CAMPBELLTOWN CITY COUNCIL

Draft Campbelltown (Sustainable City) Development Control Plan 2015

Volume 2

Site Specific DCPs

Creating Campbelltown's Future 2025

Draft Volume 2 Site Specific Development Control Plans

Contents

Note: No amendments are proposed to Parts 1,2,3 and 5 of Volume 2.

Volume 2

Site Specific Development Control Plans

Part:1

Minto Renewal DCP

Note:
The Minto Renewal DCP came into effect on 26 April 2006 and has been incorporated as Part 1 , Volume 2 of Campbelltown (Sustainable City) DCP .

Minto Renewal

Development Control Plan :
26th of April 2006

MINTO
RENEWAL

Prepared by:

WOODS BAGOT

On behalf of:

HOUSING New South Wales

campbelltown city council

LANDCOM

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1.1 The Vision

"To provide a safe, vibrant sense of place and community in Minto"

The vision for the DCP is to provide a safe, vibrant sense of place and community in Minto.

This will to be achieved through :

- changing the mix of residents to a more sustainable public / private mix with better integration into the surrounding suburbs;

- assist in strengthening the sense of place and fostering community identity for Minto's existing and future residents;

- improving the quality of local infrastructure, public open space areas and local community facilities in a pedestrian friendly environments that assist in achieving ESD principles;

- developing a built form which will enhance the visual environment and create a unique character for the development;

- creating a physical environment which encourages a vibrant local community with a distinctive and memorable neighbourhood character;

- enhancing the different characteristics of areas of the site and responds to the natural topography and character; and

The DCP will help to ensure the development of a variety of built form, from detached dwellings on rural residential lots to integrated housing positioned around open space nodal points. The design will also incorporate a network of linked community open spaces that will accommodate a variety of open space facilities such as active and passive parks, playgrounds, recreational facilities, a community building and integrated landscaped storm water treatment areas.

1.2 Introduction

1.2.1 Name of the DCP
This Plan is called Minto Renewal Development Control Plan (the DCP).

1.2.2 Purpose of the DCP
The DCP has been prepared in accordance with Section 72 of the Environmental Planning and Assessment Act 1979 (the Act) and Clause Nos 16-24 of the Environmental Planning and Assessment Regulation 2000 (the Regulation). The DCP supplements the existing Campbelltown (Urban Area) Local Environmental Plan 2002 (LEP 2002).

Council (the consent authority) is required under Section 79C of the Act, to take into consideration the relevant provisions of the DCP in determining development applications on land located within the Minto Renewal Area defined in Figure 1.

1.2.3 Land to which the DCP Applies
The DCP applies to all land contained within the Minto Renewal Area as defined in Figure 1.

1.2.4 The Consent Authority
Campbelltown City Council (Council) is the consent authority for local development within the Minto Renewal Area.

1.2.5 Development Categories
Anticipating the longevity of this Plan, there are 4 categories of development that Council is likely to experience.

Exempt Development:
Exempt development is incidental development that is of minimal environmental impact and may be carried out without the need to obtain development consent from Council. The type of development that is exempt from the need to obtain development consent is set out in Campbelltown LEP No. 209 Exempt Development.

Complying Development :
Complying development is development that meets specific criteria set out in SEPP No. 60 - Exempt and Complying Development.

Local Development:
Local development requires development consent from Council.

Integrated Development:
Integrated development is local development that requires the consent of another authority as well as Council.

State Significant Development:
State Significant development is development that is listed under Schedule 3 of the Regulation and SEPP (Major Projects) 2005, for which the Minister for Planning is the consent authority.

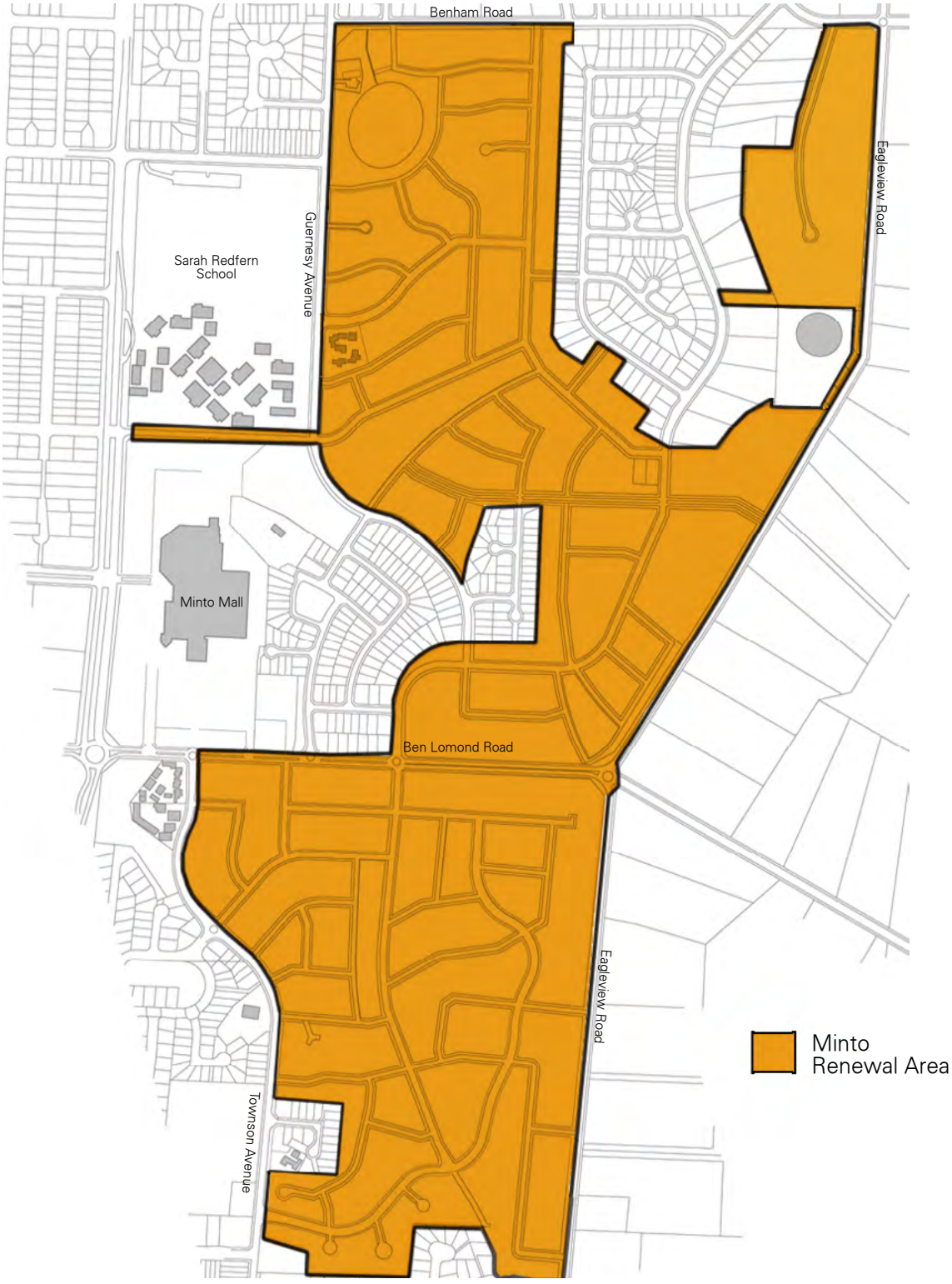


Figure 1: Land to Which the DCP Applies

1.2.6 Monitoring and Review of the DCP

Council is required to keep its LEP and DCPs under regular and periodic review to ensure that these Plans:

(a) continue to be useful and relevant;
(b) can be judged as to their effectiveness;
(c) reflect an adequate and appropriate capacity for development; and
(d) provide for the appropriate protection of the environment and natural resources.

The DCP shall be reviewed every five (5) years, or earlier, as considered necessary by Council.

1.2.7 Variation to Planning Controls and Standards within the DCP

Council may consider variations to the requirements of the DCP in certain circumstances. Requests for variations are required to be in writing and shall clearly demonstrate the reason(s) why the variation sought would not adversely impact on the environment or local amenity, would not erode the relevant standard and requirement; and that compliance with the objectives and requirements of the DCP are unreasonable or unnecessary in the circumstances of the case. Council gives no assurance that it will permit any variation(s) to the requirements the DCP. Variations will only be considered in exceptional circumstances.

Compliance with any numerical provisions of the DCP does not guarantee the granting of development consent. Each application will be considered on its merits, having regard to the matters for consideration under Section 79C of the Act.

Consistent application of the provisions of the DCP will be given high priority by Council.

1.2.8 Structure of the DCP

The format of the DCP has been set up to identify various objectives and general design requirements for each of the permissible development typologies. It comprises the following structure:

Part 1 – Preliminary
Part 2 – All Types of Development
Part 3 – Dwelling Development
Part 4 – Subdivision Standards
Part 5 – Public Domain

1.2.9 Relationship to other Plans and Documents

The provisions of this DCP are site-specific and reflect the planning and design objectives desired by the relevant stakeholder parties.

The provisions contained in the DCP are in addition to the provisions within SEPPs, REPs and the LEP. In the event of any inconsistency between the DCP and SEPPs, REPs, LEP the SEPPs, REPs and LEP will prevail. Where there is an inconsistency between the DCP and any other DCP applying to the land, the provisions of the DCP shall prevail.

1.2.10 Design Approval Process

Prior to the lodgement of a DA with Council, all applicants must first obtain approval from the Minto Design Review Panel (MDRP). There are specific requirements applying to land purchased in the Minto Renewal Area as specified in your sales contract. The MDRP consists of representatives from the Department of Housing, Council, Landcom and expert consultants having expertise in architecture, urban design, environmental planning, landscape architecture, building.

A design concept presented to the MDRP shall address the relevant objectives and design requirements applying to the development. Subject to approval by the MDRP applicants may then proceed to lodge their DA with Council. If you require any further information, please contact Landcom on (02) 9841 8600.

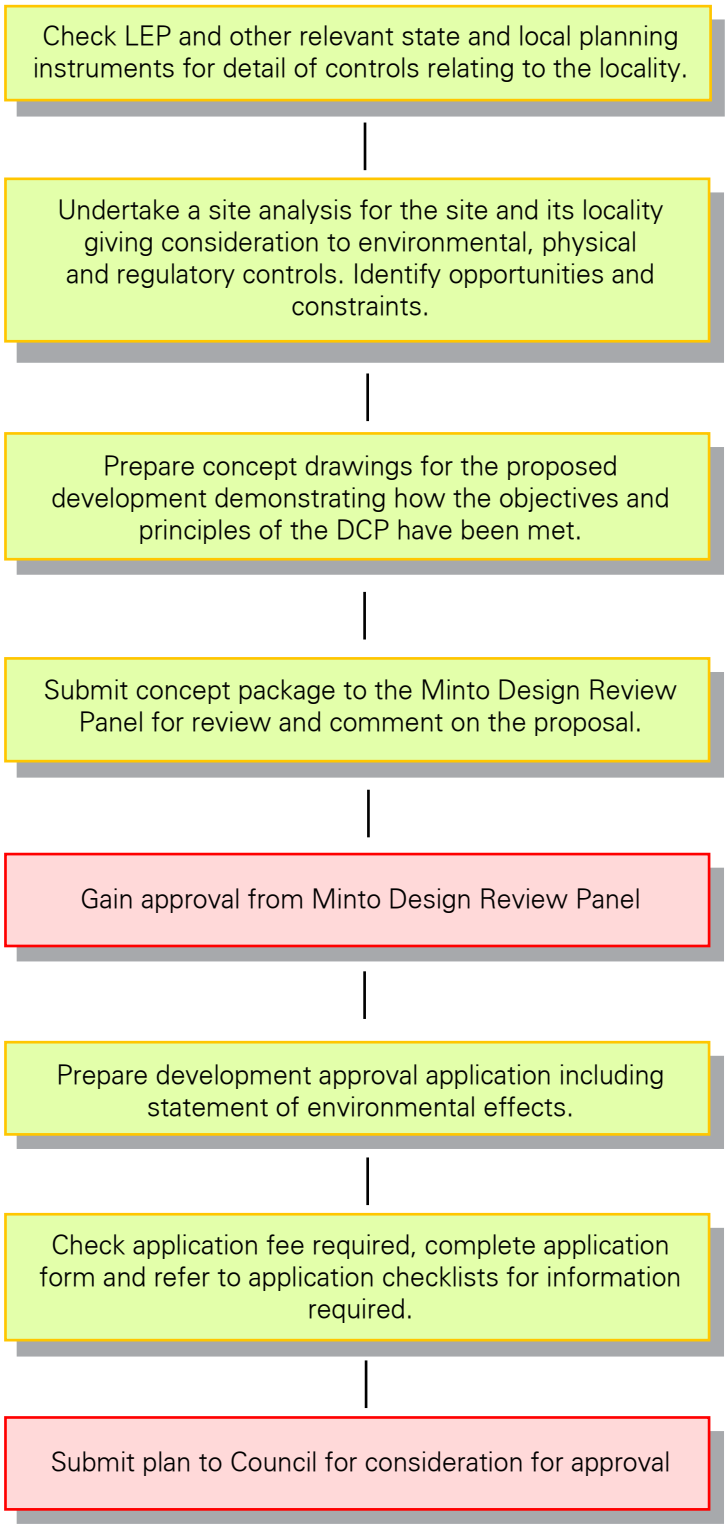


Figure 2: Development Approval Process

1.2.11 How to use the DCP

The following steps provide a general guide to using the DCP. If you require any further information or assistance, please contact Council's Customer Service Officers on (02) 4645 4608.

STEP 1

- Check the permissibility of the development under the relevant EPI(s).
- Determine the category of the development by referring to Section 1.2.5.
- If the development is 'exempt development' refer to LEP No. 209 - Exempt Development.
- If the development is 'complying development' refer to SEPP No. 60 - Exempt and Complying Development.
- If the development is not exempt or complying development, proceed to Step 2.

STEP 2

- Read part 3 (Requirements Applying to All Development) and observe the stated requirements for all development applications.

STEP 3

- Read the relevant part of the DCP that applies to the development;
- Ensure that the development satisfies the objectives and design requirement of each relevant sections of the DCP.

STEP 4

- Follow the process for seeking development consent from Council, refer Figure 2.

1.3 Project Background

This DCP has been developed as part of the Minto Renewal Project. The project involves the renewal of the public housing estate at Minto and development of surrounding vacant land. The project is a partnership between, the NSW Department of Housing and Campbelltown City Council, the two major landowners in the project area.

The project was established in response to the issues encountered in the Minto public housing estate, which was constructed in the later 1970s/early 1980s based on the Radburn design principles. The Radburn design has proven to be unsuitable for public housing communities because of poor vehicular access, unsafe rear lanes and inadequate surveillance of open spaces. Also much of the public housing stock was reaching the end of its useful life.

The Minto Renewal Project was announced in 2002. A Concept Plan has been developed for the project (Refer Figure 3) following extensive community consultation over a number of years. Under the Concept Plan, poorly performing townhouse areas are proposed to be demolished and redeveloped, whilst the more settled cottage areas will be upgraded and adjoining poorly maintained open space areas are to be developed. A new street layout and new parks are proposed, along with upgrading of the current infrastructure systems. The development will be implemented over a ten-year period. Upon completion it is anticipated that 30% of the final yield will be retained as public housing.

The Minto Renewal Project has been determined by the Minister for Planning to be a Major Project under SEPP (Major Projects) 2005. Approval for the Concept Plan has been obtained under Part 3A of the Environmental Planning and Assessment Act 1979.

The Concept Plan is generally in accordance with the controls and principles set out in this DCP. This DCP has been produced to ensure that the development principles set out in the Concept Plan are implemented throughout the project area.

Figure 3: The Concept Plan

1.4 Aims and Objectives of the DCP

The aims of this DCP are to:

- Ensure that the aims and objectives of any relevant environmental planning instrument are complemented;
- Ensure that the aims and objectives of the Minto Renewal Project Concept Plan are complemented;
- Ensure that the principles of ecological sustainability are incorporated into the design, construction and ongoing operation of development;
- Facilitate innovative development of high quality design and construction in the Minto Renewal Project area;
- Ensure that new development maintains or enhances the character and quality of the natural and built environment;
- Ensure that new development takes place on land that is capable of supporting development;
- Encourage the creation of safe, secure and liveable environments;
- Ensure that new development minimises the consumption of energy and other finite resources, to conserve environmental assets and to reduce greenhouse gas emissions; and
- Provide for a variety of high quality housing choices within the City of Campbelltown.

Some of the detailed objectives of the DCP are:

Social:

1. To provide for a mixture of housing choice and diversity of tenure including an appropriate quantity of quality public housing;

2. To foster greater social interactions between residents from various housing styles and tenure;

3. To create a network of open spaces, focal points and community facilities which provide for the active and passive needs of the community;

4. To provide for a network of pedestrian and cycle routes throughout the site which connect open space areas and community facilities for direct access and encourages walking and riding as an alternative and desirable method of transport;

5. To ensure safety and security through passive surveillance of streets and open space areas by following the principles of 'safety by design';

6. To provide community facilities in line with the evolving needs of the community;

7. To build on the existing sense of community and further develop the sense of place and distinctive identity; and

8. To provide complementary support services for residents during the period of change for the community.

Environmental:

1. To create a legible and functional road network which provides good connections with the surrounding areas and encourages safe and convenient access throughout the site;

2. To establish quality streetscapes which add to the visual and environmental amenity of the site;

3. To design an integrated stormwater management system which improves the quality and quantity of the water entering and leaving the site, and which also harnesses the principles of water sensitive urban design;

4. To improve air quality by encouraging walking, cycling and the use of public transport within the site;

5. To create linkages between open spaces along the streets inside the site and into the surrounding areas by an extensive street tree planting strategy;

6. To ensure the visual character of the 'green' ridge top is maintained through controls on development within the scenic protection zone and to maximise access to existing views and vistas; and

7. To encourage environmentally responsible building practices including solar passive design solutions for all housing and community buildings.

8. To encourage built form which results in the achievement of the Desired Future Character for the site. Refer section 1.5.

Economic:

1. To ensure that social and private housing design be of equal quality, in accordance with the desired character of the area and flexible;

2. To ensure that the future development enhances the surrounding suburbs and positively impacts upon market values in the area;

3. To create variety in housing types and tenure mix which is marketable and feasible;

4. To provide appropriate housing for low income earners, the aged and people with disabilities; and

5. To provide a plan for the ongoing maintenance of public areas and in particular, the embellished public open spaces and community facilities.

Integrated Housing



Detached Housing


Rural Residential



Figure 4: Development Character Images

1.5 Desired Future Character

Three character areas are envisaged and all dwellings will be designed to contribute to the development of these areas as identified in Appendix A.

Integrated Housing
The predominant character of the parks will be of a strong built edge. The areas directly adjoining public open space areas and close to major amenities, shall have a strong built form at a higher density to the rest of the site. The predominant character of the parks will be a strong built edge surrounding the open spaces enhancing safety through activity and surveillance.

Detached Housing
These areas will be a transition between the dense parks areas surrounding the park to the large ridge top allotments. Allotment sizes should vary based on topography with larger lots located on higher and steeper slopes and smaller lots on the lower gentler slopes. The predominant character of the area shall be of low to mid rise roof form interspersed with vegetation.

Rural Residential
This area is zoned 7(d6) Environmental Protection and is most prominent from the suburbs surrounding Minto. This area will maintain its "green" ridge top character. Houses shall be designed to minimise visual impact through their form, materials selection and colours.

Semi attached dwellings and studio apartments occur throughout the site on nominated allotments.

1.6 Definitions

"Amenity" means those qualities and characteristics of a site and its neighbouring area that contribute to the comfort and pleasantness of the local environment.

"**Asset Protection Zone**" means a buffer between development and hazards. The size and location of an asset protection zone is determined by a number of factors detailed in Planning for Bushfire Protection, 2001.

"Average Recurrence Interval" (ARI) means the average period between the recurrence of a storm event of a given rainfall intensity.

"Battleaxe Allotment" means an allotment that does not have primary frontage to a public road and is accessed via a driveway (handle) located between two adjoining allotments.

"Building Sustainability Index" (BASIX) means a web-based planning tool designed to assess the potential performance of new development against a range of sustainability indices including landscape, stormwater, water, thermal comfort and energy.

"**Bushfire Prone Land**" means land, which has been identified as bush fire prone land on the Campbelltown Bush Fire Prone Lands Map as certified by the Commissioner of the NSW Rural Fire Service.

"**Car Courts**" means a vehicular accessway provided to the rear of a cluster of up to 4 lots. Car courts shall not be dedicated to Council and will be managed under community title or a reciprocal right of way.

"**Character**" means the distinctive elements of an area or building.

"**DA**" means development application.

"Dwelling" means a room or suite of rooms occupied or used or so constructed, designed or adapted as to be capable of being occupied or used as a separate domicile.

"Dwelling House" means a building containing one dwelling and may contain a subordinate structure such as a studio apartment or outbuilding.

"Ecologically Sustainable Development" (ESD) means a development that conserves and enhances the community's resources so ecological processes are maintained and the total quality of life, now and in the future, can be increased.

"Environmental Planning Instrument" (EPI) means a State Environmental Planning Policy, Regional Environmental Planning Policy, Local Environmental Plan or Interim Development Order.

"Existing Residential Areas" means the areas containing existing dwellings defined in Appendix B.

"**Flowpath**" means the overland route taken by any concentration of, or significant sheet flow of stormwater on its way to any creek, river, bay or a flood plain in a storm.

"Freeboard" means a factor of safety used in relation to the setting of floor levels. It makes allowance for wave action, localised hydraulic behaviour and system blockages.

"Habitable Room" means a room used for normal domestic activities and includes a bedroom, living room, lounge room, music room, television room, rumpus room, sewing room, study, play room, family room, sunroom and the like. It excludes a bathroom, laundry, water closet, pantry, walk in wardrobe, lobby, clothes drying room, and other spaces of a specialised nature that are not occupied frequently or for extended periods.

"**Integrated Housing**" means the construction of dwellings (either attached or detached) and their subsequent subdivision into allotments identified on the map attached as Appendix A to the DCP.

"Natural Ground Level" means the ground level at completion of the subdivision development.

"**Noxious Weed**" means a weed declared by an order under the Noxious Weeds Act 1993.
Note: For the most up to date list refer to www.agric.nsw.gov.au/reader/weeds or contact Council's Planning and Environment Division on 02 4645 4601.

"**Open Space**" means areas within a development designed exclusively for either private or communal use by the occupants of the development.

"Primary Building Alignment" means the building facade facing the primary street frontage.

"Primary Street Frontage" means the area between the building/structure and the road to which it is orientated.

"**Primary Street Setback**" means the setback between the building/ development and road upon which it faces and or the road from which the allotment is accessed.

"Private Open Space" means open space/landscaped area for the exclusive use of occupants of a dwelling of a minimum dimension in any direction of 2 metres.

"**Principal Private Open Space**" means the area of private open space that is directly accessible from the living areas of the dwelling, consisting of an appropriately dimensioned square.

"**Probable Maximum Flood" (PMF)** means the largest flood that could conceivably occur at a particular location.

"Public Domain" means an area that is adjacent to the development site, which is under the care, control and/or ownership of a public authority.

"**Rear loaded**" means an allotment where vehicle access is from the rear.

"**Remnant Vegetation**" means the natural vegetation that still exists or, if the natural vegetation has been altered, is still representative of the structure and florisitics of the natural vegetation.

"**Rural Residential Dwelling**" means a dwelling with a minimum site area of 4000 square metres located in the zones indicated on the map in Appendix A.

"Secondary Street Frontage" means the area between the building/structure and any additional road to which it adjoins.

"**Secondary Street Setback**" means setback between the building/ development and the road upon which the building does not front.

"**Semi Attached Dwelling**" means a building comprising two attached dwellings constructed on one allotment not less than 600 square metres in area.

"Storey" means that space within a building which is situated between one floor level and the floor level above or if there is no floor above, the ceiling or roof above.

"Studio Apartment" means a self contained dwelling constructed above a double garage fronting a secondary street frontage or car court. These dwellings shall not be subdivided from the main allotment into a separate title.

"**Suitably Qualified Professional**" means a person who through suitable education and or experience, accreditation (trade or professional) and knowledge may be reasonably relied upon by Council to provide advice within an area of expertise related to the relevant task.

"Tree" means a perennial plant with self supporting stem(s) which:
(a) is more than 3 metres in height; or
(b) has a spread of more than 3 metres; or
(c) a single trunk plant with a girth of more than 450 mm or more, measured at a distance of 1 metre above the ground level; or
(d) a multi trunk plant with an individual trunk girth of 80 mm or more, measured at ground level

"Waste Management Plan" (WMP) means a plan demonstrating the details of how waste will be managed during the demolition, construction and ongoing operations of a development

"**Zero Lot Line**" means the construction of a dwelling or garage wall on top of and / or along the side property boundary of an allotment.

"Zone of Influence" means the area likely to be influenced by building loads, and is a factor of the structure of the ground on which the building is to be located.

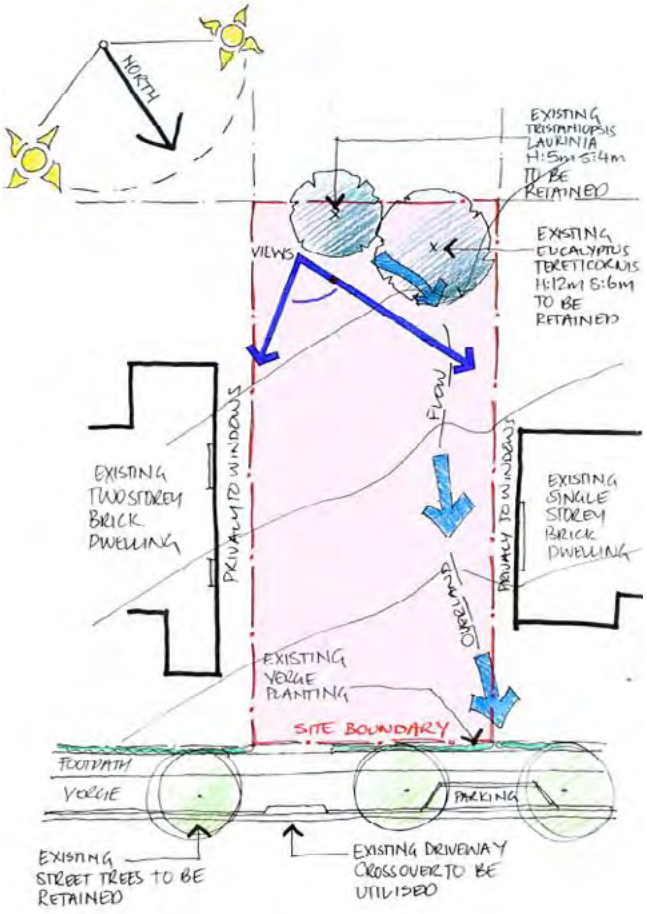


Figure 5: Example Site Analysis

2.1 Site Analysis

Objectives:

- Identify the constraints and opportunities for the development of the site and its context;
- Provide an understanding of how the development relates to the site and its context; and
- Identify the capability and suitability of the site for development.

Design Requirements:

1. A site analysis shall be lodged with the development application for all development involving the construction of a building. The scope of the site analysis will depend on the scale and nature of the development and shall address:
i) contours, slope and north point;
ii) existing landscaping and vegetation;
iii) existing buildings and structures;
iv) roads, access points, parking, and traffic management devices and the like;
v) linkages; open space networks, pedestrian/cycle paths and the like;
vi) easements, services, existing infrastructure and utilities;
vii) hydraulic features; drainage lines, water features, drainage constraints, and the like;
viii) natural hazards (e.g. flooding)
ix) solar orientation, overshadowing, prevailing winds, rainfall;
x) views and vistas to, from and within the site;
xi) a streetscape analysis;

Refer to Figure 5 Example Site Analysis.

2.2 BASIX

The Building Sustainability Index (BASIX) is an interactive, internet-based planning tool designed to assess the potential performance of residential development against a range of sustainability indices. The focus of BASIX is on the key indices of water and energy, and the related indices of landscape, stormwater and thermal comfort, reflecting the NSW Government's decision to establish water consumption and greenhouse gas emission reduction targets for all new homes built in NSW.

A BASIX certificate shall be submitted with the development application for all residential dwelling development.

Further information is available at www.basix.nsw.gov.au

2.3 Solar Access and Energy Efficiency

Good design based on efficient use of renewable natural resources can maximise the thermal comfort and energy efficiency of dwellings. This can be achieved by reducing unwanted winds and draughts whilst optimising natural ventilation as well as maximising use of natural light for heating, lighting and clothes drying purposes.

Objectives:

- To encourage building design and siting to take advantage of climatic factors and reduce household energy consumption; and

- To encourage features to be incorporated into site and building design to optimise passive solar access to internal and external spaces.

Design Requirements:

1. Living areas shall generally have a northern orientation and be directly accessible to private open space areas.

2. New dwellings shall be designed to maximise solar access to all private open space areas. Suitable shadow diagrams shall be required

3. Development shall have appropriate regard to the impact on solar access to usable private open space, solar collectors and clothes drying areas of adjoining residential development.

4. New dwellings shall be designed to reduce the need for artificial lighting during daylight hours.

5. Windows shall be protected from direct summer sun with appropriate hoods, eaves or louvres or adjustable shading devices wherever possible.

6. Materials selection and construction shall respond to orientation and potential for heat retention and protection including insulation.

7. An outdoor clothes line with adequate solar access shall be provided for every dwelling.

8. Windows and doors shall be arranged to encourage cross ventilation.

9. Council may consider the use of deciduous trees at the north and west elevations to protect against hot summer temperature and to allow for solar penetration in winter, where it may otherwise be inappropriate to plant native trees.

Figure 6: Example of a Significant View Corridor to the Site (View from Odessey House)

2.4 Views and Vistas

Objectives:

• To protect scenic value of Campbelltown's natural and built environment;

• To protect significant views and vistas from and to public places; and

• To maximise access to views and maintain open vistas to the Central Hills from both the public and private domain.

Design Requirements:

1. Buildings shall be designed to respond to important views and vistas, within and to the site.

2. Where a building has a potential impact on important views and vistas, appropriate consideration is to be given to incorporating interesting architectural features or reducing the scale of the building.

3. Buildings shall minimise impact upon the views / vistas of adjoining properties;

4. Colours, materials and landscape treatments shall be selected to reduce the visual impact on views to the site from surrounding areas (Refer Appendix C).

2.5 Building form and Character

Objectives:

• To ensure that buildings are designed to enhance the existing and future desired built form and character of the Minto Renewal Area by encouraging innovative and quality designs which is distinctive and contemporary and fits harmoniously with their surroundings.

Design Requirements:

1. Building design (including façade treatment, massing, roof design and entrance features), setbacks and landscaping shall complement the scale of development, character and qualities of the adjoining streetscape.

2. Articulate building frontages facing the street to add visual interest. Use of stepping, material combinations, verandahs, porches and balconies, canopies and blade walls shall be encouraged.

3. Development on corner sites shall incorporate facade treatments that address both street frontages and achieve articulation in the building design.

4. The built form shall relate to the natural landform and setting, particularly when viewed from a public place, building entrance ways and recognised vantage points outside the immediate locality. A sites natural slope should be used to create visual interest and generate innovative housing forms while minimising cut and fill requirements.

5. All dwellings shall be designed with a contemporary architectural character.

6. Outbuildings and ancillary structures shall be located to the rear of the site.

7. The maximum slope of a pitched roof shall be 36 degrees.

8. Eaves are mandatory and are permitted to extend up to 450mm from the side boundary except for zero lot line and parapet walls.

9. Parapet, skillion and vaulted roof forms may be incorporated to create variety in architectural style.

10. No blank walls shall be presented to any street frontage. Any continuous wall of more than one storey in height shall be no more than 10m in length. Walls over 10m long shall have a minimum offset of 500mm for the remainder of that wall. This does not apply to party walls between attached dwellings.

11. When determining appropriate external building materials for residential development, the following guidelines shall be observed:
i) External wall materials shall be predominantly masonry (ie. brick) and finished in either face brickwork, coloured / painted render or coloured bagging;
ii) Lightweight materials can be utilised to provide variety in textures or profile on dwelling facades (eg. timber, feature fibre cement sheeting or pre-finished metal sheeting);
iii) No galvanised iron, plain cement sheeting or plain concrete blocks shall be utilised;
iv) Low profile concrete, terracotta or slate roof tiles or pre-finished and pre-coloured corrugated metal roofing shall be utilised.

12. The colour palette to be used in all dwellings is to consist largely of neutral, natural tones. Feature colours may be utilised for selected elements to create interest and highlights. The intent of the palette is to create a wholistic aesthetic quality that is harmonious with the bushland character of the area by utilising colours found naturally within it. Refer Appendix C.

13. A detailed schedule of the proposed external finishes, materials and colours shall be submitted for Council's approval as part of the development application.

14. Residential development shall not exceed 2 storeys in height above natural ground level except where a three storey corner element fronting the street is allowed (Refer Appendix D). A full third storey shall not be permitted.

15. The height of development shall not result in any significant loss of amenity (including loss of solar access and visual and acoustic privacy) to adjacent properties and public places.

16. Council will consider proposals for garages under dwellings on sloping sites if satisfied that the garage would not result in a building that exceeds 2 storeys in height at any point.

16. All dwellings shall have at least one habitable room at ground level addressing the primary street frontage.

Figure 7: Examples of Three Storey Elements

Figure 8: Examples of Appropriate Garage Treatments

2.6 Car Parking and Access

Objectives:

• To minimise visual impact of garages on the streetscape;

• To provide adequate on-site car parking for residents and visitors that is convenient, secure and safe;

• To ensure that the location and design of driveways, parking, service areas and access areas are practical, easily maintained, convenient, safe and suitably landscaped; and

• To provide safe convenient access for vehicles, pedestrians and cyclists whilst minimising conflict between them.

Design Requirements:

1. All garages / carports shall be recessed a minimum 1 metre behind the front facade, whilst recognising a minimum garage / carport setback of 5.5 metres.

2. Garages facing a public street shall be no wider that 50% of the width of the dwelling (at its street fronting façade).

3. A dwelling house shall be provided with at least one enclosed garage space.

4. The number of garages on any elevation is limited to two. Garage doors shall incorporate colours / materials that are complimentary to the dwelling.

5. Garages fronting a secondary street shall have a minimum setback of 2 metres.

6. Garages to car courts shall be setback a minimum of 1 metre to accommodate adequate turning and manoeuvrability.

7. All driveways shall be located a minimum distance of 6 metres from the tangent point of the kerb and gutter of an adjacent street corner (regardless of boundary splay).

8. The geometric design of all driveways is to be in accordance with Australian Standard 2890.1 (as amended), Parking Facilities - Off Street Car Parking.

9. All driveway crossings between the front property boundary and the road kerb shall be finished in natural concrete. Dwellings shall utilise driveway crossover provided.

10. Natural concrete finishes on private driveway areas shall not be permitted (i.e. between the front property boundary and the garage).

11. To reduce the visual impact of garages, built elements such as balconies projecting past the garage frontage shall be encouraged. Refer Figure 8 for examples.

12. Development shall be in accordance with the general development criteria outlined in Figure 9.

CRITERIA	CONTROLS
Garage / Carports Setback to Street Frontage	5.5 metres*
Minimum Dimensions for Enclosed Single Garage	3.0 x 5.5 metres**
Minimum Dimensions for Enclosed Double Garage	5.5 x 5.5 metres**
Minimum Dimensions for Hard-stand Car parking Space	2.75 x 5.5 metres**

* Garage setback from secondary street frontages can be reduced to 2m and 1m in car courts

**Where an external space adjoins a building or fence an additional 0.5 metres width is required.

Figure 9: General Car parking Development Criteria

2.7 Landscaping

Objectives:

• To maintain and rehabilitate the natural environment and assist in the conservation of Campbelltown's landscape character;

• To recognise and enhance the sense of place of the Minto Renewal Area;

• To enhance the appearance of the development within the Minto Renewal Area; and

• To enhance the sustainability of the development by minimising water usage, contributing to biodiversity and enhancing passive energy systems for dwellings.

