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C11 Subdivision

A. Background

During the past decade, the City of Penrith has experienced rapid and sustained urban growth. To a large extent, Penrith's development has resulted from the release of new residential areas but some has also come from standard subdivisions of rural, industrial and residential land. The combination of continued population growth, an ageing population and pressures of housing affordability will create a demand for new and varied types of development sites.

After rezoning, the subdivision of land is one of the first steps in the development process, which has the potential to significantly impact the environment, society and culture, infrastructure and the amenity of an area.

This section of the DCP should be read in conjunction with the 'Sustainability Blueprint for New Release Areas'.

B. General Objectives

- a) To consider and address the principles of sustainable development in determining the location, design and future use of subdivided land;
- b) To address the objectives and controls in this DCP relating to social, economic, environmental and built form principles to maximise sustainable development outcomes; and
- c) To provide efficient subdivision layouts that meet the needs of the proposed land uses and activities, and market requirements for those land uses/activities.

C. Other Relevant Sections of this DCP

Applicants should read this Section of the DCP in conjunction with other relevant sections.

11.1. General Subdivision Requirements

A. Objectives

- a) To address site planning principles in the design of the subdivision layout;
- b) To preserve and retain significant environmental and cultural features of the site, such as waterways, riparian corridors and heritage items.
- c) To address environmental constraints, including flooding, drainage, slope, erosion and land within, or adjacent to, natural resource sensitive land and to ensure that any future development will not be subject to an unacceptable level of risk from natural hazards;
- d) To encourage the retention of significant existing vegetation;
- e) To adequately provide services to, and mechanisms for, the effluent disposal from any proposed allotment(s); and

- f) To address any access and traffic constraints and maximise vehicle and pedestrian safety.

B. Controls

1) Engineering Works

- a) Where roads and other engineering works are required to support a proposed subdivision, details must be included in the development application. Applicants are advised to consult with Council's Development Services Unit in relation to any subdivision proposal.

2) Site Planning

- a) Any proposed subdivision must demonstrate how the proposed subdivision design has taken into account the principles set out in Section C1 'Site Planning and Design Principles' of this DCP. This includes, but is not limited to:
 - i) Site analysis and response to the site context;
 - ii) Social impact of the proposed subdivision;
 - iii) Economic assessment of the proposed subdivision;
 - iv) Environmental assessment of the proposed subdivision;
 - v) Urban design assessment of the proposed subdivision;
 - vi) Compliance with the provisions of this DCP relating to specific land uses;
 - vii) The allotment size, shape and orientation;
 - viii) The alignment of roads with the natural topography;
 - ix) Potential energy and water savings from subdivision design and allotment orientation; and
 - x) The ability of proposed allotments to operate efficiently for the proposed use and potential future development.
- b) As part of any site analysis, the proposed subdivision must demonstrate its integration with the natural and physical features of the site including, but not limited to:
 - i) Slope and orientation of land;
 - ii) Opportunities for solar and daylight access to dwellings (if applicable);
 - iii) Design of roads and access ways (individual site access);
 - iv) Retention of special qualities or features such as trees or views;
 - v) Availability of utilities;
 - vi) Provision of adequate site drainage;

- vii) Possible need to retain the existing subdivision character;
 - viii) Heritage and archaeological conservation;
 - ix) Adequacy of each allotment considering relevant development standards for the proposed future use of the land;
 - x) Relationship to adjacent subdivision patterns; and
 - xi) Potential land use conflicts with adjacent lands.
- c) Existing vegetation and natural drainage lines should be retained and enhanced, wherever possible.
 - d) Existing dams should be retained, where possible.
 - e) Long and narrow allotments should be avoided. Allotments should have a maximum of 4:1 depth to width ratio.
 - f) 'Battle-axe' allotments are discouraged by Council. No more than two allotments shall be served by a shared access corridor. Where a corridor is shared, reciprocal rights of way and easements for drainage shall be granted over the access corridor for the benefit of both allotments.
 - g) Applications for subdivision need to demonstrate that each of the proposed allotments can support the proposed development/buildings by providing a *Potential Development Area Plan*. This Plan (based on a survey diagram) shall show the potential development area of each allotment (after taking into account setbacks that may be required to meet built form or environmental controls in this DCP).
 - h) Applications should be accompanied by landscape plans indicating proposed landscaping (including streets and how they are positioned so as not to compromise the effectiveness of street lighting) and parking arrangements.
 - i) New allotments should be located so as to protect, enhance or conserve areas of high scenic or recreational value. Council may consider subdivisions/buildings in these higher value areas where ridgelines, vistas and other geographic features are not interrupted or where building materials that blend with the environment are to be used.

3) Subdivision of Natural Resources Sensitive Land

- a) Where applicable, applicants are required to address the environmental impacts of any proposed subdivision of land where the proposed allotment(s) are within or adjacent to land shown on the Natural Resources Sensitivity Land Map of the LEP.
- b) Council will generally not support the subdivision of land within or adjacent to the land noted on the Natural Resources Sensitivity Land Map where the subdivision will result in fragmentation that will make control of environmental outcomes difficult to achieve.
- c) Council may require dedication of conservation easements, where necessary, over land adjacent to land shown on the Natural Resources Sensitivity Land Map to protect areas identified to be of significance.

