Chapter 1: Part B

Subdivision

Document History

Doc No.	Date Amended	Details Comments eg Resolution No.
#312297	14 October 2010	Res 10-696 - to create Draft DCP 2010 for public exhibition
#1014988		Draft DCP 2010 Part B (public exhibition copy)
#1068427	14 March 2011	Adopted Res 11-169 - Format changes applied

PART B - SUBDIVISION

B1.	INTRODUCTION	
	What is the purpose of this Part?	
	What are the Objectives of this Part?	
	What special considerations apply to subdivision?	3
B2.	DESIGN GUIDELINES	5
DZ.	B2.1 General	
	B2.2 Guidelines	
	B2.3 Site design	
	B2.4 Climate control	
	B2.5 Aspect	
	B2.6 Rural areas	
	B2.7 Tree preservation	
	B2.8 Landscaping	
	B2.9 Street signs	
Б0	•	
B3.	DEVELOPMENT GUIDELINES	
	B3.2 Road hierarchy	
	B3.3 Local and minor roads	
	B3.4 Road pavement	
	B3.5 Public open space and public reserves	
	B3.6 Lot size	
	B3.7 Lot frontage	
	B3.8 Stormwater drainage	
	<u> </u>	
B4.	RURAL SUBDIVISION	
	B4.1 Element – Lot Size and Shape	
	B4.2 Element – Residue Land	
	B4.3 Element – Village Zones	
	B4.4 Element – Waste Disposal	
	B4.5 Element – Stormwater Disposal	
	B4.6 Element – Road Construction and Design	
	B4.7 Element – Special Purpose Subdivision	
B5.	URBAN SUBDIVISION	
	B5.1 Element – Lot Size	
	B5.2 Element – Allotment Layout	19
	B5.3 Element – Allotment Design	21
B6.	ROADS – URBAN AREAS	22
	B6.1 Element – Road Design and Construction	
	B6.2 Element – Footpath and Nature Strip	
	B6.3 Element – Access Design	
B7.	URBAN SERVICES	
Б1.	B7.1 Element – Drainage Control	
	B7.1 Element – Dramage Control	
	B7.3 Element – Sewer	
	B7.4 Element – Water	
	B7.5 Element – Geotechnical Report	
	•	29
	Note: $^{(D)}$ = definition included in Chapter 1 Part A7 of this DCP.	

~	_	
(:h1	Page	<i>B</i> 2

This page has been intentionally left blank	On rago B

What is the purpose of this Part?

The subdivision of land establishes the basis on which future development is built. Therefore the Council seeks to ensure that the environment, the nature of future development and the aspirations of the community are given due consideration in all subdivision proposals.

The primary purpose of this Part of the DCP is to provide guidelines, controls and standards for subdivision in Byron Shire.

This Plan applies to all development consents relating to the subdivision of land within the Shire of Byron and includes strata, Torrens (freehold) and Community Title subdivision, other than those forms of subdivision permissible under Byron Development Control Plan 2010 Chapter 16 - Exempt and Complying Development.

What are the Objectives of this Part?

The objectives of this Part of the DCP are:

- To promote subdivision development which is of a high design standard and which minimises impact on the environment
- To provide for a variety of housing needs reflecting the growing diversity of household types, incomes and lifestyles
- To encourage the use of innovative design and engineering principles which enhance the physical environment and the social fabric
- To optimise the provision of infrastructure services in the most efficient and effective manner
- To ensure the continued supply of agriculturally viable land.

What special considerations apply to subdivision?

Community facilities

Applicants for subdivision in both urban and rural areas will be required to contribute towards the provision of community facilities, public reserves and open space, as Council has established that both urban and rural dwellers, and visitors utilise such facilities, whether located in towns or in the local area.

The level of such contributions will be assessed with reference to the specific characteristics of each proposal in accordance, with Section 94 of the Environmental Planning and Assessment Act, 1979 and Council's current Section 94 Plan.

Development Control Plan

Where required by the provisions of the LEP and in such other cases as required by Council, a DCP is to be prepared for an area to be subdivided prior to the lodgement of any application for subdivision, to guide the preparation and assessment of such application/s.

The DCP may relate to land in one or more ownerships and may specify such matters as:

maximum density

- approximate road layout
- areas suitable for dwelling^(D) sites

- location of public open space and/or community facilities
- environmental management
- contributions for roads and services; or
- any other matters determined by Council.

Land owners and/or applicants may be required to provide sufficient information or financial assistance to Council to enable preparation of such a plan.

Contaminated Land

Applications for subdivision of land must be accompanied by a report addressing the provisions of *State Environmental Planning Policy No. 55 - Remediation of Land.*

The likelihood of land contamination must be considered to ensure that changes in land use will not increase risks to human health or the environment. Reports must be in accordance with:

- (a) guidelines published by NSW Department of Planning; and
- (b) guidelines for consultants reporting on contaminated land published by the Environment Protection Authority.

What Design Guidelines apply to subdivision generally?

B2.1 General

The provisions of this policy relate to the layout of subdivisions, the size, shape and orientation of allotments^(D), the provision of road access and services and other relevant matters.

Subdivision in the Shire must be in accordance with the provisions of the Byron LEP 1988 and with the provisions of this plan and any other adopted DCP which applies to the area to be subdivided.

All engineering works shall be in accordance with Council's Development Design and Construction Manual as amended from time to time and with any other relevant documents prepared by Council or as otherwise approved by Council.

The requirements and provisions of this plan applies to all subdivisions, but each application will be considered by Council on its merits, having regard to relevant objectives, performance criteria and prescriptive measures as defined in this DCP. Applicants should therefore examine this plan carefully before designing and submitting an application for subdivision, and should accompany the application with all relevant information, including reasons supporting any claim for special consideration.

B2.2 Guidelines

Applicants are advised to familiarise themselves with the matters contained in other parts of this DCP since good subdivision design cannot be achieved without proper consideration of the way in which the land will be developed and used later.

In addition, applicants are referred to relevant publications offering detailed design guidelines applicable to subdivision, such as the North Coast Design Guidelines (a NSW Department of Planning publication) (dated 1989 or as amended).

B2.3 Site design

This section should be considered in conjunction with Chapter 1 Part C of this DCP – Residential Development.

