining land uses, areas of environmental constraint or risk

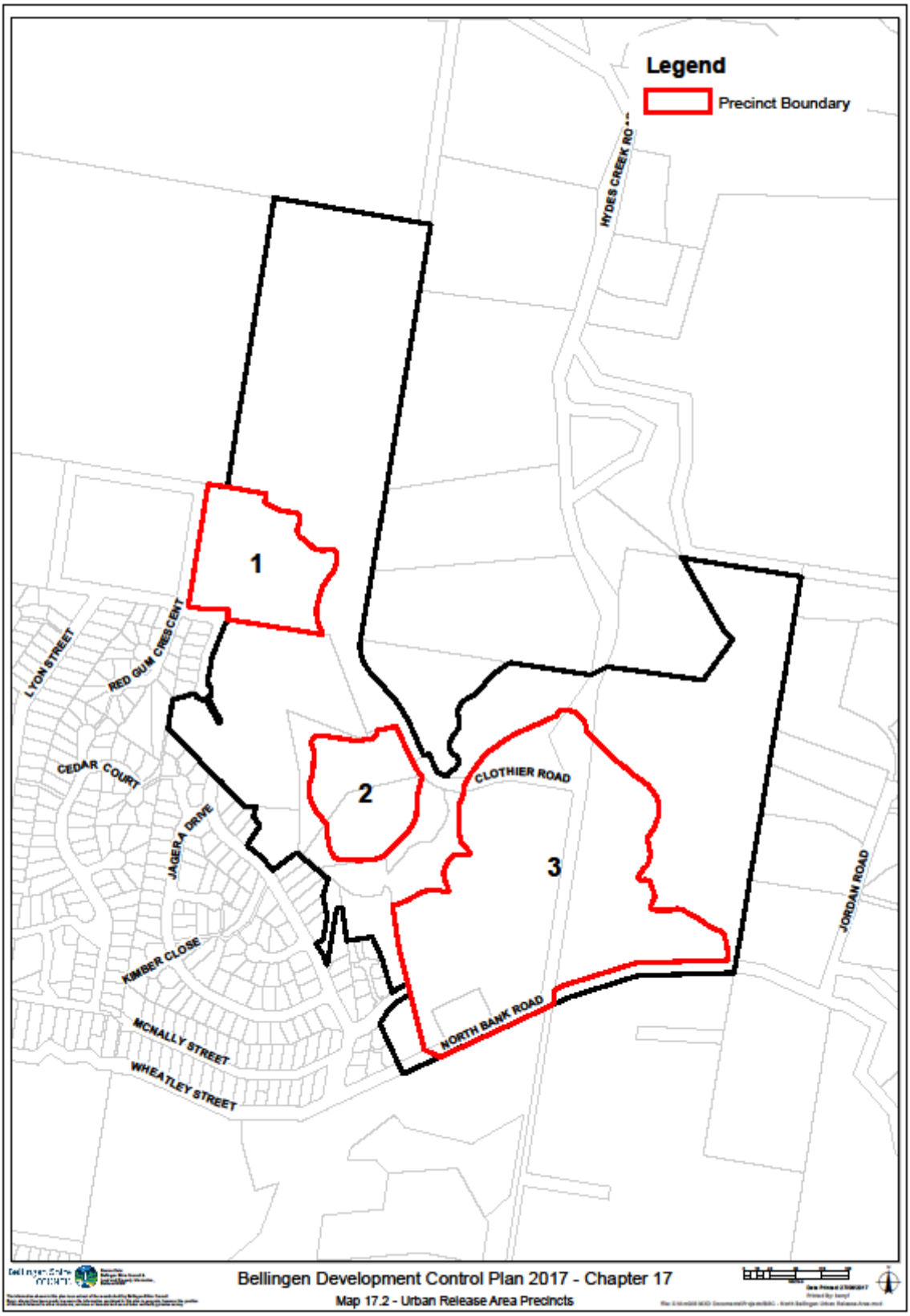
1) Subdivisions are to be designed to comply with Section 3.6.2 of Chapter 3 – Subdivision.

2) Subdivisions shall be designed to minimise disturbance to and removal of existing riparian vegetation and the need for construction works within 50 metres (the riparian buffer zone) of Frenchmans Creek.