4) Vegetation Management

- a) Any subdivision proposal is required to address the objectives and controls set out in the Vegetation Management and Landscape Design sections with particular focus on the protection of existing vegetation.
- b) Not more than 10% of the vegetation on any site shall be cleared (or required to be cleared) as a result of any subdivision proposal.
- c) The design of any subdivision layout must ensure that the potential development pattern supported by the proposed subdivision design will be consistent with the existing landscape character of the area.
- d) A subdivision application on land identified as or adjacent to 'bushfire prone land' will need to address the controls set out in the Vegetation Management Section relating to bushfire protection and the provision of asset protection zones. Where possible, removal of significant vegetation is to be minimised.
- e) Tree protection measures must be provided in accordance with Australian Standard AS 4970-2009 Protection of trees on development sites.

5) Water Management

- a) Any subdivision proposal is required to address the objectives and controls set out in the Water Management Section. The subdivision design should consider the following and incorporate measures to address:
 - i) The potential impacts of any future development on water catchments and surface water quality;
 - ii) The potential impacts of any future development on watercourses, riparian corridors and wetlands or other environmentally sensitive areas. Lot design may need to facilitate the fronting onto riparian land to facilitate surveillance and prevent degradation of these areas;
 - iii) The potential for flood risk and damage to life and property and the need to provide safe emergency access/egress from the site;
 - iv) Issues arising from stormwater and drainage requirements; and
 - v) The potential for the site design to incorporate features of water sensitive urban design.
- b) Council will not approve any subdivision of lots where it is evident that a flood free building envelope and safe internal access from/to the public road cannot be provided. The building envelope for any dwelling should be flood free in a 1:100 Average Recurrence Interval (ARI) flood. Evidence of this must be provided as part of any application.
- c) Council will not support the subdivision of any land located in a floodway or areas of high flood hazard.
- d) Subdivision of land below the flood planning level in rural zones creating additional allotments will generally not be supported. However, Council may consider a subdivision application where the applicant can demonstrate that:

- i) the flood hazard is low;
 - ii) flood free access can be provided; and
 - iii) a minimum of 1,000m² within each allotment is flood free, allowing for a dwelling and all ancillary works;
- e) Generally, land situated within existing residential, commercial and industrial zones may only be subdivided to enable its development for urban purposes where the level of the existing land to be developed is not lower than the 1:100 ARI flood. All lots created by such subdivision shall have the portion of the lot that can be built upon filled to a level at least 0.5m above the 1:100 ARI flood.
- f) Significant filling of flood planning land will not be supported. If minor filling is required on flood planning land, the provisions relating to flood liable lands will apply (refer to the Water Management section).

6) Land Management

- a) Any subdivision proposal is required to address the objectives and controls set out in the Land Management section with particular focus on ensuring that the proposed subdivision is appropriate taking into consideration:
- i) Site instability due to geology, slope or landfill;
 - ii) The need for excavation and fill to create developable allotments;
 - iii) The potential for erosion and sedimentation; and
 - iv) The potential for salinity.
- b) Any subdivision application must address whether the proposed site has any potential for contamination (in accordance with the *Contaminated Land Management Act 1997*), other than by normal grazing activities. If required by Council, the land will need to be remediated in accordance with legislative requirements before subdivision can be permitted.

7) Culture and Heritage

- a) Subdivision of a heritage item or in the vicinity of a heritage item or where there is the likelihood of an Aboriginal archaeological heritage item must address the objectives and controls set out in the Culture and Heritage section. The proposed subdivision must minimise:
- i) The impact on Aboriginal or European archaeology on the site; and
 - ii) The impact on Aboriginal objects and places.

8) Access and Transport

- a) Any subdivision proposal is required to address the objectives and controls set out in the Transport, Access and Parking section with particular focus on ensuring that the proposed subdivision is appropriate taking into consideration:
- i) The appropriate location of land uses to minimise transport requirements;

- ii) Likely traffic generation;
 - iii) Safe access and egress to the site; and
 - iv) Appropriate lot sizes to provide facilities for cars, pedestrians and bicycles.
- b) Council will not approve any subdivision of new lots in situations where each lot cannot be provided with a safe access point to an existing public road.
 - c) Council may not approve subdivision of allotments where access is to a Crown Road only.
 - d) Site frontage must be sufficient to permit vehicular and pedestrian access to the site.
 - e) A minimum allotment frontage of 25m must be provided when the allotment has a vehicle access point to a collector or major road.
 - f) Council and the Roads and Maritime Services (RMS) require that access points are grouped at existing or limited access points whenever feasible to minimise the traffic impact and risk on additional access points to road networks.
 - g) Where an internal road system is proposed to a new subdivision, the application must demonstrate a distinctive and hierarchical network of roads with clear physical distinctions between each type of road, based on function, capacity, vehicle speeds and public transport.
 - h) Any proposed road system must provide acceptable levels of access, safety and convenience for all road users, while ensuring acceptable levels of amenity and protection from the impact of traffic.
 - i) Council may levy a road contribution or require road upgrading for all proposed lots whether the lots are accessed by sealed or unsealed roads. The amount of the contribution will depend on the current standard of the road and the increased levels of traffic to be generated.

9) Noise and Vibration

- a) Any subdivision proposal is required to address the objectives and controls set out in the Noise and Vibration section with particular focus on designing lots so sensitive buildings (especially dwellings) will have sufficient setbacks or noise mitigation measures to minimise noise and vibration impacts.

10) Infrastructure and Services

- a) Council will not approve of any subdivision of new lots where requirements for effluent/waste water disposal cannot be adequately met on each individual lot.
- b) Council will not approve of any subdivision of new lots where the provision of services, such as electricity, telephone and other centralised services, would result in additional costs not paid for by the applicant.
- c) Satisfactory arrangements will be required to be made with Sydney Water in conjunction with the submission of the subdivision application. Documentary evidence will be required of the consultation which has been undertaken.

