# Section 5 – Subdivision

### **Overview**

This Section of Council's Development Control Plan has been prepared and adopted by Council to provide guidance for developers seeking to subdivide land within the Muswellbrook Shire. The guidelines outline Council's general procedures and practices in respect to both planning and engineering requirements for subdivision within the Shire. The controls have been designed to encourage a consistent environmental design standard for subdivision, yet provide sufficient flexibility to accommodate the specific needs of a broad range of land use.

Compliance with these controls will facilitate the expeditious processing of development applications, engineering plans, construction approvals and release of the Original Plan of Subdivision.

While the success of this plan relies on the sound application of the development controls it contains, Council welcomes the submission of innovative design solutions. Appointments may be made to discuss any such proposals with staff of Council's Environmental Services Division, either by telephone or by appointment, prior to lodgement of a formal development application. Council believes that the plan will encourage the approach required to produce quality subdivision for a range of housing, business, industrial and rural-residential land use.

The subdivision of land requires development consent under the provisions of the *Environmental Planning and Assessment Act 1979*.

Development consent is obtained by lodging a development application (DA) for approval by Council. The development application will need to be accompanied by the documents and fees referred to in this DCP.

Failure to provide complete or adequate subdivision information in accordance with the provisions of Section 2 of this DCP is likely to result in Council rejecting the application or unnecessary processing delays for which Council cannot be held responsible.

Applicants are strongly advised to seek the services of qualified surveyors, town planners or civil engineers where appropriate. All drawings submitted are required to bear the names of the persons responsible for the design/preparation of supporting documents.

This Section contains the following sub-sections:-

- 5.1 Introduction
- 5.2 Approval Process
- 5.3 General subdivision requirements
- 5.4 Rural/Rural Residential subdivisions
- 5.5 Residential subdivisions
- 5.6 Industrial Subdivisions

### 5.1 INTRODUCTION

The impacts of land subdivision, both environmental and socio-economic, are increasingly recognised and scrutinised. Not only is it considered that subdivision should occur with minimal environmental impact but, where practical, and particularly in the case of rural subdivision, some environmental benefit should result, through repair of environmental damage, revegetation of degraded areas, establishment of vegetation and wildlife corridors and buffers and the like.

This section provides comprehensive guidelines for the preparation and submission of development applications for the subdivision of land, where such a land use is permissible under the provisions of the Muswellbrook LEP 1989.

In particular, this section encourages applicants to prepare subdivision applications having regard to the range of matters likely to be considered in their assessment by Council staff, or in some cases, private certifiers. This section requires a thorough Site Assessment as the first stage of any proposal, and requires evidence of such assessment to be submitted as the basis of the Statement of Environmental Effects required with every application. Checklists are provided to assist applicants in carrying out the investigations required for different types of subdivision proposals.

For detailed engineering design and construction requirements for subdivision, reference should be made to the current version of AUS-SPEC (as amended by Council).

# 5.1.1 Application

### This section applies to all land to which this DCP applies.

As a matter of Council Policy, this DCP shall be taken into consideration when determining applications for consent under section 138 of the *Roads Act 1993*.

Under the Roads Act, consent of the appropriate road authority is required for the following activities:

- · erect a structure or carry out a work in on or over a public road
- dig up disturb the surface of a public road
- remove or interfere with a structure, work or tree on a public road
- pump water into a public road from any land adjoining the road.

Application forms and requirements for road opening permits and works under section 138 of the Roads Act can be obtained from Council.

### 5.1.2 Purpose

To provide detailed guidance to applicants in relation to preparation of development applications for subdivision.

# 5.1.3 Aims and Objectives

The principal objectives of this section of the DCP are to:

- a) ensure that all subdivisions and the potential impacts of such subdivisions and subsequent development take account of the principles of environmental sustainability;
- b) to encourage solar efficient subdivision designs that will assist in ensuring that subsequent development is significantly more energy efficient than conventional development;
- c) encourage the implementation of environmental buffers and provide opportunities for repair and enhancement of natural systems, especially on land previously degraded;
- d) ensure that rural subdivision reinforces the rural character of the Muswellbrook LGA;
- e) facilitate subdivision forms which have the effect of minimising environmental degradation, such as community title subdivisions;
- f) ensure that subdivision and housing take account of physical constraints relating to flooding, landslip, bush fire, contaminated land, salinity etc;
- g) further long term planning objectives contained in Muswellbrook LEP by the encouragement of lot creation consistent with those objectives;
- h) ensure adequate vehicular access from the gazetted public road system to each new lot;
- i) ensure all proposed lots are physically capable of development;
- establish a consistent and coordinated approach to the creation of residential, rural residential, rural and commercial/industrial lots throughout the Muswellbrook LGA;
- adopt criteria for residential, rural residential, rural, and commercial/industrial lots which ensures each lot is provided with an appropriate level of amenity, service and access;
- I) ensure logical, efficient and orderly development of infrastructure;
- m) ensure proposals integrate with other adjoining existing and planned uses;
- facilitate the supply of residential lots of a wide range of sizes and shapes which reflect the objectives of Muswellbrook LEP, the availability of reticulated services and the need for frontage to public roads;
- o) discourage the removal of prime agricultural land from agricultural production and to prevent adverse impacts upon the viability of established or potential agricultural activities;
- p) protect cultural resources (places of cultural and environmental heritage value) from land use or management practices which will lead to their degradation or destruction.

# **5.2 APPROVAL PROCESS**

### 5.2.1 Consent Authority

Development consent may only be obtained by lodging a development application with the "consent authority". In most instances this is the Council. Development applications cannot be lodged with accredited certifiers.

The requirements for lodging a development application are contained with Section 3 of this DCP. These requirements include submission of preliminary engineering drawings at DA stage, and this will ensure that conditions imposed on any consent will be relevant to the extent of the proposed works.

Development consent does not cover the detailed construction aspects of subdivision. You will need to obtain a construction certificate prior to commencing any construction work on site.

### 5.2.2 Construction and Principal Certifying Authorities

All subdivisions are required to be consistent with this Development Control Plan.

If your subdivision requires development consent and involves construction works you will need to obtain a construction certificate prior to commencing works. A construction certificate can be issued by Council or an accredited Certifying Authority.

In order to obtain a construction certificate, engineering construction documentation must be submitted for approval by the Certifying Authority. Prior to lodging a construction certificate application, conditions of consent may also require certain water and sewer infrastructure works to be undertaken as part of a Notice of Requirements from Council's Water and Waste Division. Any requirements contained within a Notice of Requirements relevant to construction are to be included or addressed in the Construction Certificate documentation.