17.6.4 Minimum lot size requirements

The minimum lot size for the creation of a residential allotment (independent of an approved dwelling design) is currently 600m^2. This requirement is contained within BLEP 2010 and can only be varied in accordance with BLEP 2010 Clause 4.6 – Exceptions to development standards.

1) Subdivisions are to be designed to comply with Sections 3.7.1 of Chapter 3 – Subdivision.



Map 17.2 Urban Release Area Precincts

17.6.5 Subdivision of lots with approved dwelling

1) Any development application for subdivision that proposes to create a residential allotment less than 600m^2 in area must comply with Section 3.7.1 and 3.7.2 of Chapter 3 – Subdivision.

17.6.6 Lot orientation and frontages

General

1) Subdivisions are to be designed to comply with Section 3.7.3 of Chapter 3 – Subdivision.

Lot orientation

2) New residential lots that will have a property boundary adjoining North Bank, Hydes Creek Road or Clothier Road shall be orientated to have primary frontage to these roads, as illustrated on Map 17.3.

17.6.7 Road network

General

1) Subdivisions are to be designed to comply with Section 3.7.4 of Chapter 3 – Subdivision.

Road Network Connections

2) The major new road connections required to be constructed as part of the development of the North Bellingen Release Area are illustrated in Map 17.3 and described as follows:

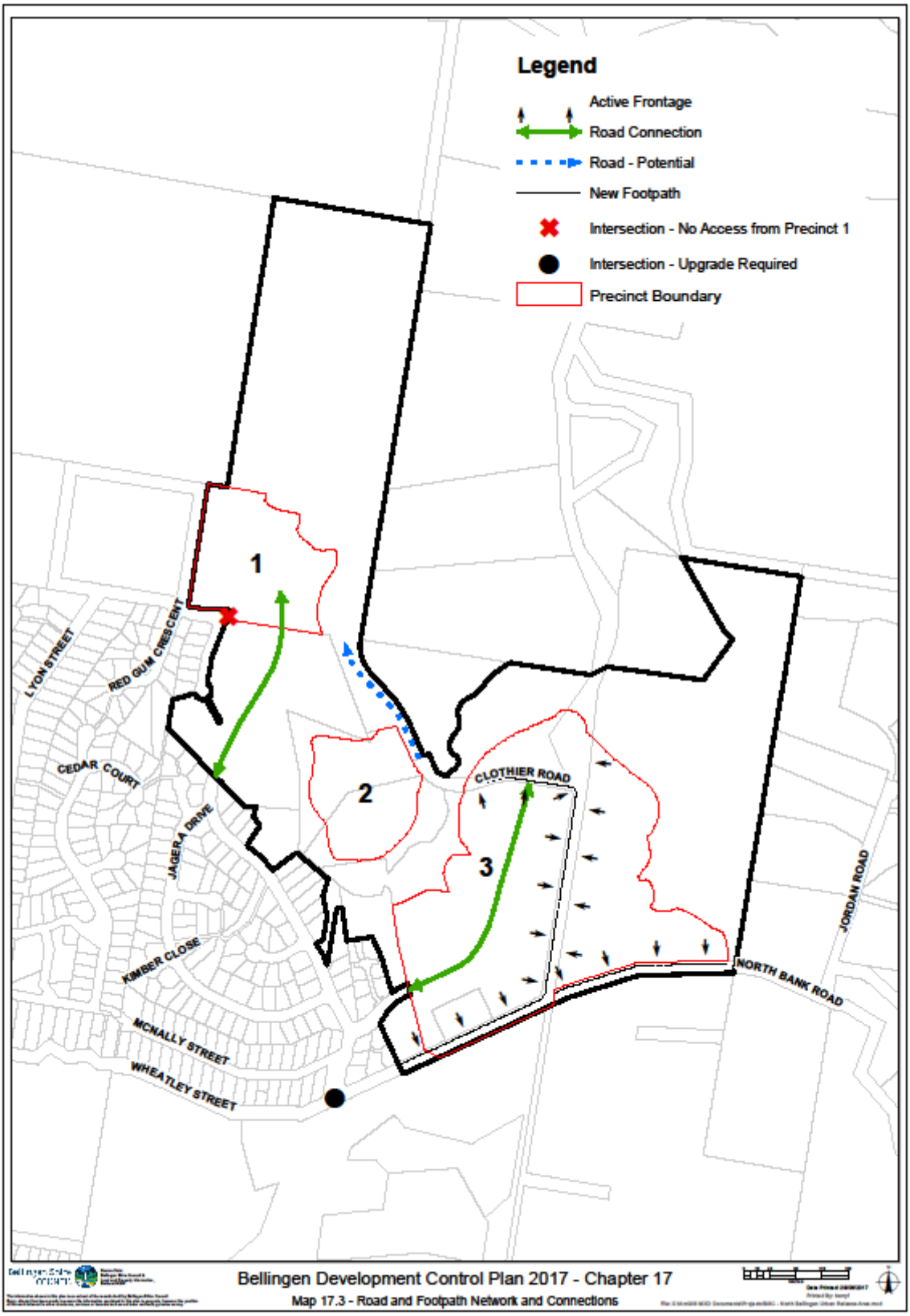
   - Precinct 1 to link up with McCristal Drive,
   - Precinct 3 (west of Hydes Creek Road) to link up with McLaughan Avenue, and
   - Precinct 2 to link to Precinct 1 via new road (Optional).