C. Lifting the Bar

The following represent some ways in which applicants can demonstrate additional commitment to the principles expressed in this Plan. Demonstration of this commitment may lead to Council considering variation of development controls. Applications that vary the development controls listed in this section will need to demonstrate that the proposed development complies with the objectives relevant to the development controls it seeks to vary.

- 1) **Consolidation of allotments:** Where an applicant is proposing substantial works that require a development application on rural or industrial properties across a number of allotments with a single use, an applicant should review the potential to consolidate those allotments as part of the development application.
- 2) **Natural Resources Sensitive Land:** Where a proposed subdivision is either within or immediately adjacent to land on the Natural Resources Sensitivity Land Map in the LEP an applicant should discuss with Council the potential to dedicate part of the subdivision as a buffer to that sensitive land.
- 3) **Water Sensitive Urban Design:** Where a subdivision involves more than 10 allotments or an area greater than 5 hectares, the applicant should demonstrate to Council how the proposed subdivision layout will incorporate water sensitive urban design mechanisms both at the entire subdivision level and for each site.

11.2 Rural Subdivision

A. Objectives

- a) To promote the continued use of agricultural land, particularly prime crop and pasture land, for commercial agricultural purposes, where that form of land use is sustainable in the long term;
- b) To allow subdivision which will maintain the rural character of the locality;
- c) To avoid land use conflicts by preventing incompatible development in or adjacent to agricultural land;
- d) To create a diversity of rural living opportunities in appropriate locations to provide scope for development in rural areas;
- e) To provide a capacity to effectively cater for a range of agricultural developments;
- f) To ensure that allotments are compatible in size and shape with the physical nature of the land, adjoining land uses and the likely use of the land in the future; and
- g) To ensure satisfactory arrangements are made for access, servicing and landscaping.

B. Controls

1) Land Capability

- a) As part of any subdivision application for rural lands, an applicant must address the impact that the proposed subdivision will have on the agricultural capability and

sustainability of the proposed allotments as well as the impact on agriculture in the surrounding area.

b) This must also address social, economic and environmental factors.

2) Avoiding Land Use Conflicts

a) The application will need to address how any potential land use conflicts (including, but not limited to, noise, dust, odour, traffic, light, etc.) will be minimised if any proposed subdivision is located within 1km of:

i) An existing approved or licensed intensive agricultural operation;

ii) A waste or resource management facility;

iii) A noxious, offensive or hazardous land use; or

iv) A sensitive land use.

b) Site locations must ensure such existing land uses will still comply with the EPA Odour Control Guidelines and other relevant publications.

c) Use of building envelopes, buffer zones and planting will be considered in helping to mitigate these issues.

3) Subdivisions for Dwellings

a) Applications for subdivision that will include a new dwelling should be accompanied by a proposal for siting of a dwelling.

b) In some circumstances, the building envelope (ground area and height) and/or design guidelines specifying the proposed building location/height must be registered on the Certificate of Title as part of the subdivision approval process.

c) The building envelope must comply with the relevant setbacks from roads, watercourses, other buildings and side boundaries in the Rural Land Uses Section of this Plan.

11.3. Residential Subdivision

A. Introduction

This plan applies to all subdivision proposals where land is zoned for residential purposes.

B. Objectives

a) To provide greater diversity of housing choice;

b) To enhance and protect the amenity of new and existing residential areas by:

i) Providing design controls for a variety of forms of residential subdivision;

- ii) Setting reasonable environmental standards for solar access, road network, vehicular access, parking, landscaping, servicing and drainage; and
- iii) Providing adequate environmental controls to protect the natural environment and systems in the construction/establishment of subdivisions.

B. Controls

1) General Requirements

Subdivision is generally the first stage of development in residential zones. Different development approval processes apply, depending on the form of development proposed.

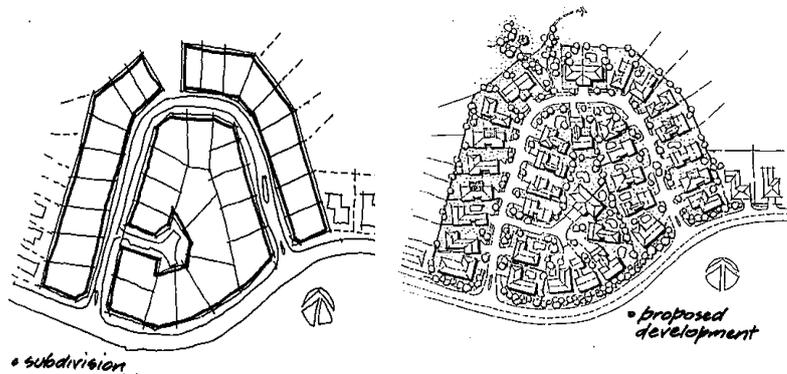
- a) Where development applications for subdivision meet the minimum lot size requirement, a development application may be made for subdivision alone.
- b) In the R1 General Residential zone, where subdivision into allotments of area less than 400m² is permitted (subject to the requirements of the LEP), a development application must be made for both subdivision and the development (e.g. detached dwelling) proposed.

2) Design Principles

- a) In determining the suitability or otherwise of any subdivision application, consideration of the following matters, together with those specified in Section 79(C) of the *Environmental Planning and Assessment Act 1979*, will be taken into account:
 - i) slope and orientation of land;
 - ii) opportunities for solar and daylight access to future dwellings;
 - iii) design of road and access ways (individual site access);
 - iv) retention of special qualities or features such as trees and views;
 - v) availability of utilities;
 - vi) provision of adequate site drainage;
 - vii) provision of public open space;
 - viii) possible need to retain existing subdivision character;
 - ix) heritage and archaeological conservation;
 - x) adequacy of each allotment considering relevant development standards such as setbacks, car parking, landscaping etc.;
 - xi) the relationship of the subdivision layout to adjacent land suitable for subdivision;
 - xii) the enhancement of existing or future subdivision character;
- b) Subdivision should only occur where the land is suitable for its intended use.
- c) Subdivision of land should not result in steep slopes or high retaining walls.