The following natural factors are to be given full consideration in the overall site design of any proposed subdivision:

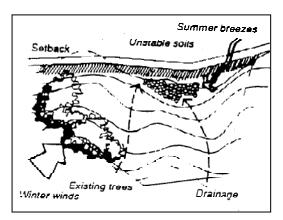
- climate control (wind and sun)
- landform
- aspect and views
- geology and soils
- drainage
- vegetation

Site design should integrate the effects of these factors with consideration of the humanmade environment with which the subdivision interacts. This will include consideration of the effects of, and the impacts on these human-made elements:

- accessibility to urban centres
- accessibility to community and recreational facilities
- road and transport networks
- site access

- physical and human services
- built environment in the vicinity
- existing buildings and improvements on the site

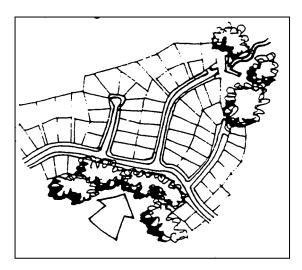
Applicants are required to demonstrate how the subdivision proposal takes these elements into account.



B2.4 Climate control

Design of the proposed subdivision should gain the most advantage of cooling breezes in summer and reduce the impact of adverse winds in winter by effective site layout and use of landscaping. Significant topographical features such as valleys and ridges can serve to channel or block prevailing winds.

Similarly, the selection of vegetation types and location of vegetation buffers and shelterbelts can be used to advantage in climate control on the site.



The site layout and landscaping should avoid funnelling unfavourable winds and encourage cooling summer breezes.

Refer to Chapter 1 Part C Section C14 of this DCP for specific provisions relating to design for energy efficient housing.

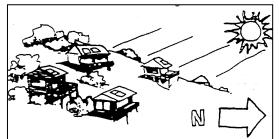
B2.5 Aspect

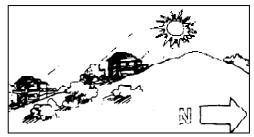
Aspect is a major factor in designing the subdivision layout in regard to optimising solar access and the following principles are a basic guide.

Solar access is maximised where:

- buildings can be sited so that the main living areas are oriented north
- overshadowing of, or by other buildings is minimised

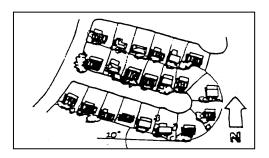
Shadows are small on a north-facing slope so dwelling^(D) sites can be closer together. On

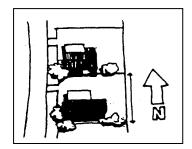




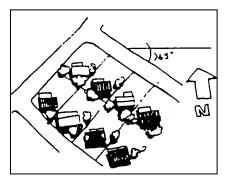
a south-facing slope, shadow length is increased so dwelling^(D) sites should be further apart. On east or west-facing slopes, dwellings^(D) need to be stepped back to maintain solar access.

Lots with a main north-south axis (from 20°W to 30°E) give the most flexibility in the siting of dwellings^(D) and reduce problems of overshadowing. Lots with a main east-west axis may need to be wider than normal.





Lots with a NW-SE or NE-SW axis are less favourable and may need to be specially designed or larger than normal to allow the siting of a house which is not parallel to the boundaries.



These guidelines should be considered integrally with the particular topography and vegetation of the site to achieve a layout that optimises solar access and site characteristics together. A regular grid of N-S and E-W streets is unlikely to result in an attractive living environment or offer the flexibility for different housing needs.

Refer to Chapter 1 Part C Section C14 of this DCP for specific provisions relating to design for energy efficient housing.

B2.6 Rural areas

Land suitable for agriculture is a limited resource and an important part of the Shire's economy. Retaining good agricultural land is therefore an important aspect of planning for the future of the Shire.

Where a subdivision is proposed near an area where land is used or has potential for agriculture, Council will give particular consideration to the likely social, economic and environmental consequences of the proposal and to the following principles:

- New lots should have dwelling^(D) sites protected from noise, dust, odours, spraying, etc, considering wind direction and topography in relation to nearby agricultural uses
- Ridgelines, vegetation and distance can provide effective buffers
- Avoid interference with own and neighbouring access for fire protection, flood or stock movement
- Maintain all-weather access to stockyards and sheds
- Ensure that flood refuges and shelterbelts are retained
- Retain paddocks in workable sizes

Drainage

Designs for stormwater drainage which are harmonious with natural drainage patterns, soils and other relevant site conditions are more likely to reduce both construction and maintenance costs. Therefore the natural drainage pattern of the site should be a basic element in subdivision layout and road design.

Applicants are encouraged to make use of open spaces and other unsealed surfaces to detain drainage surcharge. Section B3.8 suggests some innovations in stormwater drainage treatment which should be given consideration and incorporated in subdivision design where appropriate.

B2.7 Tree preservation

Chapter 1 Part A of this DCP provides information about Council's Tree Preservation Order and State Government legislation, including the *Threatened Species Conservation Act, 1995* and the *Native Vegetation Act, 2003*.

Any trees proposed to be removed as a result of a subdivision proposal must be clearly marked to facilitate identification at the time of site inspection.

Subdivision road layout should be designed around significant stands of trees which may be located within reserves or within the subdivision layout such that dwelling^(D) construction may be achieved without causing any undue interference with existing trees.

B2.8 Landscaping

The effective use of landscaping can make a significant contribution to climate control, to the overall appearance of the subdivision and to the residential environment which is ultimately created.

Applicants should refer to Chapter 1 Part H - Landscape, of this DCP for information regarding landscape design and maintenance.

Landscaping or payment in lieu may be required in accordance with Council's adopted Section 94 contribution plan/s.

B2.9 Street signs

The applicant is required to supply and erect signs in accordance with standards available from Council.

What Development Guidelines apply to subdivision?

B3.1 General

This section is aimed at assisting those involved in the subdivision process and the development industry to consider innovative alternatives to conventional practice and standards which may offer real advantages in design, cost, function and safety.

The Council, in including this advisory section, stresses that its intention is not to reduce or erode development standards but rather to suggest new and better ways of achieving the real objectives of these standards and so to enhance the quality of development in the Shire.