Council's requirements for design and construction are based on AUS-SPEC 1 Development Specification (as varied by Council). This comprehensive specification is available from Standards Australia and the variations can be obtained from Council's Community Infrastructure Department.

Before you commence any construction works, you must advise Council of the date you intend construction works and nominate a Principal Certifying Authority. You must provide at least two days notice.

### 5.2.3 Certification of Works

#### a) Certificates

You may be required to obtain a certificate from Council as a condition of development consent. This is usually required in cases of subdivision involving civil infrastructure construction that is intended to revert to Council's care and control. The certificate is required to certify that:

Work has been completed and complies with the construction plans and specifications.

• Conditions of development consent requiring construction works in accordance with Council's requirements have been complied with.

# b) Subdivision certificates

A subdivision certificate is a certificate issued by Council on the final plan of subdivision that authorises the registration of the plan with the Land Titles Office. Council will issue this certificate upon application being made on Council's form, payment of the appropriate fees and provision of evidence demonstrating compliance with all conditions of development consent.

In addition, works as executed plans and supporting documentation must be provided in accordance with Council's requirements.

The submission of final plan of subdivision, road widening, Strata or Community Title subdivision or plan of consolidation for endorsement a detailed compliance report indicating compliance with the respective conditions of development consent.

Following endorsement by Council, the subdivision plan can be registered through the Land Titles Office.

Where s.88B instruments have been prepared in response to a Council imposed requirement they must be forwarded to Council with the linen plans of subdivision for Council's consideration. S88B instruments and provisions that relate to matters that Council has not imposed are not considered to require Council endorsement.

The developer is required to maintain construction works for a minimum period of six (6) months following completion of construction as determined by Council.

To ensure satisfactory maintenance, a bond, either cash security or bank guarantee equal to 5% of the cost of the engineering works is to be lodged with Council following completion of civil construction works that are to revert to Council's care and control with the application for a subdivision certificate prior to the release of the Linen Plan of Subdivision.

Bonds for outstanding works will only be considered on the following basis:

- Being necessary for establishment of vegetation;
- Being for a short period, generally not exceeding two years;
- The work being able to be bonded without serious impacts on: utility of the land; safety; or the environment;
- Be based on the estimated construction cost for council to have the work completed, should the developer default, multiplied by 1.6. This factor allows for such things as contingencies; inflation; overheads (eg. design, contracting and project management) and other costs.

### c) Differences between final plan of survey and approved plan

When a plan of proposed subdivision is prepared, the applicant shall ensure that all detail contained on the plan reflects, as accurately as possible, the final intended subdivision.

Council, however, recognises that in some instances it is not possible to compile a plan of proposed subdivision to the exactness required on the final plan of survey that is ultimately lodged at the Land Titles Office, without undertaking extensive and costly work.

Upon preparation of the final plan of subdivision, should a discrepancy appear between the approved plan and final plan, Council may endorse the final plan subject to the following:

- (i) The discrepancy is not greater than 2% of the measurements on the approved plan (boundary lengths or area);
- (ii) The lot shape and layout is substantially the same as the approved plan;
- (iii) The discrepancy will have negligible impact on the environment; and
- (iv) Council did not receive significant objection as a result of the public notification process during the assessment process.

Where in the opinion of Council, the discrepancy is significant or not consistent with the above criteria, Council may request an application under Section 96 of the EPA Act, or in some cases, a new application.

# 5.2.4 Specific Areas

In some instances, structure plans or development principles plans have been prepared for specific areas within the land to which this DCP applies. Subdivision applications should conform with these adopted plans (see other sections for specific requirements), unless written justification for variation warrants Council's support.

# 5.3 GENERAL REQUIREMENTS FOR SUBDIVISION

### 5.3.1 Development Standards – Muswellbrook LEP

All land zoned for rural purposes (including rural-residential) and environmental protection zones have "development standards" for subdivision and associated dwelling entitlements included in the Muswellbrook LEP. These standards set the minimum lot size for subdivision and the corresponding dwelling entitlement. Development criteria may also be included. All applicants should refer to the Muswellbrook LEP to establish what the development standard is for any particular land use zone.

Development standards cannot be varied without a request being made in accordance with clause 24 of the LEP. Any application of this type must be referred to the NSW Department of Planning for concurrence, unless it is of a minor nature and can be dealt with under "assumed concurrence" provisions. Council will consider the development principles contained in the Muswellbrook LEP and the zone objectives (as well as any justification contained in the Statement of Environmental Effects and the submission under clause 24 to determine whether any variation should be supported.

In addition, the provisions of relevant legislation must be considered in any application as follows:-

### 5.3.2 Special Considerations

#### **Objectives**

- a) To ensure that proposed subdivisions take into account the relevant provisions of applicable legislation.
- b) To ensure that appropriate measures are incorporated into the subdivision proposal to address potential environmental issues

#### **Controls**

- (i) If the land is located within a <u>Proclaimed Mine Subsidence District</u>, the Mine Subsidence Board shall be contacted to determine any specific requirements that are addressed within the Statement of Environmental Effects lodged with the Development Application. (For further information go to www.minesub.nsw.gov.au)
- (ii) If the land is subject to <u>significant bushfire risk</u>, the provisions of "Planning for Bushfire Protection" issued by the NSW Rural Fire Service are addressed within the Statement of Environmental Effects lodged with the Development Application. (For further information go to <u>http://www.rfs.nsw.gov.au/</u>)
- (iii) The Statement of Environmental Effects lodged with the Development Application is to include relevant details of land use history to determine the likelihood of the <u>land being contaminated</u> and requiring remediation. (See Section 21 of this DCP or State Environmental Planning Policy No. 55 for further information or go to

http://www.planning.nsw.gov.au/assessingdev/pdf/gu\_contam.pdf)

(iv) The provisions of Clause 5A of the *Environmental Planning and Assessment Act* 1979 may require the submissions of a <u>flora and fauna assessment report</u> with

the development application. See the guidelines for submitting applications in Section 3 of this DCP.

- (v) Subdivisions which connect directly to a classified road or require concurrence under the provisions under State Environmental Planning Policy (SEPP) No. 11 – Traffic Generating Development will require concurrence from the Roads and Traffic Authority (RTA).
- (vi) Subdivisions where there has been no Flood Risk Management Study, where the guidelines provided in the Floodplain Development Manual 2005 (published by Dpet of Water and Energy) shall be considered and applied (see Section C9 of the manual)

# 5.3.3 Adoption of AUS-SPEC

Council has adopted AUS-SPEC for the purposes of implementing this DCP.

### **Objectives**

a) To ensure that all construction works associated with subdivision works are completed to an acceptable standard.