Design Requirements:

1. A detailed Landscape Plan is required for all developments at DA stage. This plan shall be prepared by a suitably qualified professional. This plan shall show the extent and type of materials and finishes, garbage storage area and access, clothes drying area, water storage tank, built elements including fencing and retaining walls, existing trees to be retained or removed, noxious weeds removed, planting layout, species (botanical and common names), numbers, installation size.

2. Landscaping shall incorporate the use of locally indigenous and other native plants, which shall form a minimum of 50% of the total plant numbers and species proposed. The plant species selected should be in accordance with the Species List attached in Appendix E.

3. Existing vegetation shall be retained where possible however all noxious weeds shall be removed. A report shall be provided with the DA detailing tree protection during construction prepared by a suitably qualified professional.

4. Maximise use of permeable materials. A minimum of 50% of the landscaped area shall be permeable.

5. Screen planting shall be used to enhance privacy between dwellings.

6. Landscape designs shall have regard for direct and easy access to, and appropriate screening of, bin storage areas, rainwater tanks, hot water units and air conditioning units associated with the dwelling.

7. A variety of landscape treatments shall be incorporated in the front setbacks of dwellings such as lawns, paved areas, mass planting beds and shade trees.

2.8 Erosion and Sediment Control

Objectives:

• Ensure that any potential loss of soil from a site and/or into the stormwater system is prevented by means of;

- appropriate planning prior to the start of construction works; and

- the effective interception, diversion and control of stormwater within the site.

Design Requirements:

1. A Soil and Water Management Plan (SWMP), which is required for sites where the disturbed area is greater than 2500m2, or an Erosion and Sediment Control Plan (ESCP) shall be prepared and submitted with a development application proposing construction and/or activities involving the disturbance of the land surface.

2. ESCPs or SWMPs to be prepared in accordance with "Managing Urban Stormwater – Soils and Construction 2004" available from Landcom.

3. Site activities shall be planned and managed to minimise soil disturbance.

4. Catch drains or diversion banks shall be designed and constructed to divert water around any area of soil disturbance.

5. All stockpiles shall be located within the sediment control zone and shall not be located within an overland flow path.

6. A water pollution sign, supplied with the development consent, must be displayed on the most prominent point of the development site and be clearly visible to the to the street.

2.9 Cut, Fill and Flooring Levels

Objectives:

- To minimise the extent of earth works associated with dwelling development;
- To ensure that the design of all dwellings respond to the site conditions with appropriate consideration to the land capability, privacy and amenity of adjoining properties;
- To ensure that any excavations are minimised and appropriately retained and that material used on site in earth works is appropriate; and
- To ensure that adequate freeboard is provided in all developments to protect from overland flows and flooding.

2.9.1 Cut and Fill

Design Requirements:

1. Balanced cut and fill operations on site shall be encouraged.

2. For the purpose of creating a building platform, the sum of the maximum cut below natural ground level and the maximum depth of fill above natural ground level shall not exceed 1 metre. Refer figure 10.

3. Any excavation within the zone of influence of any other structure requires a 'dilapidation report' (prepared by a suitably qualified professional) demonstrating that adequate ameliorative measures are to be implemented to protect the integrity of any structure.

Maximum Fill 1 Metre

Maximum Sum of Cut and Fill 1 Metre

Maximum Cut 1 Metre

Figure 10: Cut and Fill Levels

4. Development incorporating fill shall comply with the following requirements:
i) minimum cross fall of 1% to any adjoining waterway; and
ii) batters to be no steeper than 2:1.

5. Any proposed fill must be Virgin Excavated Natural Material (VENM) and/or fill that has been suitably validated as clean by a qualified environmental consultant.

6. All fill deposited in the vicinity of endemic vegetation shall comprise local material.

7. All filling works shall have regard to Council's Specification for Construction of Subdivision Roads and Drainage Works and AS 3798 Guidelines for Earthworks for Commercial and Residential Development.

2.9.2 Floor Levels

1. All development shall satisfy the relevant floor level requirement as specified in Figure 11.

2. Any solid fence constructed across an overland flow path shall be a minimum 100mm above the finished surface level of the overland flow path or higher as determined by Council.

3. Proposed finished floor levels to non habitable rooms, including garages and domestic out buildings, must satisfy the relevant floor level requirement as specified in Figure 11 for all sides except their entrances where a 20mm lip or ease will be provided in the freeboard.

4. Any allotments located on land that has been filled, shall be burdened by a 88B restriction regarding that fill and shall be noted on the respective Section 149 certificate.

CRITERIA	CONTROLS		
	100 year ARI Overland Flow Depth <300mm	100 year ARI Overland Flow Depth >=300mm	Major Storm Water or Detention Basins
Habitable Rooms	300mm	300mm	500mm
Non Habitable Rooms	100mm	100mm	300mm
Underside of Solid Fencing	100mm (min)	100mm (min)	100mm (min)

Figure 11: Flooring Requirements Adjacent to Stormwater Facilities or Overland Flow Paths

2.10 Demolition

Objectives:

• To ensure that demolition is carried out in accordance with the relevant legislation and guidelines;

• To ensure that demolition does not have an adverse impact on the environment, buildings, footpaths and roadways or upon the safety, health and well being of the community; and

• To ensure that demolition procedures are safe and environmentally efficient.

Design Requirements:

1. A development application involving demolition shall be accompanied by following information:
i) a detailed work plan prepared by a suitably qualified professional, in accordance with AS2601-2001 - The Demolition of Structures;
ii) details of the licensed demolition contractor engaged to carry out the work (including name, address and building licence number);
iii) details of methods to prevent air, noise and water pollution and the escape of hazardous substances into the public domain;
iv) details of any asbestos or other hazardous substances to be removed from the site and/or damaged during demolition; and
v) a dilapidation report where any demolition work is to be undertaken within the zone of influence of any other structure.

2. Details of how waste materials shall be managed and recycled where possible.

3. All demolition work shall comply with AS2601-2001 - The Demolition of Structures.

2.11 Water Cycle Management

Objectives:

• To ensure all water cycle management proposals are consistent with the requirements of BASIX;

• To encourage features to be incorporated into site and building design to reduce potable water usage; and

• To increase the quality and reduce the quantity of stormwater leaving the site.

Design Requirements:

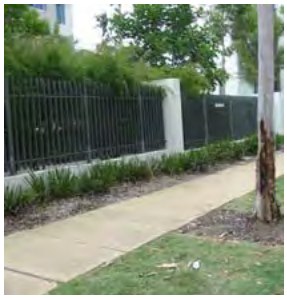
1. Development shall not impact on adjoining sites by way of overland flow of stormwater. All overland flow shall be maintained in the pre-development form or be directed to designated overland flow paths such as roads.

2. Development shall be consistent with Councils Engineering Design Guide for Development.

3. A suitable easement and drainage system shall be created over all downstream properties for development that cannot directly dispose of stormwater (under gravity) to the street or directly to Council's trunk stormwater system.

4. All rainwater tanks shall comply with AS3500 (as amended) - National Plumbing and Drainage Code Guidelines for Plumbing Associated with Rainwater Tanks in Urban Areas and Sydney Water's Guideline for Rainwater Tanks on Residential Properties.

5. Absorption Pits, charged lines and pump out systems shall not be permitted.



2.12 Fencing and Retaining Walls

Objectives:

- To ensure that fencing/retaining walls are compatible with the character and scale of development within the streetscape and other public domain areas in the locality;

- To provide clear definition between the public and private domain while encouraging casual surveillance; and

- To create strong, visually integrating element along street frontages.

Design Requirements:

1. All fencing and retaining wall details must be submitted to Council for approval as part of any new development application.

2. All front fencing, secondary street fencing and fencing adjoining common boundaries with public open space areas must be constructed in accordance with the relevant Fencing Strategy for that development stage.

3. Front fencing (ie. located forward of the front building line including those on corner lots) shall be provided on all development proposals and constructed to a maximum height of 1.2 metres and in accordance with the Fencing Strategy for that development stage.

4. In lieu of actual fencing provision, Council may also consider mass plantings in the form of a hedge, positioned behind a course of bricks constructed on the property boundary line and in accordance with the Fencing Strategy for that development stage. Plant species shall be selected from the Front Hedge Species Schedule provided in Appendix F.

5. Fencing to all side and rear property boundaries (ie. to those property boundaries that are not publicly visible) shall be provided. Such fencing shall have a maximum height of 1.8 metres and shall consist of lapped and capped hardwood timber.

6. Fencing to any secondary street frontage shall comply with the requirements listed above for front fencing. However, where such fencing encloses the rear private open space area, the maximum height of the fencing may be increased to 1.8 metres.

7. Fencing shall not obstruct power, water, sewer, gas or telephone services, drainage services (including overland flow paths) or any easements or rights of way.

8. All development proposals shall incorporate a private letter box to be incorporated within one of the masonry front fencing elements.

9. All retaining walls proposed on site must be simultaneously approved as part of any dwelling development application.

10. Any retaining wall that is proposed within a publicly visible location (eg. front building setback area) must be constructed of masonry materials (ie. no timber products) that respond to the streetscape and/or materials to be utilised within the construction of the dwelling.

11. Retaining walls shall be stepped / terraced at a maximum height of 900mm and incorporate a minimum step of 900mm face to face.

2.13 Safety and Security

Objectives:

• Ensure that development incorporates security features in accordance with the principles of Crime Prevention through Environmental Design (CPTED) to:

- minimise opportunities for crime
- enhance public security

Design Requirements:

1. Maximise casual surveillance opportunities to the street and surrounding public places and car courts.

2. Prevent entrapment areas.

3. Clearly identify and illuminate access points to dwellings.

4. Clearly differentiate between private and public space.

5. Dwelling entrances shall be visible from the street.

6. Development shall incorporate appropriate landscaping, fencing and security devices to assist in crime prevention. Landscaping and fencing shall not obscure doors, windows or access routes.

7. Minimise the use of external grilles, roller doors, downpipes and shelves which allow access to upper stories.

8. All dwellings shall be clearly numbered for identification.

2.14 Privacy

Objectives:

• Provide adequate visual and acoustic privacy for residents of new and existing development.

Design Requirements:

1. No window of an upper level habitable room or balcony shall directly face a window of another habitable room, balcony or private open space of another dwelling located within 6 metres of the proposed window or balcony. Notwithstanding, any window of a habitable room located on an upper level will be considered only where it:
i) is offset to limit views between windows; or
ii) has a sill height 1.7 metres above the floor level; or
iii) is splayed to avoid direct views between windows; or
iv) has fixed translucent glazing in any part of the window within 1.7 metres of the floor level.

2. Screening to upper level windows and balconies with views of neighbouring properties' principal private open space areas will be required.

2.15 Location and Treatment of Services

Objectives:

• To minimise the visual and acoustic impact of on site services.

Design Requirements:

1. All metre boxes and services plant shall be treated to reduce their visual prominence from the public domain by screening, recessing or colour treatments.

2. TV aerials shall be located to the rear of the dwelling, whilst satellite dishes may only be erected if they are suitably screened from view of the public and neighbours.

3. Letter boxes shall be located visible from the street and accessible from the public footpath. If no footpath is present access shall be provided accessible from outside the front boundary of the property.

4. Air-conditioning units shall be located a minimum of 4 metres from the site boundary or screened for visual and acoustic privacy. They shall not be located along the front site boundary.

2.16 Salinity

Objectives:

• To ensure that the development is not adversely impacted on by salinity and does not adversely impact on salinity in the area.

Design Requirements:

1. Native vegetation and deep rooted trees shall be incorporated in gardens. Refer to Section 2.7 Landscaping.

2. Damp proof membranes shall be used in building construction for slabs on ground with a 50mm thick layer of sand.

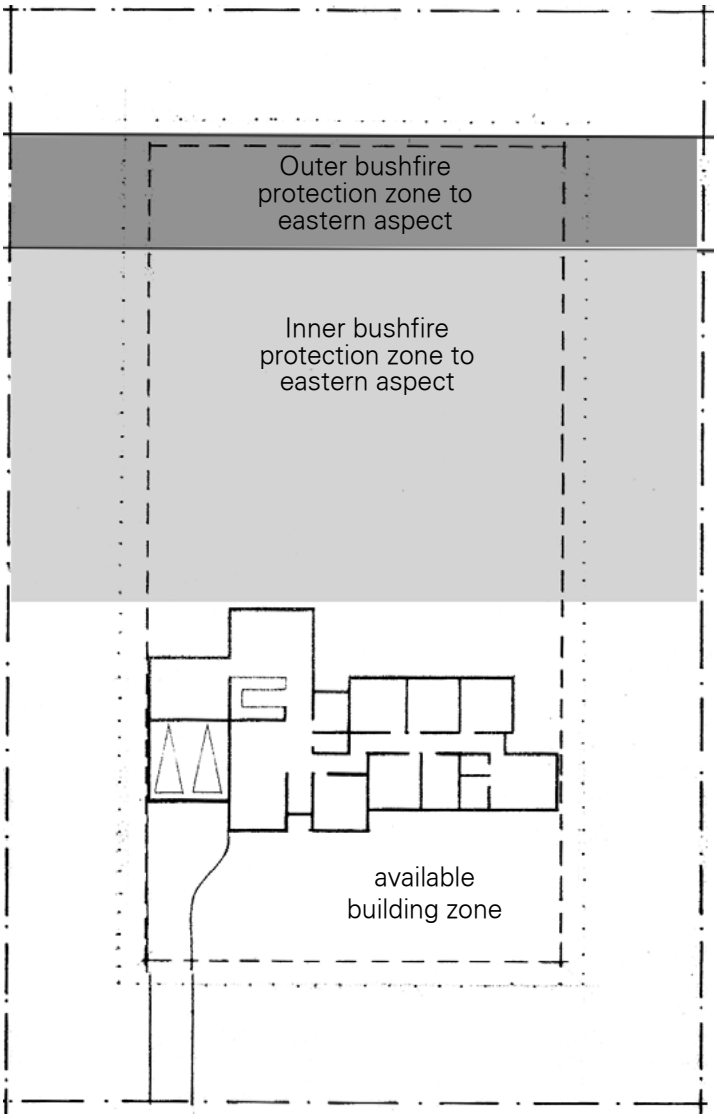


Figure 12: Typical Principles for Bushfire Protection Zones

2.17 Bushfire

Objectives:

• To ensure the risk of damage to property and danger to people through bush fire is minimised through design and management of mitigation systems.

Design Requirements:

1. All buildings and improvements shall be located to minimise the risk of loss from bushfire.

2. Development on bush fire prone land (as detailed on the Campbelltown Bush Fire Prone Lands Map) shall comply with the requirements of Planning for Bushfire Protection 2001.

3. Development applications relating to land identified on the Bushfire Prone Land Map shall be accompanied by a bushfire hazard assessment report prepared by a suitably qualified professional.

4. All 'asset protection zones' shall be provided within the boundary of the subject land. The owner of the land will have ongoing liability to ensure the management of all protection areas.

5. Adequate water reserves for fire fighting shall be available and accessible on site as specified in Planning for Bushfire Protection, 2001.

6. The eastern elevation of any dwelling located in the area notes as '**3b**' in Appendix A, shall comply with Level 2 construction standards in AS3959 (as amended) 'Construction of buildings in Bush Fire Prone Areas' and section 2.3.4 of the Building Code of Australia.

7. Roof gutters and valleys shall be leaf proofed. Protection system to use only materials with a flammability index of no greater than 5, as measured by AS 1530.2 Flamability of Materials (as amended).

2.18 Waste Management

Objectives:

- To ensure waste systems are easy to use and are accessible by collection vehicles;

- To ensure healthy and safe practices for the storage, handling and collection of waste and recycling materials;

- To prevent stormwater pollution that may occur as a result of poor waste storage and management arrangements;

- To promote the principles of ESD through appropriate resource recovery and recycling, leading to a reduction in the consumption of finite natural resources; and

- Minimise the creation of noise during the collection of waste and recyclables.

Design Requirements:

Construction

1. A Waste Management Plan (WMP) shall accompany development applications for construction of dwellings.

2. On site storage areas / containers for all waste and recycling streams, including waste to a landfill, reuse materials, recyclable materials and excavations, shall be detailed on development plans.

3. The removal of hazardous materials such as asbestos, lead paint or dust in roof cavities shall be carried out in accordance with WorkCover NSW guidelines.

Dwellings

4. Provision shall be made for all waste and recycling storage containers to be located behind the primary and secondary building alignment and out of public view.

5. Space shall be allocated behind the primary and secondary building alignments and out of public view to store the following bins:
i) a 140 litre/dwelling/week for household garbage;
ii) a 240 litre/dwelling/fortnight for dry recyclables; and
iii) a 240 litre/dwelling/fortnight for garden organics.

6. Any area for storing garbage and recycling shall be located in a position that is convenient for occupants.

7. The path for wheeling bins between waste storage area(s) and the collection vehicle shall be free of steps or kerbs and have a maximum gradient of 1:8.

8. Rear loaded, battle axe and car court dwellings shall make provision for bin collection on a public street accessible by collection vehicles.

9. No waste incineration devices shall be permitted.

3.1 Detached Dwellings

Objectives:

• To encourage quality-designed dwelling houses that make a positive contribution to the streetscape and amenity of the neighbourhood;

• To provide definition of the public domain by ensuring development addresses the streets and open spaces; and

• To ensure new development and redevelopment of dwellings in existing residential areas is integrated with the existing dwellings.

Design Requirements:

1. Compliance with relevant development criteria contained in Part 2 All Types of Development.

2. Detached dwellings shall be constructed in areas identified in Appendix A.

3. A detached dwelling shall not be erected on land with an area of less than 300 square metres and with an average width of not less than 10 metres (measured at the primary building alignment) unless the allotment was in existence at the date upon which the DCP came into effect.

4. Studio Apartments are permissible where the dwelling has a garage fronting a car court or secondary street. Refer Section 3.5 for design requirements.

5. Development shall be in accordance with the general development criteria outlined in Figure 13.

3.1.1 Dwellings in Existing Residential Areas

The existing residential areas are defined in Appendix B.

Design Requirement:

1. A new dwelling to be constructed adjacent to an existing dwelling(s), the front building line setback shall be in accordance with Figure 14 or 15 as applicable.

Figure 13: Detached Dwelling Development Criteria

CRITERIA	CONTROLS
Minimum Front Building Line Setback	4 metres *
Minimum Secondary Building Line Setback	2 metres
Minimum Side Setback	0.9 metres
Minimum Rear Building Line Setback (excluding garages)	4 metres
Minimum Garage Setback	5.5 metres **
Minimum Setback for Lightweight Projections (i.e. balconies / verandahs / porches excluding car ports)	3 metres
Maximum Building Height	2 storeys ***
Minimum Total Private Open Space Area	70 square metres
Principal Private Open Space Area	5 x 5 metres

* Refer to Figure 14 or 15 as applicable for dwellings in existing residential areas.

** Garage setback from secondary street frontages can be reduced to 2m and 1m in car courts

*** 3 storey corner elements are permitted on sites identified at Appendix D (Refer Section 2.5).

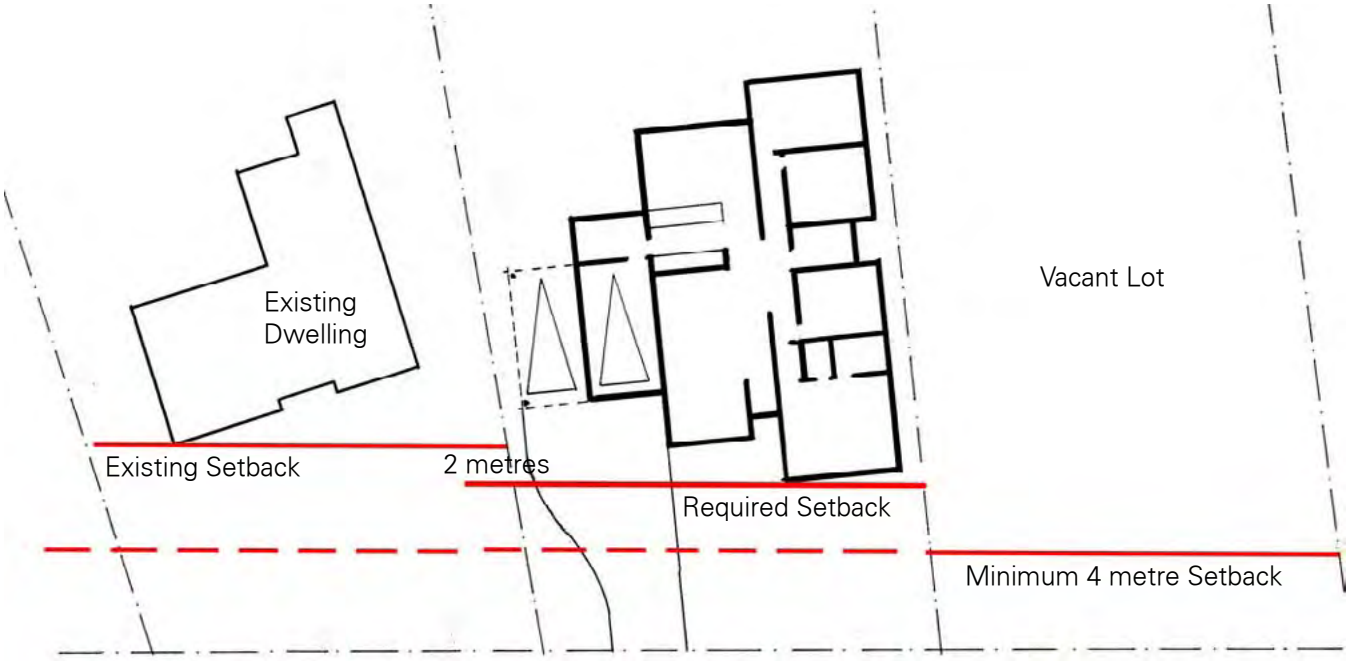


Figure 14: Front Setback for Dwellings (One Adjacent Existing Dwelling)

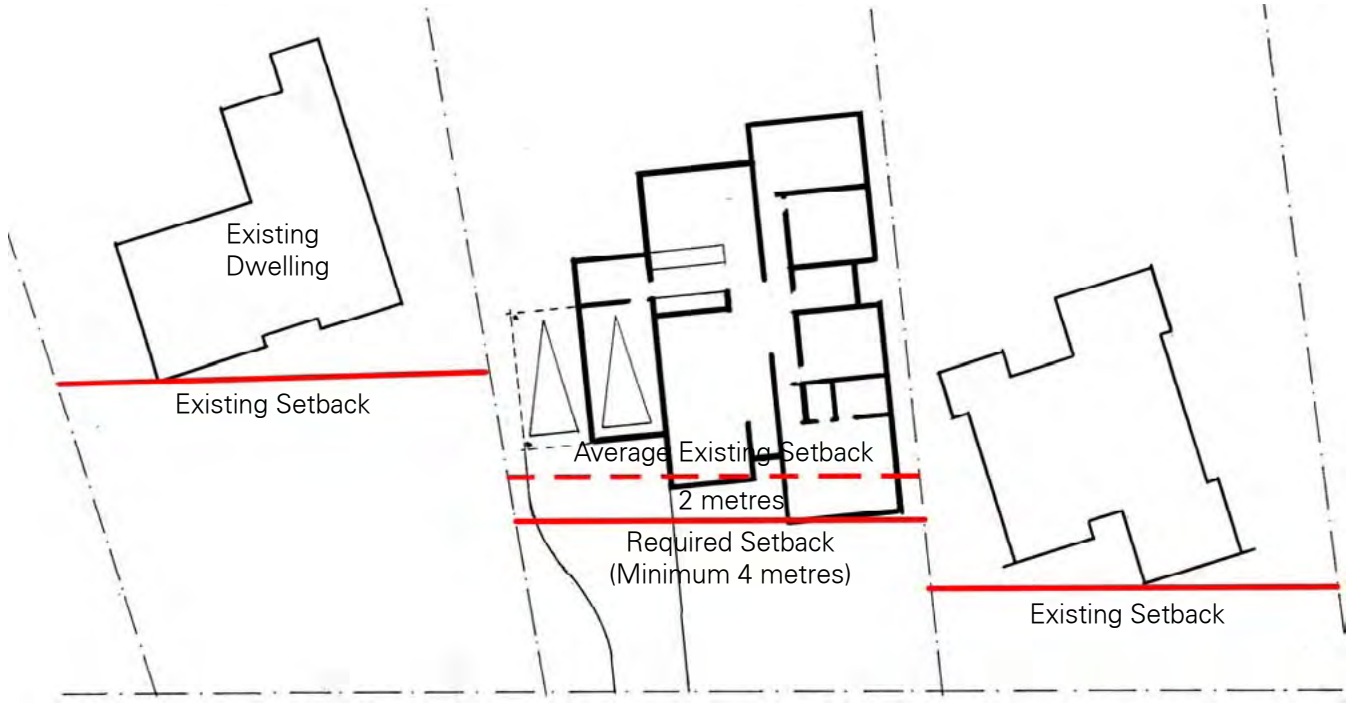


Figure 15: Front Setback for Dwellings (Two Adjacent Existing Dwellings)

3.2 Rural Dwellings

Objectives:

• To encourage quality-designed dwelling houses that make a positive contribution to the streetscape and amenity of the neighbourhood;

• To provide definition of the public domain by ensuring development addresses the streets and open spaces; and

• To maintain the character of the 'Green' ridge top.

Design Requirements:

1. Compliance with all relevant development criteria contained in Part 2 All Types of Development.

2. Rural dwellings shall be constructed in areas as defined in Appendix A.

3. A rural dwelling shall not be erected on land with an area of less than 4000 square metres.

4. A minimum setback of 10 metres shall be incorporated for all front and rear building lines.

5. The side building setback shall be a minimum of 3 metres.

6. The height of a development shall relate to the natural landform and ridge top setting – i.e. split-level designs in sloping areas.

7. All fencing shall be provided in accordance with the Fencing Strategy for the stage which will have regard to the rural setting.

8. For development on lots located in the area noted as '**3b**' in Appendix A, refer to Section 2.17 Bushfire.

9. Significant existing trees shall be retained where possible. Building design and associated site grading shall give consideration to the retention of such trees.

10. The first 8 metres of the front setback and 8 metres from the rear boundary shall be landscaped with native and endemic vegetation to create of a vegetative corridor along the ridge line. Exotic tree species shall only be considered where it will permit better solar access to a residence. Refer to Section 2.17 for bushfire requirements.

3.3 Semi Attached Dwellings

Semi attached dwellings will provide additional housing choice by allowing smaller dwellings. By locating these dwellings on corner sites they will strengthen the overall built form by acting as 'book ends' to streets and vistas.

Objectives:

- To encourage quality-designed dwelling houses that make a positive contribution to the streetscape and amenity of the neighbourhood;

- To provide definition of the public domain by ensuring development addresses the streets and open spaces;

- To promote housing choice / variety / affordability; and

- To strengthen the built form on corner sites.

Design Requirements:

1. Compliance with all relevant development criteria contained in Part 2 All Types of Development.

2. Semi attached dwellings may be constructed in areas identified in Appendix A.

3. Semi attached dwellings shall be constructed on corner lots having a minimum site area of 600 square metres.

4. Sites containing semi attached dwellings can be subdivided into two allotments each having a minimum site area of 300 square metres, in accordance with the subdivision criteria as described in Section 4.1.2.

5. The two dwelling houses comprising a semi attached dwelling shall address each street frontage and shall have garages fronting each street.

6. Development shall be in accordance with the general development criteria outlined in Figure 16.

3.4 Integrated Housing

Objectives:

• To encourage quality-designed dwelling houses that make a positive contribution to the streetscape and amenity of the neighbourhood;

• To provide definition of the public domain by ensuring development addresses the streets and open spaces;

• To promote housing choice / variety / affordability; and

• To provide higher density dwellings around parks and close to community facilities, increasing casual surveillance and activity to improve safety and security in public areas.

Design Requirements:

1. Compliance with all relevant development criteria contained in Part 2 All Types of Development.

2. Integrated housing may be constructed in areas identified in Appendix A.

3. Integrated housing shall contain a minimum of three and a maximum of six attached dwellings in any continuous row.

4. Integrated housing shall be subdivided into allotments of not less than 225 square metres with a minimum width of not less than 7.5 metres.

5. Dwellings shall be attached or built to incorporate at least 1 zero lot line.

6. Where zero lot line walls are utilised appropriate easements for services, access and maintenance shall be provided.

7. Where a side dwelling wall is not attached (ie. located on a corner allotment or mid block) that building line wall shall be setback a minimum distance of 2 metres from the property boundary.

8. Integrated housing is encouraged to have garages accessible from a car court, rear or secondary street frontage.

9. A single garage only shall be provided within the front elevation of a dwelling with a lot frontage of less than 12 metres.

10. Any proposal for integrated housing shall be designed by an architect registered with The Royal Australian Institute of Architects (RAIA).

11. Studio Apartments are permissible where the dwelling has a garage fronting a car court or secondary street. Refer Section 3.5 for design requirements.

12. Development shall be in accordance with the general development criteria outlined in Figure 16.

CRITERIA	CONTROLS
Minimum Front Building Line Setback	3 metres
Minimum Building Line Setback for Non Attached Wall	2 metres
Minimum Rear Building Line Setback (excluding garages)	4 metres
Minimum Garage Setback	5.5 metres *
Minimum Setback for Lightweight Projections (i.e. balconies / verandahs / porches excluding car ports)	1 metre
Maximum Building Height	2 storeys **
Minimum Private Open Space Area	50 square metres
Principal Private Open Space Area	4 x 4 metre square

* Garage setback from secondary street frontages can be reduced to 2m and 1m in car courts

** 3 storey corner elements are permitted on sites identified at Appendix D (Refer Section 2.5)

Figure 16: Semi Attached and Integrated Housing Development Criteria

3.5 Studio Apartments

Studio apartments promote casual surveillance over car courts, rear access garages and secondary streets. Studio apartments are "self - contained" and therefore include a combined living / bedroom area, a bathroom, maisonette kitchen and a separate on site car parking space.

Objectives:

- To provide housing choice / diversity for families;
- To provide the opportunity for rental accommodation for single occupants; and
- To provide casual surveillance over rear access points.

Design Requirements:

1. Studio apartments shall not be erected on land with an area of less than 350 square metres.

2. Studio apartments shall be located on top of detached double garages accessible from car courts or secondary street frontages.

3. Studio apartments shall be setback a minimum of 2 metres from and secondary street frontage and 1 metre from a car court.

4. Studio apartments shall not be subdivided into a separate allotment.

5. A separate off-street car parking space shall be provided for the occupants of the studio apartment in addition to the car parking requirements for the main dwelling.

6. 16 square metres of private open space shall be provided in addition to the private open space area requirements for the main dwelling.

7. A separate area for clothes drying at ground level shall be provided out of view from the public domain, for the studio apartment.

4.1 Subdivision

Objectives:

- To ensure that land once subdivided, contributes positively to the desired character of the locality and provides for the safe and attractive integration of existing and new development;

- To ensure that subdivision responds to the physical characteristics of the land, its landscape setting, orientation, landmarks and key vistas to and from that land;

- To ensure that subdivision provides safe connections with and extension of existing street patterns, as well as any pedestrian, cycleway and public open space networks;

- To promote walking and cycling as the primary mode of travel within a residential neighbourhood; and

- To encourage subdivision that results in allotments orientated, dimensioned and configured to facilitate the siting, design and construction of development appropriate to the environmental attributes of the land.

4.1.1 Neighbourhood Subdivision

Design Requirements:

1. All neighbourhood subdivisions shall be generally consistent with the Concept Plan as illustrated in Figure 3 regarding the location of open space areas, public roads and proposed residential development.

2. Final design of residential allotments shall have regard for the impact of orientation, slope, and aspect to maximise solar access to future development.

3. Compliance with the development criteria contained in Sections 4.2, 4.3, 4.4, 5.1 and 5.3.

4. Subdivisions shall promote through street access and minimise the number of cul-de-sacs.

5. All proposed allotments shall have dedicated public road access.

6. Battle axe lots shall only be permitted where a street frontage can not otherwise be provided. Such lots shall have a minimum lot area of 500 square metres excluding the access handle. Access handles shall be straight and have a minimum width of 3.5m or 6m for two adjacent handles with reciprocal rights of way.

7. Car courts shall be accessed by a handle of no more than 35 metres in length and able to accommodate adequate turning and manoeuvrability in accordance with the RTA's Guide to Traffic Generating Developments (as amended).

4.1.2 Allotment Subdivision

The subdivision pattern within the DCP shall be in accordance with the Concept Plan (Figure 3) and Section 4.1.1. No further subdivision of allotments following the neighbourhood subdivision, shall be permitted unless:

1. That allotment has been identified at Appendix A as a semi attached dwelling site. Semi attached dwellings may be subdivided into allotments of not less than 300 square metres.

2. That allotment has been identified at Appendix A as an integrated housing site. Integrated housing shall be subdivided into allotments of not less than 225 square metres with a minimum width of not less than 7.5 metres.

In these circumstances, the subdivision title is dependent upon the construction methods and ownership pattern. In this regard:

- Torrens Title subdivision provides that the allotment has dedicated public road access and has no common property, walls or services attached to it.

- Community Title subdivision (being a form of Torrens Title subdivision) provides for the establishment of a Community Owners Corporation to oversee the maintenance of community property. This form of subdivision is only permissible where detached built form is proposed.

- Strata Title subdivision provides for the establishment of a Strata Owners Corporation to oversee the maintenance of common property and services. This form of subdivision shall be provided where attached built form is proposed.

4.2 Streets

Objectives:

• To create a legible and functional road network which provides good connections with the surrounding areas and encourages safe and convenient access throughout the site; and

• To establish quality streetscapes which add to the visual and environmental amenity of the site.

Design Requirements:

1. The proposed street network shall be constructed in accordance with the Road Hierarchy attached at Appendix G.

2. Individual road design and construction shall be in accordance with the table at Appendix H and have regard to Council's Specification for Construction of Subdivision Roads and Drainage Works. Illustrated cross-sections and typical plans of the agreed road formations are contained at Appendix I.

3. Appropriate traffic calming measures shall be installed to ensure a safe speed environment and denote traffic priority.

4. Kerbing throughout shall generally be upright kerbing and not roll over.

5. The street planting strategy contained in Appendix J shall be implemented with the subdivision of the land.

6. All allotments within a subdivision that are located adjacent to the intersection of public roads (existing or proposed) shall provide a 4 x 4 metre splay to ensure adequate sight distances and maintain footpath widths. All splays shall be dedicated to Council at no cost.

7. Subdivision shall be designed and constructed so that upon completion:
i) kerbside waste collection vehicles are able to access bins at a minimum distance of 300mm, and a maximum distance of 1500mm from the left side of the vehicle to the bin;
ii) adequate kerb space is provided for the occupant of each premises to present 2 x 240 litre bins side-by-side, a minimum 300mm apart;
iii) the location for kerbside presentation provides a minimum 4 metres overhead clearance for the operation of the collection vehicle (eg. no trees or transmission lines overhanging the bins).

Shared way

4.3 Access

Objectives:

• To provide for a network of pedestrian and cycle routes within the public domain which connect open space areas and community facilities and encourage alternative modes of transport.

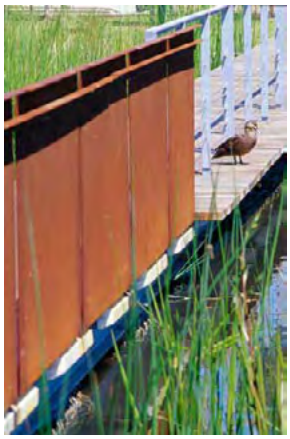
Design Requirements:

1. A network of pedestrian footpaths and cycle ways shall be provided within the estate in accordance with the Access Plan attached as Appendix K.

2. A continuous shared bicycle and pedestrian access way shall be provided linking all major public open spaces and community facilities. Pedestrian footpaths shall be provided to encourage a walkable suburb, in accordance with Council's Engineering Guide for Development.