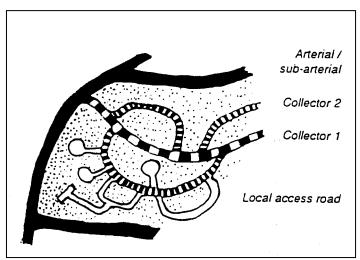
Therefore the principles outlined within this section should be taken into consideration in all subdivision designs. Although each principle is discussed separately, they are closely related and will not achieve optimum results in isolation from each other.

B3.2 Road hierarchy

The practice has often been to make road reserves and road pavements in a subdivision all the same width.

Consideration must be given to a more pronounced road hierarchy in which the size and appearance of each road matches its function. This can lead to:

- lower construction costs since the busiest (widest) road does not determine the width of all roads
- increased safety since road speed is determined to a considerable extent by pavement width
- improved appearance since the width of road pavement and nature strip, and the landscape treatment can be designed appropriately for each level of the road hierarchy and for the intended users (cars, bicycles, pedestrians).



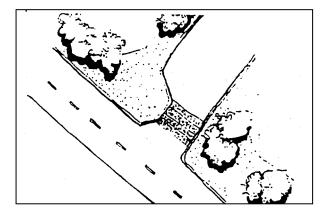
The real benefits of a road hierarchy will only be realised if the whole neighbourhood has been planned together. Streets at the lower end of the hierarchy should not become through-routes for unrelated traffic and proper provision must be made for buses and service and delivery vehicles.

Depending on the overall size and layout of a subdivision, a typical road hierarchy could include:

- Arterial or sub-arterial giving access to the subdivision but not part of it
- Collector street a main link through the subdivision, connecting directly with arterial roads
- Local access road a loop road or cul-de-sac serving more than 15 lots
- Minor road a cul-de-sac, minor loop or minor access street, serving less than 15 lots.

B3.3 Local and minor roads

Minor access roads are at the lower end of the road hierarchy. They can most happily and safely accommodate different uses together - cars, bicycles and pedestrians. This is because each serves a limited number of houses and is designed for small volumes of traffic at low speeds.

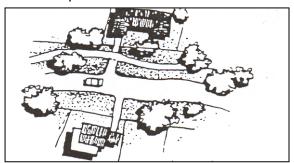


Using a greater proportion of roads at the lower end of the road hierarchy can have these advantages:

- creating a more attractive and human scale environment
- increased safety for all users by lessening traffic volume and speed
- promoting local character and mixed use of street
- reducing the amount of hard paving of roads and so reducing road construction costs and urban runoff
- helping to retain existing landscape features by reducing the area needed for roads
- integrating minor access roads with the open space network.

B3.4 Road pavement

Within a conventional road reserve width, an attractive and varied streetscape can be created by using narrower, winding roads with parking bays and footpaths within wider nature strips.



A narrower pavement width in residential streets can save costs, relate better to topographical and landscape features within the road reserve and create a pleasant, people-oriented street character. The combination of this narrower pavement meandering within the fixed reserve enhances this character.

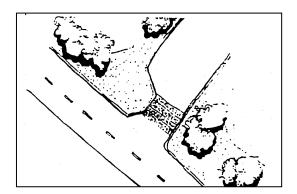
Cost savings result from reducing earthworks, road construction and paving material, and also because there is less water run-off and thus less drainage required. In many cases, only one side of the road will need a footpath.

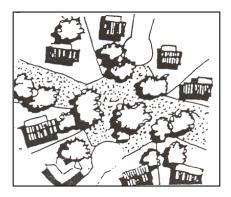
Minimum road pavement design requirements are tabled in Council's Design and Development Manuals as amended from time to time.

B3.5 Public open space and public reserves

The value of public open space is determined by how easy it is to get to, how well it is used, potential for active or passive uses, environmental value and how pleasant it is to be there.

Public open space within a subdivision must form part of a pedestrian/cycleway network which connects residential areas and other facilities. Where appropriate, landscaping of open space must be integrated with street and private landscaping to bring the whole landscape environment together.





- There must be a functional hierarchy of open space to ensure leisure activities for a wide variety of people;
- Open space must be safe to use for access or leisure;
- It must enhance the function and appearance of the subdivision;
- It must act as a landscape-linking element; and
- Only land which is in a suitable location and which is able to be used for active or
 passive recreation will be considered to meet the requirements for public open space.
 Council will consider proposals to dedicate environmentally sensitive land as public
 open space.

Public open space must be provided in accordance with Council's adopted Section 94 plan. Public open space areas must be functional, well-located and distributed appropriately throughout the subdivision to maximise usage and provide for passive and active recreational opportunities.

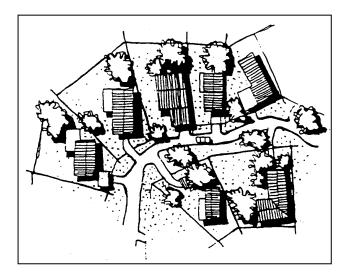
The following works will be required for land intended to be dedicated to Council as public reserves, with all costs to be met by the applicant prior to dedication:

- (a) for active recreation areas clearing, draining and surface grading; and
- (b) for passive recreation areas retention of trees and native vegetation. Drainage and surface grading where required.

All road construction and associated drainage works fronting a proposed public reserve are to be undertaken at the applicant's cost.

B3.6 Lot size

The Council wishes to encourage a range of allotment^(D) sizes to meet the needs, affordability and preferences of different household types. Therefore this plan provides for a range of lot sizes in each subdivision to be integrated throughout the development.



The advantages of smaller lot sizes can include:

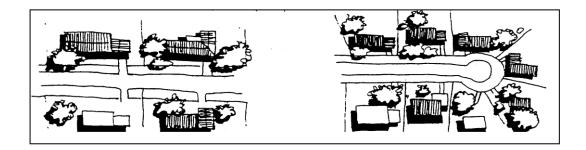
- greater choice for home owners
- more efficient use of land
- less site maintenance
- more affordable land

However, as the size of the site is reduced, good site planning and the relationship between sites become increasingly important to ensure that each dwelling^(D) site has an appropriate aspect, useable private open space and protection from overshadowing and overlooking.