- d) In cases where subdivision is proposed on land with steep slopes, details of cut and fill including proposed retaining walls are to be provided at the time of subdivision.

Figure - C11.1: Examples of subdivision



11.3.1. Allotment Orientation

A. Objectives

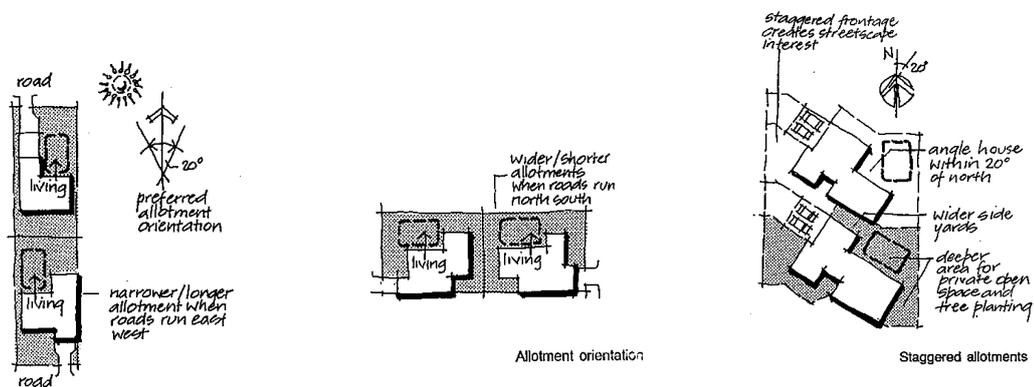
- a) To achieve comfort for future users by considering prevailing climatic factors in subdivision layout;
- b) To meet user requirements for daylight and solar radiation;
- c) To enable, where practical, the application of energy conservation principles;
- d) To ensure that the site layout of a subdivision does not preclude a northerly aspect to any dwelling located on that site;
- e) To wholly consider the design of roads and allotments to create variety and interest in the streetscape and to preserve significant natural features; and
- f) To encourage energy efficient subdivision design which maximises solar access, meets requirements for daylight and solar radiation and makes efficient use of roads; and services.

B. Controls

- 1) Staggering of allotments and extensive use of landscaping are encouraged to reduce adverse wind impacts and achieve maximum exposure to cooling breezes in summer, and create streetscape variety and interest.
- 2) The allotment orientation shall take into account:
 - a) The various types of dwellings which may be constructed on them. In this regard, potential living and private open space areas of any dwelling can be oriented to the north.
 - b) The possible overshadowing impact on existing and/or future adjoining buildings.

- c) Road orientation, which is an important factor in influencing allotment orientation to achieve energy efficient subdivision.
 - i) Roads running close to east-west provide for good orientation of allotments for solar access to dwellings and private open space, while maintaining a narrow allotment frontage. This will contribute to minimising the street length and reduce lengths of utility and service related infrastructure.
 - ii) On roads running north-south, allotments may need to be widened to provide solar access and prevent overshadowing of dwellings and private open space.
- 3) Where land slopes are generally greater than 5%, road and allotment design should provide for dwellings to be generally parallel with the contours to minimise earthworks. Special care should also be taken in the configuration of roads and allotments to:
 - a) Minimise boundary retaining walls, particularly associated with building to boundary;
 - b) Minimise potential overlooking; and
 - c) 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.

Figure - C11.2: Examples of Allotment Orientation



11.3.2. Site Frontage

A. Objective

- a) To allow the development of small sites without the need for site amalgamation.

B. Controls

- 1) Site frontage shall be sufficient to permit vehicular and pedestrian access to the site.
- 2) Access to major roads may be restricted and can potentially affect the proposed subdivision layout.
- 3) Along collector and major roads, it is desirable to reduce the number of vehicle access points. In such situations, a minimum allotment frontage of **25m** is preferred.

- 4) Alternatively, a service road running parallel to the main road may be required. (See Section 11.3.5 Road Design and Construction.)
- 5) While minimum frontage requirements are not specified in this section, each new lot created shall have satisfactory depth-to-frontage ratio and long narrow lots will be discouraged.
- 6) Allotments with double road frontage (i.e. front and rear) are discouraged.

11.3.3 Allotment Dimensions

A. Objectives

- a) To encourage variety and choice in housing forms by providing for a broad range of dwelling sizes;
- b) To meet the projected requirements of people with different housing needs;
- c) To provide sufficient area and dimensions for each allotment to enable siting and construction of a dwelling and ancillary outbuildings; and
- d) To provide sufficient area and dimensions for each allotment for the provision of private outdoor space with regard to solar and daylight access and convenient vehicle access parking (where required).