3. Establish a palette of street lighting to current Australian Standards and furniture including garbage bins, seating, bollards, signage etc, which relate to the street hierarchy and enhances the character of the development.

4. Bus stopping shall be located in the carriageway to assist in traffic calming. Bus shelters shall be provided in areas determined to have high use.



4.4 Stormwater

Objectives:

• To ensure that water cycle management appropriately responds to site and water catchment conditions and is delivered as an integrated site wide strategy; and

• To ensure that Water Sensitive Urban Design (WSUD) principles are incorporated into development wherever possible.

Design Requirements:

1. Stormwater systems and drainage works shall be designed and constructed in accordance with Council's Specification for Construction of Subdivision Roads and Drainage Works.

2. All stormwater systems shall be sized to accommodate the 100-year ARI event.

3. The design and certification of any stormwater system shall be undertaken by a suitably qualified professional.

4. The water cycle management will be appropriate to the prevailing site conditions, delivered as an integrated site wide strategy, increase the quality and reduce the quantity of stormwater leaving the site. This shall be achieved by the incorporation of swales, buffer strips, bio retention, storage tanks and other measures as appropriate.

5. Safe passage of the Probable Maximum Flood (PMF) shall be demonstrated for major systems.

6. A treatment train approach to water quality shall be incorporated into the design and construction of major systems.

7. A major (flood/minor piped flow) approach to drainage is to be taken for flows within the road reserve. Generally the piped drainage system shall be sized to accommodate the difference between the 100-year ARI flow and the maximum allowable overland flow.

8. A suitable easement shall be created over all downstream properties for development that cannot directly dispose of stormwater (under gravity) to the street or directly to Council's trunk stormwater system.

9. All proposed drainage structures incorporated within new development shall be designed to maintain public safety.

10. The water management system shall be designed such that it can be economically maintained. A maintenance plan for this system shall be developed and implemented as part of the development.

5.1 Public Open Space

The public open spaces will be diverse and interesting, providing high quality public amenity. Facilities shall be incorporated for active and passive recreation for people of all ages and abilities. The parks will act as the focus of individual neighbourhoods and of the wider Minto community.

Objectives:

• To use parks to maintain view corridors and act as orientation elements throughout the site. Parks should strengthen the character and create a point of difference between different precincts within the site;

• To encourage community interaction and ownership by creating desirable gathering spaces, using parks central to residential areas as neighbourhood focus providing a full range of activities including passive and active recreation; and

• To encourage planting and landscape treatments which build the environmental value of the site including biodiversity and native fauna habitat.

Design Requirements:

1. Parks shall generally be located as illustrated on the Open Space Network plan in Appendix L.

2. Include facilities within public open spaces generally in accordance with concept landscape plans in Appendix L.

3. Where existing significant trees are located within park areas consider detailed grading to maintain existing ground levels and allow retention of trees.

4. Lighting shall conform with the curremt Australian Standards, including AS1158, AS1680 and AS2890 (as amended).

5. Landscaping and structures shall not create obscured areas. Ensure tree species selected in public areas can be maintained with a clear trunk to a minimum of 2 metres.

6. Incorporate planting of indigenous species and vegetation communities to enhance native fauna habitats.

7. Reduce water usage by using indigenous and low water tolerant species and efficient irrigation systems.

8. Native planting should be considered as deep root planting to reduce salinity risk.

5.2 Community Facility

Objectives:

• Create a central gathering place for all members of the Minto community acting as the main focus for the Minto Renewal area and the surrounding suburbs; and

• To ensure the facility can accommodate a wide variety of uses for a broad cross section of community groups.

Design Requirements:

1. The community facility shall be appropriately located and treated so that impacts, particularly of noise are minimised to the surrounding residents.

2. The design of the community facility shall allow broad use by creating flexibility of spaces. The facility shall include offices, consulting rooms, interview rooms, a multi-use hall, adequate storage, kitchen and toilet amenities and outdoor courtyard and play areas. Dedicated rooms will be provided for uses which require functional separation or specific facilities such as youth services, day care and family centre clinics.

3. The facility shall be capable of catering for the future communities needs including but not limited to a range of cultural and religious groups, family care, child care, community activities, functions, aged citizens and youth groups.

4. The facility shall be located at a reasonable distance from surrounding housing and orient activity spaces likely to create noise issues away from residential development.

5. Ensure surveillance of the public domain surrounding the facility by creating active facades. No blank walls shall be presented on any facade.

6. Materials are to be low maintenance, hard wearing, vandal resistant and in keeping with the character of those used across the Minto Renewal area.

7. Adequate car parking shall be provided to service the facility in accordance with Council's requirements, including allowance for mini bus drop off.

8. The facility shall be designed to comply with occupational health and safety requirements and Australian Standard 1428.1 - 4 (as amended).

5.3 Safety and Security

Objectives:

• Ensure that development incorporates security features in accordance with the principles of Crime Prevention through Environmental Design (CPTED) to:

- Minimise opportunities for crime; and
- Enhance public security.

Design Requirements:

1. Maximise casual surveillance opportunities to the street and surrounding public places. Active frontages shall be incorporated into all public buildings.

2. Minimise dead ends and other possible entrapment areas.

3. Clearly identify and illuminate access points.

4. A sense of ownership for the public domain shall be created to encourage community guardianship.

5. The public domain shall be attractive to encourage use and activity.

6. Signage shall be used to make orientation and identification of public buildings and facilities clear.

7. Sight lines to all public areas shall be maintained. Concealed areas for possible hiding shall be avoided. Building designs shall minimise built elements which assist in providing illegitimate access. Service areas shall be secured or have surveillance.

8. Surfaces which will attract graffiti shall not be permitted.

9. Entrances shall be visible from the street.

10. External lighting shall be designed to:
i) encourage the use of safe areas;
ii) define safe corridors for movement of people; and
iii) allow facial recognition of approaching pedestrians at 15 metres.

11. Minimise the use of external grilles, roller doors, downpipes and shelves which allow access to upper stories.

5.4 Principles for Adjoining Development

Whilst it is recognised that the Minto Mall, the schools and Campbellfield's Homestead are not within the Minto Renewal Area, it is important to consider them as they form an important part of the context of the development.

The following principles are provided to provide an understanding of their intended relationship to the development:

5.4.1 Minto Mall

- Present active facades to surrounding streets to provide casual surveillance and increased connection to the surrounding areas. Encourage a strong built edge to the Mall precinct with mixed use development to create activity.

- Provide adequate acoustic and visual buffer from the surrounding residential areas.

- Emphasise the important junction of Ben Lomond Road and Pembroke Road as an important entry point into Minto.

- Create a "Main Street" precinct along Stafford Street between Guernsey Avenue and Pembroke Road with a strong pedestrian focus and incorporating the shared pedestrian / bicycle link.

5.4.2 The Schools

• Ensure buildings and active uses address the surrounding street frontages so as to provide casual surveillance of the streets.

• Ensure safe and convenient access to the schools from the surrounding residential areas.

• Create strong links to the schools which allow their incorporation in the Minto Renewal Project as major community facilities.

• Recognise the role of the shared library facility and ensure access is maintained.

• Recognise the value of schools as trip generators and locate associated facilities on major access routes to enhance the amenity of the area.

• Allowance for adequate parking and drop off zones shall be incorporated.

• Allowance for bus drop off at school sites shall be maintained and safe and direct access to the railway station should be strengthened.

• The shared pedestrian / bicycle link should provide direct link from the development area to the schools.

• The address to the south of Sarah Redfern School shall be strengthened to create strong linkages to the Minto Mall and the proposed Main Street along Stafford Street.

5.4.3 Campbellfield's Cottage

- Be sensitive to the homestead and link it strongly into the wider Master Plan area by providing a visual link from Redfern Park to the cottage.

- Ensure the community has the ability to appreciate the heritage value of the cottage.

- Encourage an appropriate economic use of the cottage to enable its long term conservation.

- Explore opportunities of incorporating elements of the cottage building (e.g. sandstone and corrugated metal sheeting) into any future redevelopment of the lands comprising the Minto Mall, Campbellfield's Cottage and the Catholic Education Office.

appendices

Appendix A – Dwelling Type Locations

Appendix B – Existing Residential Areas

Appendix C – Examples of Suitable Natural Colours

Appendix D – Three Storey Development Sites

Appendix E – Suggested Species Schedule

Appendix F – Front Hedge Species Schedule

Appendix G – Road Hierarchy Plan

Appendix H – Road Hierarchy Schedule

Appendix I – Subdivision Road Network Design Requirements.

Appendix J – Street Planting Strategy

Appendix K – Site Access Plan

Appendix L – Open Space Network

appendix A

Dwelling Type Locations

appendix B

Existing Residential Areas

appendix C

Examples of Suitable Natural Colours

appendix D

Three Storey Development Sites

appendix E

Suggested Species Schedule

Botanical Name	Common Name	Mature Size (Height x Spread)
Trees		
Acacia decurrens	Black Wattle	15 x 5
Acacia parramattensis	Sydney Green Wattle	10 x 4
Acer palmatum	Japanese Maple	4 x 3
Acer bergeranum	Trident Maple	4 x 3
Angophora bakeri	Narrow-leaved Apple	20 x 8
Angophora floribunda	Rough Barked Apple Gum	20 x 8
Angophora subvelutina	Broad-leaved Apple	20 x 8
Araucaria cunninghamii	Hoop Pine	30 x 8
Backhousia myrtifolia	Grey Myrtle	6 x 5
Banksia integrifolia	Coast Banksia	15 x 5
Brachychiton acerifoliusa	Australian Flame Tree	10 x 5
Calodendrum capense	Cape Chestnut	10 x 4
Callistemon citrinus	Lemon scented Bottlebrush	3 x 3
Casurina glauca	Swamp Oak	20 x 10
Corymbia maculata	Spotted Gum	20 x 8
Cupaniopsis anacardioides	Tuckeroo	10 x 5
Elaeocarpus reticulatus	Blueberry Ash	8 x 4
Eucalyptus amplifolia	Cabbage Gum	20 x 8
Eucalyptus benthamii	Camden White Gum	30 x 15
Eucalyptus eerbra	Narrow Leafed Red Ironbark	20 x 10
Eucalyptus eugenoides	Thin Leaf Stringy Bark	20 x 10
Eucalyptus ficifolia	Red Flowering Gum	10 x 5
Eucalyptus gummifera	Bloodwood	20 x 10
Eucalyptus haemostoma	Scribbly Gum	15 x 5
Eucalyptus leucoxylon "Rosea"	Pink Flowering Yellow Gum	12 x 8
Eucalypyus moluccana	Grey Box	40 x 5
Eucalyptus paniculata	Coastal Blackbutt	20 x 8
Eucalyptus robusta	Swamp Mahogany	15 x 7
Eucalyptus saligna	Sydney Blue Gum	30 x 15
Eucalyptus sideroxylon	Ironbark	30 x 5
Eucalyptus tereticornis	Forest Red Gum	40 x 5
Eucalyptus torquata	Coral Gum	10 x 5
Ficus rubiginosa	Port Jackson Fig	12 x 7
Flindersia australis	Australian Teak	15 x 8
Fraxinus excarpa	Golden Ash	16 x 12
Fraxinus excarpa "Raywood"	Claret Ash	16 x 12
Glochidion ferdinandi	Cheese Tree	4 x 3
Harpephyllum caffrum	Kaffir Plum	10 x 5
Hymenosporum flavum	Native Frangipani	7 x 4
Jacaranda mimosifolia	Jacaranda	12 x 8
Lagestroemia indica	Crepe Myrtle	6 x 3
Liquidambar styraciflua	Sweet Gum	20 x 10
Lophostemon confertus	Brush Box	12 x 8
Magnolia grandiflora	Southern Magnolia	12 x 8
Melaleuca styphelioides	Prickly Leafed Paper Bark	7 x 2
Melaleuca decora	Paperbark	7 x 2
Melaleuca linariifolia	Paperbark	10 x 4
Pistacio chinensis	Pistacio	12 x 8
Pyrus calleryana "Chanticleire"	Manchurian Pear	10 x 5

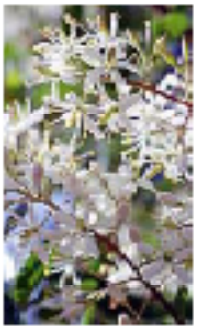
appendix E

Suggested Species Schedule

Robinia pseudoacacia 'Frisa'	Golden Robinia	10 x 5
Sapium sabiferum	Chinese Tallow Tree	10 x 5
Spathodia campenulata	West African Tulip Tree	10 x 5
Syncarpia glomulifera	Turpentine	50 x 5
Tristaniopsis laurina	Water Gum	8 x 4
Tilia cordata 'Green Spire'	Small leaved Linden	
Ulmus parvifolia	Chinese Elm	8 x 4
Waterhousia floribunda	Lilly Pilli	8 x 4

Shrubs

Acacia floribunda	White Sallow Wattle	3 x 3
Acacia terminalis	Sunshine Wattle	1.5 x 1.5
Acmena Smithii "Minor"	Narrow Leafed Lillypilly	3 x 3
Agapanthus orientalis	Blue African Lily	0.6 x 0.6
Agapanthus orientalis 'Alba'	White African Lily	0.6 x 0.6
Agapanthus orientalis 'Pantha'	White African Lily	0.6 x 0.6
Agapanthus 'Snow Drift'	Miniature White African Lily	0.3 x 0.3
Anigozanthus flavidus	Dwarf Kangaroo Paw	0.6x 0.6
Banksia 'Candlesticks'	Banksia 'Candlesticks'	0.4 x 1
Banksia spinuosa	Honey suckle banksia	4 x 2
Berberis	Berberis	2 x 2
Breynia oblongifolia	Coffee Bush	2 x 2
Bursaria spinosa	Sweet Bursaria	1.5 x 1.5
Callistemon citrinus	Lemon-scented Bottlebrush	2.5 x 2.0
Callistemon linearis	Narrow-leaved Bottlebrush	2 x 2
Callistemon salignus	Willow Bottlebrush	9 x 4
Callistemon viminalis	Weeping Bottlebrush	3 x 3
Camellia sasanqua	Sasanqua	5 x 5
Clivea nobilis	Clivea	0.6 x 0.6
Correa alba	White Native Fushia	1.5 x 1
Correa reflexa	Correa	1 x 1
Crinum Pedunculatum	River Lily	1 x 1
Dietes grandiflora	Wild Iris	0.6 x 0.6
Dianella revoluta	Flax Lily	0.6 x 0.6
Dietes bicolour	Yellow Native Lily	0.7 x 0.7
Dietes grandiflora	Blue Native Lily	0.7 x 0.7
Dillwynia juniperina	Prickly Parrot- Pea	1.0 x 1.0
Doryantes excelsa	Gymea Lily	1.5 x 0.6
Gahnia aspera	Rough Saw Sedge	0.6 x 0.6
Grevillea 'Misty Pink'	Grevillea 'Misty Pink'	3 x 2
Grevillea 'Robyn Gordon'	Grevillea 'Robyn Gordon'	1.5 x 2
Grevillea 'Superb'	Grevillea 'Superb'	1.5 x 2
Grevillea 'Moonlight'	Grevillea 'Moonlight'	4 x 2
Hebe 'Autumn Glory'	Violet Hebe	1 x 1
Hebe speciosa	Veronica	1.5 x 1.5
Jacksonia scoparia	Dogwood	1 x 1
Juncus usitatus	Common Rush	1.0 x 0.6
Kunzea ambigua	Tick Bush	2.5 x 1.5
Leptospermum attenuatum	Tea Tree	2 x 1.5
Leptospermum flavescens	Lemon Tea Tree	4 x 2



Suggested Species Schedule

Lomandra longifolia	Mat Rush	0.7 x 0.7
Lomandra multiflora	Spiny Leafed Mat Rush	0.8 x 0.8
Lomatia silaifolia	Crinkle Bush	2 x 2
Melaleuca nesophila	Showy Honey Myrtle	4 x 2
Melaleuca nodosa	Ball Honeymyrtle	4 x 2
Melaleuca styphelioides	Prickly-leaved Paperbark	5 x 3
Melaleuca thymifolia	Prickly Paperbark	1 x 1
Metrosideros "Fiji"	Newzealand Christmas Bush	2 x 2
Murraya paniculata	Mock Orange	2 x 2
Notolaea longifolia	Mock Olive	2 x 2
Osteospermum barberae	Pink African Daisy	1 x 1
Pennisetum alopecuroides	Fountain Grass	0.6 x 0.6
Pennisetum 'Burgandy giant'	Pennisetum 'Burgandy giant'	1.2 x .7
Persoonia linearis	Narrow Leaved Geebung	3 x 3
Pittosporum revolutum	Rough Fruit Pittosporum	2 x 1.5
Pittosporum Green Pillar	Pittosporum	2 x 2
Plumbago auriculata 'Blue'	Blue Plumbago	1.2 x 1.2
Phormium tenax 'Maori Maiden'	Yellow Leaf Flax	0.6 x 0.6
Phormium tenax 'Bronze Baby'	Brown NZ Flax	0.9 x 0.9
Phormium tenax 'Dazzler'	Striped NZ Flax	0.7 x 0.7
Phormium tenax 'Flamingo'	Pink NZ Flax	0.7 x 0.7
Phormium tenax 'Purpleum'	Purple NZ Flax	0.9 x 0.9
Phormium tenax 'Lime light'	Lime NZ Flax	0.5 x 0.5
Phormium tenax 'Jack Spratt'	Dwarf NZ Flax	0.3 x 0.3
Phormium tenax 'Black Magic'	Purple NZ Flax	0.6 x 0.6
Poa labillardieri	Native Tussock	0.8 x 0.8
Syzigium Australe	Lillypilly	3 x 3
Syzigium Dusty	Bronze Tip Lillypilly	2 x 2
Syzigium Pink Cascade	Pink Tip Lillypilly	2 x 2
Thryptomene saxicola	Rock Heath Myrtle	1 x 1
Themeda "Bush Joey"	Themeda 'Bush Joey'	0.4 x 0.4
Verbinum Tinus	Viburnum	2 x 2
Westringa fructosia	Coastal Rosemary	1.5 x 1
Westringia glabra	Westringia	1.2 x 1.0
Westringia Jervis Gem	Jervis Gem	1.5 x 1.5
Xylosma senticosa	Shiny Xylosma	1.5 x 1.5

Groundcovers and Climbers

Brachychiton multifida	Happy Face	0.2 x 0.4
Clematis aristata	Old Man's Beard	0.3 x 1.0
Dampiera purpurea	Purple Dampiera	0.5 x 0.5
Festuca glauca	Blue Fescu	0.2 x 0.3
Gazania regens	Treasure Flower	0.2 x 0.4
Hardenbergia violacea	Native Sarsparalla	0.3 x 1.0
Hibbertia aspera	Rough Guinea Flower	0.3 x 1.0
Kennedia rubicunda	Dusky Coral Pea	0.3 x 1.0
Liriope muscari	Lily Turf	0.3 x 0.4
Trachelospermum jasminioides	Star Jasmine	0.5 x 1.0
Viola hederacea	Native Violet	0.3 x 0.3

appendix F

Front Hedge Species Schedule




Botanical Name	Common Name	Mature Size (Height x Spread)
Acmena Smithii "Minor"	**Narrow Leafed Lillypilly**	**3 x 3**
Berberis	**Berberis**	**2 x 2**
Callistemon viminalis	**Weeping Bottlebrush**	**3 x 3**
Correa alba	**White Native Fushia**	**1.5 x 1**
Grevillea 'Robyn Gordon'	**Grevillea 'Robyn Gordon'**	**1.5 x 2**
Grevillea 'Superb'	**Grevillea 'Superb'**	**1.5 x 2**
Hebe 'Autumn Glory'	**Violet Hebe**	**1 x 1**
Hebe speciosa	Veronica	1.5 x 1.5
Matrosideros "Fiji"	Newzealand Christmas Bush	2 x 2
Murraya paniculata	Mock Orange	2 x 2
Pittosporum revolutum	Rough Fruit Pittosporum	2 x 1.5
Pittosporum Green Pillar	Pittosporum	2 x 2
Syzigium Australe	Lillypilly	3 x 3
Syzigium Dusky	Bronze Tip Lillypilly	2 x 2
Syzigium Pink Cascade	Pink Tip Lillypilly	2 x 2
Verbimum Tinus	Vibernum	2 x 2
Wastringa fructosia	Coastal Rosemary	1.5 x 1
Wastringia glabra	Westringia	1.2 x 1.0
Wastringia Jervis Gem	Jervis Gem	1.5 x 1.5
Xylosma senticosa	Shiny Xylosma	1.5 x 1.5

appendix G

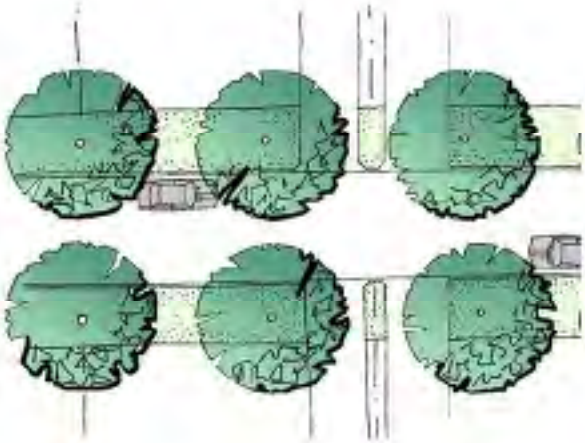
Road Hierarchy Plan

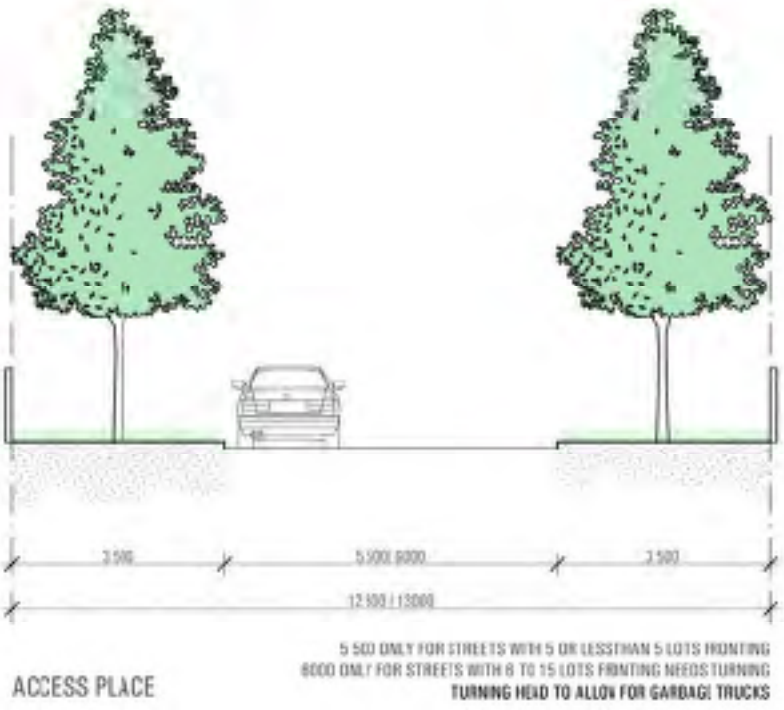
appendix H

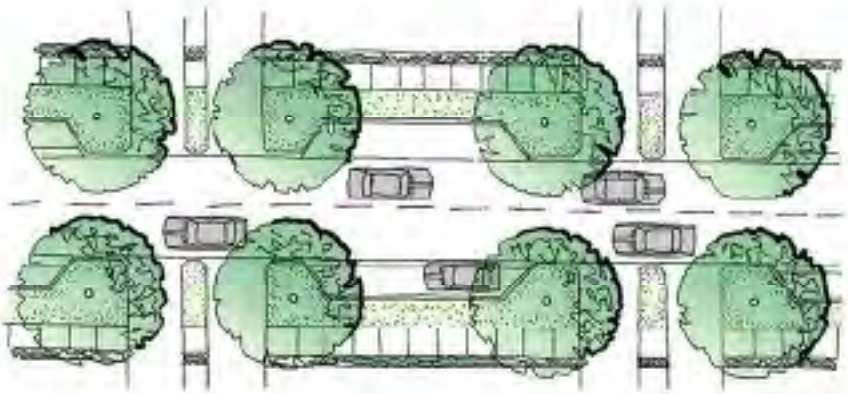
Road Hierarchy Schedule

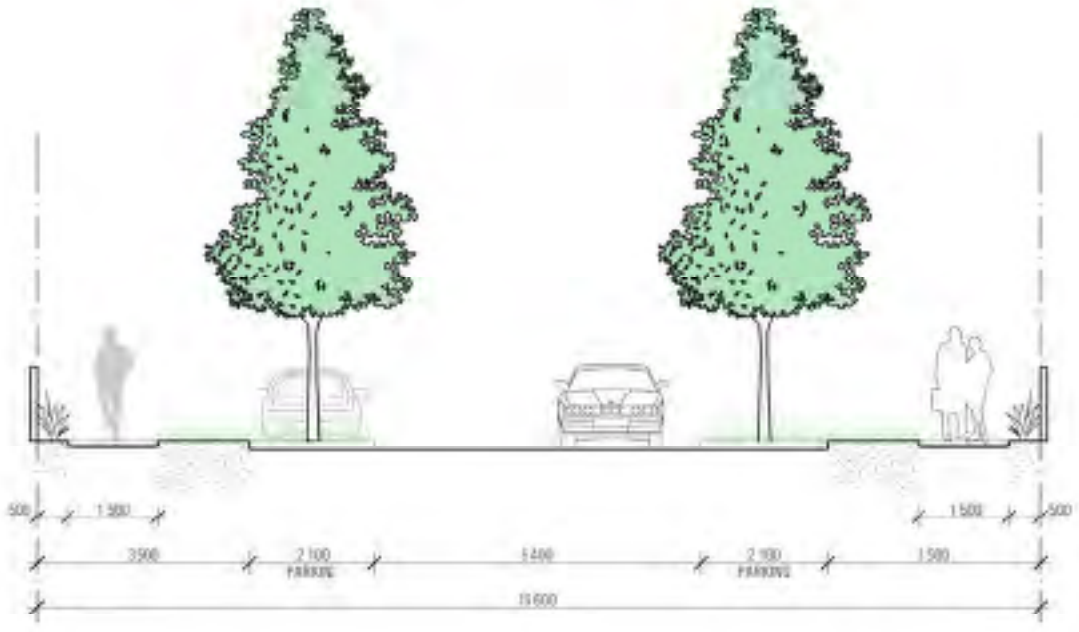
Road Hierarchy and Type	Road Reserve Width (m)	Carriageway Width (m)	Verge Width Left/Right (m/m)	Kerb Type	Concrete Foot Paving	Cycle Path	On Street Parking Bays
Road Type 1 Access Place	12.5 13.0 (1)	5.5 6.0 (1)	3.5/3.5	Rail	No	No	No
Road Type 2 Access St Under 12m Lots	16.8	5.4	3.5/3.5	Standard K & G	Yes Both Sides	No	Yes
Road Type 2 Access St Lots at Parks	11.7	7.2	0.5/4.0	Standard K & G	Yes One Side	No	No
Road Type 2 Access St with Shared Way	17.8	5.4	4.5/3.5	Standard K & G	Yes Both Sides	Yes Share way One Side	Yes
Road Type 3 Access St Over 12m Lots	15.7	7.2	4.0/4.0	Standard K & G	Yes Both Sides	No	No
Road Type 3 Lots at Parks	13.8	5.4	0.5/3.5	Standard K & G	Yes One Side	No	No
Road Type 4 Upgrading Existing to Minor Collector	20.0	6.0 6.5	4.5/4.5	Standard K & G	Yes Both Sides	Yes Share way One Side	Yes Both Sides 2.5/2.25
Road Type 5 Minor Collector	18.7	6.5	3.5/4.5	Standard K & G	Yes Both Sides	Yes Share way One Side	Yes Both Sides
Road Type 6 Upgrading Existing to Access Street	20.0	6.0 6.5	4.5/4.5	Standard K & G	Yes Both Sides	Yes Share way One Side	Yes Both Sides 2.5/2.25
Road Type 7 Swale Street	22.7	2 x 3.0	3.5/3.5	Standard K & G	Yes Both Sides	No	Yes Both Sides
Road Type 8 Oval Parking	21.3	5.4	0.5/3.5	Standard K & G	Yes One Side	No	Yes + 45° Parking Next to Oval
Road Type 9 Existing Road Reserve (Monaghan Street)	19.8	5.4	4.5/5.5	Standard K & G	Yes Both Sides	Yes (2) Share way	Yes Both Sides
Road Type 10 Existing Road Reserve (Ben Lomond Rd)	21.5	2 x 4.4	3.5/3.5	Standard K & G	Yes Both Sides	Yes Marked Both Sides of Road	Yes Both Sides
Road Type 11 Eagleview Road Half Road Works	20	3.75	4.85	Standard K & G	Yes One Side	Yes Share way One Side	Yes One Side
Road Type 12 Existing Road Verge Works	20	3.0	4.5	Standard K & G	Yes One Side	Yes Share way One Side	Yes One Side
Road Type 13 Existing Access Place Road Works	10.57 5	5.875	2.3/2.3	Standard K & G	No	No	No
Road Type 14 Eagleview Rd Half Road Works With Parking and Shared Way	30.25 (3)	3.75	Eagleview 3.5 Shareway 2.0	Standard K & G	No	Yes Shareway	Yes

1. Increases in width where lot frontage is above 8
2. Includes fully paved 6.5 wide streetscape for café seating
3. Measured to include landscaped strip between Eagleview and shared way adjacent to Valley Vista Park.




3 500
5 500/ 6000
3 500
12 500 / 13000
5 500 ONLY FOR STREETS WITH 5 OR LESS THAN 5 LOTS FRONTING
6000 ONLY FOR STREETS WITH 6 TO 15 LOTS FRONTING NEEDS TURNING
TURNING HEAD TO ALLOW FOR GARBAGE TRUCKS
ACCESS PLACE

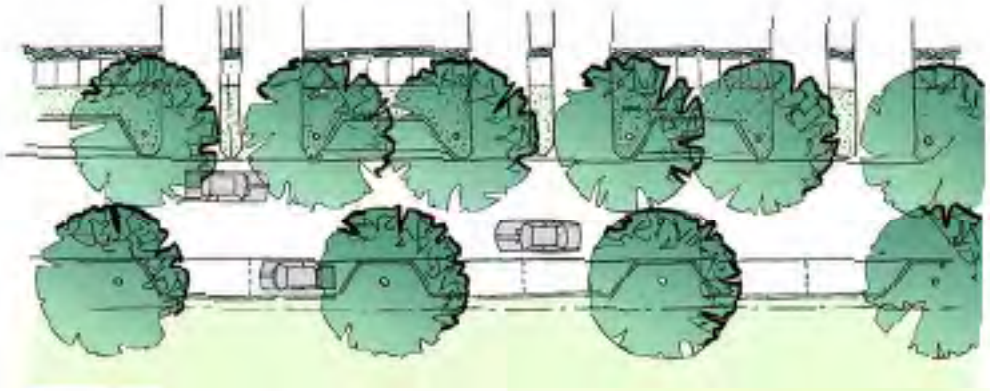


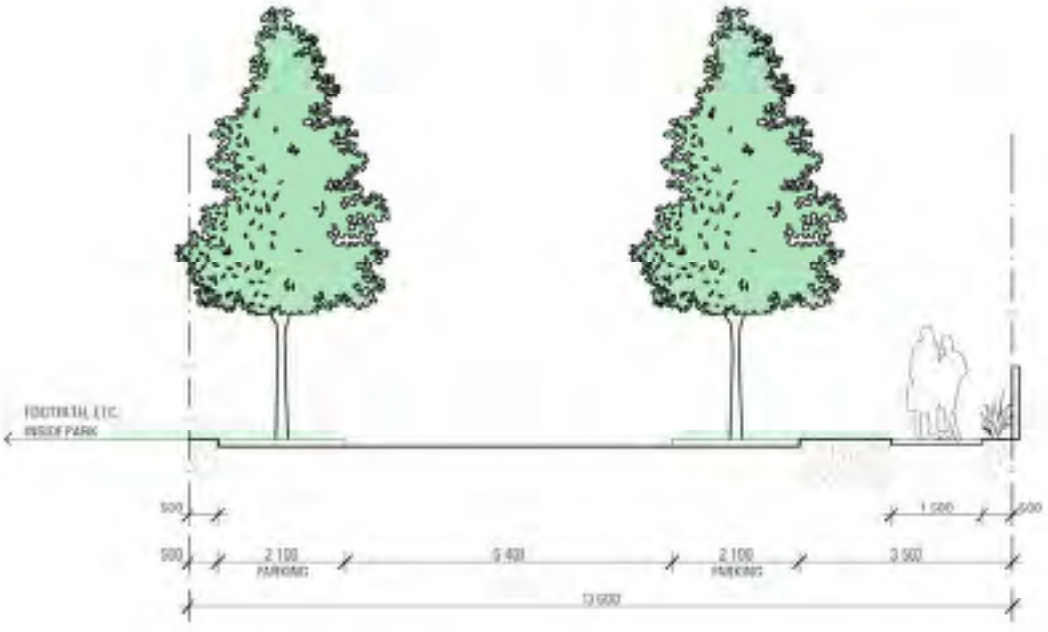


ACCESS STREET - LOTS UNDER 12m FRONTAGE

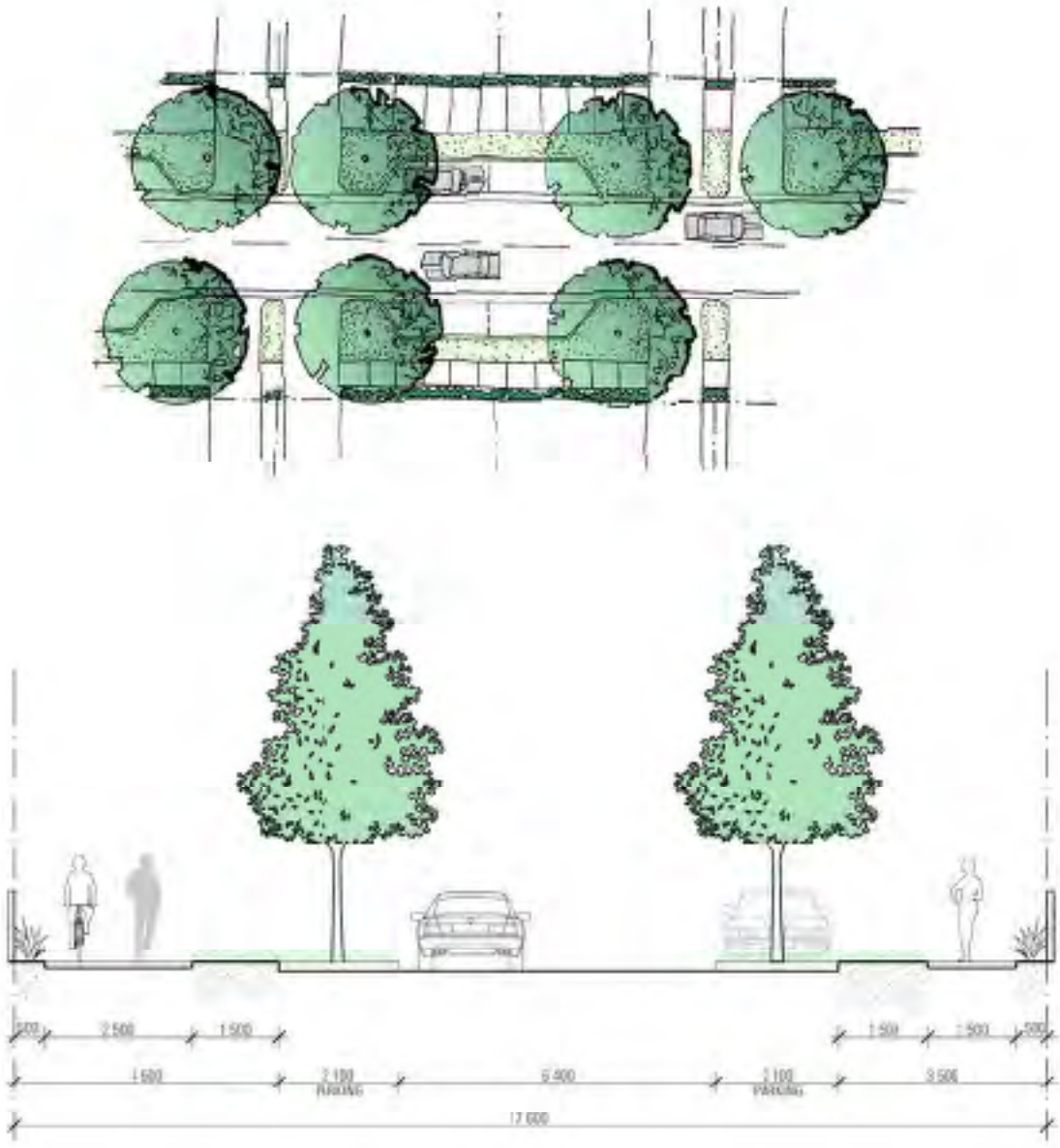
appendix I

Subdivision Road Network Design Requirements



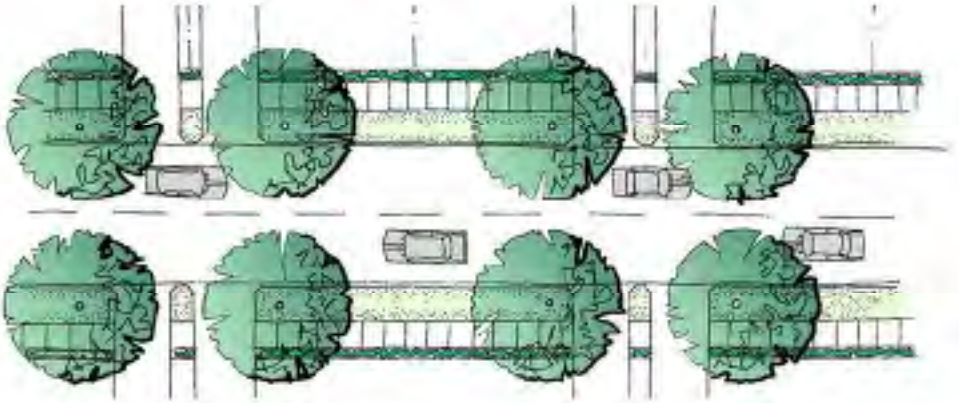


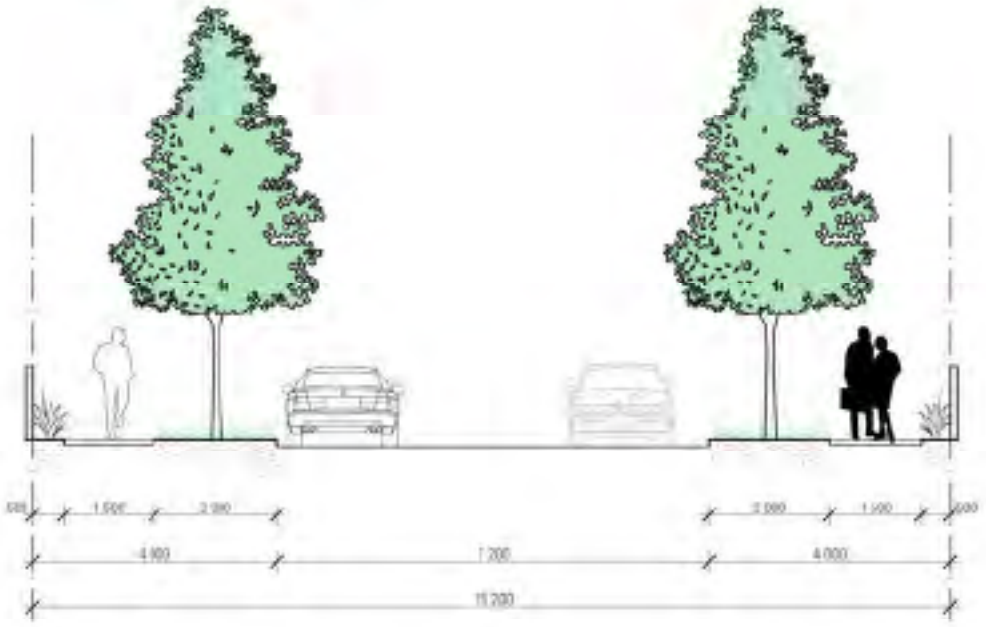
ACCESS STREET - LOTS UNDER 12m FRONTAGE AT PARKS