### **Controls**

- (i) In preparing design and construction documentation, any proposal shall have regard to any relevant provisions within AUS-SPEC(as amended by Council) that relate to that aspect of work, whether specifically mentioned within section of the DCP or otherwise.
- (ii) If the development involves any subdivision work, preliminary engineering drawings of the work to be carried out must be submitted wit the development application, indicating general compliance with the relevant provisions of AUS-SPEC.
- (iii) Council will require design documentation to be certified by an appropriately qualified person as being in accordance with relevant provisions within AUS-SPEC.
- (iv) Council will require all completed works to be certified in by an appropriately qualified person as being constructed in accordance with relevant provisions within AUS-SPEC.

### 5.3.4 Buffers

#### **Objectives**

- a) Adequate buffers are provided between proposed development and existing development on adjoining land or where potential land use conflicts may arise.
- b) The agricultural potential or residential amenity of land will not be diminished as a result of a subdivision proposal.

### **Controls**

Compliance with Section 22 of this DCP.

### 5.4 RURAL/ RURAL-RESIDENTIAL SUBDIVISION

#### Application

This section applies to the subdivision of land within RU1, E3 and R5 zones under the Muswellbrook LEP.

#### 5.4.1 Lot Size and Shape

#### **Objectives**

a) To ensure that proposed lots appropriately respond to existing site conditions, and are practical.

#### Controls

- (i) Lots are able to accommodate a building envelope of 2000m<sup>2</sup> with a minimum dimension of 30m. Building envelopes should be located a minimum of 4m from significant trees and other significant vegetation or landscape features. Building envelopes should include the area for the siting of the dwelling-house, outbuildings, landscaping and on-site effluent treatment and disposal areas (if required and permitted).
- (ii) The design of the subdivision takes into account any significant natural features on the site and these are retained.
- (v) Vegetation which adds to the visual amenity of the locality and/or which is environmentally significant is preserved in the design of the subdivision proposal.
- (vi) The width to depth ratio of allotments does not exceed 1:4. If lots are too elongated, land uses in rural or rural-residential areas may be restricted (e.g. the shape of long lots may preclude the establishment of farm dams.)
- (vii)Lot layouts minimise the number of lots that have direct access to rivers, creeks, or streams.

#### 5.4.2 Roads and Access

#### **Objectives**

- a) Existing roads are upgraded to accommodate increased traffic arising from new subdivisions.
- b) The impact of new road or access way works on adjoining residents is minimised.
- c) Road and access way construction takes account of existing topography and vegetation.
- d) Cut and fill is minimised and vegetation retained wherever practicable.

- Rural subdivision roads that are to revert to Council's care and control shall be designed and constructed in accordance with Council's AUS-SPEC No 1 (as varied by Council) Development Specification as follows:
  - Road Network: D1 Geometric Road Design.

- Road Geometry: D1 Geometric Road Design, in particular Rural Design Criteria. (Note: A hierarchy of rural roads is recognised in this specification consistent with projected traffic usage.)
- Road Pavement: D2 Pavement Design.
- Bridges/Detention Basins & Other Structures: D3 Structures/Bridge Design & D4 Subsurface Drainage Design.
- (ii) Design details for access roads may be required during development application assessment.
- (iii) A maximum of three (3) rural lots may gain access from a Right of Carriage Way within the subdivision, which must connect directly to a dedicated public road under the care and control of Council.
- (iv) The right of carriageway must be constructed to a standard that will allow all weather access for a two wheel drive vehicle.
- (v) ARTC comments will be sought when new level crossings are proposed or required, access to land relies on an existing level crossing, additional traffic is generated over level crossings without active protection, or development may impact safety elements. ARTC consideration would include legal or practical case that level crossing is still required, or there will be no increase in safety risk, demonstrated by safety analysis.

# 5.4.3 Crown Roads

### **Background**

The EP&A Act requires Council to consider the question of access before granting development consent (*ie granting development consent and leaving access via crown roads*). Hence it is now mandatory that any works required by Council on Crown Roads will see them automatically transferred from the State Government to Council. However, Council will only consider transfer of a Crown Road to Council's care and control where it is constructed to the standards required by this DCP. Implementation of these standards will not necessarily change the extent of the Council's adopted road maintenance areas.

It is important that property owners purchasing land or intending to subdivide or develop land with frontage to a Crown Road or other unmaintained road do so in the knowledge that maintenance of the existing access is not a responsibility of Council. This should not give rise to expectations of Council upgrading or maintaining access in the future.

Further inquiries of Council at the time of purchase or prior to preparation of an application would provide reliable information on access and building entitlements. While it is incumbent on any prospective purchaser or developer to make such inquiries as necessary regarding their decision to purchase, Council has a responsibility to ensure that it is not allowing development of remote areas with sub-standard services.

Crown roads are public roads by virtue of Section 267 Savings, Transitional and Other Provisions of the Roads Act (*Schedule 2 Part 2 Division 4 Section 56*). Crown roads were therefore dedicated as public roads for the purposes of the Act and have the same legal status as all public roads. The difference between public roads is the responsible Roads Authority.

The term "dedication" is relevant to particular sections of the Act and past actions

regarding road status are not commonly used nowadays in reference to dedicating a Crown road to the public as a Council road. It is more appropriate to use the term *"road transfer"* to Council.

Due to financial considerations, Council will not necessarily accept responsibility for newly constructed roads even though they meet the standards required under previous approval regimes.

Each application for transfer/dedication/construction/maintenance will be considered independently based on available evidence of :-

- · Past and present maintenance commitments by Council
- Potential for further subdivision giving rise to a need for improved access
- Existing road condition in relation to AUS-SPEC design requirements.
- Long term cost to Council of maintaining the extended length of road
- · Degree of self help proposed by developers and landholder/s for:
  - a. construction
  - b. maintenance

Access is a consideration under Section 79C and conditions requiring upgrading will be imposed on properties which front a Crown, public unmaintained road or public maintained road.

All newly created roads to be dedicated to Council will be constructed by the developer at the developers cost in accordance with AUS-SPEC design requirements.

For development on an unmaintained or Crown Road the Developer will be required to improve the full length of the road network that is to be used by the development to meet the minimum standard as detailed in AUS-SPEC design requirements and may also be required to undertake additional road improvements especially in regards to safety.

Where the improvements to the road that would be required by the developer are considered to be excessive by Council staff the development will be recommended for refusal.

For development on a Council maintained road the developer may be required to undertake improvements along the road network that services the development to meet the minimum standard as detailed in AUS-SPEC design requirements. Safety issues along the entire road leading to the development will be addressed by the developer in addition to any substandard sections (in relation to AUS-SPEC design requirements) immediately fronting the subject land.