No more that two battle axe allotments^(D) may be accessed by one access corridor. The access corridor shall be excluded from the minimum allotment^(D) area calculation

B3.7 Lot frontage

Conventional practice has concentrated on wide street frontages which result in larger block sizes, increased road lengths and servicing requirements, and thus higher costs per lot. With increasing diversity in housing preferences, there can be more flexibility in lot shapes to optimise the use of each lot in terms of aspect, house siting and private open space.

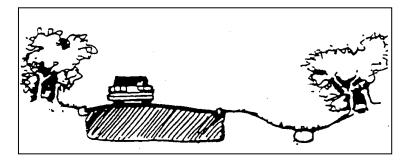


This Development Control Plan provides controls over the shape of lots. In this regard, consideration will be given to the orientation of each lot and its ability to provide a suitable house site with good aspect, useable private open space and adequate vehicle access.

B3.8 Stormwater drainage

Conventional practice requires the maximum stormwater flow depth to be contained within the road pavement and kerb area.

Greater use of the reserves as a defined overland floodway can have some advantages in cost savings, maintenance and environmental impact. Greater use of retarding basins can reduce peak flows and basins can be integrated with open space for efficient land use.



- Slower run-off means lower velocity, less siltation and less downstream erosion
- Less reliance on pipes reduces the possibility of localised flooding through pipe failure or blockage

However extreme care must be taken to ensure minimal impact of flooding in this area of high and heavy rainfall. The effectiveness of non-impervious floodways depends on soil conditions, cross-slopes and longitudinal falls. Pedestrian and vehicle safety and accessibility are major considerations with regard to floodwater depth and velocity.

Stormwater drainage design detail is tabled in Council's Design and Construction Manuals as amended from time to time.

B4.1 Element – Lot Size and Shape

Element Objectives

- To ensure that new lot sizes and shapes are consistent with defined planning objectives.
- To ensure that adequate access is available to hatchet-shaped lots.

Performance Criteria

Land suitable for agriculture is both a limited resource and an important part of the Shire's economy. Retaining good agricultural land is therefore an important aspect of planning for the future of the Shire.

Where a subdivision is proposed near an area where land is used for, or has potential for agriculture, Council will give particular consideration to the likely social, economic and environmental consequences of the proposal and to the following principles:

- New lots must have dwelling^(D) sites protected from noise, dust, odours, spraying, etc, considering wind direction and topography in relation to nearby agricultural uses
- Ridgelines, vegetation and distance can provide effective buffers
- Avoid interference with own and neighbouring access for fire protection, flood or stock movement
- Maintain all-weather access to stockyards and sheds
- Ensure that flood refuges and shelterbelts are retained

Prescriptive Measures

All lots are to conform to the minimum area prescribed in the relevant planning instruments. The LEP makes provision for minimum allotment^(D) sizes in different rural zones and applicants must familiarise themselves with all statutory requirements.

Battle-axe or hatchet-shaped lots may be permitted in rural zones. The minimum road frontage of each allotment^(D) must be 7 metres. This may translate as 3.5 metres each if reciprocal rights of carriageway provide shared access to 2 adjoining lots but no more than 2 lots are to be accessed in this way.

B4.2 Element – Residue Land

Element Objective

To ensure that the design of subdivisions on land which crosses Small Holdings Zone boundaries is consistent with defined planning objectives for the locality.

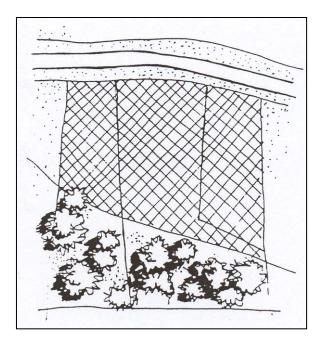
Performance Criteria

There are no Performance Criteria for this Element.

Prescriptive Measures

In many cases. a parcel of land may be partly within Zone No.1(c1)(Small Holdings Zone) or Zone No. 1(c2)(Small Holdings Zone) and partly within some other zone.

Where the part outside Zone No. 1(c1) or 1(c2) (Small Holdings Zone) is of insufficient size to create a separate lot in accordance with the provisions of the LEP relating to the zone in which the residue is situated, such land must be incorporated within one or more of the lots to be created within Zone No. 1(c1) or 1(c2)(Small Holdings Zone).



Any such land outside Zone No. 1(c1) or 1(c2)(Small Holdings Zone) may not be used to increase the lot yield as determined by the provisions of the LEP at the time of subdivision or subsequently.

Lots which incorporate residue land as described in this clause will have no further subdivision entitlement, whether or not such lots have an area greater than the minimum provided by the LEP for the relevant Zone No. 1(c)(Small Holdings Zone).

B4.3 Element – Village Zones

Element Objective

To ensure that the design of subdivisions in Village zones is consistent with defined planning objectives.

Performance Criteria

Subdivision of land within Zone No. 2(v)(Village Zone) must be in accordance with any adopted DCP relating specifically to the land which may make provision for subdivision standards, including the minimum size of lots, for any particular village area.

Prescriptive Measures

The minimum area of lots within village zones must be 1,000 square metres where it can be demonstrated to Council's satisfaction that there will be no detrimental effect on the existing village character.

Larger lot sizes may be required depending on the particular characteristics of each area and lot. It will be the applicant's responsibility to demonstrate the suitability of proposed lot sizes.

B4.4 Element – Waste Disposal

Element Objective

To ensure that sustainable sewage management facilities are available to new lots.

Performance Criteria

Applicants must demonstrate that all newly created allotments^(D) can satisfactorily provide appropriate sewage management, whether by connection to Council's sewerage reticulation system or alternative on-site disposal systems.

Prescriptive Measures

Each allotment^(D) created, where Council deems sewer service is available, may be connected to Council's sewerage reticulation system if desired.

In all other cases the performance standards for sewage management specified in the Design Guidelines for On-site Sewage Management Systems will apply. Council may also consider any alternative system approved by the NSW Department of Health, however any system adopted will be required to meet the minimum standards set down by Council.

B4.5 Element – Stormwater Disposal

Element Objective

To facilitate effective drainage provision and management.

Performance Criteria

Council encourages the use of existing established overland drainage paths.

Prescriptive Measures

Council will require the dedication of drainage easements or reserves to accommodate concentrated flows in a common drainage system. Drainage system design requirements are tabled in Councils Design and Development Manuals as amended from time to time.