ACCESS STREET - LOTS UNDER 12m FRONTAGE WITH SHARED WAY

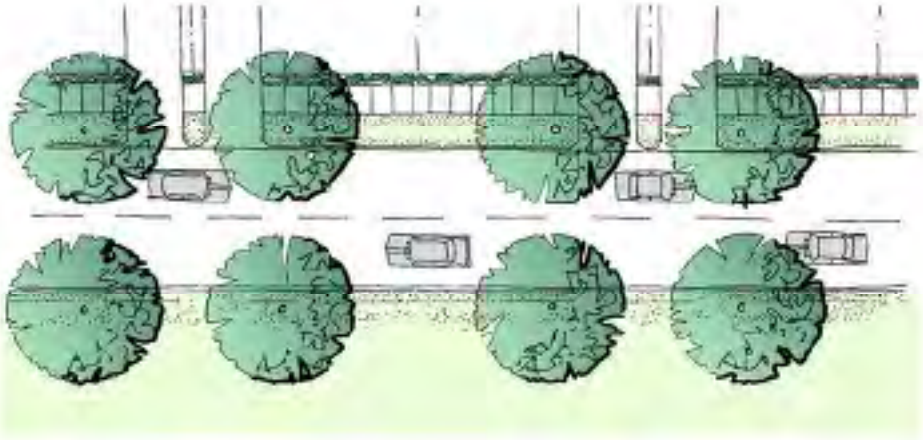
appendix I

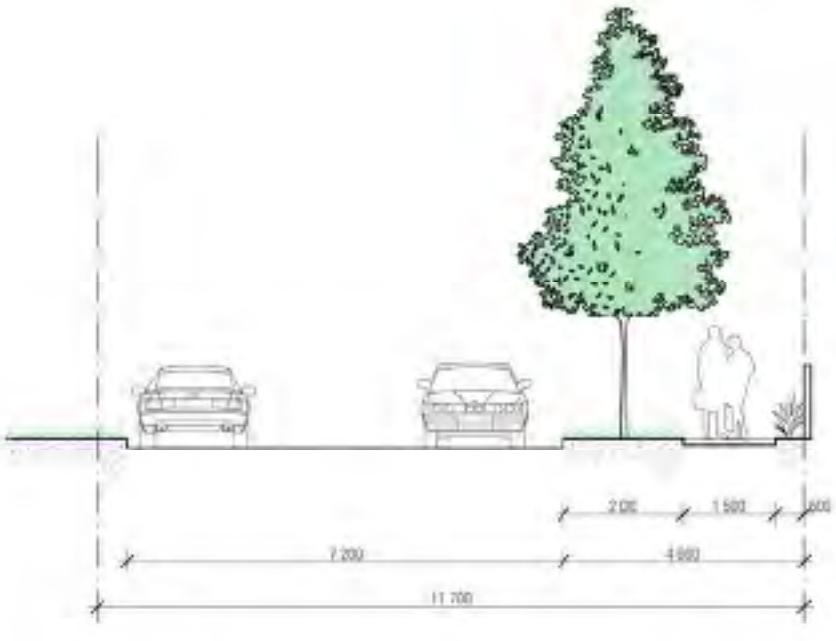




ACCESS STREET - LOTS OVER 12m FRONTAGE

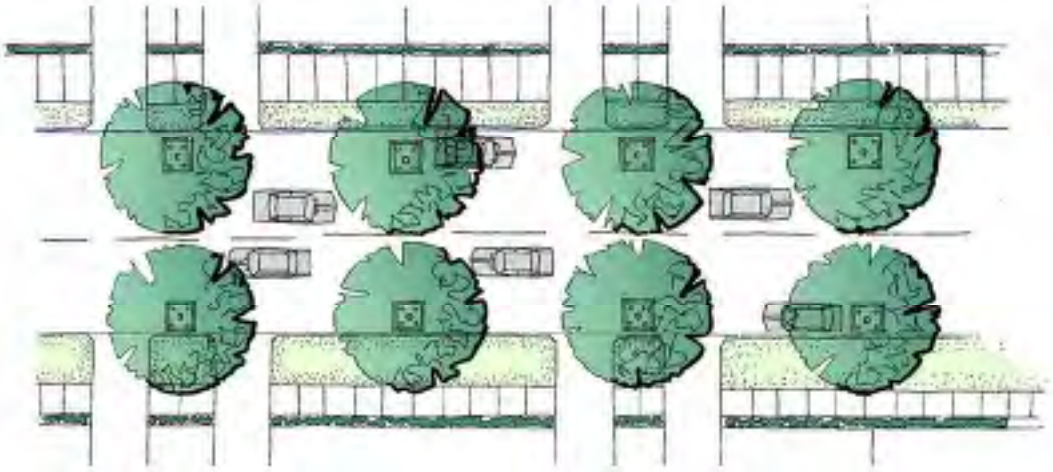
NO LINE MARKINGS

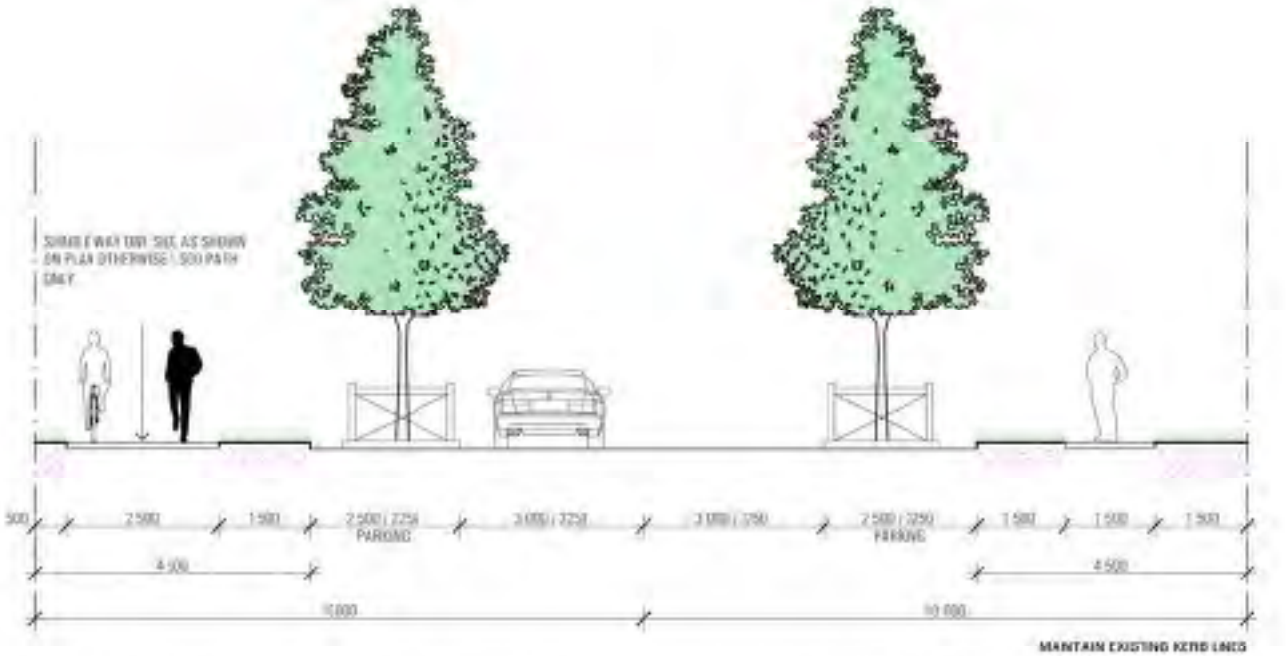




ACCESS STREET - LOTS OVER 12m FRONTAGE AT PARKS NO LINE MARKINGS

Subdivision Road Network Design Requirements.

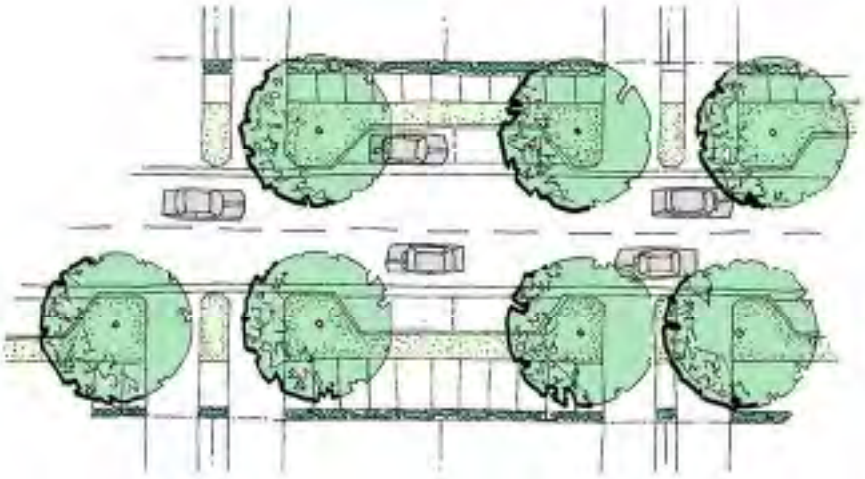




UPGRADE OF EXISTING STREETS TO ACCESS STREET,
UPGRADE OF EXISTING STREETS TO MINOR COLLECTOR &
CONTINUATION OF EXISTING STREETS

3250 TRAVEL LANES AND 2250 PARKING ON **MINOR COLLECTOR TO ALLOW BUSROUTE. INCLUDES SHARED WAY**

3000 TRAVEL LANES AND 2500 PARKING ON ACCESS STREETS & 1500 WIDE FOOTPATHS ONLY

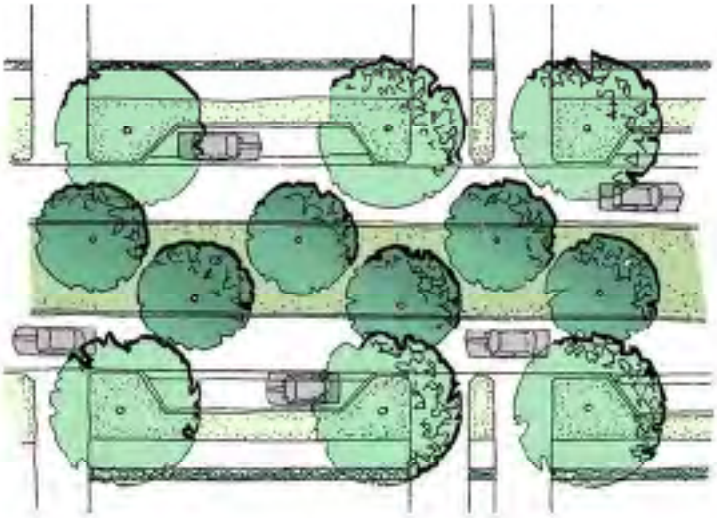


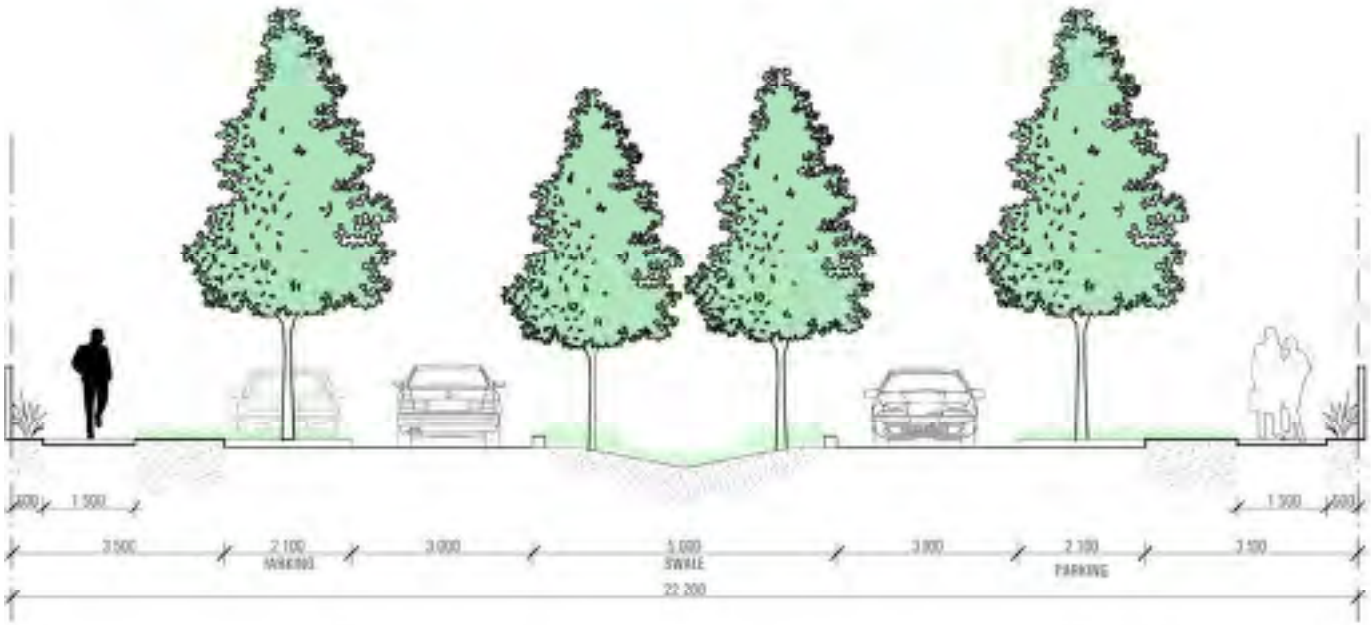

MINOR COLLECTOR
INCLUD BUSROUTE AND SHARED WAY

appendix I

Subdivision Road Network Design Requirements.

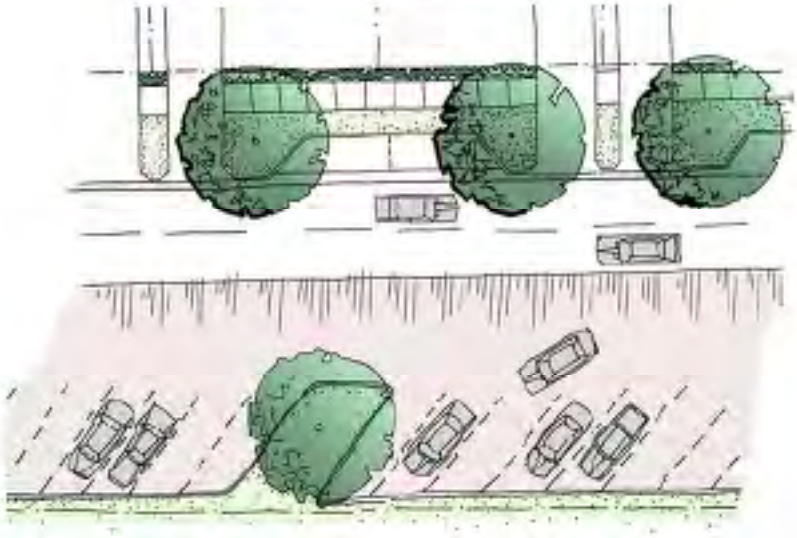


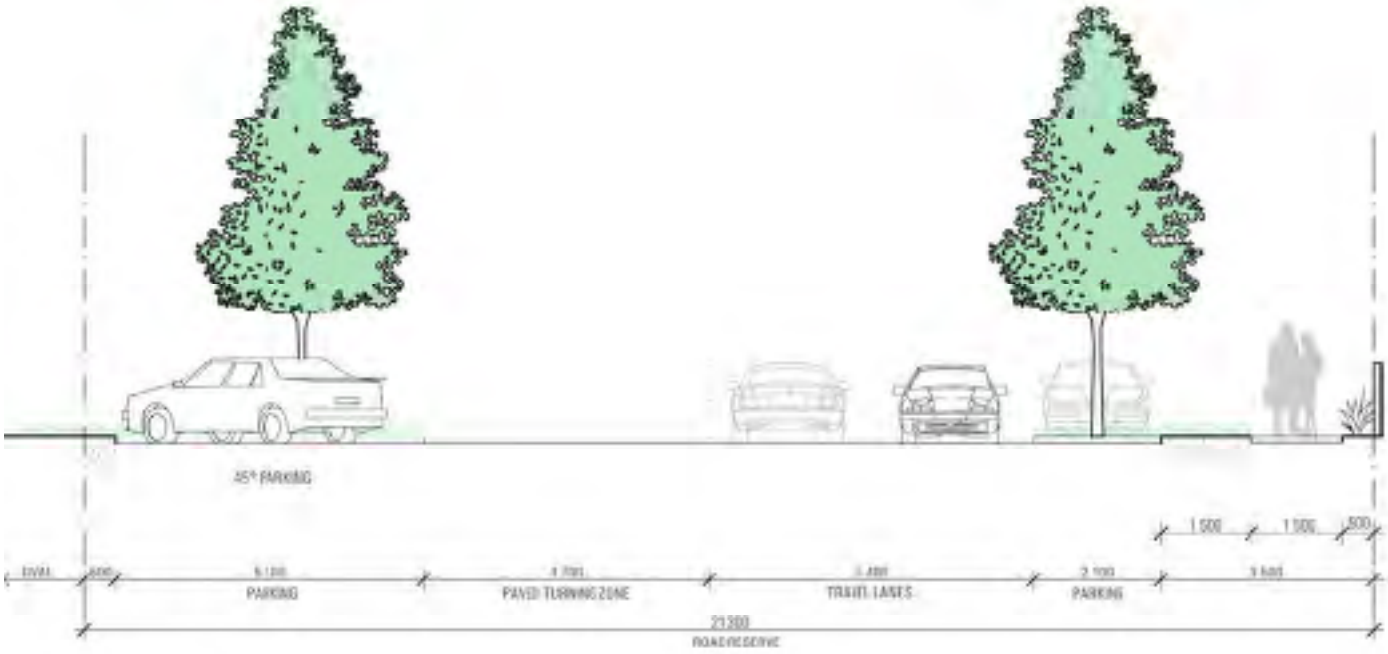





STREET WITH SWALE

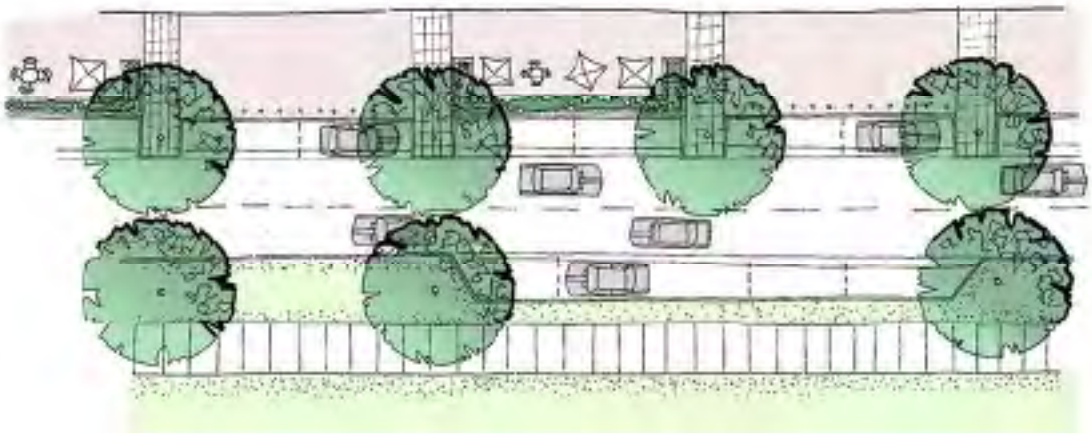
INTERMITANT KERB TO SWALE TO ALLOW WATER TO FLOW IN TO THE SWALE.

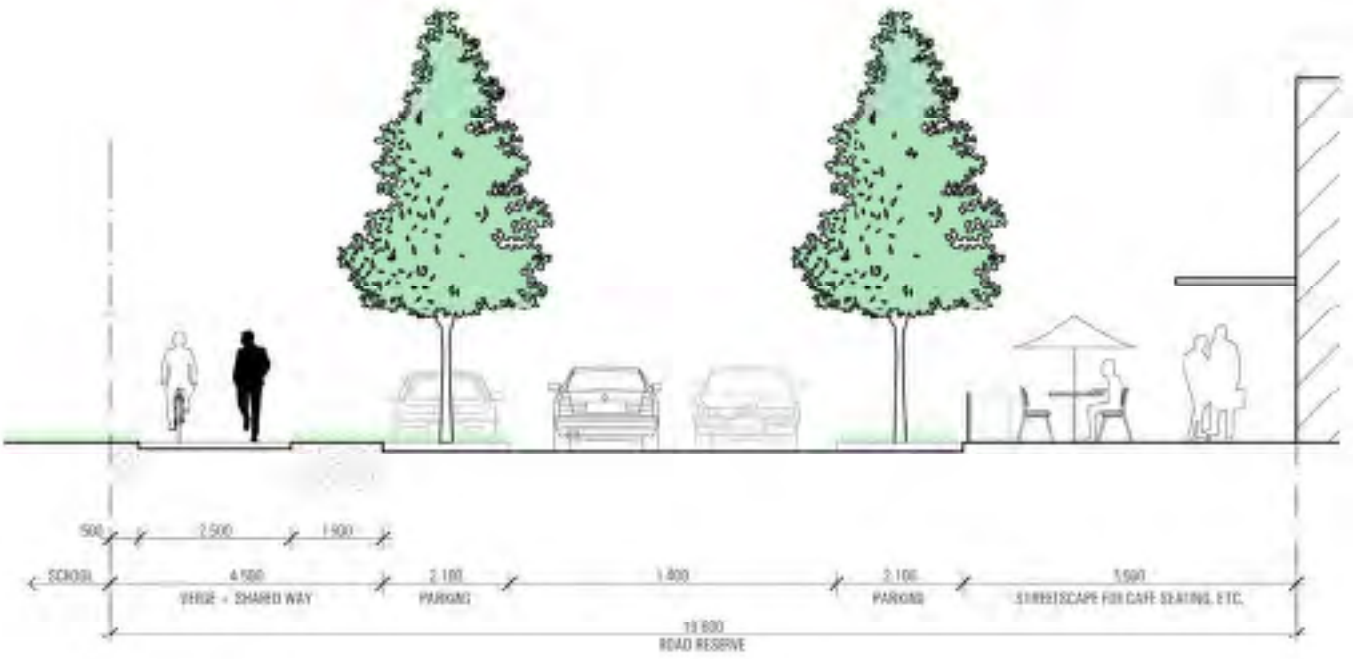



45° PARKING
1 500
1 500
500
PARKING
PAVED TURNING ZONE
TRAFFIC LANES
PARKING
21 300
ROAD RESERVE

OVAL STREET

appendix I

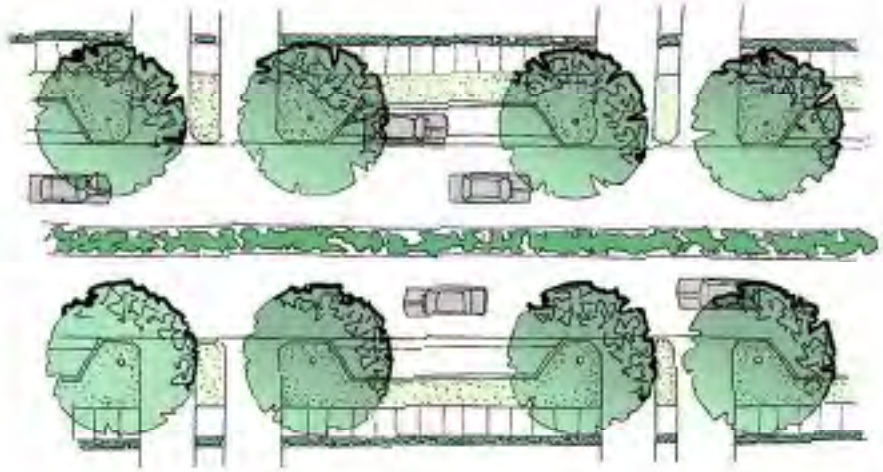


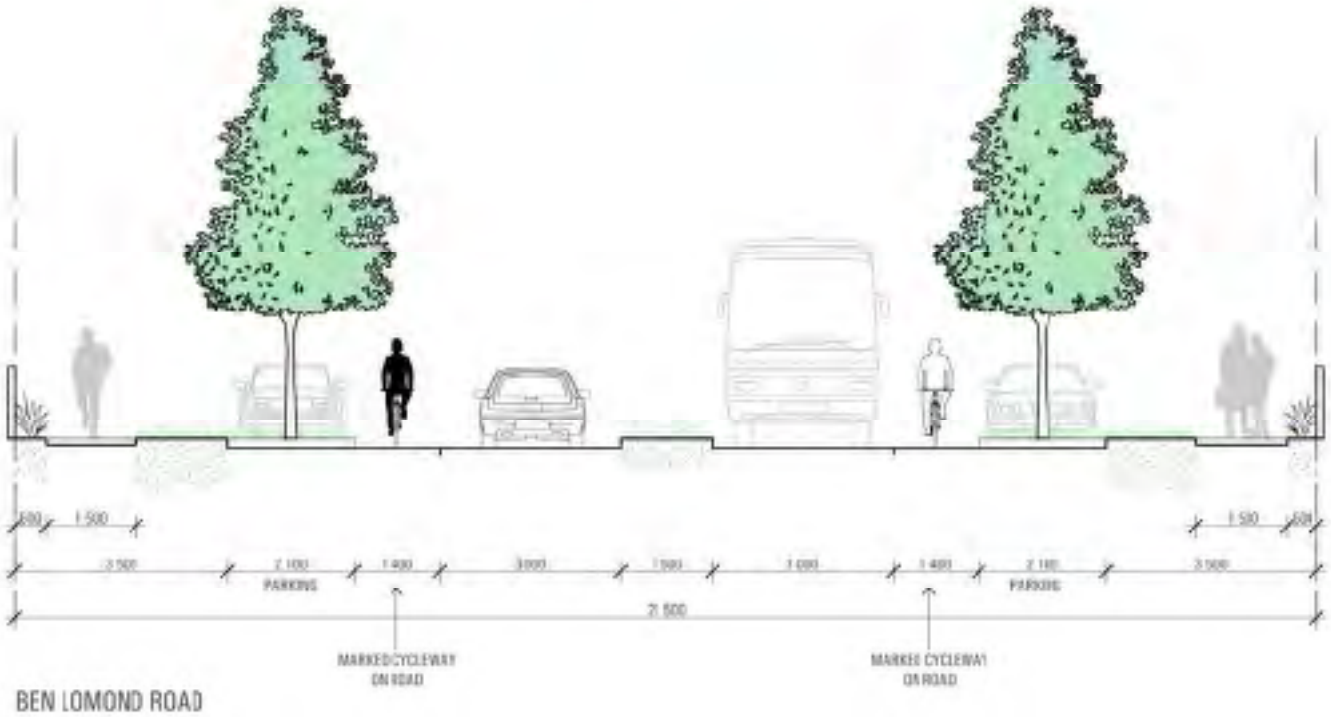


MONAGHAN STREET

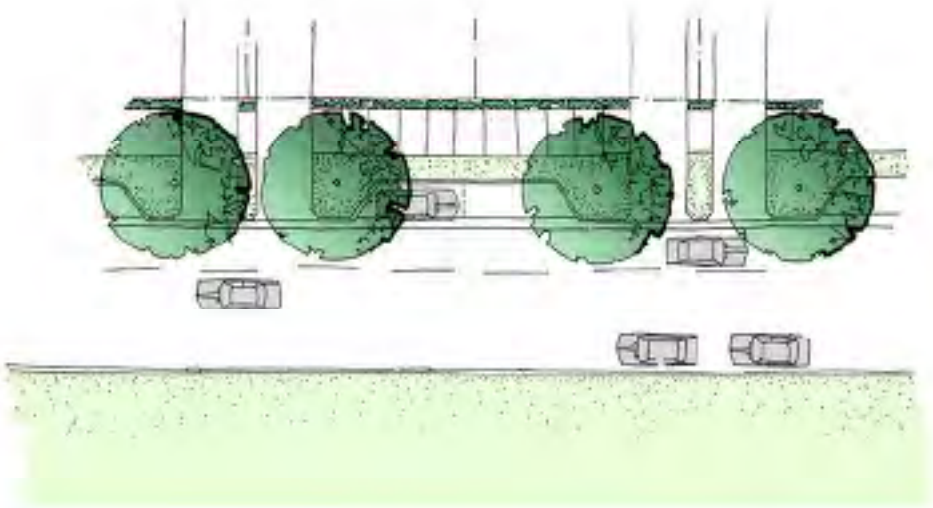
appendix I

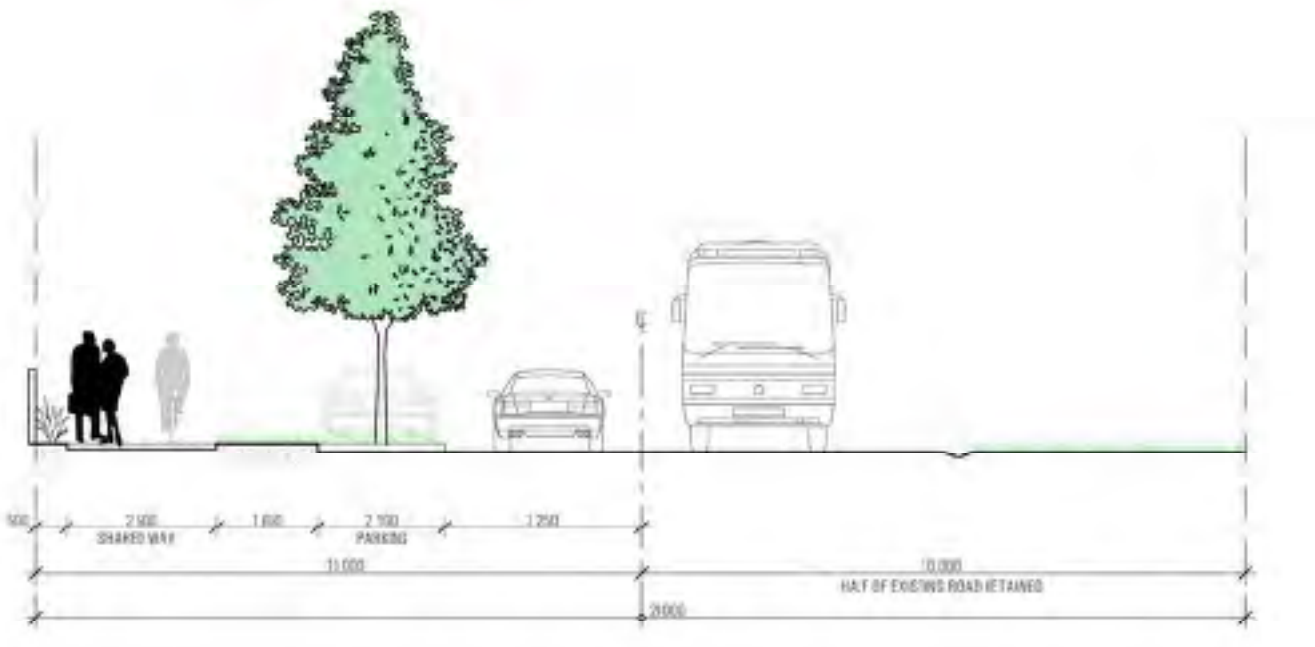
Subdivision Road Network Design Requirements.