B. Controls

Allotment Size

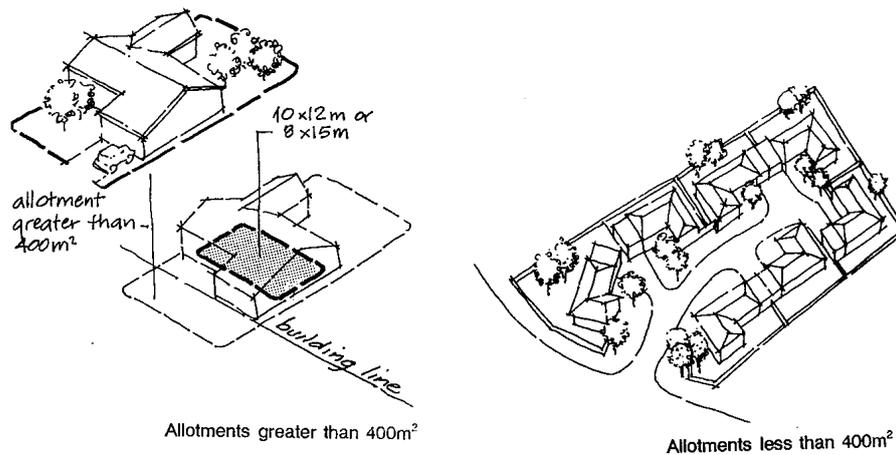
Residential lots greater than 400m²

- 1) Allotment dimensions shall be capable of containing a rectangle suitable for building purposes measuring 10m x 12m or 8m x 15m behind the building line.

Residential lots less than 400m²

- 2) In determining the suitability of any subdivision application for small lots (i.e. less than 400m²), special consideration of the following matters will also be taken:
 - a) Cost of providing services and the capacity of existing services;
 - b) The advantages of building to a boundary and using attached and semi-detached forms of housing;
 - c) That adequate privacy can be assured for each proposed dwelling; and
 - d) That adequate provision is made for access to natural light for each proposed dwelling.

Figure C11.3: Examples of allotments greater and less than 400m²



Battle-Axe Lots

- 1) Battle-axe lots must be greater than 400m².
- 2) Battle-axe allotments are generally discouraged. Where battle-axe allotments are proposed the access corridor will not be included in the site area calculation for battle-axe allotments.
- 3) Requirements for access corridors are:
 - a) Minimum width of 4m;
 - b) Minimum width for shared corridor of 5m;
 - c) Maximum length of 60m.
- 4) No more than 2 allotments shall be served by a shared corridor.
- 5) Where a corridor is shared, reciprocal rights of way and easements for drainage shall be granted for the benefit of both allotments.
- 6) Council will not be responsible for the maintenance of access corridors.

11.3.4 Road Network

A. Objectives – road network

- 1) To provide a distinctive and hierarchical network of roads with clear physical distinctions between each type of road based on function, capacity, vehicle speeds, and public safety.
- 2) To provide acceptable levels of access, safety and convenience for all road users in residential areas, while ensuring acceptable levels of amenity, and protection from the impact of traffic.
- 3) To establish a road network which provides:

- a) the basis for cost effective-design and construction of roads;
- b) efficient and accessible bus routes;
- c) safe and convenient movement of pedestrians;
- d) integrated natural drainage and open space systems;
- e) efficient provision of public utilities networks;
- f) roads within any residential neighbourhood which do not function as through traffic-roads for externally-generated traffic; and
- g) to provide for safe on-street parking of vehicles.

B. Controls – road network

- 1) The road network shall conform to a strategic plan for the area showing an existing and proposed major road network above the level of collector which satisfies projected district and regional travel.
- 2) The road network shall provide for access to bus routes within acceptable walking distance from all dwellings. Unless prescribed otherwise, no more than 10% of allotments shall be more than 250m straight line or 400m walking distance from a proposed bus route.

11.3.5 Road Design and Construction

A. Objectives

- a) To provide roads consistent with their function within the road network, having regard to their safety and visual impact.
- b) To provide sufficient road reserve, carriageway and verge width to allow roads to perform their designated functions within the road network.
- c) To allow all users of the road – motorists, pedestrians and cyclists – to proceed safely, conveniently and without delay.
- d) To provide access for emergency and service vehicles to all dwellings.
- e) To accommodate sufficient on-street parking.
- f) To accommodate public utility services and drainage systems.
- g) To provide road pavements and edges that are appropriate for the control of vehicle movements, perform any required drainage function, are structurally adequate and use materials that reinforce the residential function of the street.
- h) To minimise road construction and life cycle costs without compromising other objectives.

B. Controls

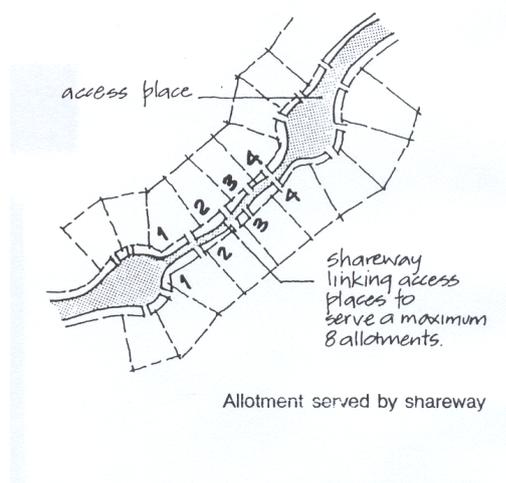
1) Connections between roads

- a) The minimum distance from an access place or road to a collector road shall be 60m if the junction is on the same side of the road or 40m if the junction is staggered on opposite sides of the road.
- b) Intersections shall be either T junctions or roundabouts.

2) Controls – road capacity

- a) A share-way shall serve a maximum of 8 single dwelling allotments, or 6 single dwelling allotments if it is a cul-de-sac.
- b) An access place serving allotments greater than 400m² shall serve a maximum of 24 single dwelling allotments.
- c) An access place serving allotments less than 400m² shall serve a maximum number of 30 allotments.
- d) An access street shall serve a maximum of 200 single dwelling allotments or generate no more than 1,500 vehicle movements per day based on an average of 7 vehicle movements per dwelling unless a lower rate can be demonstrated. Lower rates may be applied to multi dwelling housing.