B4.6 Element – Road Construction and Design

Element Objectives

- To ensure access and drainage provision to new lots.
- To enable flexibility in design of new rural roads.
- To ensure adequate sight distance at intersections
- To ensure constructed access is provided to new lots.

Performance Criteria

The planning, location and design of each new road must conform reasonably with the proposed road system shown in any adopted DCP which relates to the relevant area and must provide a simple, logical and safe road network which enables users to find their way readily to any destination.

Road widths must reflect the role and function of the road in the road hierarchy.

Roads must be designed to ensure adequate sight distances.

Roads must be designed to provide efficient access while reducing speed to safe levels.

Prescriptive Measures

Construction and drainage of roads are required for all rural subdivision. The design of such works is to comply with Council's Development Design and Construction Manual in rural areas and with the requirements of any DCP relating to the land. Construction must be carried out in accordance with those requirements.

Council may consider alternative designs in particular instances where the applicant can demonstrate that:

- safety requirements are not compromised
- the proposed road will not carry more than 60 vehicle movements per day

- visibility is not impaired from start to finish of the road along its centre-lines
- the grassed verge of the proposed road will not be damaged by traffic movements along the road
- an adequate manoeuvring area is provided to accommodate the turning of a standard (8.8m) service vehicle at the end of a road or in a location approved by Council,
- the proposed narrow pavement be no longer than 120 metres in length

Council requires the provision and dedication of corner splays at existing and new road intersections in accordance with the following schedule:

- (a) at the junction of a local road with a main road as determined by the Roads and Traffic Authority;
- (b) at all other junctions in rural areas 7.5 metres.

Where an allotment^(D) to be subdivided has access via an unsealed or unconstructed road, the applicant is to provide constructed road access from the nearest constructed road to all allotments^(D) involved in the subdivision.

B4.7 Element – Special Purpose Subdivision

Element Objective

To ensure that special purpose subdivision meets defined planning objectives.

Performance Criteria

The LEP provides for special purpose subdivision only when an allotment^(D) is created for a purpose lawfully permitted within that zone (other than agriculture, forestry, a dwellinghouse^(D) or a rural worker's dwelling^(D)).

Special purpose subdivision proposals must demonstrate the degree of community benefit anticipated.

Prescriptive Measures

An application for special purpose subdivision must be accompanied by the following documentary evidence to demonstrate clearly the viability of the proposed subdivision:

- i) that a substantial commitment to the development has been made either by way of substantial infrastructure or by cash flow equivalent to average annual earnings for the Shire.
- the applicant must demonstrate that a market exists or is developing for products grown or for the use for which special purpose subdivision is granted. The applicant is required to demonstrate performance ability, which may include proven ability in the field of endeavour or substantial market research. In the case of nurseries, applications will be referred to the Department of Agriculture for comment:
- iii) applications for special purpose subdivision must be consistent with the objectives of the particular zone within which subdivision is proposed.
- iv) where special purpose subdivision is proposed for a parcel of land upon which a dwelling-house^(D) exists, that dwelling-house^(D) is to be located within the residue parcel and not within the lot for which consent for a special purpose subdivision had been granted;
- v) where any land parcel falls below the minimum area permissible in the zone pursuant to clause 11 of the Byron LEP then a State Environmental Planning Policy No.1 objection to the development standard must be lodged.

B5.1 Element – Lot Size

Element Objectives

- To provide lots of sufficient size to satisfy the needs of future residents, and which will accommodate well designed and innovative development;
- To encourage diversity in lot size and opportunities for a variety of housing choice;
- To ensure that lot design takes into account the natural features of the site and locality.

Performance Criteria

Lots are to be of sufficient area to allow for the siting of a dwelling^(D) and ancillary buildings including provisions for private open space, vehicle access and parking and to permit solar access. Allotments^(D) also need provide sufficient effluent disposal areas and necessary replacement area where required.

Lot sizes are required to enable dwellings^(D) and driveways to be sited to protect natural or cultural features, and respond to site constraints including topography, bushland, soil erosion, drainage, and bushfire risk.

Prescriptive Measures

The following table indicates Council's minimum requirements for lot sizes (including residential community title) in urban subdivisions:

Type of lot	Minimum lot area
General lot	600 m ²
Corner lot	650 m ²
Hatchet-shaped lot	800 m ²
(excluding access handle)	
Hatchet-shaped lot adjacent to public reserve	650 m ²
(excluding access handle)	
Fan-shaped lot (minimum frontage 7m)	650 m ²

To provide useable areas, lot sizes must be increased where sites are steep or contain significant landscape features including watercourses and easements.

Proposed lots containing existing dwellings^(D) must not result in that lot having a floor space ratio^(D) in excess of 0.5:1.

Lots must enable the construction of a built form which is sympathetic to the established character of the area.

There is no minimum allotment^(D) size for strata subdivision.

B5.2 Element – Allotment Layout

Element Objective

To promote allotments^(D) of varying sizes which provide pleasant streetscapes, maximise energy efficiency, satisfy user requirements and mitigate environmental impacts.

Performance Criteria

Lots sizes and configurations must be varied to provide a mix of allotment^(D) types which create an efficient allotment^(D) layout, create pleasant streetscapes and encourage a variety of housing types.

Lots must be configured to account for significant natural landscape elements or constraints and mitigate environmental impact.

Lots must be designed to respect site constraints such as topography, drainage, soil landscapes, flora, fauna and bushfire hazard.

Disturbance to existing natural vegetation and landforms, watercourses, wetlands and overland flow paths must be minimised.

Lots must be configured to provide convenient access to public open space areas and community facilities.

Lots should be oriented to maximise solar access.

Lot layout and pedestrian networks must be configured to enhance personal safety and minimise potential for crime, vandalism and fear of crime.

The principles in Chapter 1Part C Section C14 relating to design for energy efficient housing must be applied to subdivision design.

Prescriptive Measures

Where possible lots should be orientated to provide the long axis within the range N20°W to N30°E or E20°N to E30°S.

Where possible, lots must be rectangular rather than splay shaped to maximise the opportunity for energy efficient housing.

Lots must be staggered and landscaped to achieve maximum solar access and to create interest in the streetscape.