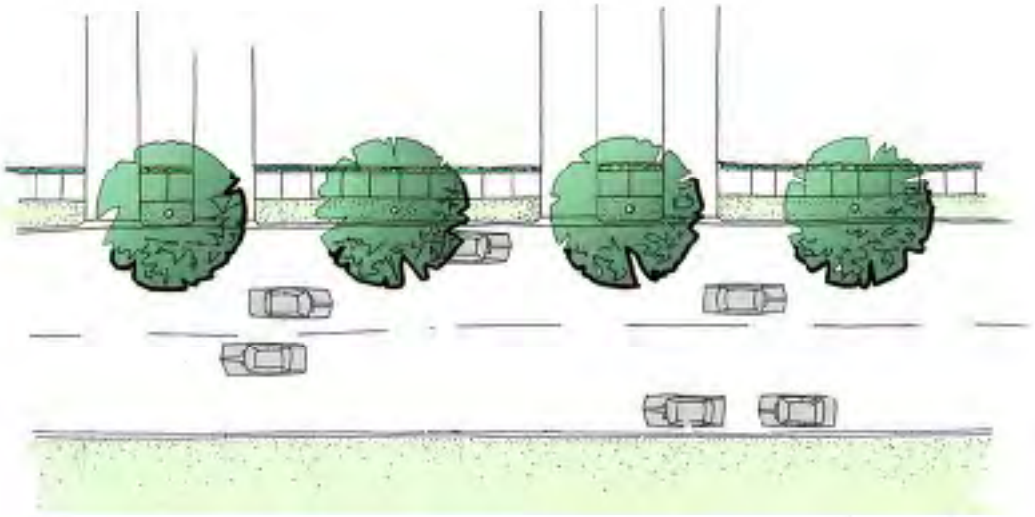
appendix I

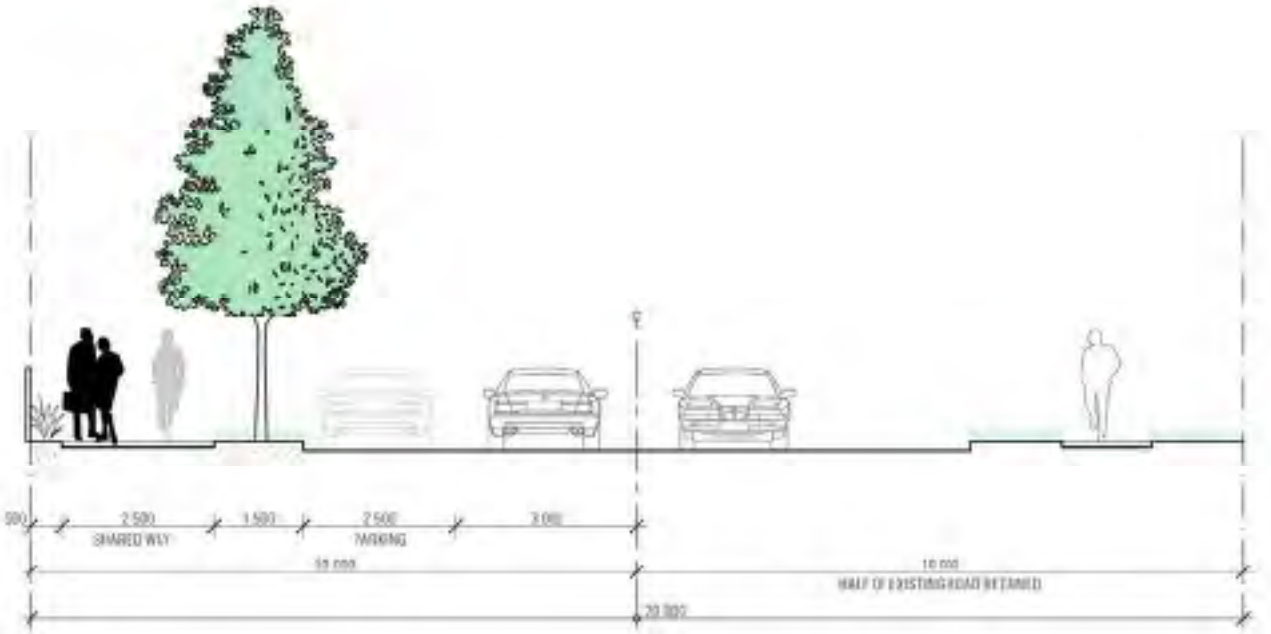




EAGELVIEW ROAD - HALF ROAD UPGRADE

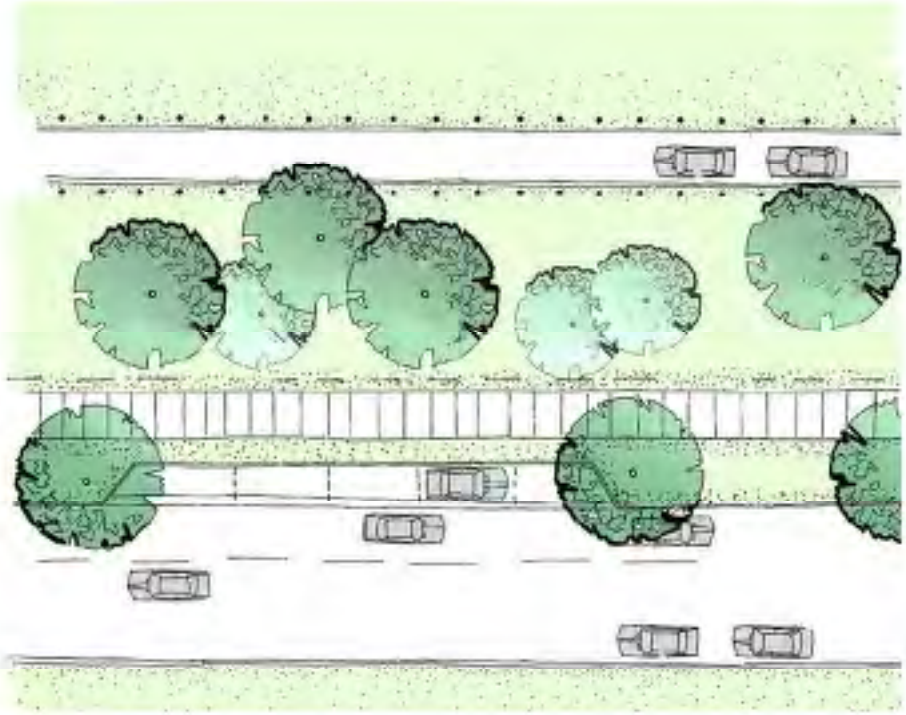
INCLUDE BUSROUTE AND SHARED WAY

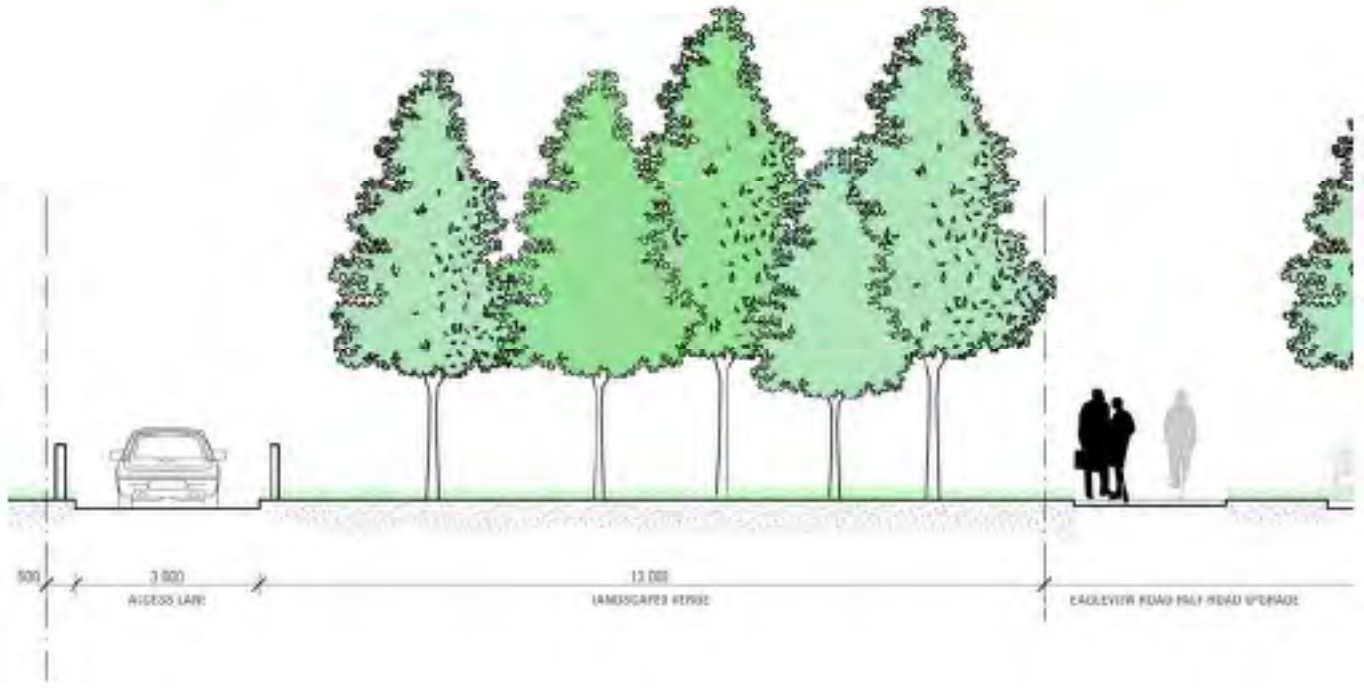




EXISTING STREETS - HALF ROAD VERGE UPGRADE

INCLUDE BUSROUTE AND SHARED WAY
MAINTAIN EXISTING KERBLINES





ACCESS LANE AT VALLEY VISTA PARK

appendix J

Street Planting Strategy














- Street trees shall be planted to both sides of all streets.

- Use predominantly indigenous species for street tree plantings to enhance existing character and diversity of native vegetation.

- Use exotic species for street tree plantings to enhance orientation and allow winter solar access as appropriate, in particular to frontages of north facing lots.

- Use species for street tree plantings which will reach a mature size appropriate to the scale of the street.

- Street tree planting shall be coordinated with subdivision layout, traffic plan and services layouts to ensure appropriate configuration with vehicle crossovers, sight lines, lighting and other services.

- Street trees to be planted between parking bays at a maximum of one per 10 spaces for 90deg parking and one per 3 spaces for parallel parking.

- 500mm planting zone between public footpath and lot boundary to be planted with species on the Verge Planting Proposed Species List following.

- All street trees to have root control barriers installed.

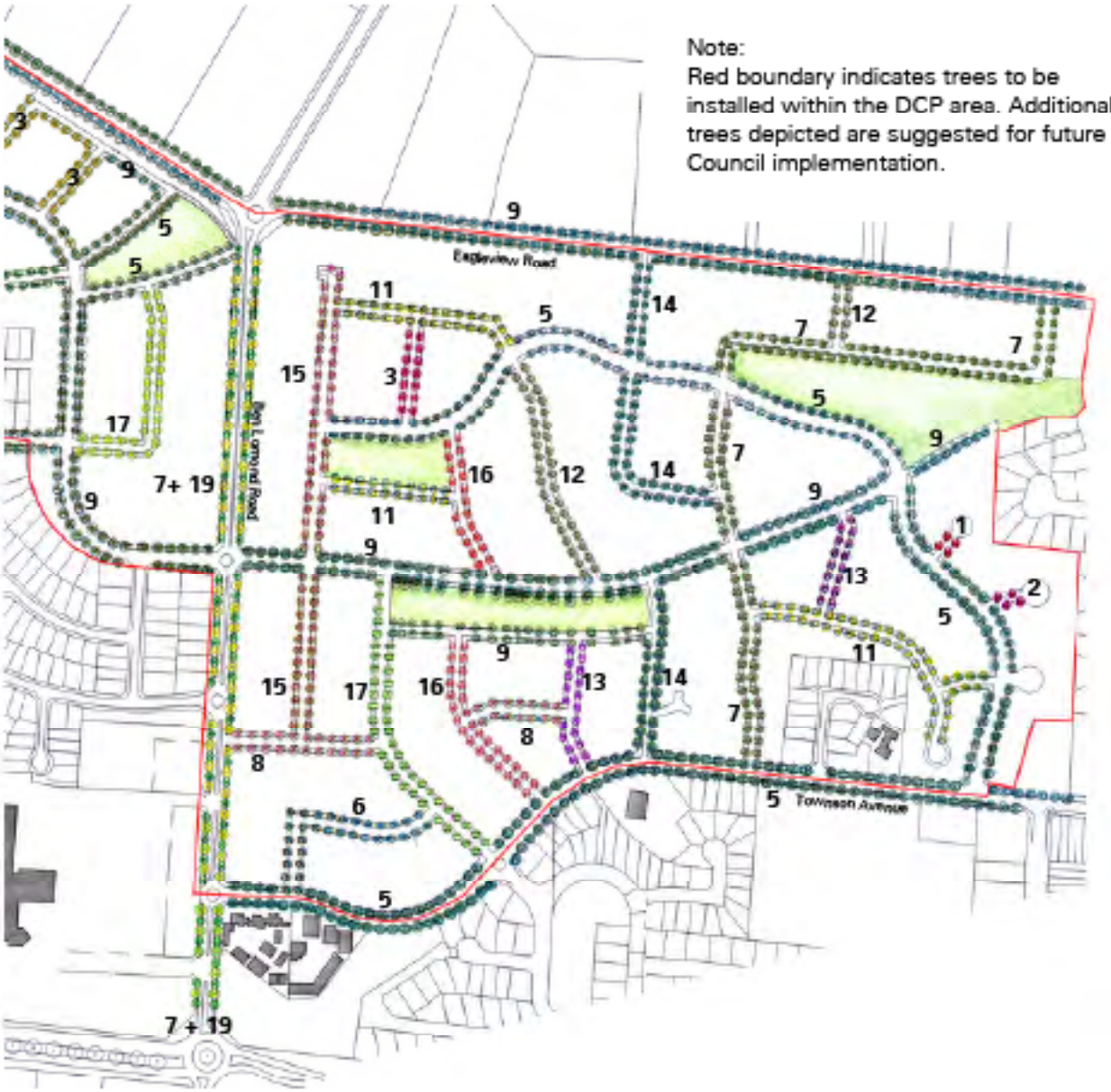
appendix J

Street Tree Planting Strategy North

Street Tree Planting Strategy South

SPECIES LIST

1. Acer palmatum
2. Acer buergerianum
3. Brachychiton acerifolius
4. Casuarina glauca
5. Elaeocarpus reticulatus
6. Eucalyptus Crebra
7. Eucalyptus haemastoma
8. Eucalyptus sideroxylon rosea
9. Eucalyptus tereticornis
10. Ficus Hillii
11. Hymenosporum flavum
12. Waterhousia floribunda
13. Lagestroemia indica
14. Lophostemon confertus
15. Pistacia chinensis
16. Pyrus calleryana 'Chanticlaire'
17. Robinia pseudoacacia 'Frisia'
18. Ulmus parvifolia
19. Tristaniopsis laurina



appendix J

Verge Planting Proposed Species List







Botanical Name	Common Name	Mature Size (Height x Spread)
Agapanthus orientalis	Blue African Lily	0.6 x 0.6
Agapanthus orientalis 'Alba'	White African Lily	0.6 x 0.6
Agapanthus orientalis 'Pantha'	White African Lily	0.6 x 0.6
Agapanthus 'Snow Drift'	Miniature White African Lily	0.3 x 0.3
Brachychiton multifida	Happy Face	0.2 x 0.4
Crinum Peduneulatum	River Lily	1 x 1
Dianella revoluta	Flax Lily	0.6 x 0.6
Dietes bicolour	Yellow Native Lily	0.7 x 0.7
Dietes grandiflora	Blue Native Lily	0.7 x 0.7
Gazania regens	Treasure Flower	0.2 x 0.4
Liriope muscari	Lily Turf	0.3 x 0.4
Lomandra longifolia	Mat Rush	0.7 x 0.7
Phormium tenax 'Bronze Baby'	Brown NZ Flax	0.9 x 0.9
Phormium tenax 'Dazzler'	Striped NZ Flax	0.7 x 0.7
Phormium tenax 'Flamingo'	Pink NZ Flax	0.7 x 0.7
Phormium tenax 'Purpleum'	Purple NZ Flax	0.9 x 0.9
Phormium tenax 'Lime light'	Lime NZ Flax	0.5 x 0.5
Phormium tenax 'Jack Spratt'	Dwarf NZ Flax	0.3 x 0.3
Phormium tenax 'Black Magic'	Purple NZ Flax	0.6 x 0.6
Westringia fructosia	Coastal Westringia	1 x 1

appendix K

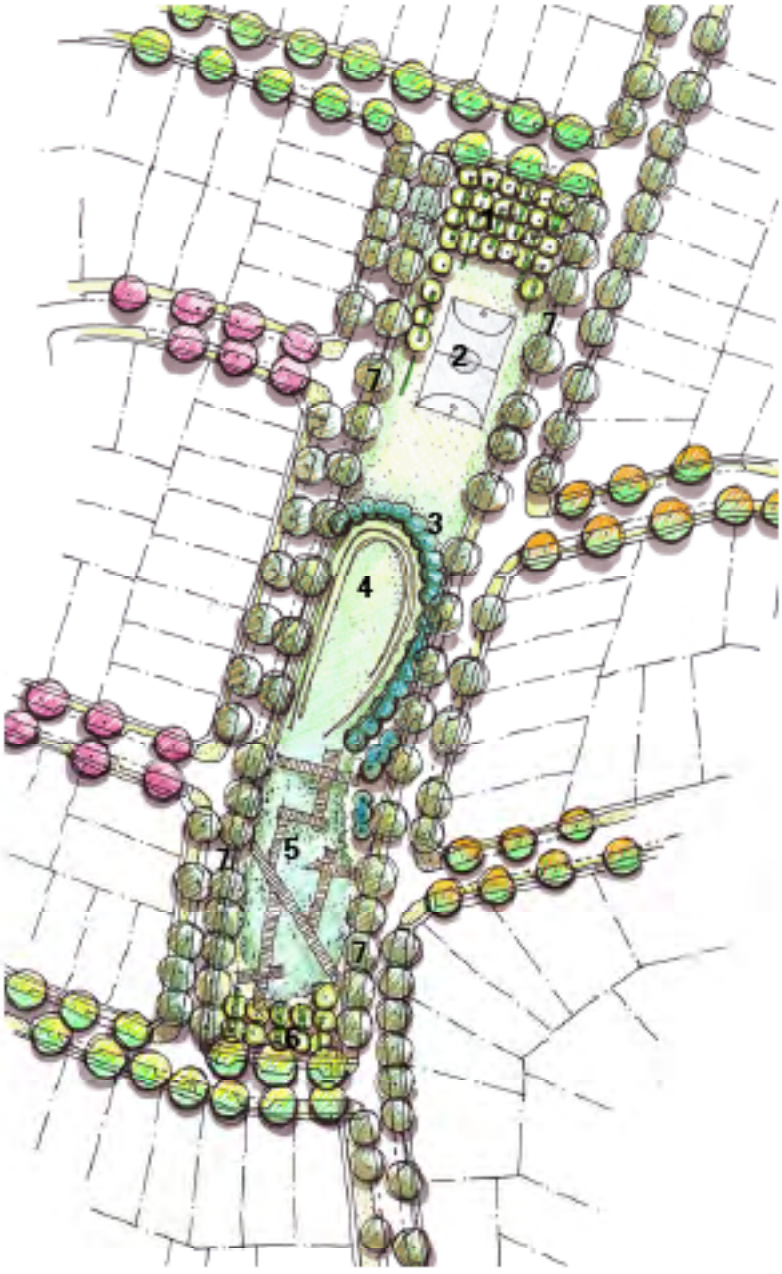
Site Access Plan

appendix L

Open Space Network

appendix L

Scarborough Park Concept



1. Grid of trees and grasses as strong entry statement.
2. Active Play area with full size basketball court for informal games, and grassed kick about area.
3. Feature planting of Exotic deciduous trees to create seasonal interest.
4. Passive recreation area Open grassed space with seating.
5. Timber boardwalk linking across rain garden area.
6. Grid of trees and grasses as strong entry statement.
7. Boundary and street tree plantings, spaced to the create interest and difference along the length of the park.

Minimum Development Area: 0.8Ha

Note: Design subject to separate Development Application

appendix L

Benham Oval Concept

Note: Design subject to seperate Development Application

appendix L

Benham Oval Concept

1. Cricket Practice Nets.
2. Pedestrian path linking to school.
3. Deciduous trees to north of building.
4. Amenities and Kiosk facilities 5. Feature grove of flowering deciduous trees with table settings underneath.
6. Adequate 45 degree on street parking provided street.
7. Pedestrian footpath behind parking.
8. Oval with retaining wall to low side
9. Street tree plantings
10. Low feature plantings to terminate view corridors.
11. Bench seating for spectators.
12. Connection to cross site shared way network.
13. Existing childcare centre.
14. Existing trees to be retained where possible. Existing stone feature retained, strengthen planting with clean trunked indigenous species.
15. Entrance feature and ornamental planting.
16. Existing Playground.

Minimum Development Area: 2Ha

appendix L

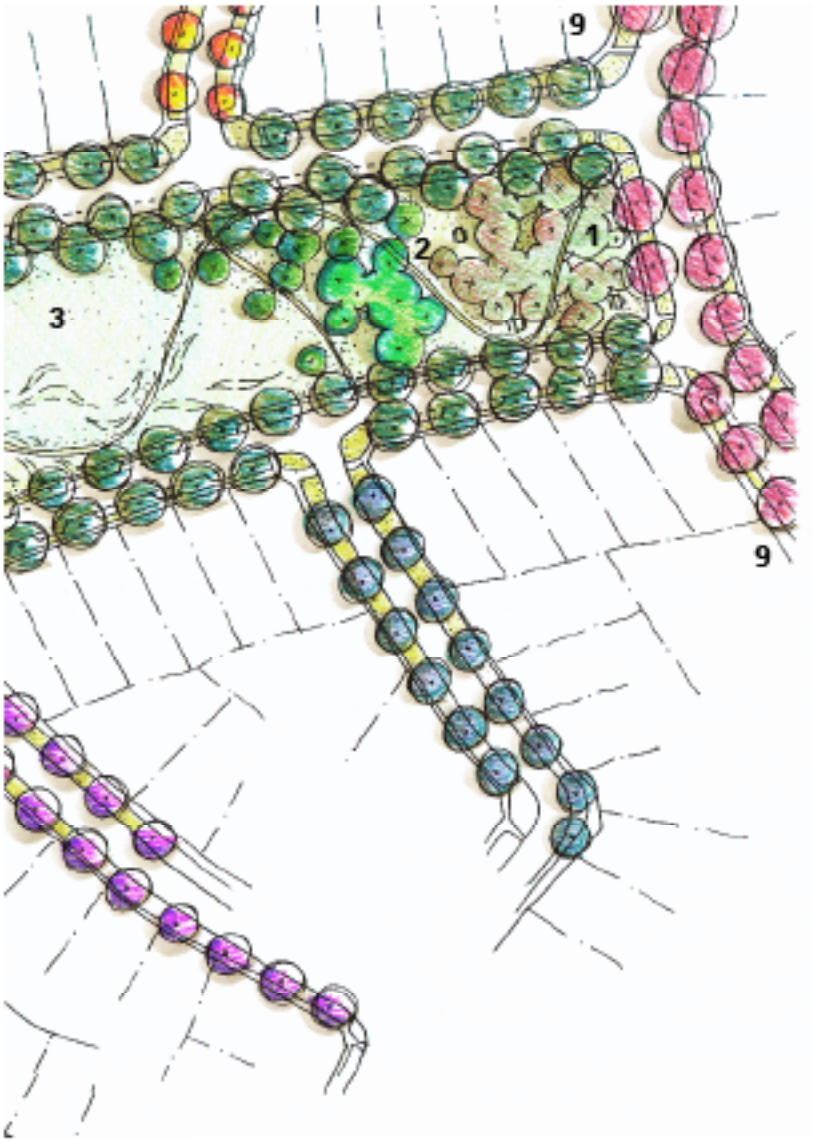
Redfern Park Concept

Note: Design subject to separate Development Application

appendix L

Redfern Park Concept



1. Forest- Hill top vegetation open underneath to maintain surveillance. Including seating, and picnic tables.
2. Small seating areas along linking pathway down hill.
3. Largely open grassed area for active recreation.
4. Earth mounding feature directs overland flow.
5. Pedestrian paths linking across park.
6. Play for teenagers could include skate ramp.
7. Overland flow into dry creek bed.
8. Mid aged children's play equipment.
9. Cross estate shared way network.
10. Rain Garden.
11. Small children's play area.
12. Minto community Hall.
13. Outdoor courtyard, seating, Cafe.
14. Low screen planting to carparking.
15. Entry feature
16. Ornamental open pool
17. Performance / gathering space, terraced walls afford seating and picnic set ups.

Minimum Development Area: 2Ha

appendix L

Valley Vista Park Concept

1. Possible incorporation of public art work
2. Feature trees shared way link
3. Deciduous street trees
4. Grove of tall clear trunked indigenous trees along ridge line, maintaining open views out, and green views in.
5. Picnic facilities under grove of clear trunked indigenous trees.
6. Central access spine pathway linking discreet spaces.
7. Small seating viewing areas, incorporated into level changes.
8. Feature entry planting/ statement.
9. Larger seating BBQ area.
10. Mass planting on banks taking up level changes.

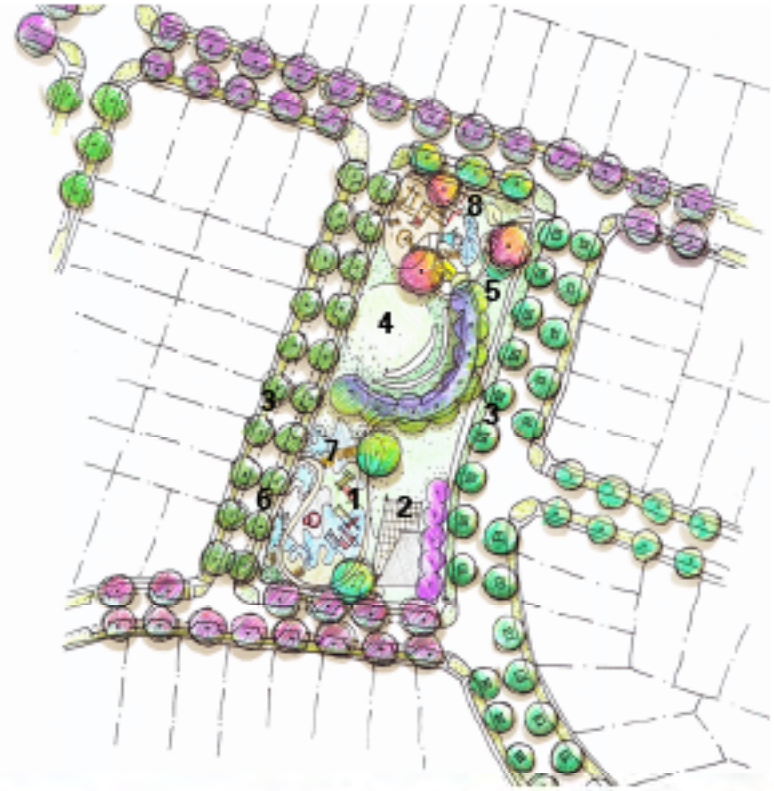
Minimum Development Area: 0.5Ha

appendix L

Kids Community Park Concept







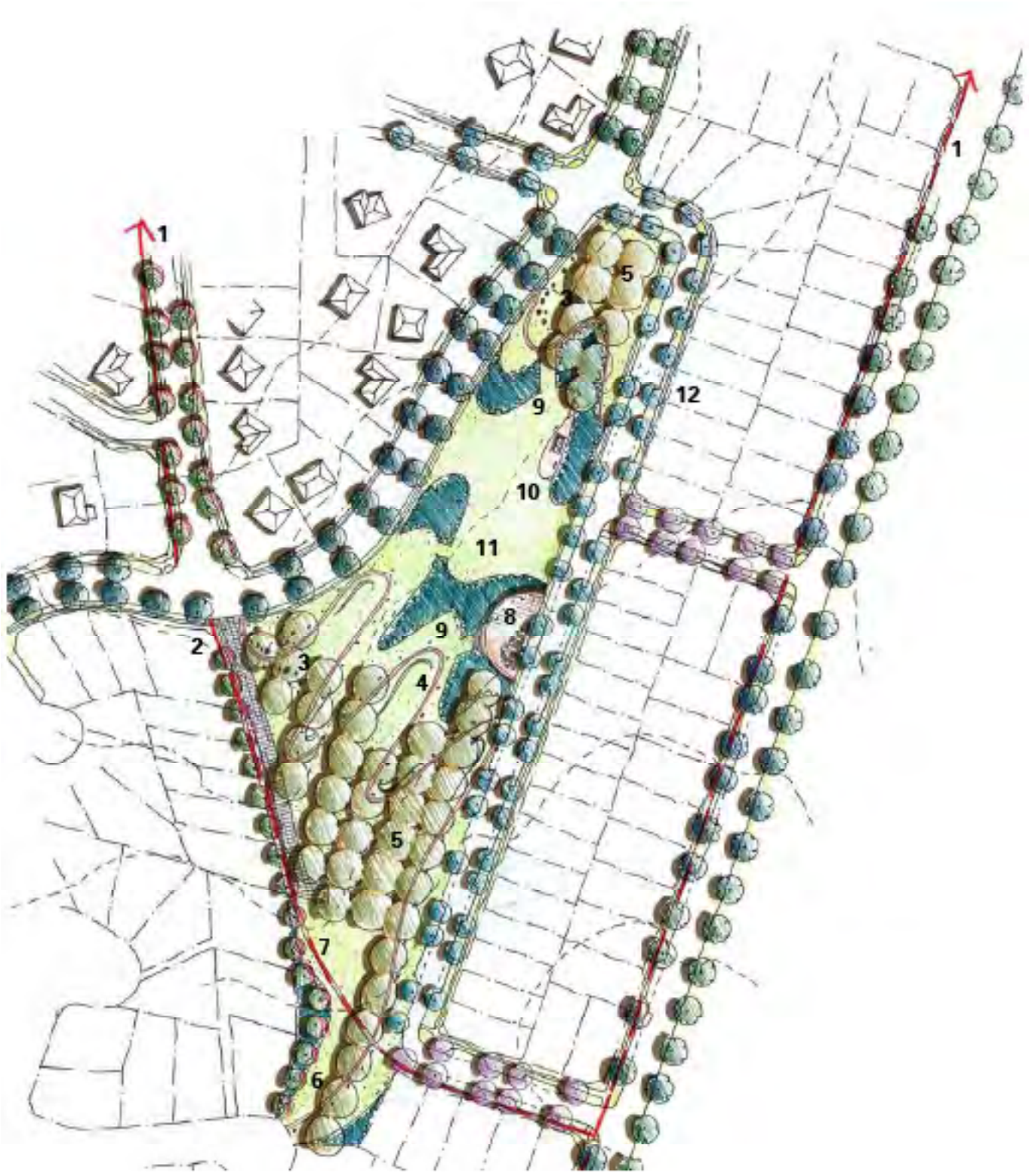
1. Young children's play area, close to shelter and seating.
2. Shelter to BBQ/ Toilets/ picnic facilities, Incorporating relocated community mural.
3. Street Trees
4. Performance/ Amphitheatre space
5. Gentle grade pathway for easy access and children's bike path.
6. Incorporate memorial created by existing tenants to commemorate Minto Estate community. Including a stone wall feature.
7. Concept for entire playground aims to illustrate the history of the area, starting with native bush, indigenous culture, through farming, housing and to the future.
8. Older children's playground, accommodating aged and disabilities.

Minimum Development Area: 0.5Ha


Note: Design subject to separate Development Application

appendix L

Kyeamount Reserve



Note: Design subject to separate Development Application

appendix L

Kyeamount Reserve




1. Cross site shared bicycle and pedestrian way.
2. Access lane to dwellings.
3. Sculptural feature.
4. Gently ramped path for equitable access with lighting and retaining walls along length.
5. Tall clear trunked Eucalypt trees to maintain views to mountains under canopy.
6. Pedestrian path access from neighbouring subdivision.
7. Screen planting to back fences and seating area.
8. Raised, paved lookout platform with shade structure and seating.
9. Low dense planting to create a variety of spaces while maintaining views.
10. Seating area.
11. Open grassed area for open views and play.
12. Street tree planting and on street parking.

Minimum Development Area: 1.5Ha

Volume 2

Site Specific Development Control Plans

Part:2

Glenfield Road Urban Area DCP

Note:
The Glenfield Road Area DCP came into effect on 28 February 2002 and has now been incorporated as Part 2 , Volume 2 of Campbelltown (Sustainable City) DCP.

Glenfield Road Area development control plan

Glenfield Road Area
development control plan

TABLE OF CONTENTS

Part 1 General Information

1.1 What is this plan called?

This Plan shall be known as the *"Campbelltown Development Control Plan - Glenfield Road Area 2002"* (Glenfield Road Area DCP).

1.2 How is this plan made?

1.2.1 This Plan is made by Council in accordance with Section 72 of the Environmental Planning & Assessment Act, 1979, as amended (EP & Act) and the associated Regulations.

1.2.2 Notes are provided in italic text within boxes throughout the Plan to provide supplementary information and explanation. These notes do not form part of the DCP and may be altered by Council as necessary without a formal modification of the Plan, to update or expand upon explanations.

1.3 Why is the plan required?

1.3.1 This Plan is required to provide detailed controls to supplement the provisions of the Campbelltown Local Environmental Plan 2002 (LEP 2002). An objective of LEP 2002 specifically recognises the role of DCPs to provide detailed planning provisions to supplement the broader planning framework of the LEP.

1.3.2 This Plan introduces performance based criteria to ensure that Council has the opportunity to assess development with a merit orientated approach to satisfy predetermined objectives.

1.4 Where does the policy apply?

This Plan applies to that land within the Campbelltown Local Government Area (LGA) generally bound by Campbelltown Road, Old Glenfield Road, Glenfield Road, the Main South Railway Line, as identified on Map 1.

1.5 What applications does the plan apply to?

This Plan provides criteria for the assessment of all applications lodged for the purposes of obtaining development consent. The types of development for which approval may be sought will primarily relate to subdivision, single dwelling houses and multi-unit dwelling houses.

1.6 What do the terms used in this plan mean?

For the purposes of this Plan, the definitions outlined within the Dictionary appended to the Plan as Schedule 1 have been adopted.

Map 1 – Areas Where the Policy Applies

1.7 How does this plan relate to other plans and legislation?

1.7.1 This Plan should be read in conjunction with the Campbelltown LEP 2002, the Environmental Planning and Assessment Act, 1979 and associated Regulations and applicable Regional Environmental Plans and State Environmental Planning Policies.

1.7.2 Reference should also be made to other development control plans adopted by Council. This Plan supersedes other DCPs where inconsistencies arise.

1.7.3 Approvals may also be required from other government agencies. In some cases, (refer to Schedule 2) the development application must be made for integrated development approval.

1.8 What are the Objectives of the DCP?

The aim of this Plan is to provide detailed planning guidelines and standards to ensure the orderly, efficient and environmentally acceptable development of a new urban release area in a manner, which achieves the following objectives:

a) To identify the criteria and process for assessing applications and to outline the responsibilities of both Council and applicant.

b) To specify the minimum standard of information to be submitted with a development application.

c) To comprehensively outline all criteria which will be relevant to the assessment of development proposals, including urban character, subdivision design, building form, open space and landscaping, transport, traffic and access, car parking, ecologically sustainable development, geotechnical constraints, site contamination, noise, water management and pollution control.

d) To specify criteria to ensure that such development is consistent with the planned character of the area.

e) To identify key principles associated with the development of the area, inclusive of land required for open space/drainage management purposes and major road connections.

f) To specify a requirement for Council to approve a Masterplan for the study area which details the manner in which subdivision will proceed, prior to the issuing of any development approvals.

1.9 How is the Plan to be applied to achieve its Objectives?

1.9.1 The design elements within Part B of this plan have three components:

- A set of objectives;
- Performance criteria; and
- Development Requirements.

The "***objectives***" specified for each design element represent the outcomes that Council wishes to achieve.