Figure C11.4: Examples of allotments which is served by a share-way



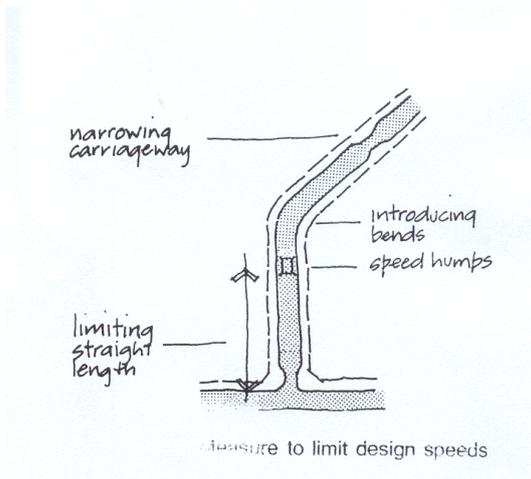
Controls – design speeds

- 1) Design speeds shall be a maximum of:
 - a) 15km per hour – share-way, access place.
 - b) 40km per hour – access street.
 - c) A combination of measures may be required to limit design speeds by:
 - i) limiting street length

- ii) introducing bends
- iii) introducing slow points, bends and other traffic management measures such as constriction of carriageway width, speed humps etc. These may not be appropriate in all situations.

2) Design shall conform to Council's guidelines. Speed profiles are required for each road.

Figure C11.5: Examples of allotments which reduce speed



Control - road reserves

- 1) Where a subdivision adjoins a collector road of a standard less than Council's current standard, adequate half-width road pavement construction, kerbing and footpath along the full length of the frontage shall be provided to approved standards.
- 2) Rear fences of a subdivision fronting collector roads are discouraged. Where there is no alternative greater verge widths may be required to provide for landscaping against fences taking into account intersection sight distance requirements.

11.3.6. Landscaping and Site Design

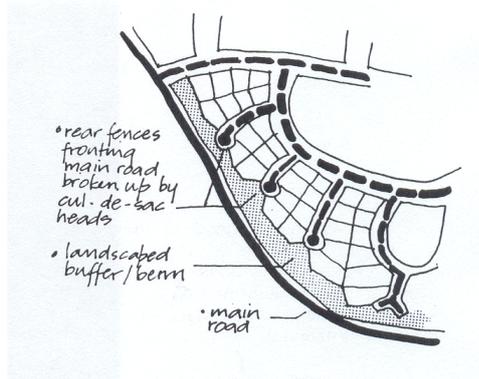
A. Objectives

- a) To maintain and enhance the existing streetscape and landscape character;
- b) To enhance the settings of buildings;
- c) To provide for acoustic and visual privacy;
- d) To reinforce and define vehicle speed control design elements;.
- e) To provide shade for buildings and areas of open space; and
- f) To preserve mature trees and significant landscape elements.

B. Controls

- 1) Landscaping shall be designed to enhance the natural features of the site and adjoining areas. Existing landscape elements such as rock formations, vegetation or water courses shall, where possible, be preserved.
- 2) In established areas, landscaping shall relate to the scale of other elements of the streetscape and the landscaping of adjoining development. Where possible, landscaped areas shall adjoin landscaped areas of adjoining allotments.
- 3) Rear fences fronting public roads are discouraged. Where they are unavoidable, the following may be required:
 - a) Greater setbacks for landscaping against fences, consistent with acoustic and road design standards.
 - b) Building frontages to face road by provision of parallel access road separated by acoustic and landscaped buffer.
 - c) Landscaped berms and other planting, particularly where a minimal amount of rear fencing is provided such as with cul-de-sac heads abutting the major road boundary.
- 4) For all subdivisions, street tree planting or a contribution for street tree planting at the following rate shall be provided:
 - a) For allotments greater than 400m², a contribution for one (1) super advanced tree per 10m road frontage.
 - b) For allotments less than 400m², to be in accordance with an approved landscape plan for the entire development.
- 5) Subdivision design shall maintain existing mature trees where possible. Council has in force a Tree Preservation Order which requires Council's consent to the removal or lopping of any tree.
- 6) The slope from any proposed dwelling to a street shall be such as to allow recreational use and the provision of a footpath where required.

Figure C11.6: Landscaping on streets



11.3.7 Services

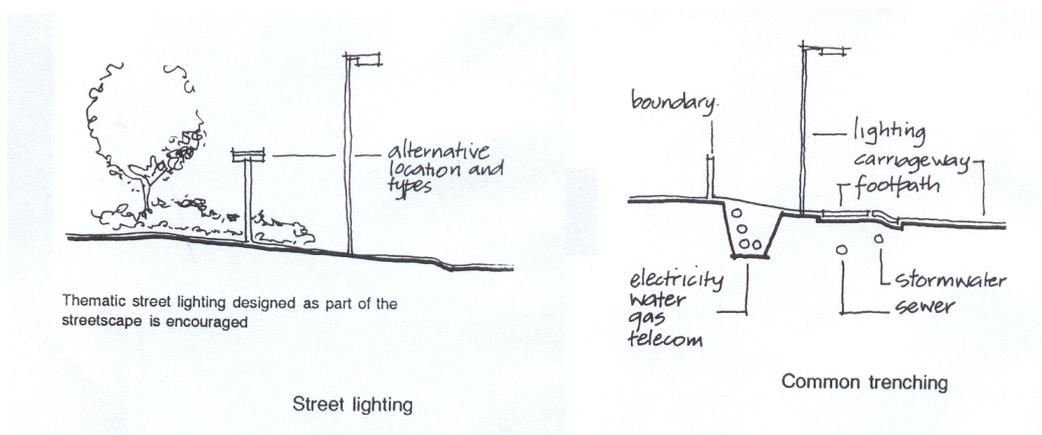
A. Background

- To provide for the location of public utilities to each allotment and within road reserves in an efficient and cost-effective manner;
- To maximise the opportunities for shared (common) trenching and reduced restrictions on landscaping within road reserves; and
- To ensure residential areas are adequately serviced in a timely, cost-effective, coordinated and efficient manner.