Where these improvements to the road that would be required by the developer are considered to be excessive by Council staff the development will be recommended for refusal.

For development other than subdivision, traffic generation and Average Annual Daily Traffic (AADT) for the road that the development is located on shall be used to determine staged upgrading costs and contribution rates respectively. The standard to be adopted in AUS-SPEC shall have regard for all lots (including the proposed lots under the development) to be serviced by that section of road. The cost of any upgrades to the Road will be borne by the developer.

### **Objectives**

- a) To ensure that Crown Roads transferred to Council are constructed to an acceptable standard.
- b) To prevent future generations bearing the cost of roadworks that should have been provided at the time of subdivision.

### **Controls**

 Council will only consider dedication of a road or transfer of a Crown Road to Council's care and control where it is constructed to relevant AUS-SPEC standards referred to in this DCP, taking into consideration all the issues raised within section 6.4.3 of this DCP.

### 5.4.4 Soil and Water Management

#### **Objectives**

- a) The quality of runoff water from the subject land is the same or better than the quality of water prior to the subdivision taking place.
- b) Drainage from proposed lots is consistent with the pre-development stormwater patterns and flow regime.

#### **Controls**

(i) Compliance with section 20 and 25 of this DCP.

### 5.4.5 Effluent Disposal

#### **Objectives**

- a) Effluent and waste water is disposed of in a manner which is consistent with the land capability of the property.
- b) Effluent and waste water is disposed of in a manner that will not cause unhealthy or unsanitary conditions.
- c) No adverse impact is to be caused to the environment generally.

- (i) Where sewer is not available or within 75m of the subdivision, all effluent must be retained and disposed of on-site. No pump-out systems will be permitted.
- (ii) Council may require submission of a geo-technical investigation report in certain cases, depending upon soil conditions, number of lots proposed, size of allotments and the like.
- (iii) Disposal of effluent must not create a health nuisance or pollution particularly in relation to nutrients infiltrating into bushland and/or water courses.

(iv) The proposed on site waste treatment system is designed to/ or is considered able to comply with the provisions of Section 23 of this DCP.

# 5.4.6 Flora and Fauna

#### **Objectives**

- a) To ensure that existing vegetation is retained unless it is demonstrated that this is impractical in the circumstances
- b) To ensure that impacts of subdivisions on existing flora and fauna is minimised.

### **Controls**

- (i) Vegetation cover is retained where ever practicable as it acts to stabilise soils, minimise runoff, acts as a pollutant trap along watercourses and is important as a habitat for native fauna.
- (ii) Vegetation is retained where it forms a link to other bushland areas, buffer zones, wildlife corridors and the like.
- (iii) Allowance for the movement of fauna species on sites is maximised to maintain biological diversity.
- (iv) Subdivision proposals are designed to minimise disturbance to existing vegetation.
- (v) Vegetation which is scenically and environmentally significant is retained.
- (vi) Vegetation which adds to the soil stability of the land is retained.
- (vii) Subdivision proposals are designed so as to minimise fragmentation of bushland.
- (viii) Opportunities for revegetation will be pursued as part of the subdivision process as a trade off for site development and as a means of value adding to the environment. In particular, revegetation of any existing creeks, streams and drainage lines, or repair and revegetation of eroded or otherwise degraded areas is considered.
- (ix) Under-scrubbing is not undertaken.
- (x) Degraded areas are to be rehabilitated as part of the subdivision.
- (xi) Watercourses and drainage lines to be retained as part of the subdivision scheme are to be stabilised and revegetated with appropriate native species.
- (xii) Environmentally sensitive areas are to be preserved and enhanced with appropriate native vegetation where necessary.

### 5.4.7 Visual Amenity

#### **Objectives**

- a) Subdivision proposals are designed so that subsequent development will have minimal impact on significant views and vistas.
- b) Subdivisions are designed to compliment the landscape rather than altering the landscape to suit a subdivision layout.
- c) Subdivision proposal is compatible with the cultural and landscape characteristics of the locality or region.

# <u>Controls</u>

- (i) Building envelopes, accessways and roads shall avoid ridge tops and steep slopes.
- (ii) Subdivision of escarpments, ridges, and other visually interesting places are managed in such a way that the visual impact rising from development on newly created allotments is minimal.
- (iii) Subdivisions are designed so that, when subsequently developed, visually significant vegetation, such as that found on ridge tops and other visually prominent locations will be retained.
- (iv) Proposals to subdivide visually sensitive or prominent areas will require visual impact assessment to be addressed within the Statement of Environmental Effects.

# 5.4.8 Heritage

### **Objectives**

- a) Heritage items and their curtilage are retained where possible.
- b) Subdivision is sympathetically designed to minimise the impact on heritage items of the subject land or adjoining lands.
- c) Adequate curtilage is provided around heritage items to provide an appropriate buffer.

### <u>Controls</u>

- (i) A subdivision proposal on land which contains, or is adjacent to, an item of environmental heritage as defined in the Muswellbrook Local Environmental Plan is to illustrate the means proposed to preserve and protect such items. In this respect a conservation plan, detailing how the item would be restored if necessary, should accompany the application.
- (ii) Where a heritage item is in a state of disrepair, Council may negotiate its restoration as part of the subdivision proposal, having regard to both the need for a viable subdivision, and the desirability of maintaining heritage items for future generations.
- (iii) Subdivision of land to create 3 or more lots will require consultation with the Local Aboriginal Land Council or an Aboriginal Archaeology Assessment Report must be prepared in accordance with the recommendations of the Department of Environment and Climate Change.

### 5.4.9 Utility Services

#### **Objectives**

- a) All lots created have an adequate provision of utility services and not result in a detrimental impact on the environment.
- b) The provision of utility services does not detrimentally impact on the landscape character of an area, or detrimentally impact vegetation corridors.

- (i) Adequate water supplies for both domestic and fire fighting purposes must be available.
- (ii) Electricity shall be provided to all lots, except for those considered by Council to be "remote", where an alternative supply proposal is provided and the requirement may be waived and a covenant placed on the title of the land where possible.
- (iii) Where available, connection to reticulated sewage disposal systems will be required.
- (iv) The design and provision of public utilities conform to the cost effective criteria of the relevant servicing authority.
- (v) Compatible public utility services are located in common trenches so as to minimise the land required, soil erosion and the cost of providing the services.
- (vi) Adequate buffers are maintained between utilities and houses to protect residential amenity and health.