The "***performance criteria***" represent a means of assessing whether the desired outcomes will be achieved. Council will consider how well each of these criteria (where relevant) has been addressed by the applicant or designer when determining an application under this Plan.

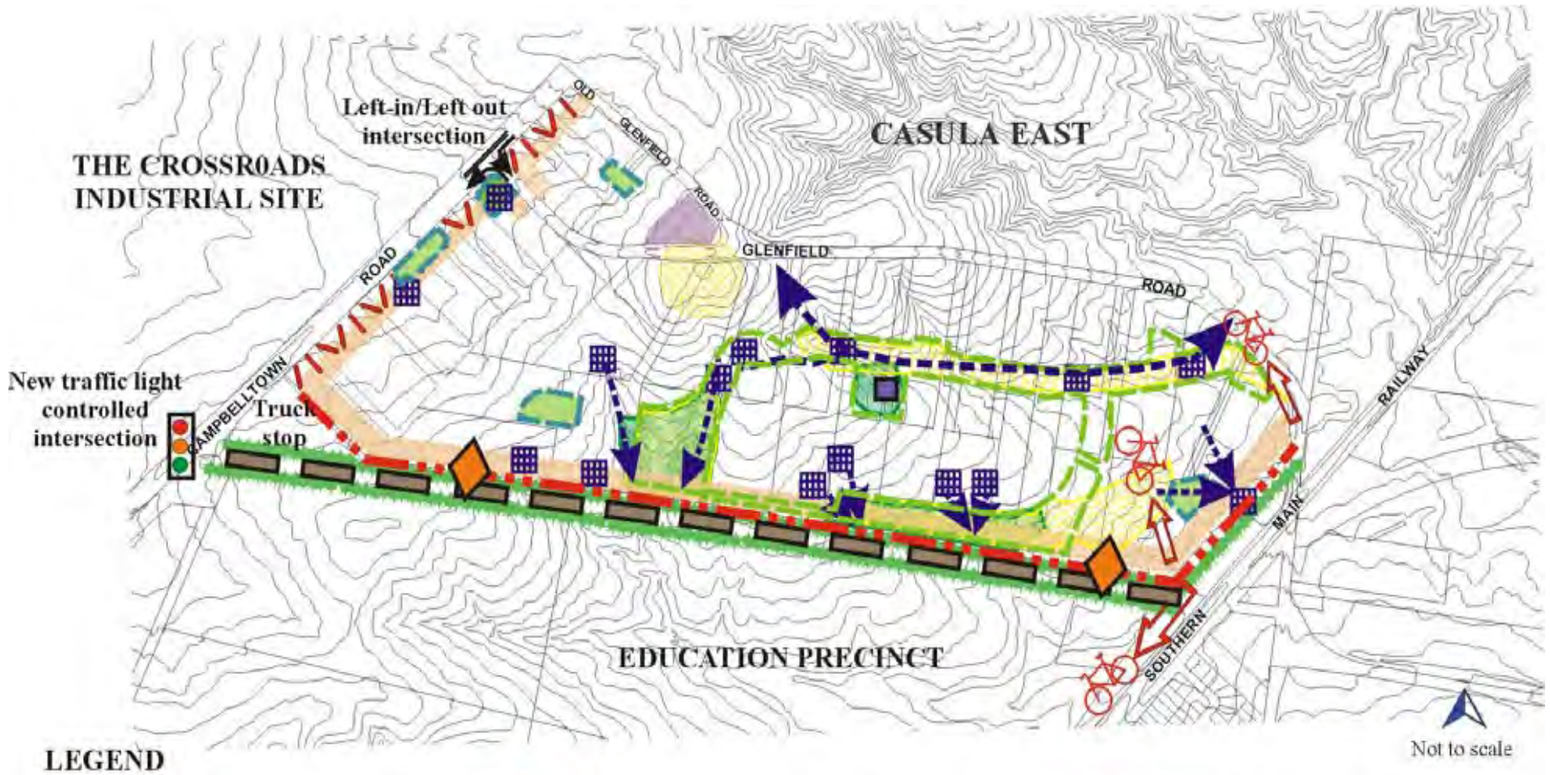
The "***development requirements***" are possible ways of achieving the outcomes. While these solutions may satisfy the performance criteria, other solutions could also be adopted.

1.9.2 It is essential that all development satisfies the performance criteria to meet the objectives of those criteria, and in some cases compliance with the development standard may not be sufficient. The aim is to suit the approach to the site while satisfying market requirements and enable proponents to develop a variety of design responses.

1.10 When did this plan come into force?

This plan came into force on 28 February 2003.

Development Control Plan Map



LEGEND

- New Road (access denied)
- Connection to new road
- Acoustic / visual barrier
- Acoustic wall
- Landscape treatment along roadways & acoustic walls
- Dwellings limited to 1 storey to minimize height required for acoustic barriers. Acoustic treatment required if more than one storey
- Provide pedestrian / cycling access opportunities to train station
- Important remnant bushland to be senstively integrated into open space corridor
- Isolated archaeological find
- Areas of potential archaeological deposits (PADs) requiring monitoring during construction
- Natural creek line to be retained
- Possible water management structure
- Site of Proposed Multi-Purpose Community Centre
- Location of Pocket Parks (Note areas as required)
- Open Space Corridor

NOTES:
1. Refer to detailed studies in LES for definition of constrained area

1.10 What is a Site Analysis?

A site analysis is the process of examining and recording the opportunities and constraints to the potential development of the site, including consideration of how such development may best and achieve compatibility with the existing and likely future urban character of the locality. A thorough site analysis should form the basis for the design of any development proposal, to ensure that the best possible design for a site is achieved.

In some situations, a design for a proposal may not be able to fully or ultimately satisfy all the performance criteria established in this Plan. It is important for Council, developers and designers to use the site analysis as the basis for determining which objectives and performance criteria are more important. In these cases, consideration to a trade-off between the critical criteria of the Plan can be based on the conclusions of the site analysis.

Each application will need to demonstrate that a site analysis has been undertaken. The preferred means to demonstrate that a site analysis has been undertaken is to provide an annotated diagram and, if appropriate, commentary within an accompanying Statement of Environmental Effects.

An investigation of the site should identify:

- Site dimensions:
- Topography: spot levels and/or contours; north point; natural drainage; and any contaminated soils or filled areas.
- Services: easements/connections for drainage and utility services.
- Existing vegetation: location; height; spread of established trees; and species.
- Micro climates: orientation; and prevailing winds.
- Location of buildings and other structures; heritage and archaeological features; fences; property boundaries; and pedestrian and vehicle access.
- Views to and from the site.
- Overshadowing by neighbouring structures.

Features of the surrounding locality that should be considered within a site analysis include:

- Neighbouring buildings: location; height; and use.
- Privacy: adjoining private open spaces; living room windows overlooking site (particularly those within 9m of the site); and location of any facing doors and/or windows.
- Walls built to the site's boundary: location, height and materials.
- Difference in levels between the site and adjacent properties at their boundaries.
- Views and solar access enjoyed by neighbouring properties.
- Major trees on adjacent properties, particularly those within 9m of the subject site.
- Street-frontage features: poles; trees; kerb crossovers; bus stops; and other services.
- The built form and character of adjacent development including: architectural character; front fencing; and garden styles.
- Heritage features of surrounding locality and landscape.

- Direction and distance to local facilities: local shops; schools; public transport; and recreation and community facilities.
- Public open space: location; and use.
- Adjoining bushland or environmentally sensitive land.
- Sources of nuisance: noisy roads or significant noise sources; and polluting operations.

1.11 What is required to lodge a Development Application?

Applicants are encouraged to use the services of architects, town planners, engineers, landscape architects, professional designers and other specialists as required to undertake the site analysis, design of development and to prepare the supporting documentation. Consultation with neighbours and Council officers before completing the proposal is highly recommended.

The amount of information required for a development or building application will vary depending on location, scale and complexity of the proposal.

The following information *must* be submitted as part of an application:

- a completed **application form**, signed by the owner of the land or accompanied by the written authority of the owner to lodge the application (including where appropriate the company seal or seal of the body corporate).
- **application fees** as advised by Council.
- **A survey or site plan** at a scale of 1:200 showing:
  - site dimensions;
  - changes of levels on the site;
  - the position of buildings on the site and adjoining sites and the ridge-lines and eaves levels of those buildings; (All levels should be to AHD)
  - existing vegetation, showing canopy spread of trees and ground levels at the base of the trunk;
  - spot levels of street frontage including road gutter; and
  - easements for drainage and services affecting or benefiting the subject property.
- a **site analysis** as outlined in Section 1.11, including a statement of how the proposed development has addressed the site opportunities and constraints identified.
- **architectural plans** (3 copies) at a minimum scale of 1:200 showing:
  - dimensions and reduced levels of all floors and ridge-lines;
  - detailed floor plans; and
  - all elevations and relevant sections.
- **notification plans** (A4 size) showing the location, height and external configuration of the proposed development.
- a **statement of environmental effects** (for all development applications) which:
  - explains how the proposal has addressed the relevant considerations contained in section 79C of the Environmental Planning and

Assessment Act 1979, and in particular this Plan;

- explains how the project design has responded to the information contained in the site analysis; and
- demonstrates that the intent of the criteria has been satisfied.

- a **landscape plan** showing:
  - proposed site contours and reduced levels at embankments, retaining walls and other critical locations
  - existing vegetation and the proposed planting and landscaping (including proposed species)
  - general arrangement of hard landscaping elements on and adjoining the site
  - proposed lighting arrangements
  - proposed maintenance and irrigation systems.

- A **stormwater management plan** specifying the proposed method of draining the site and provision of on-site stormwater detention. Location, diameter, invert levels and specification of all proposed piping with supporting calculations are to be included.

Other information may also be required, including:

- **shadow diagrams** showing the effect of 9am, 12 noon and 3pm shadows during mid-winter.
- a **species impact statement** where a threatened species, population or community is identified in accordance with the *Threatened Species Conservation Act*.
- a **SEPP 1 Objection** signed by the applicant outlining why compliance with a particular development standard (contained in Campbelltown (Urban Area) LEP 2002 or other applicable environmental planning instrument) is unreasonable or unnecessary.

Note: Refer to State Environmental Planning Policy No. 1 – *Development Requirements*

- **soil and water management and sediment control plan**, for all subdivisions requiring site works and residential development sites with gradients exceeding 15% or over 2000m^2 in area.
- an **environmental site assessment** (site contamination report), where it is known or suspected that the site is subject to site contaminants.

Note: *Reference should also be made to State Environmental Planning Policy No. 55 – Remediation of Land*

For further information, refer to Council's application form or enquire with Council's Planning and Environment Division.

- a **Salinity Hazard Assessment** assessing the Salinity Hazard Potential and recommending how to address any on site salinity hazards.

- a **Bushfire Hazard Assessment** where land is within 100 metres of bushland in accordance with Planning for Bushfire Protection, as produced by the NSW Rural Fire Service and which recommends how to manage the risks.

- an **Acoustic Assessment** where land is adjacent to an arterial road and recommending measures necessary to meet requirements of the Environmental Protection Authority for residential development.

Part 2 Criteria for Development

2.1 Masterplan

OBJECTIVES

a. To ensure that the area to which this plan applies is planned in a comprehensive and integrated manner.

b. To provide details in regard to the urban form and design of the new residential area in the form of a Masterplan, including the location of public open space, roads, lot configurations, pedestrian access connections, drainage systems, preservation of significant vegetation and the provision of community facilities and services and public utilities.

c. To provide safe, convenient and effective new neighbourhoods that meet the diverse and changing needs of the community.

Performance Criteria	Development Requirements
P1.1 Development must proceed in accordance with a comprehensive masterplan.	**D1.1** Development must conform to an adopted Masterplan. No development application will be approved until a Masterplan has been adopted in accordance with the provisions of this Plan.
P1.2 The urban form and layout of the new residential area is to create a distinct and positive identity, by responding to site characteristics, the natural setting, landmarks and views and through clearly readable street and open space networks.	**D1.2** A Masterplan is a document adopted by a resolution of Council, consisting of written information, maps and diagrams that make more detailed provisions relating to development of the land. A Masterplan must be generally consistent with this plan.
P1.3 While allowing for the creation of its own identity, the new residential area is to retain important linkages with surrounding established areas, and is not to result in any amenity impacts upon these areas.	**D1.3** A draft Masterplan may be prepared by or on behalf of the owner or lessee of the land concerned, or by Council.
P1.4 Vehicle, cyclist and pedestrian networks, land use mix and residential density should minimise fossil fuel use by reducing local vehicle trips, travel	

Performance Criteria	Development Requirements
distances and speeds, maximise public transport effectiveness, and encourage walking and cycling to daily activities.	
P1.5 The site layout should retain significant vegetation and habitat areas, incorporate natural features, minimises soil erosion and avoid development on flood prone land.	**D1.4** A draft Masterplan should be prepared following consultation with Council and is to illustrate and explain, where appropriate, proposals for the following: • Phasing of development; • Distribution of land uses; • Pedestrian and cycle circulation networks; • Roads; • Parking provision; • Subdivision pattern; • Infrastructure provision; • Treatment proposed for road corridors; • A concept landscape plan; • Decontamination of the site; • Provision of public facilities; • Provision of open space, its function and landscaping; • Any other matters stipulated by the Council. **D1.5** The Masterplan must incorporate a stormwater management plan, which addresses those issues identified in the local environmental study, which preceded the zoning of the land. **D1.6** Before the Council adopts a Masterplan: • The draft Masterplan must be advertised, and exhibited for not less than 21 days for public comment; • The Council must take into account any written submissions made about the content of the plan during the exhibition period. **D1.7** A Masterplan may be replaced or amended by the preparation of a subsequent or amending Masterplan, which complies with the above

Performance Criteria	Development Requirements
	consultation and determination process.

2.2 Streetscape and Urban Character

OBJECTIVES

a. To ensure that all new development is compatible with the intended future character of the estate.

b. To ensure that new development is sensitive to the landscape setting and environmental conditions of the locality.

c. To ensure that the appearance of new development is of a high visual quality enhances the streetscape and compliments good quality surrounding development.

Performance Criteria	Development Requirements

Performance Criteria	Development Requirements

Urban Character

P1. Development should be consistent with the desired urban character for the estate. Elements which describe the desired urban character are as depicted by the Masterplan and described as follows:

- To create a high quality masterplanned residential estate.
- The creation of a legible, attractive and inviting entry statement at the main entries to the estate.
- To create a variety of housing choice, inclusive of both standard detached housing and multi-unit dwellings.
- Achievement of a net residential density of 15 dwellings per hectare (exclusive of open space and community facilities land), so as to maximise the viability of public transport.
- To ensure vehicular access is simple, safe and direct and creates a pleasant environment.
- To provide maximum connectivity through the estate for pedestrians, with a central pedestrian/cycle network, which takes advantage of the attractiveness of the proposed open space corridor, to encourage pedestrian/cycle movements throughout the estate, connecting to Glenfield Railway Station and shops.
- The provision of community facilities within the estate, which provides a focal point for, the incoming population, linked by the pedestrian/cycle and open space system.

D1.1 The development should be consistent with the desired urban character of the estate and the Masterplan.

D1.2 Those major elements site opportunities and constraints to be taken into consideration in the formulation of the masterplan and subsequent development proposals are depicted upon the Development Control Plan Map.

Typical future urban character- multi-unit dwelling development

Performance Criteria	Development Requirements

Streetscape

P2.1 Development should positively contribute towards the creation and enhancement of the visual character of the street with particular reference to architectural themes, landscape themes and fencing styles.

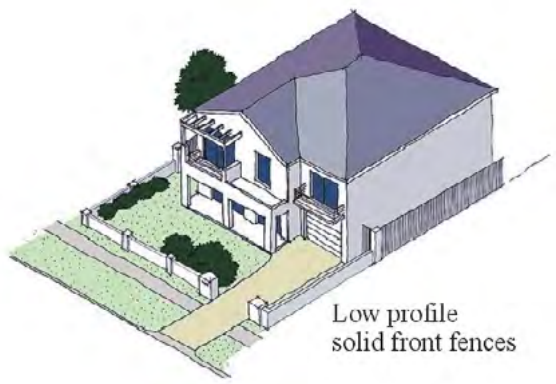
D2.1 New buildings shall adhere to a minimum front building line of 4.5 metres. A setback of 5.5 metres applies to the face of garage doors or carports.

D2.2 Subdivision proposals shall provide for street tree planting consistent with the Masterplan.

D2.3 Landscaping shall be provided with all developments, which is consistent with the Masterplan and incorporate existing trees where possible.

P3. Front Fences

Front fences and walls should maintain the streetscape character and be consistent with the established style and pattern of fences in the locality.



D3.1 Front fences (or absence thereof) should be consistently provided in accordance with a theme specified by the Masterplan.

D3.2 Visually impenetrable solid forms of front fences (such as masonry or timber fences) should not exceed a height of 0.9 m.

D3.3 Visually penetrable front fences (such as pre-painted metal grill or timber picket fences) should not exceed a height of 1.2 metres.

D3.4 Front fences of a height exceeding 1.2 metres in height are permitted only where required to satisfy acoustic abatement criteria and should be provided with a landscaped area of not less than 600mm wide on the street side of the fence and should not exceed 10 metre in length without some articulation or detailing to provide visual interest.

2.3 Subdivision Design

OBJECTIVES

a. To encourage a variety of lot sizes to promote housing choice.

b. To develop a subdivision and lot size pattern that will reinforce the desired future character of the estate.

c. The ensure the future allotments are of a size and configuration to accommodated future intended housing, in recognition of any constraints that may exist on the land.

d. To provide usable allotments which maximise energy efficiency and mitigate environmental impacts.

e. To design roads which balance the functions of traffic movement and pedestrian and residential amenity.

Performance Criteria	Development Requirements

Performance Criteria	Development Requirements

P1 Minimum Allotment Sizes

Lot size and dimensions should be capable of accommodating a dwelling or a multi-unit housing development where consistent with the Masterplan, in a manner which complies with all other requirements of this DCP, inclusive of the provision of adequate landscaped area, private open space and car accommodation.

D1.1 The minimum lot size for each dwelling type shall be as follows:

Housing Type	Minimum Lot Size	Site Width at the Building Line
Single Detached Dwelling	450m^2	15m
Zero lot line or semi-detached dwelling	350m^2	7.5m
Terraces	240m^2 [1]	7.5m
Multi-unit housing developments	1500m^2	25m

[1] The development of terrace houses is only permitted in a minimum group of 6 dwellings (which may include other dwelling forms). A combined minimum development site of 1500m^2 is therefore required for terrace developments

D1.2 Lots to be created for single detached dwellings should be able to accommodate a building envelope of 200m^2 with a minimum dimension of 10 metres.

D1.3 Subdivision proposals for zero lot line, semi-detached and terrace housing must be accompanied by development plans for the proposed housing, to be approved by Council in conjunction with the subdivision.

Performance Criteria	Development Requirements
P2 Rear accessways Rear accessways may be provided as part of a subdivision, but shall not be dedicated as a public road.	**D2.1** All rear accessways shall not be dedicated as public roads but rather shall be a common lot in a community title subdivision incorporating those lots to which are provided rear access.

2.4 Building Form

OBJECTIVES

a. To ensure that the bulk, scale and height of proposed development provides reasonable neighbour amenity and maintains an appropriate residential character.

b. To ensure that adequate sunlight access and ventilation for living areas and private open spaces of new and neighbouring dwellings is provided for.

Performance Criteria	Development Requirements

Building Size and Setbacks

P1.1 The form of proposed buildings, which is controlled by setbacks, height, the extent of cut and fill and achievable floorspace should be consistent with the intended character of the locality within which it is located.

Possible building form

D1.1 The maximum height of buildings should not exceed 2 storeys in height. A third storey, in the form of attic rooms, may be provided in terrace housing or required for architectural articulation of buildings (eg. in a street corner situation).

D1.2 The maximum floorspace ratio (FSR) of buildings shall not exceed the following:

Location Maximum FSR for sites less than 1,500m^2	Maximum FSR for sites equal to or greater than 1,500m^2
0.5:1	0.6:1

Performance Criteria	Development Requirements
	D1.3 Setbacks from side and rear boundaries to be as follows: -
	D1.4 Walls with windows or other openings are to have a minimum setback of 1.0m. Variations will be considered on their merits.
	D1.5 Walls built to site boundaries to have a maximum wall height of 3.5 metres and a maximum wall length of 40% of the abutting property boundary (unless matching an existing or simultaneously constructed wall, eg. semi detached house or terrace building). Where dwellings proposed in a minimum group of 6, the 2 storey dwellings may be constructed with a nil setback to the boundary for a maximum length of 10 metres for the 2 storey section. Variations will be considered on their merits.
	D1.6 A minimum side setback of 1.5m applies to corner lots.
Building Design	
P2. The building design, detailing and finish should provide an appropriate scale to the street; add visual interest when viewed from public streets.	**D2.1** The frontage of buildings and their entries should address the street, including Old Glenfield Road and Glenfield Road. Vehicular access to lots having frontage to Old Glenfield Road and Glenfield Road shall be from adjoining streets in accordance with the Masterplan.
	D2.2 A maximum unarticulated length of a wall facing a public street to be 6.5 metres.
	Note: *Punctuation by bay windows, verandahs, balconies or wall offsets may be considered to be adequate articulation*.

2.5 Open Space and Landscaping

OBJECTIVES

a. To provide sufficient and accessible open space for the reasonable recreation needs of the likely residents of the proposed dwelling.

b. To provide private outdoor living areas that relate well to the living areas of dwellings.

c. To enhance the appearance, amenity, energy and water efficiency of developments through integrated landscape design.

Performance Criteria	Development Requirements
Private Outdoor Living Areas	
P1.1 Each dwelling to have access to some usable and private external area.	**D1.1** All dwellings shall be provided with some form of outdoor living area such as either private open space, balconies or roof terraces.
P2.1 Private outdoor living areas are clearly defined and screened for private use.	**D2.1** Private outdoor living areas located at ground level should be: • Bound by buildings, fencing or dense landscaping which will restrict views to a height of 1.8m • a minimum area of 20% of the site area of each allotment with a minimum dimension of 2.5m • one area with a minimum dimension of 4m x 4m • directly accessible from a living area of the dwelling • a maximum gradient of 1 in 10
P2.2 Private outdoor living areas are located to: • take advantage of available outlooks or views and natural features of the site • reduce adverse impacts of adjacent buildings on privacy and overshadowing • resolve surveillance, privacy and security issues when private open space abuts public space.	**D2.2** Private open space and balconies shall take advantage of mid and long distance views where privacy impacts will not arise. **D2.3** Fencing of private open space, where abutting public open space, shall be provide for some cross viewing.

Performance Criteria	Development Requirements
• **P3.** Orientation of the private outdoor living areas should achieve comfortable year round use. **Landscaping**	**D3.1** Compliance with the provisions of Section 2.5 of this Plan.
P4. The landscape design specifies landscape themes, vegetation (location and species), paving and lighting that provide a safe, attractive and functional environment for residents, integrates the development with the neighbourhood and contributes to energy efficiency and water management.	**D4.1** The submission of a landscape plan. **D4.2** A minimum of 20% of landscaped area in residential zoned areas should consist of deep rooted tree plantings. **D4.3** The proposed landscaping to comply with the minimum specification requirements outlined as Schedule C.
P5. Major existing trees are retained in viable condition wherever practicable through appropriate siting of buildings, accessways and parking areas and appropriate landscape treatment.	**P5.1** No building structures or disturbance to existing ground levels are proposed within the drip line of existing significant trees to be retained as recommended in a report submitted by a qualified horticulturist. ***Note**: Council has an existing Tree Preservation Order and approval should be sought for any lopping, major pruning or removal of existing trees.*

Incorporating existing trees into parkland,
and orientation of dwellings to address the open space

2.6 Ecologically Sustainable Development

OBJECTIVES

a. To reduce the demand for waste disposal by maximising the reuse and recycling of building/ construction materials.

b. To promote development which maximises the opportunities for energy efficient uses of resources, particularly in regard to solar power and water management.

c. To encourage the protection and conservation of native animals and plants, including threatened species, populations and ecological communities and their habitat.

d. To ensure that redevelopment of contaminated or potentially contaminated land does not pose a risk to public health or the environment, is suitably assessed to determine the extent of contamination, and is remediated to render the site suitable for the proposed use.

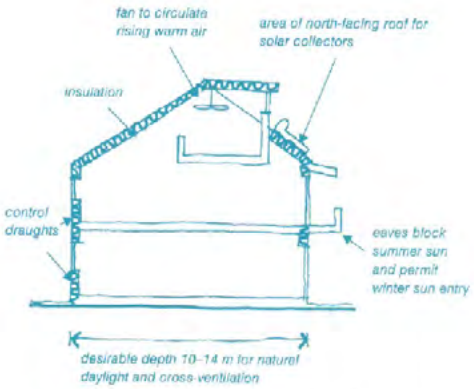
Performance Criteria	Development Requirements
Waste Management	
P1. Provide procedures to facilitate waste minimisation and materials recycling as part of the demolition and construction process.	**D1.1** Identify and nominate opportunities to reuse materials from the demolition and excavation phase for the proposed new use as well as potential waste materials (such as recyclable packaging, off cuts and other excess materials as part of the construction process.
 Dedicated metal recycling skip, Seven Hills Waste Transfer Station. Source : Waste Planning Guide for Development Applications 1998	***Note:*** *A list of premises which take recyclable material can be accessed through the Waste Board's internet web site in* *www.wasteboard@nsw.gov.au*

Performance Criteria	Development Requirements
 **Recover** valuable **resources** from the waste stream for recycling and reuse. **Resource Recovery** reduces disposal costs, prevents further environmental damage and saves resources for further use. Source : Waste Planning Guide for Development Applications 1998	**D1.2** Provision of designated areas on the site sufficient for colour coded or labelled storage bins, containers or stockpiles for separated and any left-over waste from the construction process in locations with convenient vehicular access for removal by the waste contractor.

Performance Criteria	Development Requirements
Energy Efficiency	
P2 Design developments so as to facilitate the use of renewable energy sources wherever possible.	**D2.1** Provide for solar water heaters where hot water supply is necessary. Where possible, solar water heaters should be installed to face directly north for maximum efficiency. Alternatively, place solar panels facing east to west (which still achieves 88% of the efficiency of a north-facing panel). If solar water heaters are not installed the design of new buildings must ensure there is the ability to install a suitable system at a later date. **D2.2** Solar hot water panels should be mounted at a 30^{o} angle from the horizontal. **D2.3** All solar water heaters need to comply with the relevant Australian Standards for their installation (refer to AS 3500.4 – 1990 National Plumbing and Drainage Code, Part 4, Hot Water Supply Systems) and for their design and manufacture (refer to AS 2712 – 1993 Solar Water Heaters, Design and Construction). **D2.4** Solar collectors on proposed buildings or existing buildings on adjoining properties, or a minimum $3m^2$ of north facing roof (in the event that there are no existing solar collectors on proposed or neighbouring buildings) should have unimpeded solar access between the hours of 9 am and 3 pm on June 21.

Performance Criteria	Development Requirements
P3 Subdivisions to facilitate maximum solar access to future residential development.	**D3.1** Orient the majority of streets within 20^0 west of north and 30^0 east of north.
P4 Residential buildings and private or communal open space should be designed to control summer sun and allow the penetration of winter sun to ensure reasonable access to sunlight or daylight for living spaces within buildings and open space around buildings.	**D3.2** Maximise streets with predominantly north-south orientation or lots with predominantly east-west orientation to maximise solar access to lots and facilitate installation of solar collectors.
	D4.1 At least one internal living area and a minimum of 50% of the principal area of ground level private open space (ie. that part which complies with D2.1 of Section 2.5) to have access to a minimum of 2 hours of direct sunlight between the hours of 9 am and 3 pm on June 21.
	D4.2 Where existing overshadowing is greater than what is required in D4.1 then the proposed development shall not cause a further reduction in solar access.
	D4.3 The western walls of a residence should be suitably screened (with pergolas, other shading devices or vegetation) or alternatively, the number of window openings should be minimised.
P5. Provide insulation so as to minimise the need for artificial heating and cooling to provide adequate comfort level for occupants.	**D5.1** Insulation for all dwellings to achieve a recommended ”R” value for external walls of R1.0 and for roofs and R1.5 ceilings. In this regard, compliance with AS 2627-1993 Thermal Insulation of Dwellings Part 1 is recommended.
	Note: *The effectiveness of insulation to resist heat flow through its fibres, particles, etc. is known as its “R” value.*

Performance Criteria	Development Requirements
P6. New buildings should incorporate sufficient thermal massing (heat bank storage) to reduce the need for additional heating.	**D6.1** Detail consideration in the design of buildings to be provided in regard to the position and level of glazing on the external walls to assist the use of thermal massing. Generally, a relatively large proportion of glazing is required on the northern side of buildings to enable the heavy weight of materials of the building to directly absorb heat from the winter sun. **D6.2** Glazing should be positioned to allow the lower angle of the winter sun to penetrate the internal areas of buildings while excluding a greater proportion of the higher angled summer sun. **D6.3** Maximise the thermal mass of walls and floors by utilising materials such as bricks, stone etc. for walls and a concrete slab on ground floor for flooring.
P7 New buildings should provide for the use of water efficient fixtures to reduce the demand for (mains) water and wastewater discharge.	**D7.1** New development to provide a minimum of 2 water efficient fixtures per residential dwelling.
P8 Development should be designed to maximise the utilisation of natural winds for air conditioning purposes to reduce the need for electrical air conditioning systems.	**D8.1** Developments should seek to utilise or be sheltered from prevailing winds, as appropriate, (in Campbelltown during the summer season, use can be made of the cooling prevailing afternoon winds which come from an east/north-east direction). **D9.1** Early consideration of window placement can permit cross ventilation.



Some considerations for energy-efficient housing in temperate climate zones.

Source : AMCORD 1995

Note: *This is where cool air enters a building from one side and exits via another. This movement of air will allow warmer inside air to be replaced with cooler outside air.*

Performance Criteria	Development Requirements
P9 The design and management of landscaping should reduce the consumption of mains water that would otherwise normally be required.	**D9.1** Landscape design should: • Choose species of plants which are suited to the soil type and aspect of the area, thereby reducing the need for supplementary watering; • Provide a minimum cover of 75mm to 100mm of mulch on garden areas; • Minimise the area of lawn and substitute with ground cover or native grasses.
Flora and Fauna Conservation	
P10 Development should not affect threatened species, populations or ecological communities and their habitats in any way, including: • their removal or destruction; • an alteration to drainage patterns, water quality, solar access or potential for weed invasion in a manner, which would critically affect their long-term survival. ***Note:*** *Reference should be made to the provisions of the Environmental Planning & Assessment Act, 1979 and the Threatened Species Conservation Act in regard to the requirements for the protection of rare, threatened or*	**D10.1** The proposed development should not affect the endangered ecological community known as Cumberland Plain Woodland, the area of which is delineated upon the DCP Map. **D10.2** A plan of management to be adopted by Council for the Woodland area and riparian corridors to be conserved prior to development works proceeding. **D10.3** Where there is potential for scheduled species to be threatened by a proposed development, an 8-part test shall be undertaken to confirm the existence or otherwise of threatened species. **D10.4** Where confirmed by 8-part test, or where the existence of threatened species is known, a Threatened Species Impact Statement shall be provided with the Development Application, and the design of the development shall take into consideration the findings of that statement.
Site Contamination	
P11 All land that is known or is subject to potential contaminants is to	**D11.1** A detailed contamination assessment be completed and

Performance Criteria	Development Requirements
be remediated prior to occupation in a manner, which will reduce the risk of harm to human health or any aspect of the environment to accepted EPA standards.	submitted with any development applications, focusing on the areas categorised as medium or high risk within the report prepared by Sinclair Knight Merz (Ref EN01176, November 2001) prepared as part of the LES.

Performance Criteria	Development Requirements
	D11.2 A detailed Stage 2 contamination investigation to be undertaken in areas identified as likely to be contaminated. This will require an intrusive investigation involving soil sampling and analysis, focussing on the results from the previous studies, to assess the nature and extent of any contamination on the site in accordance with ANZECC, NHMRC and NSW EPA Guidelines. **D11.3** In the event of contamination being found at the site, a remedial action plan (RAP) is to be prepared and submitted to Council for approval prior to the issue of development approvals. The RAP must identify options for treatment or disposal of contamination on, or off-site.
Bushfire Risk	
P12 Development on land that is subject to bushfire risk shall be designed so that the development is not subject to risk from bushfire.	**D12** Where land is subject to bushfire risk the development shall be constructed to satisfy the requirements of *Planning for Bushfire Protection*, as produced by the NSW Rural Fire Service.
Salinity	
P13 All land that is known or is subject to potential salinity shall be remediated to minimise the impact of salinity.	**D13** In the event of salinity being found at the site, a remedial action plan (RAP) is to be prepared and submitted to Council for approval prior to the issue of development approvals. The RAP must identify options for treatment of salinity.

2.7 Aboriginal Heritage

OBJECTIVES

a. To conserve sites or relics of significance to Aboriginal Heritage.

Performance Criteria	Development Requirements
P1.1 No development or associated site works are to result in the disturbance of any known artifact or area of potential aboriginal archaeology deposit (PAD) without the prior approval of the NPWS and Local Aboriginal representatives.	**D1.1** The identified isolated artifact shown on the DCP Map shall not be subject to any disturbance, unless a written permit to collect from the Director of the NPWS is obtained. If to be disturbed, arrangements shall be made with the Cubbitch Barta Native Title Claimants Aboriginal Corporation to obtain custody of the relic after collection. **D.1.2** During the initial phases of development construction, affecting areas of potential archeological deposits (PADs), as depicted upon the DCP Map, shall be monitored by Local Aboriginal representatives, as required. In this regard, the requirements of the Tharawal Local Aboriginal Land Council and Cubbitch Barta Native Title Claimants Aboriginal Corporation, shall be confirmed and communicated to Council. ***Note:*** *It is an offence under the terms of the National Parks & Wildlife Act, 1974 (as amended) to damage, deface or destroy an Aboriginal relic or place without obtaining the written consent of the Director, National Parks & Wildlife Service NSW.*

2.8 Water Management

OBJECTIVES

a. To provide drainage systems which adequately protect people and the natural and built environments at an acceptable level of risk and in a cost effective manner and which contribute positively to the environmental enhancement of catchment areas

b. To ensure effective and adequate drainage is provided for new development sites.

c. To ensure development is designed in consideration of potential flood hazards.

d. To maximise conservation of water.

Performance Criteria	Development Requirements

Performance Criteria	Development Requirements
Floodplain Management	
P1.1 The proposed development should not result in any increased risk to human life.	**D1.1** Compliance with Council's Flood Policy and the provisions of the State Government 's "Floodplain Development Manual" available from the NSW Department of Land and Water Conservation.
P1.2 Potential economic and social costs, which may arise from damage to property from flooding, should not be greater than that which can reasonably be managed by the property owner and general community.	
Stormwater Drainage	
P2 Stormwater runoff generated by new development should be managed to protect any potential damage to persons or property.	**D2.1** All properties, subject to D3.1 shall be piped to the stormwater system as depicted in the Water Management Plan forming part of the adopted Masterplan. Where properties fall away from the street and/or are unable to drain to a trunk drainage system, an easement for draining stormwater is required through downstream properties.
	D2.2 Where a drainage easement is required, written agreement from the downstream owner shall be submitted with the development application and the easement shall be registered prior to issue of the construction certificate.