B. Controls

- The design and construction of utility services shall conform to the specific standards of the relevant servicing authority.
- Where possible, compatible public utility services shall be coordinated in common trenching to maximise cost-effectiveness.
- In access places and streets, the design of street lighting as part of a thematic streetscape is encouraged.

Figure C11.7 Location of services



11.3.8. Drainage

A. Objectives

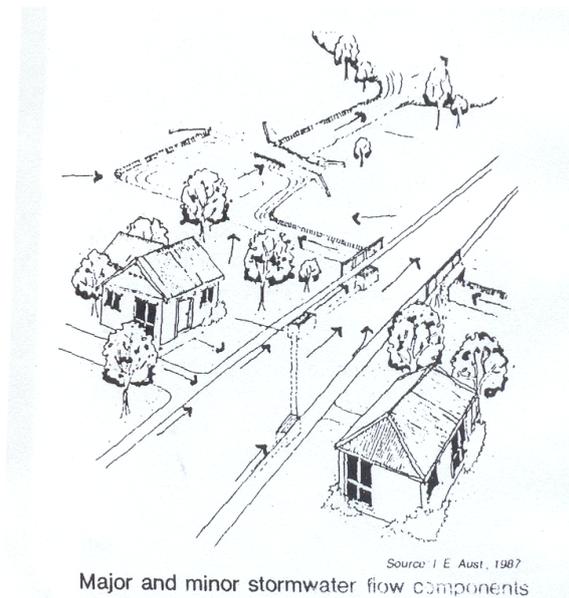
For minor stormwater flows, the objectives are to:

- a) prevent damage by stormwater to the built and natural environment;
- b) reduce nuisance flows to a high level which is acceptable to the community.
- c) provide a stormwater system which can be maintained economically;
- d) provide a stormwater system which utilises open space in a manner compatible with other uses;
- e) control flooding and enable access to allotments, stabilise the land form and control erosion; and
- f) minimise urban run-off pollutants to watercourses.

The objectives for major stormwater flows are to:

- a) prevent both short and long term inundation of habitable dwellings;
- b) control flooding and enable access to allotments; and
- c) stabilise the land form and control erosion.

Figure C11.8: Major and Minor Stormwater Flow Components



B. Controls

- 1) The piped drainage system shall be designed to control minor stormwater flows under normal operating conditions for an Average Recurrence Interval (ARI) of five (5) years.

- 2) The drainage system shall be designed to control major stormwater flows under normal operating conditions for an ARI of 100 years.
- 3) The design of the drainage system shall comply with the NSW Environment Protection Authority standards for urban run-off.
- 4) Allotment drainage shall discharge to the roadway gutter wherever possible.
- 5) Where easements are required over downstream property, Council requires the submission of the adjoining owner's consent with the development application.

11.3.9. Public Open Space

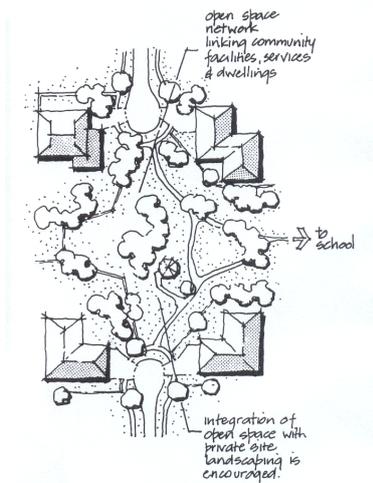
A. Objectives

- a) To ensure adequate provision and distribution of public open space in convenient locations and of a quality to meet the recreation needs of the community;
- b) To encourage dual use of open space for recreation and major drainage networks, provided the land is suitable for both purposes;
- c) To encourage opportunities to link open space networks, community facilities and public services of dwellings;
- d) To encourage the retention of significant existing vegetation with open space areas, and integration with private site landscaping and natural bushland areas; and
- e) To provide for the absorption/on-site detention of stormwater to aid in slowing the rate of run-off.

B. Controls

- 1) Open space shall accord with the relevant Council Section 94 Contributions Plan and other Section of this Plan or open space plan based on a needs assessment for the vicinity.
- 2) Council will consider the dual use of suitable open space for recreation and major stormwater drainage in accordance with the principles and requirements of the WSROC handbook "Dual Use of Drainage Open Space in Western Sydney" (1989).
- 3) On-site provision of open space (such as for integrated housing development) may only satisfy passive recreation. Council may require a contribution for the provision of, or enhancement of, active recreation space elsewhere.
- 4) In established areas, and where Council determines that the public open space component of a subdivision shall be located elsewhere, a contribution to Council will be required for acquiring or improving more suitable open space in the vicinity.

Figure C11.9: Example of public open space



11.3.10 Environmental Site Management

A. Objectives

- a) To avoid environmental degradation as a consequence of alterations to natural systems.
- b) To improve, where possible, the environmental amenity of residential development.
- c) To enhance the physical appearance of residential development by retention of significant natural features, including established trees and vegetation.