# 5.4.10 Hazards

### **Objectives**

- a) Subdivision proposals are designed so as to enable separation between future dwellings and potential bush fire fronts.
- b) Subdivision of flood prone land does not result in increased risk to life or property both on the subject land and adjoining lands.
- c) Subdivision of land that has been identified as being prone to landslip does not increase the risk to life or property on the subject land or adjoining lands.
- d) Subdivision proposals are designed to take account of any known contamination of the site, and remediation works undertaken if required.
- e) No adverse impacts on existing or possible use of surrounding lands occur as a result of the subdivision proceeding.

- (i) Where a subdivision proposal is located on bushfire prone land the applicant must comply with the NSW Rural Fire Services' document, "Planning for Bush Fire Protection", In general, Council will not favourably consider subdivision of heavily vegetated land in bush fire prone areas where the subdivision will require subsequent clearing of vegetation to meet required radiation zones, access requirements and the like.
- (ii) In accordance with the requirements of the abovementioned documents, details shall be provided regarding the dimensions of the fire protection zone and arrangements and maintenance for access for bush fire fighting vehicles. Two separate points of access may be required in some circumstances.
- (iii) Where a subdivision proposal is on land identified as being potentially subject to landslip, the applicant shall engage a geotechnical consultant to prepare a report on the viability of subdividing the land and if viable provide recommendations as to the siting and the type of buildings and waste water treatment systems which could be permitted on the subject land.
- (iv) Where a subdivision proposal is on land identified as being potentially subject to flooding, the applicant shall engage a hydrological or hydraulic consultant to

prepare a flood study on the and is necessary, a Floodplain Risk Management study.

(v) Development adjacent to rail corridors identified in clause 31 of the LEP will require an acoustic report to be submitted to Council to address and indicate measures to mitigate potential impacts from noise and vibration. Relevant publications available from "Railcorp" for consideration are:-

- Rail Related Noise and Vibration; Issue to Consider in Local Environmental Planning
- Interim Guidelines for Councils consideration of rail noise and vibration in the planning process
- Guidelines for applicants consideration of rail noise and vibration in the planning process
- (vi) Comply with Section 13 of this DCP.

# 5.5 RESIDENTIAL SUBDIVISION

#### Application

This section applies to the subdivision of land within R1 and RU5 zones under the Muswellbrook LEP.

### 5.5.1 Local Street Design

#### Objectives

- a) Street widths are to reflect the role and function of the street in the road hierarchy and traffic generation, in accordance with Council's adopted strategic plans.
- b) Junctions along residential streets are to be spaced to create safe and convenient vehicle movements.
- c) The street network is to create a convenient route for residents between their home and higher order roads.
- d) The street network is to facilitate walking and cycling within the neighbourhood and to local activity centres.
- e) The street network is to be orientated where practical, to promote efficient solar access for dwellings.
- f) The street network is to take into account existing topography and existing open space systems and natural constraints.
- g) Streets shall not operate as through traffic routes for externally generated traffic while at the same time limiting the length of time local drivers need to spend in a low speed environment.
- h) Streets are to be designed to allow on street car parking.
- i) Streets and lots are to be located so that residential dwellings are not subjected to unacceptable traffic noise.
- j) Streets are to be designed to cater for service vehicles.

#### Controls

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No. Of Allotments	Road Reserve Width (metres)	Minimum Carriage Way Width	Parking Provision	Kerb Type	Footpath requirement (metres)	Cycleway requirement (metres)
<10 (local road – or up to 300 vehicle trips per day)	13.0m*	6.0m	Verge	Rollover	Nil – unless part of nominated network	Nil – unless part of adopted network
10 – 200 (local road – or up to 2000 vehicle trips per day)	18.0m (4.0m verges)	7.5m (up to 1000 vehicles) or otherwise 9.0m	Carriage way	Rollover/ barrier	1.2m (on one side of street)	Nil – unless part of adopted network
200 – 400 (urban collector – or up to 3000 vehicle trips	20.0m (4.0m verges)	11.0m	Carriage way	Barrier	1.2m (both sides of street)	Nil – unless part of adopted network

i) Design specifications for public streets shall generally be as follows:

# Muswellbrook Shire Development Control Plan Section 5 Subdivision

per day)						
> 400 (sub- arterial or arterial – or up to 6000 vehicle trips per day)	20.0m (4.5m verges)	13.0m	Carriage way	Barrier	1.2m	2.0m on one side or dedicated lanes (1.5m) on carriageway

\* May be reduced to a minimum of 10 metres where access is required on only 1 side of the road.

- 1) The classification and design of roads as local, collector or arterial is to be derived from AUSSPEC guidelines.
- 2) Any variations to the above criteria are to be assessed and justified against AUSSPEC guidelines.
- 3) Culs-de-sac should not exceed 200 metres in length unless topographic constraints render other options impracticable.
- 4) Streets should be designed to provide interest and variety in the streetscape through kerbs (where appropriate), landscaping and paving treatments. The street design should be compatible with the existing road pattern in the locality.
- 5) No more than 3 turning movements at intersections should be required in order to travel from any home to the most convenient collector street or higher order road.
- 6) The minimum spacing of staggered junctions in a local street network should be 20 metres.
- 7) Any subdivision proposal adjoining a rear lane shall be designed so as to provide both vehicular and pedestrian access to the front street. Conversely, Council will not require the upgrading of rear lanes where vehicular and pedestrian access has been provided to the front street.
- 8) Cul-de-sac for residential roads should have minimum seal radii of 8.5 metres and boundary radii of 12.0 metres.
- For residential subdivision, the carriageway, verge and road reserves shall be in accordance with Council's AUS-SPEC No 1 (as varied by Council). Subdivision roads shall be designed in accordance with AUS-SPEC No 1 (as varied by Council) Development Specification as follows:
  - Road Network & Road Geometry: D1 Geometric Road Design.
  - Pedestrian Movements: D9 Cycleway and Pathway Design.
  - *Road Pavement:* D2 Pavement Design.
  - *Bridges/Detention Basins & other Structures:* D3 Structures/Bridge Design & D4 Subsurface Drainage Design.

Within the internal road network of residential area, up to four distinct levels of roads may be provided. They are:

Access Street:	A minor road which carries the lowest volume of traffic, providing driveway access to no more than three lots on each side or forming a link between two access places. Vehicle, pedestrian and recreation use is shared, with design to encourage priority for pedestrians.
Local Street:	A minor road which carries a higher volume of traffic and provides direct access to lots. Vehicle, pedestrian and recreation use is shared, with traffic access having priority.
Collector Road:	A road linking access streets to major roads, possibly providing bus routes and giving restricted access to lots.

**Distributor:** A road which connects the internal road network with an external major (arterial) road network and giving restricted access to lots.