3) Any road connection between Precinct 1 and Figwood Drive or Iron Bark Place that would result in additional traffic being directed onto Lyon Street will not be permitted.

4) All riparian areas that are proposed to be dedicated to Council for inclusion in Council's open space network must adjoin a perimeter road. Council will not accept subdivision layouts that involve the creation of residential lots that back onto open space areas.

Provision for Public Transport

5) The subdivision layout of Precinct 3 (west of Hydes Creek Road) is to be designed to accommodate a circular bus route through the release area. This route is to link in with the existing bus route that runs in McCristal and Jagera Drive, North Bellingen.



Map 17.3 Road and Footpath Network and Connections

6) The masterplan for the subdivision development lodged with the initial development application for subdivision of Precinct 3 (west of Hydes Creek Road) shall show the proposed bus route and bus stop locations.

Wheatley Street and McCristal Drive intersection

This intersection, shown on Map 17.3, will require upgrading in order to safely accommodate increases in traffic that will be generated by subdivision development of the North Bellingen Urban Release Area, Precinct 1 in particular.

7) If a development application for subdivision of Precinct 1 or Precinct 3 (west of Hydes Creek Road) is received by Council that will involve direction of additional traffic to the Wheatley Street and McCristal Drive intersection and Council does not have a Section 94 (Roads and Traffic) Plan in place that will specifically collect funds from developments occurring on land to which this Chapter applies towards the upgrade of this intersection, the developer would be expected to financially contribute towards the construction of the upgraded intersection via a voluntary planning agreement negotiated with Council.

8) The design and construction of the abovementioned intersection must meet Council engineering specifications. The design must be based on the projected traffic volumes generated from residential subdivision of Precinct 1 and 3.

Clothier Road Bridge Replacement

Clothier Road Bridge is a timber bridge was built at the 1 in 10 flood level, as determined by Council at the time of construction. This means that land west of the bridge is cut off from the rest of the North Bellingen residential area in most flood events, including the 1% AEP flood.

9) Any development application lodged for subdivision within Precinct 2 that involves direction of additional traffic onto Clothier Road Bridge must also include a proposal to construct a replacement bridge or culvert that meets Council's engineering specifications and the provisions of Chapter 8 – Flood and Riverine Processes. Alternatively, there is an option to construct a new road that connects the end of Clothier Road with the existing road network within Precinct 1, as shown on Map 17.3.

10) The finished road level of the new bridge or culvert over Frenchmans Creek must at or above the 1% AEP flood level.

11) The new bridge or culvert over Frenchmans Creek or a new road that connects to the existing road network in Precinct 1 is to be completed to Council's satisfaction prior to the release of any subdivision certificate relating to Precinct 2.

12) Frenchmans Creek has been classified by the NSW Department of Primary Industries (DPI) as Key Fish Habitat. The removal of the bridge and construction of the new crossing must therefore be designed and undertaken in accordance with the NSW DPI *Policy and guidelines for fish habitat conservation and management (Update 2013)* and any conditions of a permit issued under Part 7 of the *Fisheries Management Act 1994*.

Clothier Road Upgrade

13) Any development that involves direction of additional traffic onto Clothiers Road will necessitate an upgrade of this road to the road standard specified by Council's engineering specifications for the full length from the point of access to the intersection of Clothier Road with Hydes Creek Road.