B. Controls

- 1) Development shall comply with the provisions of the Vegetation Management Section Management of this Plan and current soil erosion, sediment and water quality control requirements.
- 2) A detailed site plan shall be prepared by a suitably qualified consultant, identifying significant trees and vegetation and other physical constraints, such as watercourses.
- 3) A site management plan shall be prepared and submitted with the development application showing arrangements for the control of stormwater runoff and erosion control, during and after completion of the development, site restoration and other mitigation measures required prior to the development being undertaken, stockpile position, and all vegetation/trees to be removed and/or retained.
- 4) Council may require a performance bond or bank guarantee to be submitted to secure performance of works in accordance with an approved site management plan.

11.4. Industrial Subdivision

A. Objectives

- a) To ensure that access for all industrial lots will not significantly affect the function, efficiency and safety of all classified roads in Penrith; and
- b) To rationalise and consolidate landholdings where appropriate.

11.4.1. Subdivision – Lot Standards

A. Background

This section provides complementary objectives and controls to ensure that industrial lots operate efficiently and appropriately for their land use.

B. Objectives

- a) To provide opportunities for parcels of land of varying size and dimensions to satisfy market demand and the needs of industry;
- b) To ensure that access for all industrial lots will not significantly affect the function, efficiency and safety of classified and other major roads; and
- c) To rationalise and consolidate landholdings where appropriate.

C. Controls

1) Minimum Lot Width

- a) Minimum lot sizes are indicated on the Penrith LEP 2010 Lot Size Map.
- b) The minimum lot width of each lot is to be in accordance with the controls set out in Table C11.1 below.

Table C11.1: Minimum Lot Width

Location	Minimum Lot Width
Lots fronting Castlereagh Road	60m
Lots fronting: <ul style="list-style-type: none">• Andrews Road• Mulgoa Road• Old Bathurst Road	50m
Lots within:	20m

Location	Minimum Lot Width
<ul style="list-style-type: none"> • South Penrith (Precincts 6)* • St Marys (Precincts 1, 2 and 3)* 	
Lots within 'Lambridge Estate' (Precinct 4)	See Precinct 4 Plan below
All other lots (not specified above)	20m

* For precinct boundaries, see Section D4 'Industrial Development'

2) Allotment Shape

- a) Subdivision of land fronting Castlereagh Road, Great Western Highway, Mulgoa Road and Parker Street shall not result in the creation of battle-axe or hatchet-shaped allotments unless in accordance with clause b) below.
- b) Council may agree to a subdivision which creates battle-axe or hatchet-shaped allotments in the following circumstances:
 - i) Where the access handle has a minimum width of 15m and the proposed allotment(s) of land does not directly access Castlereagh Road, Great Western Highway, Mulgoa Road and Parker Street; or
 - ii) In Precincts 1 and 2 (St Marys), where it can be demonstrated that satisfactory access and manoeuvring areas for vehicles can be provided.
- c) Subdivisions creating more than 5 lots shall provide:
 - i) A variety of lot sizes; and
 - ii) At least 20% of the lots with dimensions greater than the specified minimum for that precinct.

3) Lot Consolidation

- a) Where industrial development involves two or more existing allotments, consolidation of those lots must occur. Evidence of such consolidation must be submitted to Council prior to occupation of the approved use.
- b) Land within Precinct 4 - Lambridge Estate must be consolidated prior to development. Consolidation shall occur in accordance with Figure C11.10.

Figure C11.10: Precinct 4 – Lambridge Estate Consolidation Plan



11.4.2. Subdivision – Access Roads

A. Objectives

The objective of this section is to ensure safe and efficient conditions for the movement of vehicles, cyclists and pedestrians into and within the industrial precincts.

B. Controls

- 1) All roads and intersections within any internal road network shall incorporate traffic facilities that promote safe and efficient traffic movement, speed control and maximise landscape opportunities.
- 2) The design of roads and traffic facilities shall comply with Council's engineering standards and accompanying Guidelines, and any Roads and Maritime Services requirements.
- 3) New industrial subdivisions should incorporate road designs that:
 - a) Provide a distinctive and hierarchical network of roads, with clear physical distinctions between each type of road, based on function, capacity, vehicle speeds and safety;
 - b) Utilise interesting, varied street patterns and avoid long 'gunbarrel' effects; and
 - c) Incorporate cycle links adjacent to existing and proposed cycle and pedestrian networks.

- 4) Newly created lots, resulting from the subdivision (but not strata subdivision) of land that has frontage to Castlereagh Road shall not have direct access onto Castlereagh Road. Access into these new lots shall be incorporated into the design of the subdivision by providing a new road off Castlereagh Road.

11.4.3. Subdivision – Other Requirements

A. Objectives

- a) To implement measures to promote high quality of discharge to the sewer and drainage system that will result in improving the water quality of the Hawkesbury-Nepean River system and tributaries; and
- b) To preserve Aboriginal archaeological resources located in the industrial areas of the City.

B. Controls

- 1) Newly created lots are to drain directly to a piped drainage system, and not to the kerb and gutter.
- 2) If the land has an area of 5ha or greater, then the subdivision proposal is to incorporate the specific water quality treatment measures detailed in the Catchment Management and Water Quality part of the Water Management Section of this Plan. Information on the water quality treatment for the subdivision is to be submitted with the application for subdivision.
- 3) The likelihood of Aboriginal archaeological items being present on the land must also be considered with the creation of new industrial lots. The Culture and Heritage Section of this Plan details the necessary documentation to be submitted with the application for subdivision.