Lots and the associated vehicular and pedestrian accessways must be configured to provide convenient access to public open space areas and community facilities.

Vegetation which adds significantly to the visual amenity of the area of the land must be preserved where possible.

Lot layout and pedestrian accessway networks are to maximise the opportunities for observation of buildings, spaces and activities by residents, passing motorists and pedestrians. Double street frontages (ie. front and rear) are to be avoided and pedestrian accessways are to run largely along public spaces (including roads and open spaces).

Subdivision proposals in the urban areas of the Shire are to have regard to the possible environmental constraints that may affect any particular site.

Where lands are identified as containing or adjoining bushland or contain or adjoin lands containing endangered flora and fauna species, development proposals are to be accompanied by flora and fauna assessments prepared by suitably qualified persons. This requirement is in addition to other flora and fauna documentation required by relevant legislation, including the *Threatened Species Conservation Act, 1995* and *SEPP No.44* - *Koala Habitat Protection.*

Lands identified as containing or directly adjoining natural water courses or trunk drainage lines may be subject to partial inundation during the 1 in 100 year ARI storm event. Development proposals which involve the development of land in close proximity to watercourses or other areas of possible inundation, are to be accompanied by a hydrologic study submitted by an appropriately qualified person to demonstrate that the

proposal or any future development will not interfere with the natural flowpath or be subject to flooding. Appropriate buffers to watercourses must be provided. Lots must be designed to allow the construction of a building or carriageway with a maximum cut or fill of 1m from natural ground level whilst not impeding the flow of waters.

Lands identified as having moderate or high bushfire hazard must be accompanied by a fire management plan to adequately minimise risk.

B5.3 Element – Allotment Design

Element Objectives

- To ensure that residential lots are capable of accommodating a range of housing types.
- To provide useable allotments^(D) which provide pleasant streetscapes, maximise energy efficiency and mitigate environmental impacts.

Performance Criteria

Lots must maintain an appropriate shape to accommodate a dwelling^(D) and associated development.

Lots and building envelopes must be designed to maximise solar access to dwellings^(D) and future private open space areas.

Lot design must minimise impacts on the natural environment. Significant landscape features must be incorporated as an integral part of the subdivision.

Lots must be designed to promote the development of energy efficient housing. The principles in Chapter 1 Part C Section C14 relating to design for energy efficient housing must be applied to subdivision and lot design.

Prescriptive Measures

Lots must be able to accommodate a building envelope with minimum dimensions 12 metres by 15 metres.

Building envelopes must be sited to avoid site constraints and take advantage of site opportunities.

Lots must be designed to maximise useable areas of the site and have regard to the topography.

Hatchet-shaped lots must have a minimum frontage of 5m (ie, 3m driveway and provision for services, landscaping etc). This may translate as 3m each if reciprocal rights of carriageway provide shared access, but no more than 2 lots are to be accessed in this way (ie 4m driveway and provision for services, landscaping etc.).

Landscaping of the access handle of hatchet-shaped lots is required. A landscaping plan must be submitted with the development application for subdivision - refer to Chapter 1 Part H of this Development Control Plan for details.

B6.1 Element – Road Design and Construction

Element Objectives

- To ensure provision of a safe, logical and legible road hierarchy.
- To ensure that new roads are capable of safely accommodating multiple functions, including provision for vehicles, pedestrians, cyclists, landscaping, services and property access.
- To ensure adequate provision for safe turning of vehicles, including service vehicles.
- To ensure adequate edge treatment and pavement protection for roads.
- To ensure protection of road shoulders against traffic and erosion damage.
- To ensure the availability of safe and adequate sight distance at intersections.
- To ensure paved access of adequate construction standard is provided to new lots.
- To enable provision of services whilst protecting pavement integrity.

Performance Criteria

The planning, location and design of each new road must conform reasonably with the proposed road system shown in any adopted DCP which relates to the relevant area; and must provide a simple, logical and safe road network which enables users to find their way readily to any destination.

- Road widths should reflect the role and function of the road in the road hierarchy.
- Roads should be designed to ensure adequate site distances.
- Roads should be designed to provide efficient access while reducing speed to safe levels.
- Roads should be designed to allow on-street car parking.
- Roads in new residential subdivision areas should be designed to provide for safe, convenient and efficient bus routes and the needs of cyclists/pedestrians.

Prescriptive Measures

Widths of roads must be in accordance with the following schedule. The schedule is to be read in conjunction with Council's Development Design and Construction Manual.

No minor access road or accessway must provide a through traffic distribution function.

No allotment^(D) is to have its sole access via an existing road reserve less than 15 metres.

Type of Road	Minimum width of road reserve	Minimum width of carriageway
Local distributor	20 m	13 m
Collector	20 m	11 m
Local access road serving more than 15		
lots	17 m	8 m
Minor access road serving no more than		
15 lots (including 2 corner lots)	15 m	6 m

Where a turning area is required, the applicant is to provide an area sufficient to accommodate the turning of vehicles in accordance with AUSTROADS publications and the detail provided in Councils Development Design and Construction Manuals.

Council requires integral kerb and gutter to be provided for the full length of the road frontage of the subdivision at the applicant's cost. Alternative kerb and guttering will be considered where soils and topography allow satisfactory on-site infiltration. Road shoulders must be sealed for the full length of the road frontage of the subdivision, from the edge of the existing seal to the lip of any kerb and gutter, at the applicant's cost.

Council requires the provision and dedication of corner splays at existing road intersections in accordance with the following:

- (a) at the junction of a local road with a main road as determined by the Roads and Traffic Authority;
- (b) urban areas, cross roads 7.5 metres.

Where an allotment^(D) proposed to be subdivided has access via an unsealed or unconstructed road, the applicant is to provide constructed road access in accordance with Councils Development Design and Construction Manual from the nearest constructed road to all allotments^(D) in the subdivision.

Where required by a service authority the applicant must provide service conduits or submains in road crossings prior to the construction of the kerb and gutters.

B6.2 Element – Footpath and Nature Strip

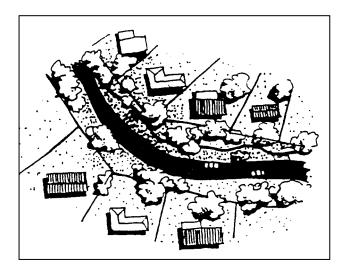
Element Objective

To ensure provision of a safe pedestrian environment and attractive, landscaped streetscape.