- iii) Intersections shall be either T-Junctions or roundabouts.
- (iv) The road network shall conform to a strategic plan for the area showing an existing and proposed major road network above the level of a collector road which satisfies the projected need of the neighbourhood.
- (v) Private access ways should be restricted wherever possible on distributor roads.
- (vi) In relation to narrower streets, adequate provision should be made for garbage collection services and the entry of other large service vehicles.
- (vii)The road network shall be designed to accommodate bus routes (generally along collector roads) within 400m direct distance of all dwellings. It should also provide opportunities for road connections to adjoining land, in accordance with an overall subdivision concept or as agreed by Council.

# 5.5.2 Access Way Design

### **Objectives**

- a) Access way design are to provide safe and efficient entrance/exit to individual lots.
- b) Access ways are to be landscaped and treated so as to reduce the visual and environmental impact of hard paved areas.
- c) Access way designs are to minimise the impact on the amenity and future management of the existing and future dwellings.

- i) Access ways are to be designed in accordance with AUSSPEC and AS2890.1.
- ii) Access ways shall have a minimum sealed width of 3.0 metres.
- iii) Access ways shall not serve more than three (3) lots.
- (iv) Access ways shall be nominated as reciprocal rights of way on the plan of subdivision.
- (v) Access ways shall have a maximum grade of 25% (1:4) at any point.
- (vi) The following standards apply to lots with battle axe handles:

No. Of Allotments	Minimum Width Of Battle-Axe Access Handle (Metres)
1	3.5
2	5.0
3	2.0 per lot

- (vii) Access ways shall be sited away from noise and visually sensitive components of existing and future dwellings.
- (viii)Where possible access ways shall be located on the south side of existing and future dwellings.
- (ix) Access ways are to provide interest and variety and avoid lengthy straight sections.

- (x) Where the site is steep or fronts a local collector or higher order road (greater than 3,000 vehicles per day) or an area with high pedestrian traffic, access ways are to be designed so that vehicles can be driven both onto and off the property in a forward direction.
- (xi) Where vehicles would otherwise have to reverse more than 50 metres, a turning area is to be provided to enable the vehicles to enter and leave the site in a forward direction and reduce the need to reverse over long distances.
- (xii) Passing bays shall be provided every 30 metres in accordance with AS 2890.1

# 5.5.3 Pedestrians and Cyclists

### **Objectives**

- a) Pedestrian and cycle networks are provided in accordance with Council's adopted strategic plans.
- b) The location of footpaths or cycle paths are defined using the following parameters:
  - Demand for footpaths and cycle paths;
  - Opportunities to link open space networks and communities including public transport, local activity centres and schools;
  - Topography;
  - Cyclist and pedestrian safety, including Crime Prevention Through Environmental Design (CPTED) guidelines.
- c) The alignment of footpaths allow safe and convenient use by pedestrians and cyclists and should be variable enough to accommodate trees and other significant features.
- d) Paths designed to enable widening at certain points to allow passing facilities for pedestrians/cyclists.
- e) Pedestrian and cyclist paths are constructed to provide a stable and attractive surface for projected users which is easily maintained.

- i) No footpaths are required on streets with a traffic volume less than 300 vehicles per day as pedestrians can share the road surface with vehicles in a low speed environment.
- ii) Pedestrian and cycleways shall be designed in accordance with AUS-SPEC No 1 (as varied by Council) Development Specification as follows:
  - Pedestrian Movements: D9 Cycleway and Pathway Design.
- iii) In all but exceptional circumstances, Council will require the provision of pedestrian pathways at the end of a cul-de-sac to facilitate pedestrian access to community facilities such as open space, schools and neighbourhood shops and to ensure that provision is made to alternative access to and from cul-de-sacs.
- iv) Footpaths are to be provided on one side of streets with traffic volumes between 300 vehicles per day and 2,000 vehicles per day and on both side of streets with traffic volumes over 2,000 vehicles per day.

### 5.5.4 Utility Services

### **Objectives**

- a) All lots created for residential purposes are to have adequate provision of services and not result in a detrimental impact on the environment.
- b) The design and provision of public utilities are to conform to the cost effective criteria of the relevant servicing authority.
- c) Compatible public utility services are to be located in common trenches so as to minimise the land required, soil erosion and the cost of providing the services.
- d) Adequate buffers are to be maintained between utilities and houses to protect residential amenity and health.

### **Controls**

- (i) Sewerage services are to be provided in accordance with the written requirements of Council.
- (ii) Water supply services are to be provided in accordance with the written requirements of Council.
- (iii) Street lighting is required in all streets in accordance with the requirements of the energy utility.
- (iv) Provision of written evidence of compliance with the requirements of all relevant service authorities (electricity, telephone, etc.) prior to release of construction certificate or subdivision certificate, as may be appropriate.
- (v) Underground power must be provided to all lots in new release areas.

### 5.5.5 Stormwater Management

#### **Objectives**

- a) Drainage from subdivision sites is consistent in both water quality and quantity terms with the predevelopment storm water patterns.
- b) Drainage systems are designed so as to ensure safety and minimise the likelihood of storm water inundation and flooding of existing and future dwellings.
- c) Adequate provision is made for measures during construction to ensure that the landform is stabilised and erosion controlled.
- d) Natural drainage systems are incorporated into designs.

#### **Controls**

(i) Storm water management systems shall be designed and constructed in accordance with section 25 of this DCP

# 5.5.6 Lot Size and Shape

### **Objectives**

- a) Lots have an appropriate area and dimensions for the siting and construction of a dwelling and ancillary out buildings, the provision of private out door space and convenient vehicle access and parking.
- b) To provide usable areas, lot sizes are increased where sites are steep or contain significant landscape features including water courses and easements.
- c) Lot sizes and dimensions enable dwellings to be sited to:
  - Protect natural and cultural features;
  - · Acknowledge site constraints including soil erosion and bush fire risk; and
  - Retain special features such as trees and views.
- d) Lot sizes shall meet with the projected requirements of people with different housing needs and provide housing diversity and choice.
- e) Lot sizes and configurations are to be varied to provide a mix of allotment types which create pleasant street scapes and encourage a variety of housing types.
- f) Lots are to be configured to account for significant natural landscape elements or utility constraints and be designed to minimise environmental impact.