17.6.8 Subdivision pattern and connectivity

1) Subdivisions are to be designed to comply with Section 3.7.5 of Chapter 3 – Subdivision.

17.6.9 Infrastructure requirements

General

1) Infrastructure provision is to be provided as per Section 3.7.6 of Chapter 3 – Subdivision unless otherwise specified within this Chapter.

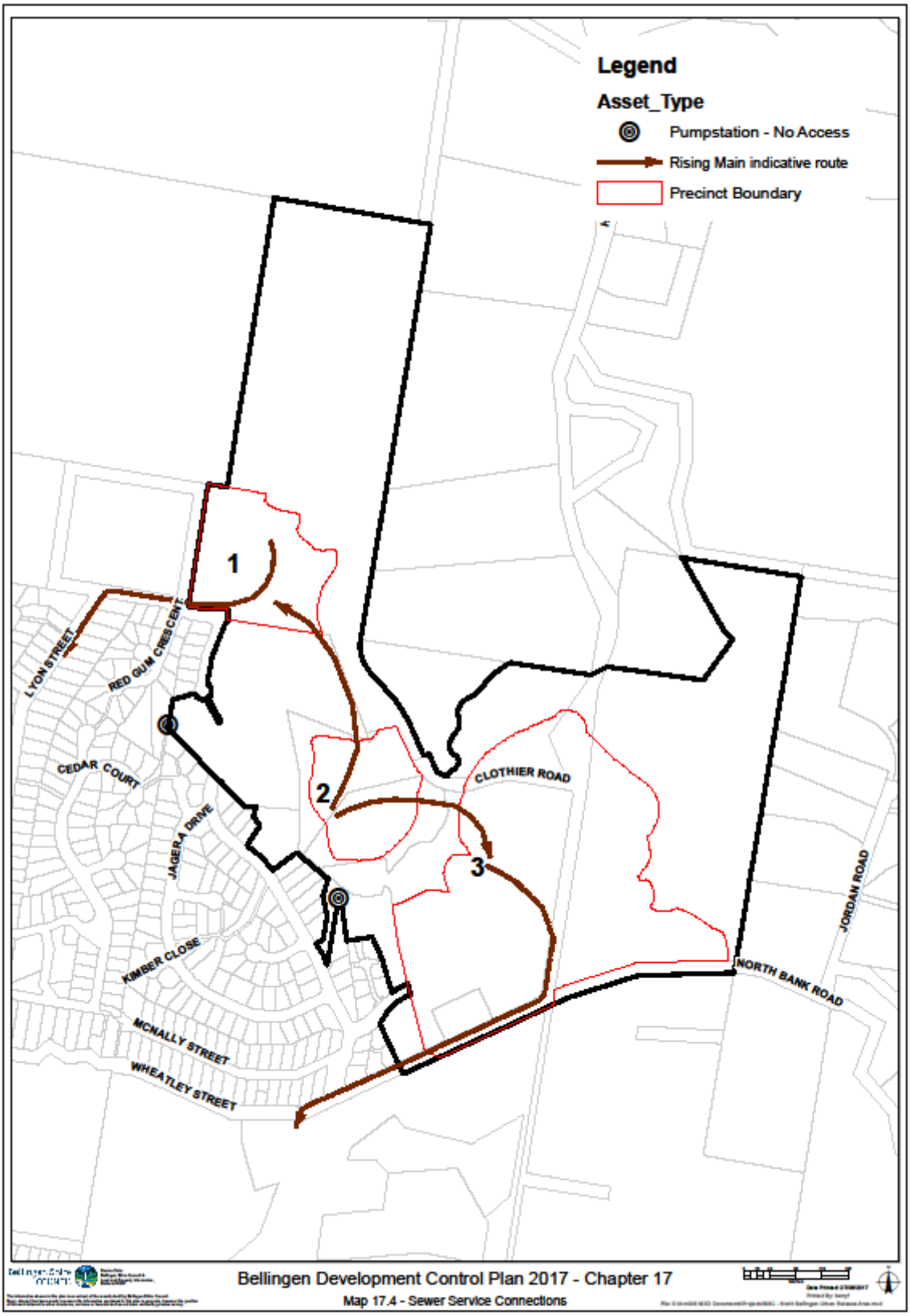
Connection to Sewer

2) Sewer connection requirements and options are illustrated on Map 17.4 and detailed below:

    i. New sewer mains constructed as part of the subdivision development of Precinct 1 may not connect into the pump station located approximately 180 metres south of the south-western corner of this precinct. New sewer mains must connect into Council mains located in Lyon Street, North Bellingen. Note: Council is willing to accept a new pump station in this area.