Performance Criteria

Council wishes to encourage footpath and nature strip treatment which reflects the particular road function and provides a safe and pleasant people-oriented environment for pedestrians and cyclists.

The alignment of footpaths should be designed to serve the needs of safety and pedestrian access to dwellings^(D), open space and other facilities to retain existing vegetation, and to contribute to the overall landscape planning of the subdivision.



Prescriptive Measures

The width of the footpath, the materials used, laybacks and tactile indicators are to be in accordance with AS 1428.4. Proponents should also check the NSW Department of Urban Affairs and Planning Technical Bulletin 17 "Access to Public Spaces for Disabled People."

In the case of local access roads, minor access roads or accessways, the provision of a footpath on one side of the road only may be approved where it is demonstrated to Council's satisfaction that the proposal enhances the residential environment and provides adequate safety and convenience for pedestrians.

The following table gives minimum width requirements for nature strips adjacent to the road classifications described in clause B6.2:

Type of Road	Minimum nature strip (each side)
Distributor	3.5 m
Collector	3.5 m
Local access road	3.0 m
Minor access road	3.0 m

The minimum nature strip area must not be used as a tool to reduce the minimum road reserve width in relation to the road pavement. Any additional area must be used by the designer to enhance and complement the local environment.

B6.3 Element – Access Design

Element Objective

To ensure provision of safe and effective access to properties.

Performance Criteria

- Accessway widths should reflect the function and volume of use.
- Accessway design should provide safe and efficient entrance/exit to individual lots.
- Accessways should form an integral part of the overall design of the subdivision
- Accessway design should minimise the impact upon the amenity of existing and future dwellings^(D).
- Accessways should be landscaped and treated to reduce the visual and environmental impact of hard paved areas

Prescriptive Measures

Vehicle access is required to each lot created by the subdivision in accordance with Council's access standards.

Shared accessways serving no more than 2 lots must have a minimum 4.0m wide carriageway.

Where the property to be subdivided is an existing battleaxe block with an access handle width of less than 5.0m, the application should be accompanied by landscaping details for the accessway area demonstrating that the landscaping complements the established character and streetscape of the area. Such details could incorporate a meandering driveway with landscaping elements on each side, different pavement treatments and kerb blisters incorporating landscaping beds.

Private accessways servicing up to 24 dwellings^(D) must have a minimum width of 8.0m. An accessway must consist of a carriageway of at least 5.0m, excluding kerbs, with a landscaped verge of 1.0m on each side and an area of 1.0m for services.

Private accessways serving 5 or more dwellings^(D) must have a minimum pavement width of 5m and passing points every 40m. Pavement widths at the boundary must be widened to 6m for a length suitable to allow vehicles to pass without restriction.

Carriageways must have a maximum grade of 20% at any point with a maximum average grade of 16% over the length of the carriageway. Carriageway materials and colours must be non glare and blend in with the built forms in the area.

Where carriageways are to be negotiated by a waste collection vehicle, they must have a maximum gradient of 16% at any one point.

The ingress and egress points of accessways must provide sight distances of 70m.

Accessway design must minimise cut and fill to a maximum of 1m from natural ground level.

Accessways must be sited away from the noise sensitive and visually sensitive components of existing and future dwellings^(D).

Where possible driveways must be located on the south side of existing and future dwellings^(D).

Carriageways must be sited to provide adequate height for all vehicles to ensure clearance of eaves, gutters and overhangs of existing buildings marked for retention.

Accessway design must provide interest and variety and avoid lengthy straight sections.

Porous paving^(D) is preferred to private access ways especially where soils are capable of high infiltration rates.

Where the site^(D) is steep or fronts a busy road or highly pedestrianised area, accessways must be designed so that the vehicles can be driven both onto and off the property in a forward direction.

Accessways serving two or more properties on sites^(D) which are steep, front a busy road, are in a highly pedestrianised area, have limited sight distance or would otherwise require a vehicle to reverse more than 50 metres must incorporate a turning area able to be accessed at all times and supported by a right of way.

Where vehicles would otherwise have to reverse more than 50m, a turning area must be provided to enable vehicles to enter and leave the site^(D) in a forward direction and to reduce the need to reverse over long distances. Turning areas for vehicles must be designed to allow the 85% Design Car Turning Path.

B7.1 Element – Drainage Control

Element Objective

- To control the flow of water into the natural drainage system and mitigate impacts from stormwater runoff.
- To enable effective drainage provision.
- To provide for effective roofwater disposal.

Performance Criteria

Drainage from subdivision sites^(D) must be consistent with the pre-development stormwater patterns.

Drainage systems must be designed to ensure safety and minimise the likelihood of stormwater inundation of habitable floor areas.

Prescriptive Measures

The applicant must construct drains as required and provide all necessary drainage easements and, where necessary, transfer to Council any necessary drainage reserve.

The applicant must provide common drainage lines and easements in accordance with Council's Development Design and Construction Manuals. Easements must be created in favour of those lots served by the drainage line and burdening those burdened by the drainage line. The point of disposal for common drainage lines must be as determined by Council. The purpose of such lines is for the carriage of roof stormwater only, not interallotment^(D) drainage.

For small lot subdivision, an appropriate stormwater flow management system must be established to reduce the velocity of stormwater discharge.

On-site stormwater and drainage control must be designed for the 10 year ARI storm. Trunk drainage systems must provide for the 10 year ARI event with overland flow paths designed for the 100 year storm ARI event.

A hydrology study must be submitted to identify the 1 in 100 year ARI flow level where the land is traversed or adjacent a trunk drainage system.

The habitable floor areas of dwellings^(D) constructed adjacent trunk drainage systems, watercourses and creeks must be a minimum of 0.5m above the 100 year ARI flow level.

Stormwater must be gravity drained to Council's drainage system, which may require inter-allotment^(D) drainage.

Proposals may require the creation of easements over downstream properties for drainage purposes. In this circumstance, a letter of consent from the owner(s) of the downstream properties is to be submitted with the development application. Typically, those easements must be registered prior to the release of the final plan of subdivision.