- In order to ensure consistency with section 6 of this DCP (densities) allotment specifically identified as suitable for multi dwelling housing should be nominated as dual occupancy or multi dwelling housing lots in DAs for residential subdivision of > 10 lots and must be <20% of lots in a subdivision.</li>
- (ii) "Battleaxe' or "Hatchet" shaped lots shall have a minimum area of 750m<sup>2</sup>.
- (ii) Allotments shall have a minimum width of 18 metres at the building line. Council may consider a lesser dimension but only as part of an integrated housing development.
- (iii) An allotment shall not be less than 20 metres in depth to ensure there is some flexibility in the choice of housing design and siting as well as the availability of suitable space for other activities normally associated with a dwelling.
- (iv) The dimensions for access corridors for battle-axe shaped allotments are as follows:

Maximum Length	= 60 metres
Minimum Width	= 3.5 metres
Minimum width of	
shared access corri	dor = 5.0 metres

- (v) No more than 3 allotments are served by a private access way.
- (vi) Vegetation which adds significantly to the visual amenity of a locality and/or which is environmentally significant or of habitat value should be conserved in the design of the subdivision proposal.
- (vii) Lots should be designed to allow the construction of a dwelling with a maximum cut or fill of 1 metre from the natural ground level.
- (viii) Lots should be able to accommodate a building envelope of 200m<sup>2</sup> with a minimum dimension of 10 metres.
- (ix) Lot layouts minimise the number of lots that have direct access to rivers, creeks, or streams.

# 5.5.7 Solar Access and Lot Orientation

#### **Objectives**

- a) Lot sizes reflect reasonable consideration of the impact of topography and aspect to maximise solar access;
- b) Lots are of a suitable shape to permit the location of dwellings with suitable solar access and private open space;

#### **Controls**

- (i) Staggering of lots and extensive use of landscaping is encouraged to reduce adverse wind impacts and create streetscape variety and interest.
- (ii) Lot orientation shall take into account the various types of dwellings which may be constructed on them. Ensure that potential indoor living and related private open space areas of future dwellings can be orientated to the north. Consider the possible overshadowing impact on existing or future adjoining buildings. Consideration of road orientation is an important factor in influencing lot orientation to achieve an energy efficient subdivision.
- (iii) Roads running east-west provide for good orientation of lots for solar access to dwellings and private open space, while maintaining a narrow lot frontage. This will contribute to minimising the lengths of street, utility and service related infrastructure. On roads running north-south, lots may need to be widened to provide for solar access and to prevent overshadowing of dwellings and private open space.
- (iv) Where the land has a slope generally greater than 5%, road and lot design should provide for dwellings to be generally parallel with the contours to minimise earthworks. Special care should be taken in the configuration of roads and lots to:
  - Minimise boundary retaining walls, particularly associated with building to the boundary line;
  - Minimise loss of privacy (overlooking);
  - Maintain solar access where slopes face south. A greater distance between dwellings will generally be required to achieve the same solar access as on level sites or north facing slopes.

### 5.5.8 Heritage

#### **Objectives**

- a) Heritage items should be retained.
- b) Subdivision should be sympathetically designed to minimise the impact on heritage items and curtilage of the subject land or adjoining lands.
- c) Subdivisions should be sympathetically designed to ensure that the existing heritage value of the streetscape and character of the area is maintained.

#### <u>Controls</u>

- (i) A subdivision proposal on land which contains or is adjacent to an item of environmental heritage as defined in Schedule 5 of Muswellbrook Local Environmental Plan shall illustrate the means proposed to preserve and protect such items.
- (ii) Subdivision of land to create 3 or more lots will require consultation with the Local Aboriginal Land Council or an Aboriginal Archaeology Assessment Report must be prepared in accordance with the recommendations of the Department of Environment and Climate Change.

# 5.5.9 Site Works

### **Objectives**

- a) To ensure that subdivision earthworks maintain existing topography and contours.
- b) To ensure that appropriate provisions are in incorporated into the subdivision to minimise any environmental impacts associated with changes to natural ground levels.

### **Controls**

- (i) The natural surface contours shall be reviewed and where necessary, the finished surface levels shall be designed accordingly to ensure the land is suitably prepared.
- (ii) Siteworks shall be planned to allow topsoil to be striped, stockpiled and reused on the site. No soil is to be removed from the site without Council's consent.
- (iii) Filling and leveling shall not adversely affect adjoining land and shall be carried out as indicated on the approved engineering plans.
- (iv) Site regrading is to be employed and undertaken in accordance with Council's AUS-SPEC No. 1(as varied by Council) Development Specification D6 Site Regrading and in accordance with AS 3798.
- (v) Any proposed filling is to consist of a sound clean material of a reasonable standard and free of large rocks, stumps, organic matter and other debris.
  Placing of fill on prepared areas shall not commence until approval has been granted by Council. Geotechnical certification may be required to indicate compliance with Australian Standards AS 2870 (Residential Slabs and Footings).
- (vi) Levels shall be constructed to ensure that lots drain to the street and/or an existing or proposed stormwater drainage system. Where required, a system of interallotment drainage shall be installed to prevent ponding of water or intensification of runoff onto adjoining land.
- (vii)Separation fencing is provided between development land and any rail corridor.

### 5.5.10 Open Space

The location, layout and design of subdivision and development surrounding public open space should minimise potential problems relating to personal security and surveillance, property security, vandalism and poor visual amenity in relation to the park and its boundaries. This may be achieved by:

- bounding public open spaces with streets and ensuring adjacent lots front and
- overlook open spaces;
- where streets cannot be provided, battle-axe lots may front to parks and public open space; and
- providing access to parks via the local street system rather than pedestrian access ways.

Local, neighbourhood and district parks are to be created to provide landscaped areas for passive enjoyment and/or for informal recreation and non-organised leisure. Parks are to be of varying sizes that respond to the topography, subdivision pattern and other open space elements.

Greenway links are to be provided to ensure connectivity between the open space proposed in the subject development, other existing and proposed areas of public open space and places, commercial centres and schools.

### **Objectives**

- a) To ensure that an adequate amount of public open space is provided to serve the residents of new subdivisions.
- b) To ensure that residents have convenient access to public open space that serves local recreational needs.
- c) To encourage opportunities to link open space networks, community facilities, and public services to service new residential development.
- d) To encourage the provision and retention of significant vegetation within public open space areas.
- e) Public open space is to be distributed so that it contributes to the legibility and character of the development, provides for a range of uses and activities, is cost-effective to maintain and assist with urban water management.