    ii. New sewer mains constructed as part of the subdivision development of Precinct 2 must connect into the new sewer mains servicing Precinct 1 or 3. Sewage generated by this development may not be directed to the existing pump station located approximately 50 metres south of the southern boundary of this Precinct.

    iii. New sewer mains constructed as part of the subdivision development of Precinct 3 must connect directly to the Bellingen Sewage Treatment Plant. This will involve construction of a new sewer main within the road reserve of North Bank Road.



Map 17.4 Sewer Service Connections

Stormwater

3) All development applications lodged for subdivision of land shall be designed to comply with Chapter 12 – Stormwater.

4) The design of any required water quality intervention devices shall be in accordance with Bellingen Shire Council Water Sensitive Urban Design Guidelines. The location of the devices must be out of the floodway and above the 10% Annual Exceedance Probability design flood line.

5) The stormwater management plan shall demonstrate to Council's satisfaction that there will be 'no net impact' upon the water quality, quantity and flow velocity of the receiving waterway from the proposed development, in accordance with Section 6.1.2.1 of the NSW DPI Policy and guidelines for fish habitat conservation and management.

17.6.10 Previous land uses and potential contamination

1) As a minimum, a Preliminary Investigation of land proposed for subdivision must be undertaken for any subdivision application in accordance with Council's adopted Contaminated Land Policy (2016) and Contaminated Land Policy Guidelines (2016).

2) Council may require more detailed investigations and remediation depending upon the outcomes of the Preliminary Investigation.

17.6.11 Landscaping

1) As per requirements of Chapter 9 – Landscaping.

17.6.12 Split zoned land parcels

1) The layout of any subdivision of any land that contains two zonings pursuant to BLEP 2010 must ensure that an adequate building envelope is located on that portion of the land that is zoned R1 – General Residential.

17.6.13 Open space network

1) All development applications lodged for subdivision of land to which this Chapter applies shall demonstrate that each new residential allotment will be within 400 metres walking distance of existing or proposed local public open space park or bushland reserve that has a minimum area of 0.5ha. This open space area must be accessible to the public via a public footpath or road network.

2) Any proposal for a new local public open space reserve that incorporates some or all of the riparian area within the Precinct must ensure that the following requirements are satisfied:

    i. The proposed open space area directly adjoins Council's existing open space network as shown on Map 17.5,

    ii. Existing significant landscape trees (as shown on Map 17.5), key habitat trees and remnant vegetation are incorporated into the design and layout of the open space area where possible,

iii. A public footpath that is at least 1.2 metres wide will be constructed along the length of the riparian open space area,

iv. The riparian open space area is bordered by a public road,

v. The open space area will be landscaped and embellished in accordance with the principles of the NSW Police *Safer by Design* guidelines,

vi. The open space area will be made free of noxious and environmental weeds as identified by Chapter 6 of this DCP in accordance with an approved Weed Management Plan, landscaped and embellished in accordance with an approved Landscape Masterplan and maintained in accordance with an approved Maintenance and Management Plan prior to handover to Council.

3) Any proposal for a new local public park that is intended to be embellished with a playground as part of the subdivision development must ensure the following requirements are satisfied:

i. The area has a minimum size of 0.5ha,

ii. The chosen play equipment is suitable for the most common age group of children living in the locality (as demonstrated by the most up to date census statistics available),

iii. The area has a high degree of amenity,

iv. Existing significant trees or remnant vegetation are incorporated into the design and layout of the park where possible,

v. The park is located, designed, landscaped and embellished in accordance with the principles of the NSW Police Safer by Design guidelines,