Performance Criteria	Development Requirements
Rainwater Tanks **P3.** Maximum reuse of stormwater should be achieved.	**D3.1** A rainwater tank shall be provided in conjunction with each dwelling in accordance with the following requirements: • the tank shall have a minimum capacity of 5,000 litres, • the tank shall be used for toilet flushing and other non potable domestic water uses such as gardens etc, • the tank must be designed to capture and store roof water from gutters or downpipes on a building and not from another source other than a water supply service pipe, • the tank must be fitted with a first-flush device, being a device that causes the initial run-off of any rain to bypass the tank to reduce pollutants entering the tank, • the tank must be provided with a backflow prevention device where it is also connected to a water supply service pipe, • the tank must be structurally sound, • the tank must be prefabricated, or be constructed from prefabricated elements that were designed and manufactured for the purpose of the construction of a rainwater tank, • the tank must be assembled and installed in accordance with the instructions of the manufacturer or designer of the tank, • the tank, and any stand for the tank, must be installed and maintained in accordance with any requirements of Sydney Water,

Performance Criteria	Development Requirements
	• the installation of the tank must not involve the excavation of more than 1 m from the existing ground level, or the filling of more than 1 m above the existing ground level, • the tank must not be installed over or immediately adjacent to a water main or a sewer main or over any structure or fittings used by Sydney Water unless it is installed in accordance with any requirements of Sydney Water, • no part of the tank or any stand for the tank may rest on a footing of any building or other structure, including a retaining wall, • the tank must be located behind the front alignment to the street of the building to which the tank is connected (or, in the case of a building on a corner block, the tank must be located behind both the street front and street side alignments of the building), • the tank must not exceed 2.4 m in height above ground level, including any stand for the tank, • the tank must be located at least 450 mm from any property boundary, • a sign must be affixed to the tank clearly stating that the water in the tank is rainwater, • any overflow from the tank must be directed into an existing stormwater system, • the tank must be enclosed, and any inlet to the tank must be screened or filtered, to prevent the entry of foreign matter or creatures, • the tank must be maintained at all times so as not to cause a

	nuisance with respect to mosquito breeding or overland flow of water,

Performance Criteria	Development Requirements
	• any plumbing work undertaken on or for the tank that affects a water supply service pipe or a water main must be undertaken: (i) with the consent of Sydney Water, and (ii) in accordance with any requirements by Sydney Water for the plumbing work, and (iii) by a licensed plumber in accordance with the New South Wales Code of Practice— Plumbing and Drainage produced by the Committee on Uniformity of Plumbing and Drainage Regulations in New South Wales, • any motorised or electric pump used to draw water from the tank or to transfer water between tanks: (i) must not create an offensive noise, and in the case of a permanent electric pump, must be installed by a licensed electrician. • all residential lots created shall carry an S88B restriction specifying that a rainwater tank shall be installed in conjunction with a dwelling in accordance with the requirements of Council and Sydney Water.

2.9 Transport

OBJECTIVES

a. To increase opportunities for choice in mode of transport and to assist in facilitating cost effective and energy efficient public transport services that are acceptable and convenient to the community.

b. To encourage walking and cycling by providing safe, convenient and legible movement networks to points of attraction within and beyond the development and facilities for the secure temporary storage of bicycles.

c. To provide convenient and safe access and parking to meet the needs of all residents and visitors.

d. To provide access arrangements which do not impact upon the efficient or safe operation of the surrounding road system.

d. To encourage the integrated design of access and parking facilities to minimise visual and environmental impacts.

Performance Criteria	Development Requirements

Performance Criteria	Development Requirements

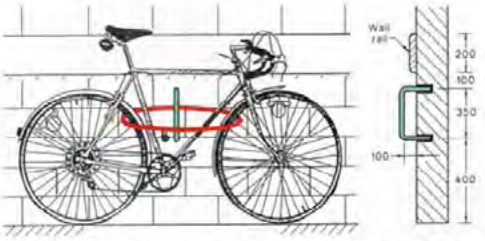
Public Transport

P1. Site layout and location should maximise opportunities for use of public transport.

D1.1 All future dwellings are to be within 400 metres walking distance of a bus route.

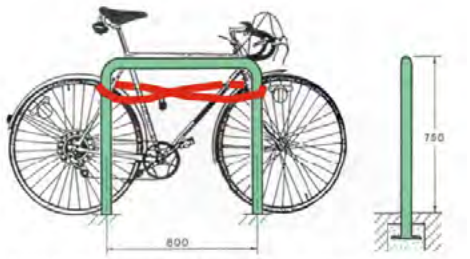
D1.2 Where opportunities exist, pedestrian and cycle links should be provided to public transport facilities, a bus route and the Glenfield Railway Station.

D1.3 Pedestrian and cycle links are to be well lit and benefit from casual surveillance from surrounding development or vehicular routes in regular use (eg. bus routes).



Wall-mounted bracket and rail - frame and both wheels secured by single chain

Source : AS2890.3 - 1993 Parking Facilities



Floor Rail - frame and both wheels secured by single chain in figure - of - eight pattern

Source : AS2890.3 - 1993 Parking Facilities

Performance Criteria	Development Requirements
	D1.4 Bicycle racks in safe and convenient locations are to be provided in multi-dwelling housing developments with a total gross floor area exceeding 1,000m^2, at the rate of one rack per 5 dwellings.
Access and Circulation Design	
P3. Vehicular movement to and from the site and within the site, should be designed to reduce potential conflict with other vehicles and pedestrians.	**D3.1** No direct vehicular access to Campbelltown Road, Old Glenfield Road, Glenfield Road or any possible future link road adjacent to the southern boundary of the estate. A S88B restriction shall be placed on each lot having frontage to these roads prohibiting access to these roads. **D3.2** Accessways and driveways for multi-unit dwelling developments with common driveways: • Are designed to enable vehicles to enter the parking space in a single turning movement; • Leave the parking space in no more than two turning movements; • Comply with AS 2890 – 1993 (Parts 1 to 5) Parking Facilities • Comply with AS 1428.1 – 1993 Design for Access and Mobility
P4. Accessways, driveways and open parking areas are suitably landscaped to enhance amenity while providing for security and accessibility of all residents and visitors.	**D4.0** Landscaping along driveways and accessways to be provided as required to a minimum standard which complies with the specification provided as Schedule C.

Performance Criteria	Development Requirements
Vehicular Parking	
P6. Parking facilities are designed and located to: • conveniently and safely serve users; provide designated car parking spaces for people with disabilities; • enable the efficient use of car spaces and accessways; • use innovative solutions to car parking (underground, semi-basement or dual use) particularly where site conditions permit; and • reduce the visual dominance of car parking areas and accessways.	**D6.1** Designated car parking spaces comply with the requirements of parking for persons with disabilities specified by AS 2890.1 and AS 1428.2. **D6.2** Car parking spaces and areas to be designed to comply with AS 2890 – 1993 (Parts 1 to 5) Parking Facilities.

Performance Criteria	Development Requirements
P7. Car parking is provided with regard to the: • likely parking demand generation of the development; • availability of public transport • availability of on-street car parking • locations of schools and local shops • possible demand for car parking space from adjoining localities; • occasional need for overflow car parking; • requirements of people with a limited mobility, sensory impairment and at different stages of the family life cycle.	**D7.1** Accommodation on-site for 2 cars provided for single detached dwelling-houses. **D7.2** Car parking is provided for multi-unit dwelling developments at the following rates

Number of Bedrooms per Dwelling	Car Parking Spaces per dwelling
Bedsitter or 1 bedroom	0.75
2 bedroom	1.00
3 or more bedrooms	1.50
Visitor spaces	0.20

Notes:
- Visitor spaces are required for all multi-unit dwelling developments in addition to resident spaces
- Car parking calculations are to be rounded up

D7.3 Stacked parking, for a maximum of 2 car parking spaces, may be provided only for use by the same dwelling.

Design of Parking Spaces	
P8. The size of parking spaces and structures should reflect: • functional requirements; • the amount of space available (for example, having regard to the location of existing buildings or trees); and • bulk/scale relationship with adjacent development on-site.	**D8.1** Car parking structures to be incorporated into the design of residential buildings, so to not dominate the appearance of the building when viewed from public streets or internal private roadways. **D8.2** The openings of undercover parking spaces should not occupy more than 45% of the street elevation of the building.

Performance Criteria	Development Requirements
	**D8.3** The design of car parking structures shall be integrated with the design of the proposed development, and be in sympathy with the appearance of adjacent development by: • the use of similar materials, colours, height and roof pitch; • integrating the structure within the development; • breaking up structures with different surface and wall treatments and landscaping; • locating car parking at the rear of the site where rear access is available; and • limit the number of adjoining garages to single or double, without some form of articulation or break.
Glenfield Road and Old Glenfield Road **P9.** The street pavement should match that provided elsewhere in the urban release area.	**D9.** Kerb and guttering and road shoulder shall be provided along the frontage to Glenfield Road and Old Glenfield Road in conjunction with subdivision of land having frontage to those roads.
Local street frontage to open space **P10.** Local streets should be fully constructed adjacent to open space.	**D10.** All local streets having frontage to open space shall be constructed to their full width and dedicated as a public road at no cost to Council.

2.10 Security, Privacy and Acoustic Amenity

OBJECTIVES

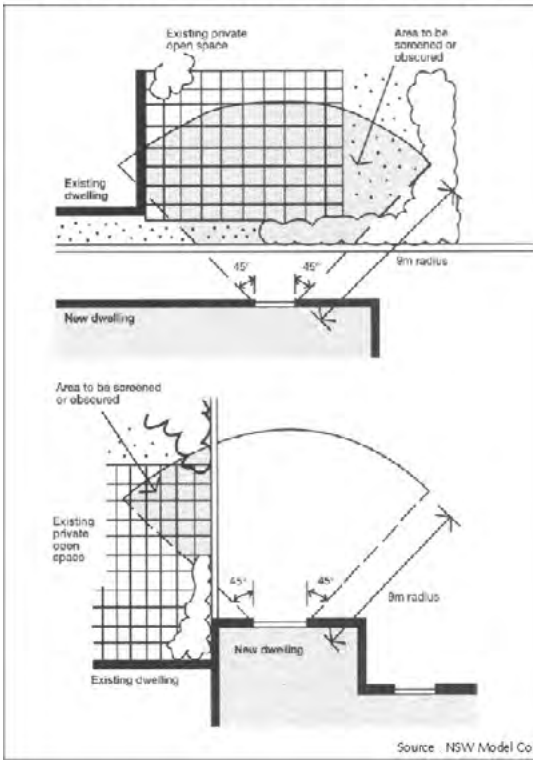
a. To ensure the siting and design of buildings provide visual and acoustic privacy for residents and neighbours in their dwellings and private open spaces.

b. To provide personal and property security for residents and visitors and enhance perceptions of community safety.

c. To ensure that all future occupants are provided with appropriate acoustic amenity.

Performance Criteria	Development Requirements
Overlooking	
P1. Private external living spaces and internal living areas of adjacent dwellings should be protected from overlooking.	**D1.1** Site layout and building design ensures that windows do not provide direct and close views into windows, or private external living spaces of adjoining dwellings.
	D1.2 Habitable room windows (other than bedroom windows) of adjacent dwellings within a distance of 9 metres are: • Offset by a distance sufficient to limit views between windows; or • Have sill heights of 1.7 metres above floor level; or • Have fixed obscure glazing in any part of the window within 1.7 metres of the floor level.
	D1.3 Direct views onto adjoining private external living spaces are obscured by: • Screening that has a maximum area of 25% openings, is permanently fixed and made of durable materials; or • Existing dense vegetation or new planting.

Screen views to adjacent private open spaces



Performance Criteria	Development Requirements
Noise	
P2. The transmission of noise between adjoining properties should be minimised.	**D2.1** New dwellings should be protected from existing and likely future noise sources emanating from adjoining residential properties and other high noise sources (such as busy roads, railway lines and industries) and minimise the transmission of intrusive noise to adjoining residential properties. **D2.2** No occupation of residential dwellings will be permitted until the construction of noise abatement barriers as specified upon the adopted Masterplan. The noise abatement barriers and dwellings will need to be designed to comply with the recommendations of the noise planning report prepared by Atkins Acoustics (ref: 31.5316.R1:DD21, Nov 2001) as part of the Local Environmental Study, except that noise walls will not generally be permitted along Glenfield Road. Where dwellings are constructed adjacent to Glenfield Road, acoustic measures will need to be designed as part of the design of the dwelling. **D2.3** Compliance with the provisions of the *Environmental Noise Control Manual* published by the NSW Environment Protection Authority.

Performance Criteria	Development Requirements

Security

P3. Site layout and design of the dwellings, including height of front fences and use of security lighting, should minimise the potential for crime, vandalism and fear.

Source : Better cities (National Status Report 1995)

D3.1 Shared pedestrian entries to multiple dwelling complexes should be lockable.

D3.2 Buildings adjacent to streets or public spaces are designed to allow casual surveillance and should have at least one habitable room window facing that area.

2.11 Ancillary Site Facilities

OBJECTIVES

(a) To ensure that site facilities are effectively integrated into the development and are unobtrusive.

(b) To ensure site facilities are adequate, accessible to all residents and easy to maintain.

(c) To ensure facilities are provided for efficient solid waste management.

Performance Criteria	Development Requirements
Waste Disposal	
P1.1 Provisions of waste and recycling bin enclosures which are: • adequate in size • durable and waterproof • blend in with the development • avoid visual clutter • easy to maintain in a clean and hygienic condition.	**D1.1** Nomination of a waste and recycling bin storage area which is capable of accommodating one 120-litre bin per dwelling with easy access to the public street frontage and which is located within 60m walking distance from each dwelling.
P1.2 Waste and recycling bin enclosures are located for convenient access by residents and collection vehicles.	**D1.2** If the area is to be a bin storage area for more than one dwelling it should be adequately screened.
Clothes Drying Areas and Other Site Facilities	
P2. Adequate clothes drying facilities are provided for all residents, easily accessible to all residents.	

PART 3 Schedules

SCHEDULE A
Dictionary

"AMCORD" means the national resource document for residential development published by the Commonwealth Government and entitled "*Australian Model Code for Residential Development"* (1997 Edition).

"*amenity"* means features, facilities or services of a house, locality or district, which make for a pleasant and comfortable life.

"*biodiversity"* means variety of life forms, plants, animals and microorganisms. It is usually considered at three levels:

(a) genetic diversity;

(b) species diversity; and

(c) ecosystem diversity.

(See also *ecologically sustainable development*).

"*conservation"* means all of the processes of looking after a place so as to retain its cultural significance. It includes maintenance and may, according to circumstance, include preservation, restoration, reconstruction and adaptation and will be commonly a combination of more than one of these. (*Source: The Burra Charter*)

"*ecologically sustainable development (ESD)"* means development that uses, conserves and enhances the community's resources so that ecological processes, on which life depends, are maintained and the total quality of life now and in the future can be increased. (Source: National Strategy for Ecologically Sustainable Development, 1992) ESD is essentially about creating a system, which is self sustaining in the long term. It is more a process than a product. It incorporates conservation principles and practices into the development process, so that a sustainable balance between environmental and economic objectives can be achieved.

"floorspace ratio" is the ratio of gross floor area of the building to the area of the land on which the building is proposed to be erected.

"***gross floor area"*** means that some of the areas of each floor of a building where the area of each floor is taken to be the area within the outer face of the external enclosing walls as measured at a height of 1400mm above each floor level excluding:

(i) Columns, fin walls, sun control devices and any elements, projections or works outside the general line of the outer face of the external wall;

(ii) Lift towers, cooling towers, machinery and plan rooms and ancillary storage space and vertical air-conditioning ducts;

(iii) Car-parking needed to meet any requirements of Council and any internal access thereto;

(iv) Space for the loading and unloading of goods.

"*ground level"* means the level of a site before development is carried out on the site under this Plan. This does not include any level that has been created without the approval of the Council where this would otherwise be required.

"height" means the vertical distance between natural ground level and the top most point of a structure, excluding minor attachments and architectural detailing such as television aerials and fenestration.

"Multi-unit dwelling housing" is as defined by Campbelltown LEP 2001.

Note: *Schedule 1 of Campbelltown LEP 2001 defines multi dwelling housing as*

development involving the erection of three or more dwellings on a site.

"***Public Domain"*** is the shared urban areas and spaces, the structures that relate to those spaces and the infrastructure that serves them, which is accessible or available to the general public, regardless of whether they are in public ownership, or not.

"Semi-detached dwelling" means a single free-standing dwelling sharing a common boundary with the adjoining neighbour, generally described as two dwellings made to look like one larger building.

"Single detached dwelling" is a free-standing residential building which contains one, but not more than one, dwelling on its own allotment generally set within a landscaped garden.

"Storeys, and the number of storeys" are as defined by Clause 6 of State Environmental Planning Policy No. 6 – Number of Storeys in the Building (SEPP No. 6).

Note: *SEPP 6 generally defines the number of storeys in a building as follows:*

- *the maximum number of storeys, floors or levels as the case may be, of the building which may be intersected by the same vertical line, not being a line which passes through any wall of the building; but*
- *excluding the whole or any part of a roof used as an uncovered garden, terrace or deck.*

"Terrace" means a single dwelling, which shares both side boundary lines with adjoining neighbours, and is generally built from side boundary to the other side boundary. This building type is repeated to form a row of attached dwellings.

"Zero lot line dwelling" means a dwelling built to one side boundary line. The planned configuration shall form a courtyard space usually to the rear of the allotment.

SCHEDULE B

List of Approvals That May be required From Other Government Agencies

(will require submission of an integrated development application)

AGENCY	LEGISLATION	SECTION	APPROVAL FOR
NSW Fisheries	Fisheries Management Act	144	Aquaculture permit
		201	Permit to dredge or reclamation work
		205	Permit to cut, remove, damage or destroy marine vegetation
Heritage Council (Heritage Office)	Heritage Act	58	Approval to damage, move, alter or undertake any development on an item protected by a Permanent or Interim Conservation Order
National Parks & Wildlife Service	National Parks and Wildlife Act	90	Consent to knowingly destroy, deface, or damage to an Aboriginal Relic or an Aboriginal Place[1]
Environment Protection Authority	Protection of the Environment Operations Act	43(a) and 47	Licence to carry out scheduled development work (work that is designed to enable a scheduled activity to be carried out)
		43(b) and 48	Licence to carry out a scheduled activity (excluding a waste activity but including a waste facility)
		43(d) and 122[3]	Licence to control the carrying out of non-scheduled activities for the purpose of regulating any water pollution
Department of Land and Water Conservation	Rivers and Foreshores Improvement Act	Part 3A (section 22B)	Permit required to make an excavation or remove material within 40 metres of a river, lake or lagoon or do anything that obstructs or detrimentally affects the flow of water on a river, lake or lagoon
	Water Act	10, 13A, 18F, 20B, 20CA, and 20L[4]	Licence or permit to construct a work and to take water
		Part 8	Approval to construct an earthwork, embankment or levee on the bank of a river or lake, or within a floodplain

Roads and Traffic Authority	Roads Act	138	A consent (from the RTA only) to erect or alter structures or works, or connect a public road to a classified road or tollway
Rural Fire Service	Rural Fires Act	100B	Authorisation under section 100B in respect of bush fire safety of subdivision of land that could lawfully be used for residential or rural residential purposes or development of land for special fire protection purposes

NOTES

1. Development is not integrated development unless a relic referred to in section 90 of the National Parks and Wildlife Act is known, immediately before the development application is made, to exist on the land to which the development application applies.

2. The Protection of the Environment Operations Act contains a schedule of activities that the EPA will licence. List A provides the short description of the list of scheduled activities listed in Schedule 1 of the POEO Act. It should be noted that activities below certain thresholds do not need a licence.

3. It is a defence in proceedings relating to the pollution of waters that the pollution was regulated by an environmental protection licence and the conditions of that licence were not breached.

5. Please note that other requirements apply to the gaining of an entitlement to take water under these sections.

SCHEDULE C

Minimum Landscaping Specification

1.0 SITE MANAGEMENT CONDITION

Site Condition

1.1 Areas to be landscaped should be left clean of building materials and rubbish.

Existing Plant Material

1.2 All existing trees, shrubs, ground covers, perennial plants and lawn areas except those indicated to be removed shall be retained irrespective of size. Ensure that trunks, branches and roots are protected against damage.

1.3 Special care is to be taken when cultivating around existing plant material.

Tree Protection

1.4 Protect all trees to be retained on site and their root systems from damage caused by or arising from the course of the carrying out of works.

1.5 Before commencing any other work, surround each tree or group of trees on site with a 2 metre high light gauge reinforcing mesh fence supported and tied to 50mm diameter galvanised steel posts firmly driven into the ground at not less than 1.5 metre spacings.

1.6 The fences shall be not less than 2 metres from any tree trunk and no materials, equipment, machinery, rubbish and other items shall be stored within the fence. Remove any materials, rubbish, etc. that may be within the fences at any time.

1.7 Should any minor trimming or removal of lower branches be necessary, this shall comply with the requirements of the Council's Tree Preservation.

Weed Eradication

1.8 Eradicate weeds by environmentally acceptable methods, using a non-residual glyphosate herbicide in any of its registered formulas.

1.9 Regularly remove by hand rubbish and weed growth or regrowth that may occur throughout the grassed, planted and mulched areas.

2.0 SITE PREPARATION

2.1 All garden areas shall have a minimum depth of 300mm of topsoil, being either suitably improved and cultivated insitu soil or imported topsoil. Add organic matter in the form of compost to a depth of 75mm over the entire areas previously cultivated as specified. Organic matter shall be thoroughly mixed through the prepared soil before planting out.

2.2 Insitu topsoil in garden areas shall be free from grass, weeds, stumps or materials toxic to plant growth, and appropriately cultivated and fertilised.

2.3 Imported topsoil shall be of a horticulturally suitable quality sandy loam comprising 85% coarse and fine sands and no more than 15% humus and fine materials. It shall be in a friable state and free from any materials toxic to plant growth, and free from stumps, roots, clay lumps or similar material. It shall be entirely free from noxious weeds and free from grass. Topsoil shall only be worked whilst in a moderately moist condition.

2.4 Level the site so that the contours are as shown on the plan. The surface shall be left smooth and free of all foreign material. The contours shall be within plus or minus 150mm of those shown on the plan.

3.0 FERTILISER

3.1 The areas to be turfed shall first be fertilised with a complete lawn fertiliser with a N:P:K ratio of 10:9:8 such as “Shirley’s No. 17” applied evenly by a fertiliser spreader at the rate of 4kg/100m^2.

3.2 Plants are to be fertilised with a slow release fertiliser of 20g per hole.

4.0 TURFING

4.1 Provide 75mm depth of topsoil for lawn areas. Level, compact lightly and rake to a smooth surface prior to turf laying. Ensure that turf finishes flush with kerbs and pavements and no ponding occurs as a result of turf levels.

4.2 Turf shall be obtained from an approved commercial grower of cultivated turf. It shall be free of lawn pests, diseases and reasonably weed free. Before cultivating, turf shall be mown to a height of 12mm to give a close sward. Turf shall be machine cut, of even thickness in either squares or rolls. After cutting, it shall not be stacked or rolled for more than 48 hours.

4.3 Prior to final raking, apply fertiliser as specified elsewhere evenly over levelled surfaces. Lay turf sods without excessive joints, thoroughly water without delay and roll with light roller to bring into firm contact with soil.

4.4 Top-dress joints with sandy loam to give good cover whilst still revealing the grass shoots.

4.5 Maintain lawn areas during construction with regular watering and mowing.

5.0 EDGINGS

5.1 Timber edgings shall consist of 300mm x 150mm hardwood edgings that have been treated with one coat of creosote. Edgings to be fixed at 5 metre centres using 50mm x 50mm hardwood pegs nailed to the edge board with a 40mm galvanised clout. Edge boards are to be approximately 10mm below all grass areas.

5.2 Brick edgings shall consist of well baked selected common bricks placed on edge 10mm below existing ground or grass level. A 10mm wide cement mortar joint shall be applied between each brick.

6.0 PLANTING

6.1 Planting holes shall be at least 450mm square and dug to a depth of 75mm more than the depth of the root ball.

6.2 All surplus material shall be removed and replaced with planting soil as specified previously. The bottom of each hole shall be loosened to a further 150mm to assist drainage.

6.3 A slow release fertiliser at the rate of 20g/hole shall be placed at the bottom of each hole before planting. Stake and tie as specified elsewhere. If planted in lawn areas, leave a neat 600mm square opening in turf after planting is completed. Form a shallow saucer-like depression in soil around base of plant.

6.4 Planting shall not be carried out in dry soil or in extreme weather conditions.

6.5 Avoid hilling up of soil around young plant stem. Firm soil around the root ball and thoroughly soak the areas after planting. On completion, cultivate, rake and leave all gardens areas in a neat and tidy condition. Remove all containers from site.

7.0 PLANTING MATERIALS

7.1 Trees and shrubs shall be true to name and variety. Substitutes in size and variety shall not be made without approval.

7.2 All plants shall be true to size, in well developed, healthy condition, free from insects and diseases with well established root systems.

7.3 Advanced sizes shall be grown in a container of minimum 5 litre capacity. Semi-mature sizes shall be grown in a container of minimum 3.5 litre capacity. Ground cover plants shall be in 150mm pots.

8.0 STAKING

8.1 Provide stakes for all trees and shrubs.

8.2 All trees shall have one (1) 40mm x 40mm x 1.5m straight hardwood stake, pointed at one end. Tall shrubs shall have one (1) 25mm x 25mm x 1.2m stake pointed at one end.

8.3 Firmly install stakes to each tree/shrub taking care not to damage the root system.

8.4 Ties shall be of plastic strips of webbing material or hessian tie.

8.5 Securely tie plant to the stake in a way to avoid damage to the stem whilst allowing a small degree of movement.

8.6 Labels shall be entirely removed from the plants.

9.0 MULCH

9.1 Spread mulch to all areas indicated on plan. Mulch shall be of commercial quality, free from foreign debris and without potential to initiate weed growth.

9.2 After planting the areas indicated, spread the material to an even depth of 75mm to 100mm on the surface of the topsoil so the refinished levels are flush with surrounding kerbs, edges or paths.

10. MAINTENANCE

10.1 Approved landscaping will be required to be maintained in good condition at all times as a condition of development consent.

10.2 Maintenance shall be carried out in accordance with accepted horticultural practices and, as a minimum, is to include the following:

i) Watering, as required, to maintain a healthy growth rate and not place plant material under stress through lack of moisture.

ii) Weed and rubbish removal from any area deemed to be in the landscape works. The site is to be maintained in a clean and orderly state at all times.

iii) Replacement of any plant material deemed to have failed with a specimen of similar size and identical species and/or cultivar.

iv) Grassed areas require watering, weeding, mowing, fertilising, top dressing and replacement of failed areas of turf.

v) Mulched surfaces shall be kept in a clean and tidy condition and reinstated to ensure adequate cover is retained.

vi) Adjust staking and tying as necessary to support the planting.

vii) Spraying of herbicide, insecticide and/or fungicide, shall be carried out in accordance with the manufacturer's directions.

viii) Make good any defects or faults arising from defective workmanship.

Volume 2

Site Specific Development Control Plans

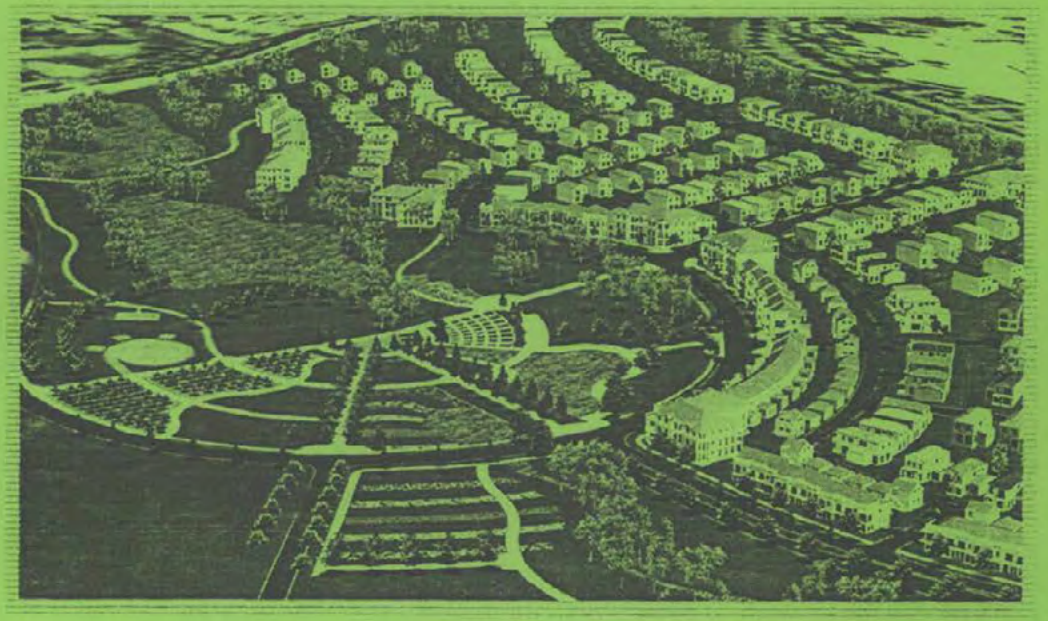
Part:3

Campbelltown Link Site

Note:
The Campbelltown Link Site DCP came into effect on 09 January 2002 and has been incorporated as Part 3 , Volume 2 of Campbelltown (Sustainable City) DCP.

CAMPBELLTOWN LINK SITE

DEVELOPMENT CONTROL PLAN



Prepared for
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Paddington NSW 2021

Contents

Figures

PART 1

1 INTRODUCTION

1.1 What is this plan called and when did it come into force?

This is the Campbelltown Development Control Plan (DCP) No.104, for the Link Site. This plan came into force on 9 January 2002 in accordance with clause 21(2) of the Environmental Planning and Assessment Regulation (as amended) 2000.

1.2 Where does this plan apply?

This is a site specific Development Control Plan, which applies to the whole of the Campbelltown Link Site, being Lots 1 and 2 in DP1013191, part Lot 55 in DP711210 and part Lots 21 and 22 in DP584098 (see Figure 1).

1.3 What are the objectives of this plan?

The objectives of this plan are:

a. To allow for a variety of land uses and building types including: open space, residential, mixed uses, commercial, and aged housing within appropriate identified precincts;

b. To ensure a minimum neighbourhood dwelling density of 30 dwellings per hectare of total residential precincts is achieved through the provision of a mixture of dwelling types and building configurations;

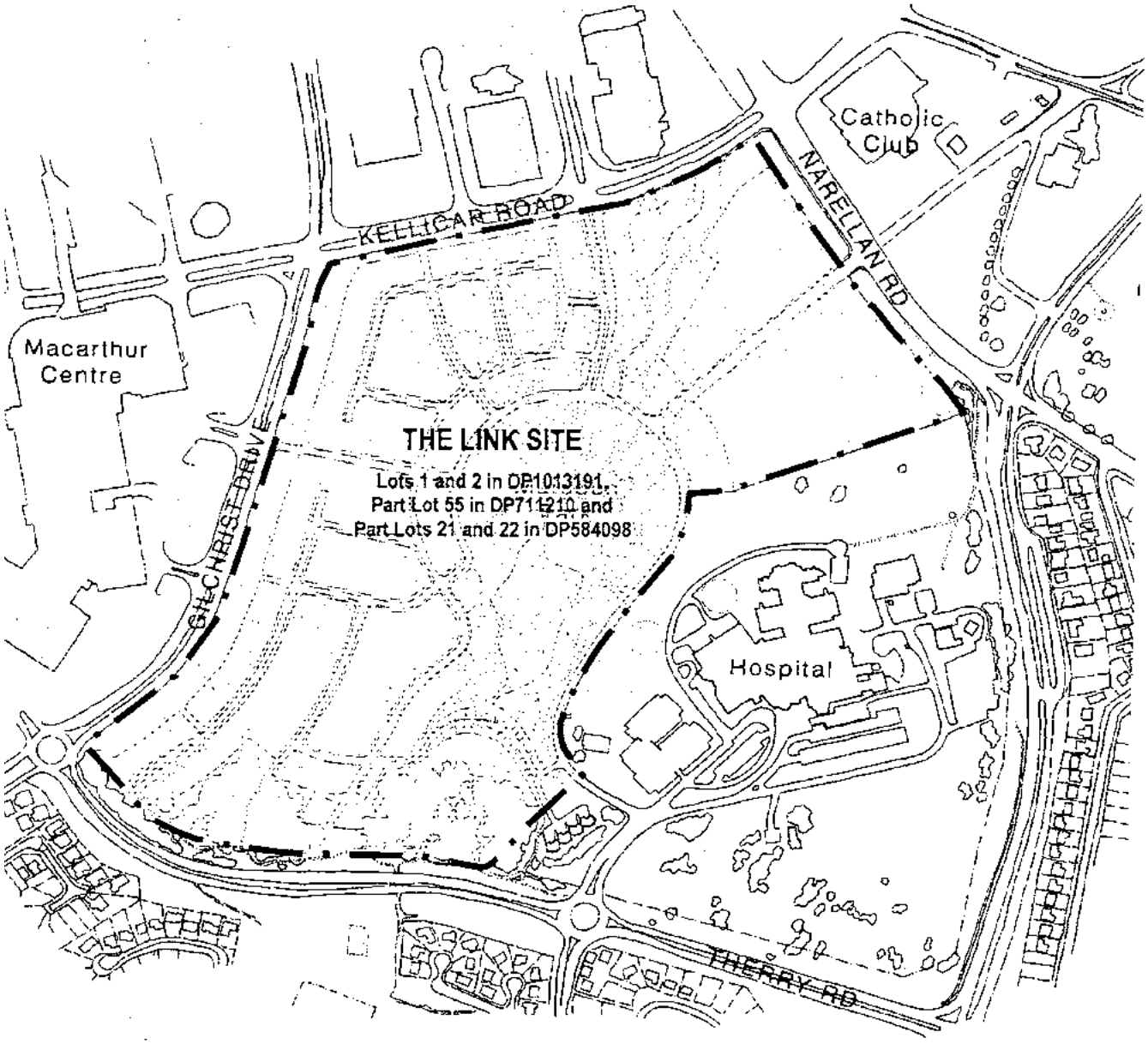
c. To ensure building design demonstrates architectural merit and comprises high quality materials and finishes;

d. To create a place that serves and inspires present generations without compromising future generations through the utilisation of ecologically sustainable design practices;

e. To provide opportunities to a range of transport nodes;

f. To provide for increased housing densities in close proximity to transport nodes and civic precincts, in accordance with State Government Policies and Council's Housing Strategy;

g. To capitalise on the Link Site's location and distinctive features to create a high quality urban environment which offers a range of housing, employment and recreational opportunities.



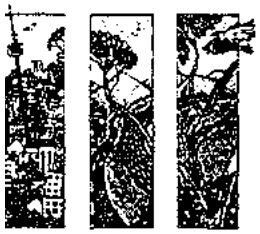


FIGURE 1
SITE PLAN

CAMPBELLTOWN LINK SITE DCP

Not to Scale

1.4 How to use this plan

The design guidelines and requirements of this DCP aim to meet the vision and key objectives identified in the Campbelltown Link Master Plan.

The DCP consists of twelve (12) sections, which are divided into two parts. Part 1 contains the introduction; vision, principles and precincts; and general site planning and guidelines for residential development. Part 2 contains the sections specifically relating to individual precincts.

All development proposals should address the "vision" and general provisions, together with the objectives, desired character and design guidelines for each precinct. The following flow chart illustrates the process required during the preparation of a development application (DA).