### <u>Controls</u>

- (i) Provision of local or neighbourhood public open space to be provided within the proposed subdivision at a rate of 1.0ha per 1000 people (or part thereof) based on a dwelling occupancy rate of 2.63 persons per lot, in accordance with the table below.
- (ii) Casual open Space (parks) for community recreation, social needs and passive enjoyment is required to be dedicated and embellished.
- (iii) Aquatic environments, natural watercourses, riparian buffers and foreshores within the development site must be dedicated to the public as reserve, and not as open space on any proposed plan of subdivision.
- (iv) Dual use of drainage facilities for open space purposes is encouraged as a means of establishing a linked open space network, however only those parts of the drainage areas that is in excess of that required for riparian management and buffers will be credited towards open space commitments. The linear shaped land which is used and predominantly occupied by connecting pedestrian/cycle paths will not be accepted as casual open space.
- (v) Environmentally sensitive areas and visually significant topographical/landform features within the development site should be dedicated to the public unless

their environmental/scenic/visual values and appropriate management can be guaranteed in perpetuity in private ownership.

- (vi) Details of proposed street tree plantings are to be provided.
- (vii) Appropriate attention is to be given to the following factors:
  - General landscape theme (i.e. evergreen/deciduous);
  - Climatic considerations (i.e. wind conditions and variation in sunlight);
  - Use of water and drainage areas for recreation and visual amenity;
  - Planting themes and grouping of plant types (eg. For privacy, screening etc.);
  - Choice of surface finishes (eg. Paving) and outdoor furniture to reflect a theme.

### **TABLE: LOCAL & NEIGHBOURHOOD PARKS - DEVELOPMENT STANDARDS**

Areas of landscaped green space that enhance the amenity and character of the neighbourhood and provide space for leisure and/or informal recreational pursuits, may include a play area being a small intimate space used for children's play and adult respite

Local Public Open Space Development Standards			
Area	Area of 0.25 to 1.5ha. The number and distribution of these parks is to be		
	such that 95% of residents are located within a 400m radius.		
Shape	Length to width ratio shall not exceed 3:1, and a 20m buffer provided from		
	active paly areas to residential boundaries		
Landform	>80% of the area to have slopes <8%, with good drainage, grassed surfaces		
	incorporating and landscaped elements/paved areas with soft fall		
Access	Vehicular access from local roads for maintenance vehicles and readily		
	accessible by pedestrians and bicycles		
Road frontage	>50% of perimeter for casual surveillance		
Amenities	Playground equipment, soft fall surfaces under play equipment, kick about		
	area, paving for ball games, seating with shade, landscaping, drinking		
	fountains, general shade and lighting. Play areas fenced from balance of		
	park to delineate use. Toilet blocks if servicing greater than 1000 persons		
Services	Access to garbage collection, regular maintenance, water, electricity.		

# 5.6 INDUSTRIAL SUBDIVISION

#### **Application**

This section applies to the subdivision of land within IN1 and IN2 zones under the Muswellbrook LEP.

#### 5.6.1 Lot Sizes and Shapes

#### **Objectives**

- a) Each proposed lot offers maximum utility in terms of building space and accessibility bearing in mind the requirements of modern industrial activity.
- b) Lot sizes for the different types of industrial subdivision will vary according to functional purpose.
- c) In considering an application for subdivision, Council will have regard to the following factors:
  - If the subdivision involves the creation of a significant number of lots then provision should be made for a variety of lot sizes;
  - The overall pattern of lot sizes in the locality and the type of industrial activity characteristic of the locality in which the subdivision is located.

#### **Controls**

- (i) The minimum width of a lot in an industrial zone shall be 30 metres at the building line. Lot widths of less than 30 metres will be considered where lots are part of an integrated industrial development
- (ii) Battle-axe shaped allotments shall comply with the minimum width at the building line stated above. Battle-axe handles shall have a minimum width of 8 metres.
- (iii) The above standards have been imposed to ensure that lots have dimensions which permit the safe manoeuvring of trucks within the lot so that trucks and cars can leave the lot in a forward direction.
- (iv) The size of lots should provide sufficient space to accommodate the industrial operations and buildings envisaged, make allowance for possible future expansion and allow the site to function properly and efficiently in terms of development requirements. These requirements may relate to factors such as:-
  - safe ingress and egress
  - vehicular movement with the curtilage of the site
  - parking
  - deliveries
  - storage and bin areas
  - boundary setback requirements
  - landscaped areas

#### 5.6.2 Access and Road Layout

#### **Objectives**

a) Road layouts and access points are designed to provide for the safe and efficient movement of traffic to and from each proposed lot within the industrial areas.

b) Access from individual lots to major roads are minimised. The use of minor roads for such access is desirable where ever practicable.

### **Controls**

(i) The following design requirements generally apply to roads servicing industrial lots:

Road Reserve Width	Carriage Way Width	Minimum Footway
20 metres	11 metres	3.5 metres

- (ii) Industrial and Commercial subdivision roads shall be designed in accordance with Council's AUS-SPEC No 1 (as varied by Council) Development Specification as follows:
  - Road Network: D1 Geometric Road Design.
  - Road Geometry: D1 Geometric Road Design.
  - Road Pavement: D2 Pavement Design.
  - *Bridges/Detention Basins & other Structures*: D3 Structures/Bridge Design & D4 Subsurface Drainage Design.
  - Construction of the roads will be in accordance with Council's AUS-SPEC No 1(as varied by Council) Development Specification Construction.
- (iii) Culs-de sac for industrial roads are to be avoided, but where they are considered the only option, are to have minimum kerb radii of 13.5 metres and boundary radii of 17.0 metres and be AC surfaced.
- (iv) Battle-axe lots may be acceptable for light and service industries which are not serviced by larger vehicles. Details such as the shape of the effective lot area, the need for truncation in the lot and the width of the access handle will be determined on a case by case basis.
- (v) Vehicular access from allotments to a public road are capable with complying with the provisions of AS2890.1 and the RTA's Guidelines for Traffic Generating Development.
- (vi) Direct vehicular access to major roads from within individual lots is avoided.

### 5.6.3 Utility Services

#### **Objectives**

a) New industrial lots are provided with all services including water, sewer, stormwater drainage, power, telephone and gas where appropriate.

### <u>Controls</u>

- (i) Connection to a reticulated sewerage system is a normal requirement of an industrial subdivision. However, where a reticulated sewerage connection is not available and is not likely to be available for some time, the council may consider Development Applications on the basis that:
  - It is satisfied that the development will be limited to "dry industry";
  - Any application for industrial subdivision in unsewered areas is accompanied by an effluent disposal report.
- (ii) All industrial subdivisions shall be connected to the power, telephone and water supply for the locality

(iii) Compliance with section 25 of this DCP.

### 5.6.4 Adjoining Development

### **Objectives**

a) Industrial land uses should be compatible with adjacent commercial and or residential areas.

#### **Controls**

(i) The applicant may be required to indicate how the industrial land could be developed and also show the location of landscaping, building and other site planning techniques with the aim of minimising impact on adjoining commercial and or residential uses.

The following page no. is 6-1