B7.2 Element – Utility Services

Element Objectives

- To provide public utilities in a safe, efficient and cost effective manner and reduce constraints on landscaping within road reserves.
- To minimise visual and vegetation impacts of electricity reticulation.
- To minimise visual and vegetation impacts of telephone service lines.

Performance Criteria

Subdivision must have adequate provision of services and have minimal impact on the environment.

Compatible public utility services must be provided in common trenching wherever practical to minimise construction costs, soil erosion and land allocation for underground services.

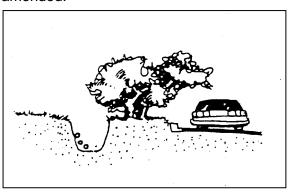
Prescriptive Measures

The siting and design of proposed utilities must be illustrated on the subdivision plan submitted with the development application.

Provision is to be made for the placement of electricity underground in urban zones unless specified by a site^(D) specific DCP or unless overhead electricity lines are predominant in the area. Alternatively, provision having been made for an adequate renewable energy system will be required prior to release of a Subdivision Certificate.

Provision is to be made for the placement of underground telephone services in urban zones. Written evidence of satisfactory arrangements with a telecommunications provider will be required prior to release of a Subdivision Certificate.

Subdivision design must provide for the common trenching, where possible, of services to reduce the number of trenches and the amount of land required, and to reduce costs and disruption due to maintenance. Trenching must meet the standards detailed within the Streets Opening Conference – Information Bulletin on Codes & Practices, 1997 or as amended.



B7.3 Element - Sewer

Element Objective

To ensure that a sustainable sewage management system is provided to all new lots.

Performance Criteria

Sewer must be provided to all lots within urban zones and satisfactory arrangements must be made with Council prior to the lodgement of any application for subdivision.

Prescriptive Measures

The sewerage system must be sized and designed in accordance with council's adopted Subdivision Design Specifications.

A contribution will be required towards the upgrading of treatment works to which the subdivision will drain. This contribution will be calculated on the basis of equivalent population as detailed in the guidelines for sewer contribution, available at the Council offices.

A further contribution will be required towards the upgrading and amplification of headworks, eg pump stations, carrier mains and rising mains.

Reticulation for the proposed development must be carried out at the proponent's cost by an approved contractor. A sewerage connection point must be made to each parcel of land designed for separate occupation. The system must be designed to optimise the effective building envelope of each lot.

All sewer mains and rising mains must be located within easements designed in accordance with Council's requirements.

Pump Stations, Wells, Access Chambers, Vents and other ancillary works must be located with due consideration to the amenity of the subdivision, of adjacent developments and the environment. Consideration must be given to noise, odours and the aesthetic impact of the system, and to access and maintenance requirements of the Council.

Road crossings are to be installed prior to the construction of kerb and gutter.

All works are to be carried out in accordance with approved plans, under Council supervision.

B7.4 Element – Water

Element Objective

To ensure that all new lots are provided with a water supply.

Performance Criteria

To ensure all new lots are provided with an adequate reticulated water supply and rain water harvesting be encouraged. Satisfactory arrangements must be made with Council before lodgement of any application for subdivision.

Prescriptive Measures

An amplification charge is required for the provision of water to each lot and will be assessed in accordance with adopted fees and charges specified in Council's Management Plan.

A water connection point must be provided to each parcel of land designed for occupation.

The water supply system must be designed to optimise the affective building envelope of each parcel of land designed for occupation.

All water mains must be located within easements designed in accordance with Council's requirements.

Pump Stations, Hydrants, Metering and other ancillary works must be located with due consideration to the amenity of the subdivision, of adjacent developments, and the environment. Consideration must be given to noise, and the aesthetic impact of the system, and to access and maintenance requirements of the Council.

Reticulation must be carried out at the proponent's cost by an approved contractor.

Road crossings are to be installed prior to the construction of kerb and gutter.

B7.5 Element – Geotechnical Report

Element Objective

To ensure that new lots have adequate geotechnical characteristics to accommodate anticipated development.

Performance Criteria

There are no Performance Criteria for this Element.

Prescriptive Measures

Council will require a certificate from a NATA - accredited practising civil engineer on all allotments^(D), identifying a building envelope of adequate size and shape (that is, a rectangle with dimensions at least 15m by 12m) on each proposed lot and is not subject to slip or subsidence.

This report must address the matters listed in AS1726 (as amended from time to time):

- The report must be prepared by a suitably qualified engineer, acceptable to Council, specialising in geophysical sciences. It must show, by diagram, the location of test drill holes on excavations made and clearly state the result of all subsequent tests of soil samples in a format acceptable to Council. The safe bearing capacity of the soil at any particular depth must be clearly stated.
- The report is required to provide a site^(D) plan of the property, to approximate scale only, clearly identifying the proposed building site^(D) and certifying to the safety of that site^(D) and/or to any alternate site^(D) for optional use.
- The report must make specific comment of the maximum depth of any cut or excavation which is allowable to be made in conjunction with the proposed building(s). It must also clearly indicate the required angle or slope to any benching or earth wall, and whether such slope is required to be retained by a retaining wall.
- The report is required to state if any particular type of retaining wall is not recommended for use under the applicable conditions of the site^(D), and what type or types of retaining wall (to be designed by a structural engineer) may be most suitable for any site^(D).
- The report is required to state a specific area(s) of the site^(D) where excess earth or earth filling (if proposed) may be safely deposited. Details of maximum depth compaction angle of repose of such earth must be stated. Regard to the safety of the proposed building(s), the site^(D) itself and any adjoining or adjacent sites^(D) or buildings must be made.
- The report is required to state if any particular style of building design or material is preferred and/or any particular style or design of building should not be used, having regard to the long term safety of the building.
- The report must specifically deal with the method which may be used for safe disposal
 of all roof waters if such waters cannot be disposed into a stormwater drainage system
 of the Council.
- Council will reserve the right to refuse to accept any report which does not comply with this Clause and may require a second report or an alternate opinion on the technical detail of a report at the applicant's expense.

-	Every engineer specialising in geophysical sciences and preparing reports consideration of Council is required to provide written evidence of their hole insurance policy to the value of \$10m indemnifying him/her against profess negligence.	ding an