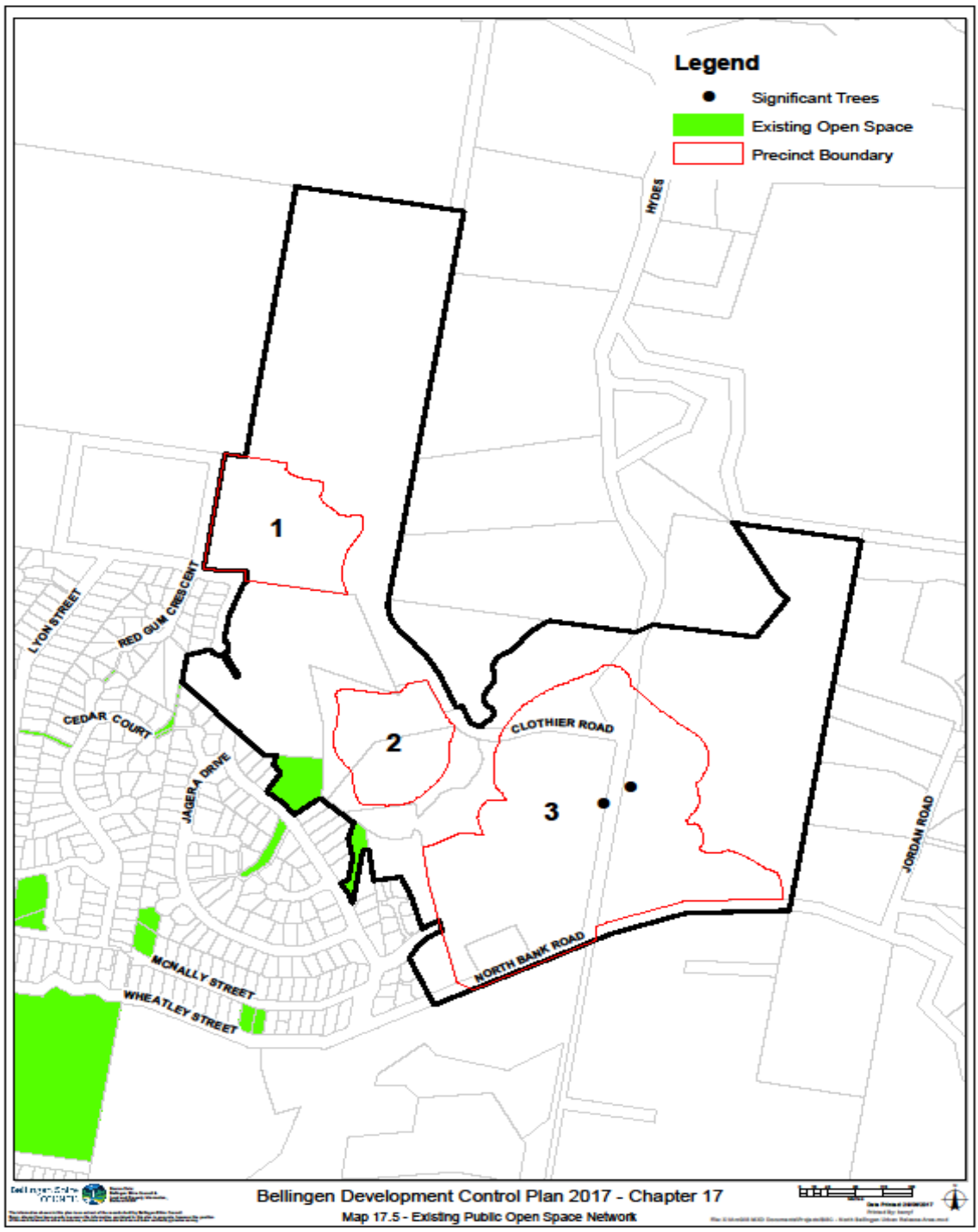
vi. Shade trees and seating for parents are provided,

vii. The park must have direct frontage to a public road that is sufficiently wide to enable adequate passive surveillance of the park from the street,

viii. The park is landscaped and embellished in accordance with an approved Landscape Masterplan and maintained in accordance with an approved Maintenance and Management Plan prior to handover to Council.

17.6.14 Odour from Bellingen Sewage Treatment Plant

1) All residential lots created as a result of a subdivision of land within Precinct 3 that are located within 245 metres of the nearest property boundary of the Bellingen Sewerage Treatment Plant must be registered with a restriction to user that alerts the future residents of the possibility of occasional offensive odours from the plant being experienced during upset/malfunction conditions.



Map 17.5 Existing Public Open Space Network