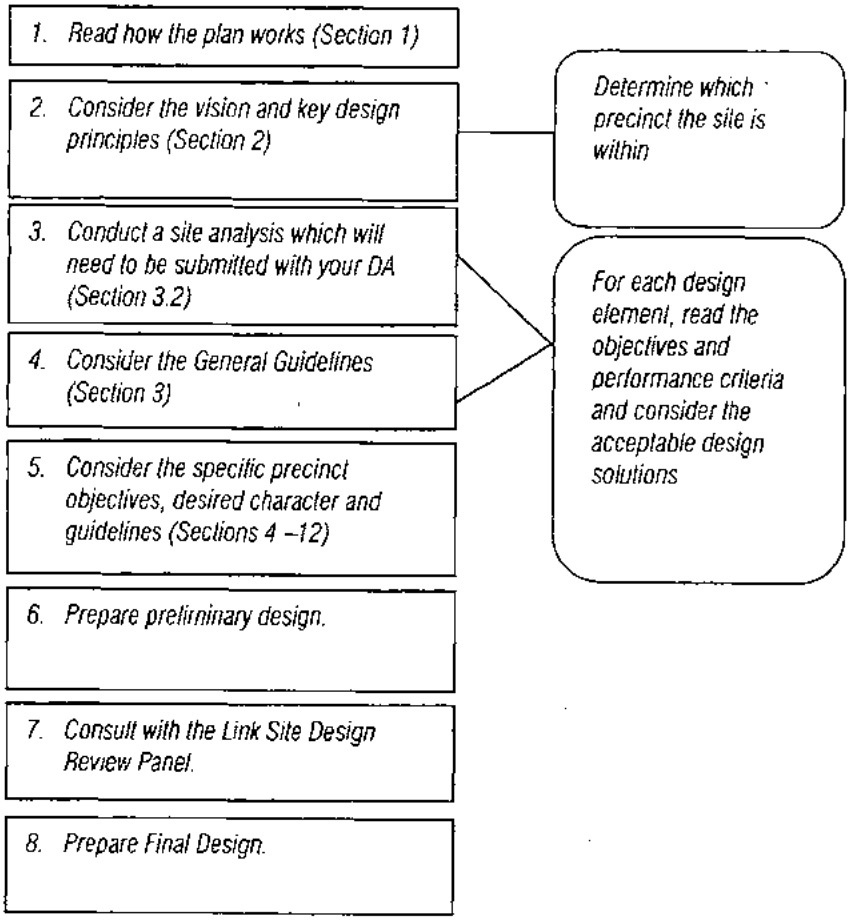


Figure 2: Process for Preparation of Development Application

Design Review Panel

The Development Application must be submitted to the Link Site Design Review Panel for endorsement prior to lodgement with Council. This panel comprises nominated representatives from the landowner, project architect and Campbelltown Council.

1.5 Relationship to other plans, policies and documents

This DCP is to be read in conjunction with the provisions of any environmental planning instruments that apply to the land. Where there is an inconsistency between this plan and any other DCP or policy applying to the same land, the provisions of this DCP should prevail, to the extent of that inconsistency.

Other DCPs that apply to the Campbelltown Link Site include DCP 52 – Off Street Car Parking, DCP 95 – Controls for Waste Management in Development, Construction and Demolition, DCP 106 – Protection of Buildings from Subterranean Termites, DCP 112 – Sediment and Erosion Control, DCP 115 – Energy Efficiency Land Subdivision, DCP 116 – Energy Smart Homes Single Dwelling, DCP 117 - Energy Smart Homes Alterations and Additions, DCP 118 - Energy Smart Homes Multiple Dwellings and DCP 119 – Energy Smart Homes Multi-Unit Residential Buildings.

The DCP is based on a Master Plan, which is a valuable reference document for the development of the site. The Masterplan incorporates design guidelines, which identify the architectural style and the quality of dwellings to be constructed on the site. The key elements from the Master Plan are contained in this DCP to assist Council to assess subsequent development applications.

1.6 How the precinct specific sections work

The Link Site is divided into nine precincts, including: an open space precinct, 5 residential precincts, 2 commercial precincts, and an aged persons precinct. The precincts are identified and described in Section 2 of this DCP.

The Open Space precinct will comprise Marsden Park and parkland corridors, Gilchrist Drive and Kellicar Road landscaped buffer reserves and public streets. This precinct includes a large central park for the benefit of all Campbelltown residents and workers.

The two commercial precincts, which are separated into a Business Commercial Precinct and a Special Commercial Precinct are intended to form critical elements of the Link Site both functionally and visually, providing integration between the site and the surrounding uses.

The Aged Persons Precinct will provide for the development of a range of housing and other related facilities for the aged.

The five residential precincts, namely Entry Avenue, Parkside Crescent, Hilltop Drive, Rolling Green and Bushland precincts, have been designed to produce a particular streetscape outcome and development type.

The precinct specific design guidelines prescribed in the DCP aim to ensure that the desired character of each precinct is achieved and the overall vision of the Masterplan is realised.

Each precinct contains an Introduction, Precinct Objectives, Desired Character and Design Guidelines.

1.7 Monitoring and amendments

The plan shall be monitored and reviewed in light of the site development. A formal review will occur on the completion of each stage or at such interval as determined by Council.

2 Vision, Principles, Precincts and Pedestrian Links

2.1 General

This section contains the vision, key design principles and provides a brief description of the precincts.

2.2 Vision

To capitalise on the site's strategic location and distinctive features to create a high quality urban environment which offers a range of housing, employment and recreation opportunities and has a special identity and sense of community.

2.3 Key Design Principles

The key design principles for the Campbelltown Link Site are:

a. To provide an urban structure that responds to the topography of the Link Site and creates a safe and attractive public domain;

b. To encourage the detailing of building forms in an appropriate contemporary style;

c. To provide a range of housing types, including those not currently available within the Campbelltown area;

d. To provide an attractive and functional public domain for the use of all Campbelltown residents and workers;

e. To promote ecologically sustainable building design;

f. To provide a robust and permeable public domain network, comprising open space, streets and pedestrian links that will provide connectivity between the Link Site and the surrounding areas of Queen Street, Macarthur Square and Campbelltown Hospital;

h. To promote good urban design through the provision of well-articulated buildings that contribute to a lively and aesthetically pleasing environment.

i. To provide a distinctive character for the identified precincts by adopting a palette of built forms and landscaping.

j. To provide for a range of commercial activities that are suitable for the Regional Centre and which complement existing centres.

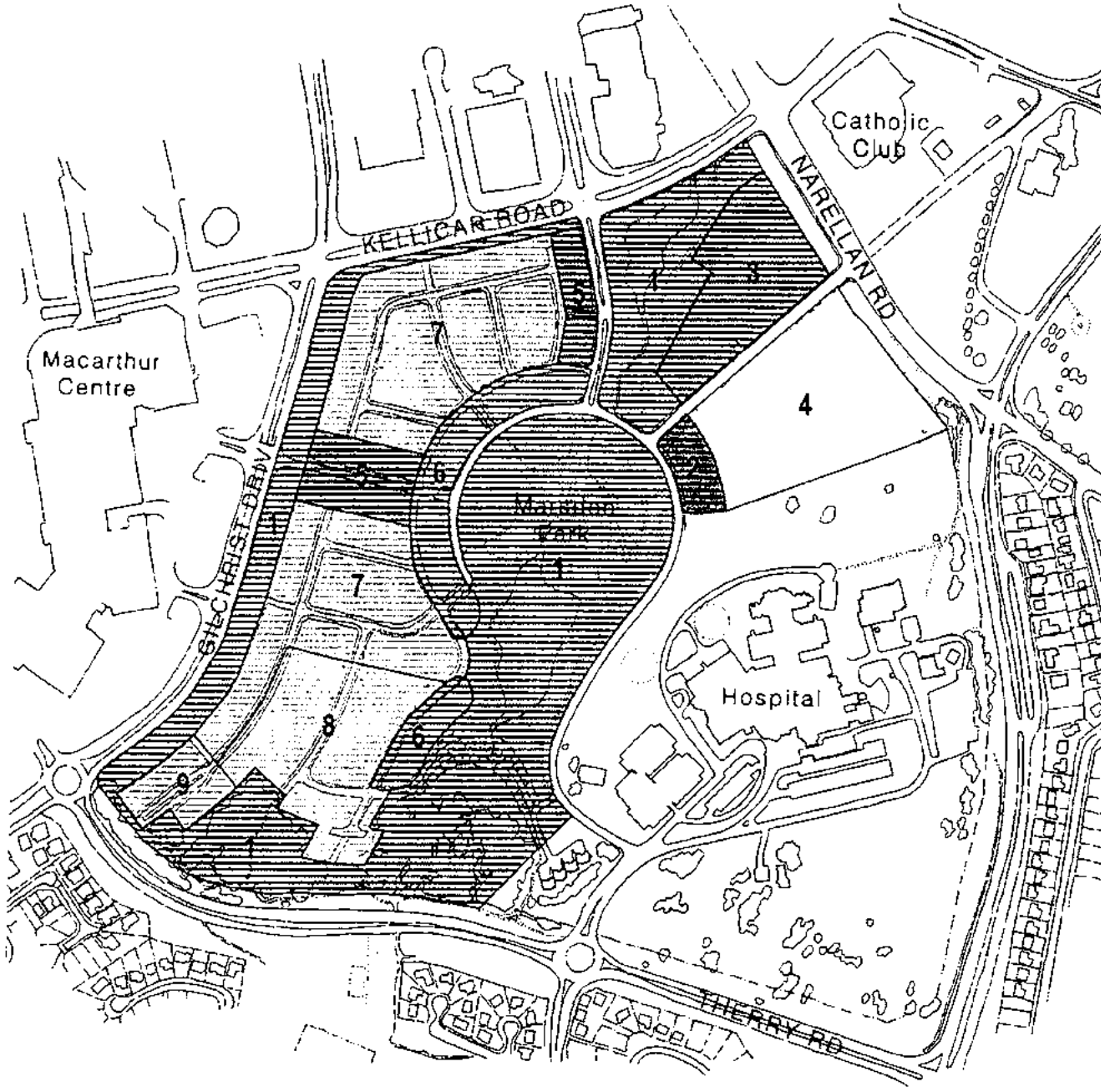
2.4 Precincts

Nine (9) precincts have been created in response to variations in the urban setting, topography and proximity to distinct surrounding land uses. The geographic arrangement of the precinct areas within the Campbelltown Link Site is shown on Figure 3.

The individual precincts have been selected on the basis of their physical landscape characteristics, their desired function and their relationship with existing and proposed uses on adjoining sites. Each precinct has an identified character and desired streetscape. The preferred land uses for each precinct, outlined as follows, aim to meet the overall objectives and vision of this plan and the Masterplan.

Preferred uses and functions of the non-residential precincts and the Aged Persons Precinct are listed as follows:

Open Space	Passive and Active Public Domain • Regional and local open space is proposed in addition to landscaped buffer reserves and streets.
Business Commercial	Commercial Use • Preferred uses should comprise professional suites possibly for medical oriented specialists and uses associated with the adjoining hospital site.
Special Commercial	Commercial/Recreation Use • Preferred uses comprise a range of specialist commercial uses, which may include entertainment facilities, restaurant/café, a hotel, cultural centre, convention centre and sporting complex. Bulky goods retailing and other large scale retail uses are not permitted in this precinct.
Aged Persons	Specialist Residential • Preferred uses comprise a mix of housing and associated facilities for older people, which may include self care units, hostel accommodation and nursing homes.



LEGEND:

- 1 Open Space
- 2 Business Commercial
- 3 Special Commercial
- 4 Aged Persons
- 5 Entry Avenue
- 6 Parkside Crescent
- 7 Rolling Green
- 8 Bushland
- 9 Hilltop Drive

FIGURE 3
PRECINCT PLAN

CAMPBELLTOWN LINK SITE DCP

Not to Scale

A total of five residential precincts have been created to meet the demands for housing in the Campbelltown Area in accordance with Council's Residential Strategy and market demand studies. Preferred building types and functions for each residential precinct, which respect the individual landscape characteristics of each precinct and assist in achieving the desired character of each precinct, are specified as follows.

Entry Avenue	Residential/Mixed Use • Zero Lot Line • Terraces • Apartments • Home business
Parkside Crescent	Residential Use • Terraces • Apartments
Rolling Green	Residential Use • Single detached dwelling • Zero Lot Line • Semi-detached • Terraces
Bushland	Residential Use • Single detached dwelling • Apartments
Hilltop Drive	Residential Use • Single detached dwelling • Semi-detached • Apartments

2.5 Pedestrian Links

The Campbelltown Link Site is located within the Regional Centre of Campbelltown. A pedestrian link between individual sites within the Regional Centre is essential to ensure it functions in terms of access. The location of Narellan Road between the Link Site and Old Menangle Road/Queen Street has the potential to isolate individual site uses which must be avoided.

A pedestrian link between the Campbelltown Link Site and the Main Street is to be provided as part of the development of the Link Site to provide access within the Regional Centre.

Options for the provision of this link that are to be considered and assessed in the development of the Link Site include:

- signalised intersection with associated pedestrian crossing
- overhead pedestrian bridge
- underground pedestrian tunnel.

Ideally the pedestrian link should be provided as early as possible in the development of the Link Site but must be provided prior to the completion of the development.

3 General Site Planning & Guidelines for Residential Development

3.1 General

This section outlines each element involved in the site planning and design process for residential development. It applies to all residential precincts within the Link Site including the Aged Persons Precinct. Each element includes an explanation, objectives and design guidelines and requirements.

3.2 Site Analysis

Explanation

Inherent in this DCP is a desire to preserve and enhance the qualities of each site through site responsive design and development. A site analysis allows the constraints and opportunities of a site to be identified and for building design to be responsive to these.

Objectives

a. To preserve and enhance the individual qualities of each site through lot responsive design and development.

b. To promote well designed buildings which make a positive contribution to the streetscape setting and precinct.

c. To ensure development makes the best use of a site's natural features and considers amenity, streetscape and energy efficiency at the start of the design process.

Design Guidelines and Requirements

A Site Analysis should accompany each application for development. This should include a plan showing the following information:

- north point and all boundary dimensions;
- slope of land;
- any easements or right of ways and existing or proposed services;
- any existing trees or significant stands of vegetation;
- the sun's path and shadows;
- prevailing winds;
- views;
- noise sources;
- the location of proposed buildings on the site;
- an outline of neighbouring buildings, where developed;
- proposed private open space areas; and
- existing private open space areas of adjoining sites.

An example of a typical site analysis is shown in Figure 4.

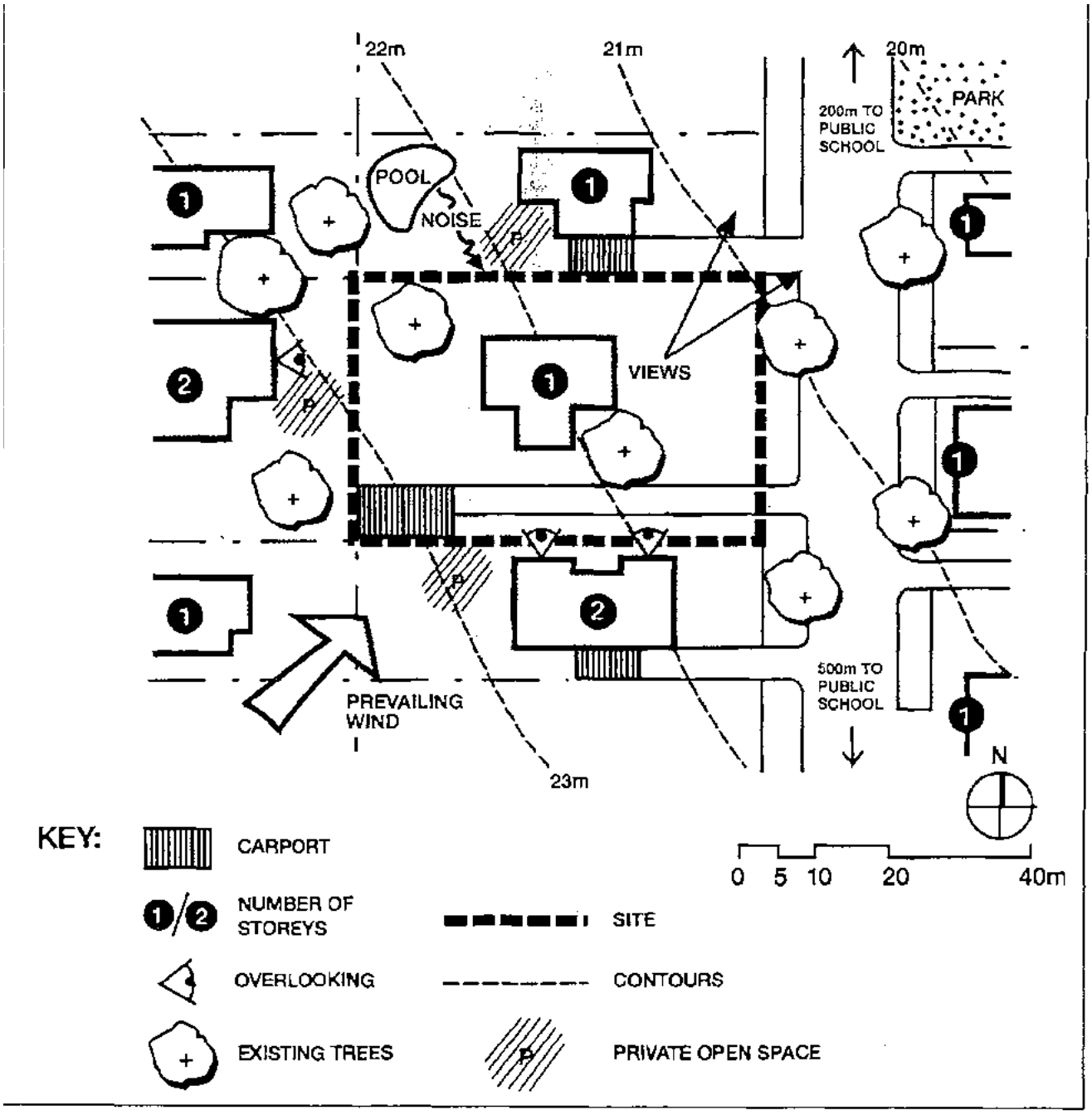


FIGURE 4
SITE ANALYSIS

3.3 Minimum Allotment Sizes

Explanation

Lot size requirements ensures that appropriate areas are set aside for the development of certain dwelling types and that adequate space is provided for minimum frontages, private open space and the provision of adequate carparking.

Lot sizes also assist in controlling the density of development and providing housing diversity. Character and streetscape are to a large degree influenced by lot size and frontage.

Objectives

a. To encourage a variety of lot sizes across the Link Site to promote a variety of housing choice.

b. To develop a subdivision and lot size pattern that will reinforce the desired future character of the residential precincts consisting of both formal and less formal streetscapes.

c. To design individual lots that accommodate specific forms of housing in order to achieve the desired urban form and density.

Design Guidelines and Requirements

Residential lot size and frontage should be capable of accommodating a dwelling, adequate landscaped area and private open space, and at least two car parking spaces.

Lot size should take into account the slope of the land and the desired character of each precinct.

The lot size for each dwelling type is to be:

	Minimum	Indicative Range
• Single Detached Dwelling	390 m^2	390-500 m^2
• Zero-Lot Line Dwelling	250 m^2	250-350 m^2
• Semi-Detached Dwelling	250 m^2	250-350 m^2
• Terraces	200 m^2	200-300 m^2
• Apartments	800 m^2	800-2000 m^2

The development of terrace houses is only permitted in minimum groups of six dwellings. A combined minimum development site of 1200m^2, is therefore required for terrace developments.

A minimum site frontage of 7.5m is required for all dwellings, except apartments. The minimum site frontage required for apartments is 20m.

3.4 Building Envelope

Explanation

The building envelope is the three dimensional space within which a development may take place. The building envelope is generated by maximum building height, site cover and setback controls. The building envelope ensures that the scale and bulk of future development is compatible with the desired streetscape character and that privacy and solar access to adjoining buildings is maintained. It also ensures that private open space is generally provided to the rear of dwellings.

Setbacks can influence the character and scale of individual neighbourhoods and streets. Visual and acoustic privacy and solar access to neighbouring dwellings are also influenced by setbacks.

Site coverage restricts the building footprint to control the size and bulk of buildings. It also encourages existing vegetation to be retained and provides suitable areas for landscaping and private open space.

Objectives

a. To minimise the bulk and scale of buildings and provide sufficient landscaped areas to achieve an attractive residential environment.

b. To provide a range of setback controls that contribute to the overall character of the Link Site and the individual character of each precinct.

c. To provide front setback controls in accordance with the desired streetscape character of individual precincts.

d. To provide for appropriate setbacks which reinforce the intended street hierarchy.

e. To create vistas to Marsden Park.

f. To ensure building heights relate to the topography of individual sites.

Design Guidelines and Requirements

For all residential buildings, the building envelope should provide for the predominant bulk at the front of each lot.

Setbacks:
Setback controls are precinct specific and are provided within the precinct sections of this DCP. Consult each individual precinct for relevant controls.

Site Cover:
The maximum site coverage for all residential lots is 65%.

Height of Building Types:
The height of buildings relates to the type of dwelling to be erected. The height of buildings is to be as follows:

- Single Detached Dwelling 1 –2 storeys
- Zero-lot line Dwelling 1 – 2 storeys
- Semi-Detached Dwelling 2 storeys
- Terraces 2 - 3 storeys
- Apartments 2 – 4 storeys

3.5 Private Open Space

Explanation

Private open space forms a usable landscaped area on each residential site for recreational purposes. Controlling the minimum dimensions and location of private open space on a site are an important means of ensuring that the private open space is usable.

Objectives

a. To ensure all residents have access to useable and well located private open space.

b. To enhance the amenity of the built environment by providing high quality private open space.

Design Guidelines and Requirements

Landscaping of private open space should contribute to the amenity of the dwelling and the streetscape.

Landscaping and garden design should provide for shade in summer, sunlight in winter, privacy and protection from the wind.

Dwellings:
The minimum private open space requirement for all dwellings, except apartments, is 20% of the site area of each allotment. One part of this should form an area of at least 16m² with minimum dimensions of 4m x 4m.

Where possible, the principal area of private open space should face north and extend from the living rooms of dwellings.

Apartments:
The minimum private open space requirement for apartments is 8m² with a minimum dimension of 2m.

Communal open space for apartments should be shown on a Landscape Plan. The layout of communal open space should provide for a range of uses and facilities associated with apartment living and make a positive

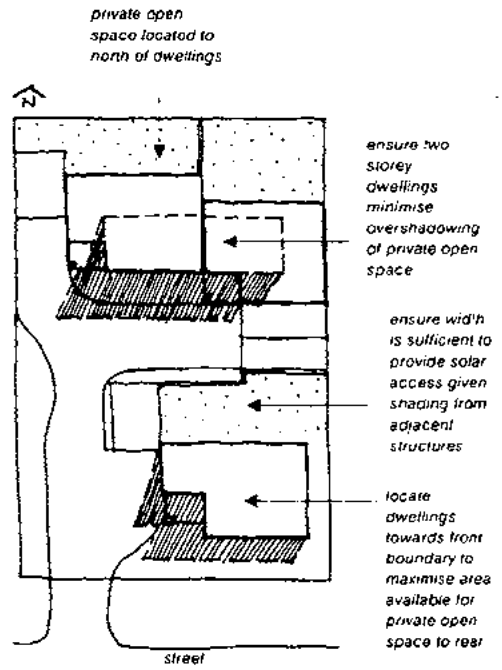


Figure 5: Consideration is to be given to the shape and aspect of private open space

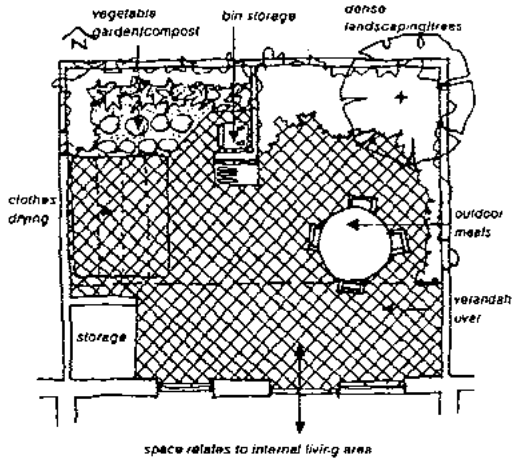


Figure 6: Private open space fulfils a number of functions

contribution to the amenity of the site and the character of the development.

3.6 Views, Visual and Acoustic Privacy

Explanation

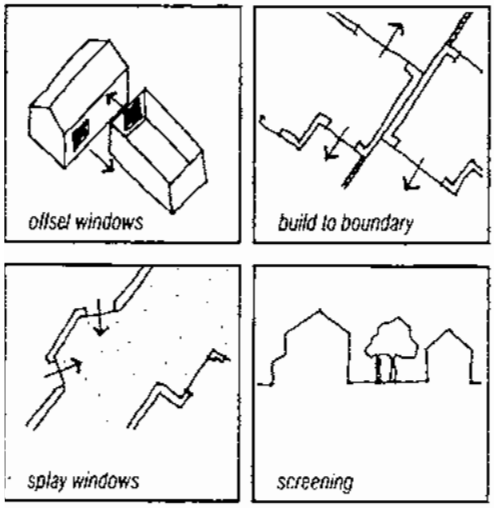


Figure 7: Visual privacy design suggestions

Privacy refers to both visual and acoustic privacy. The privacy needs of occupants and neighbours should influence all stages of design from the siting and internal layout of buildings to the detailed characteristics of development, such as fencing and landscaping. Visual privacy is a highly valued component of the amenity of any neighbourhood and should influence the location of a building's windows and private open space. However, it is acknowledged that privacy to open space is not always achievable in apartment and terrace style buildings.

Objectives

a. To encourage developments that minimise noise and overlooking impacts to neighbouring properties.

b. To encourage adequate privacy levels for all inhabitants and neighbours.

c. To ensure that lots fronting main roads have noise attenuation and security measures provided to achieve appropriate amenity.

Design Guidelines and Requirements

Visual Privacy:
The direct overlooking from the principal living rooms of a proposed dwelling to the principal living rooms of a neighbouring dwelling is discouraged and should be minimised through appropriate building layout, location and design of windows, balconies and landscaping. Privacy screens should be used where necessary.

It is acceptable, due to the nature of this development that some overlooking of rear yards will occur.

Acoustic Privacy:
Developments close to noise sources such as busy roads should be designed so that habitable rooms and private open space areas are located away from noise sources, unless appropriate acoustic barriers are provided. Acoustic treatment should be in accordance with Council's required standards.

Noise sensitive rooms such as bedrooms should be located away from garages and car parking spaces, wherever possible. Where this is not possible, other appropriate noise attenuation measures should be used.

Doors and windows should be kept to a minimum on the side of the building most exposed to the noise source, where possible.

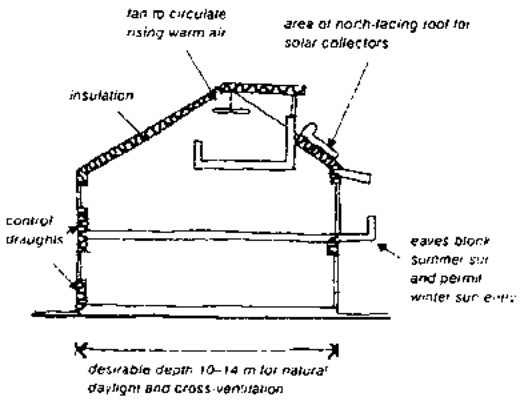


Figure 8: Design suggestions for energy efficient housing.

3.7 Ecologically Sustainable Development

Explanation

Ecologically Sustainable Development (ESD) encompasses design principles that contribute to environmentally responsible development outcomes. Essentially, ESD aims to achieve a balance that integrates the protection of ecological processes and natural systems, promotes economic development and maintains the cultural, economic, physical and social wellbeing of people and communities. This includes planning for the efficient use of new residential subdivisions and designing energy and water efficient homes. The following guiding principles should be taken into account when designing and constructing energy efficient buildings. Council's Energy Smart Homes DCPs (Nos. 115-119 inclusive) also apply to the Campbelltown Link Site Development.

Objectives

a. To ensure developments are sited to maximise solar access to indoor and outdoor living areas and to minimise heating requirements.
b. To minimise the overshadowing of neighbouring dwellings and open spaces through careful house siting.
c. To provide thermal mass and insulation where necessary, to residential dwellings to minimise energy consumption.
d. To ensure that waste generated by the proposed development is minimised and disposed of in a proper location.

Design Guidelines and Requirements

Dwellings and private open space should be provided with adequate daylight, natural ventilation and sunlight.

Dwellings should be designed to minimise energy used for heating and cooling.

Significant overshadowing of habitable rooms and private open spaces should be avoided, where possible.

Hard surfaces such as driveways and paved areas should be minimised to reduce stormwater runoff.

Appropriate building materials and insulation where necessary, should be used to assist thermal performance.

Developments should meet the relevant requirements of Council's Energy Smart Homes DCPs (Nos.115-119n inclusive) and DCP No.95 – Controls for Waste Management in Development, Construction and Demolition.

3.8 Parking and Access

Explanation

The provision of car parking should reasonably satisfy the needs of future residents. Parking areas, driveways and garages must be carefully designed so they are safe, accessible and do not detract from the streetscape.

Objectives

a. To ensure all developments incorporate adequate parking and that parking areas and garage structures do not detract from the streetscapa nor visually dominate the street.

b. To ensure vehicular and pedestrian safety is considered in the planning and design process.

c. To minimise the size and number of driveways and driveway crossovers so that on-street parking is not diminished, pedestrian conflicts are minimised and the visual amenity of the streetscape is not compromised.

Design Guidelines and Requirements

Garages to principal street frontages should not dominate the streetscape or detract from the appearance of the dwelling and should be integrated into the design of the dwelling. Garages and carports are to be located at the rear of all lots that have rear street access.

The width of any garage when facing the primary street should not occupy more than 50% of the lot frontage.

Two on-site carparking spaces should be provided for all dwellings, except apartments. One space should be provided for each apartment and an additional one space per five apartments is required for visitor parking.

Car parking should generally be provided in the following configurations:

- Double width garage for dwellings with greater than 12m frontage;
- Single width garage plus single-stacked space for dwellings with less than 12m frontage;
- Double garage at the rear to secondary side street for dwellings on a corner lot; and
- Double width garage located at the rear of lot only for dwellings with rear street access.

All car parking dimensions and driveway widths are to be provided in accordance with the Australian Standards for Off-Street Car Parking (AS 2890.1-1993).

A schedule of Minimum Standards for proposed streets and pathways is provided at **Annexure 2**.

Apartments:
Resident parking for apartments should comprise either basement parking or be situated at the rear of the lot. Visitor parking should be defined by clearly marked spaces and ideally be located at the rear of the lot and not undercover.

Corner Lots:
Where no rear street access is available, any carport or garage structure on a corner lot should be located on the secondary frontage at the rear of the lot.

3.9 Security, Site Facilities and Utilities

Explanation

All residential development within the Campbelltown Link Site should incorporate passive design elements to improve security around the site. The provision of site facilities influences the livability of a dwelling and consequently the quality of life of their inhabitants. Well-designed dwellings that contribute to an attractive streetscape will improve the well being of residents.

Unattractive or poorly designed site facilities including garbage and mail storage areas, satellite dishes and TV antennas, solar panels and air conditioners can detract from the image and amenity of a development.

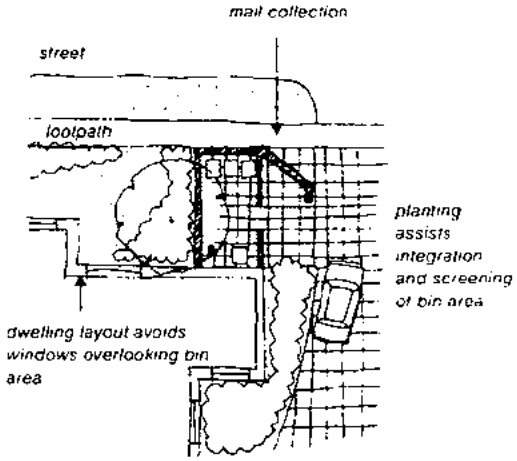


Figure 9: Site facilities, such as mailboxes and garbage areas, should be convenient to use and integrated into the development so as not to detract from the streetscape.

Objectives

a. To provide adequate site facilities for all dwellings.

b. To ensure that the design of site facilities are not visually intrusive to the primary street frontage or any other prominent vantage point.

c. To ensure buildings incorporate passive design elements which promote a safe living environment.

Design Guidelines and Requirements

For all development:
Garbage and recycling areas should be located at the rear or side of the dwelling behind the building line and away from doors and windows. All site facilities should be designed for attractive visual appearance and convenient use.

Satellite dishes, TV and radio antennas should be located so that the visual impact to the streetscape is minimised. Solar panels and air conditioners, if required, should be located to the rear of the roof. Window or wall mounted units are not permitted on the primary street frontage. All piped and cabled services should be placed underground.

Buildings adjacent to streets and public open space should be designed to allow casual surveillance from dwellings and should have at least one habitable room window facing that area.

For Apartments:

Car wash facilities should be provided for each apartment building. Adequate lighting should be provided to all pedestrian paths, communal open space, parking areas and building entries. Adequate open air clothes drying facilities (communal or individual) are to be provided for use by each dwelling and are to be visually screened from the street.

PART 2

4 Open Space Precinct

4.1 Introduction

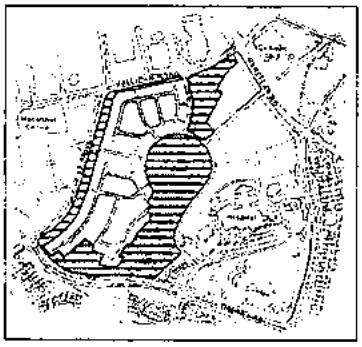


Figure 10: Open Space Precinct Location Plan

The Open Space Precinct comprises four main areas, being the Marsden Park and parkland corridor, Gilchrist Drive ridge top landscape buffer, Kellicar Road landscape buffer, and public domain streets (See Figure 10). The Open Space precinct has a total area of approximately 21.4ha and has been designed to provide a range of high quality settings and functions that complement the surrounding built environment.

Marsden Park is located in the centre of the site and will provide a focal point for the entire Link Site. Marsden Park and the parkland corridor encompasses a formal central park with an area of 4ha, an informal bushland/wetland to the south with an area of 5ha and a northern informal park adjoining Kellicar Road to the north with an area of 2.9ha.

The Gilchrist Drive Ridge Top Landscape Buffer adjoins Gilchrist Drive and will comprise a 30m landscape reserve, featuring a pedestrian and cycle way and appropriate landscaping to mitigate against traffic noise.

The Kellicar Road Landscape Buffer adjoins Kellicar Road and will comprise a 10m landscape reserve to allow for noise mitigation measures to be implemented.

The design of this precinct will be realised through the following objectives, desired character and design guidelines.

4.2 Precinct Objectives

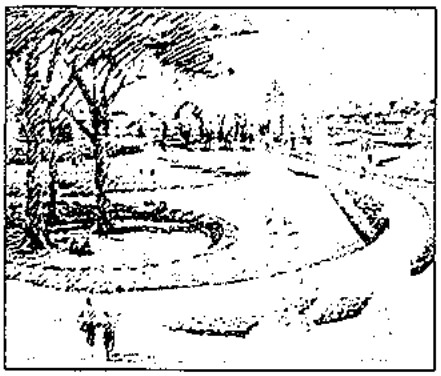


Figure 11: Open Space Precinct Desired Character

The objectives of the precinct are:

a. To create a high quality network of open space within the Link Area site that provides a range of functions and recreational settings for residents of the site and the surrounding area.

b. To ensure that the aesthetic and functional value of the open space is maximised by incorporating pedestrian and cyclist linkages, water quality management and acoustic and visual screening within the design of the open space network.

c. To provide open space which contributes to the amenity of the Link Site and assists in the development of high quality residential and commercial streetscapes in areas adjoining the open space.

4.3 Desired Character

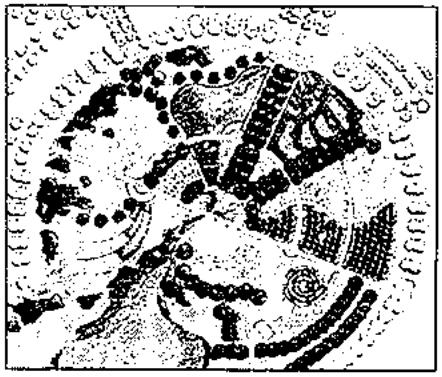


Figure 12: Marsden Park

The desired character of the Open Space Precinct has several elements, which reflect the range of functions expected from the different open space areas. A list of preferred tree species is provided in Annexure 1.

Marsden Park and Parkland Corridors:
Marsden Park will be the central focus of the development site and should provide a distinctive identity and a high level of amenity for residents. Its formal landscaped design and alignment of visual corridors will create a focal point from many parts of the site and surrounding areas.

All major roads entering the Link Site should focus on the central formal park, which is to be ringed by a crescent. An open vista across the parklands and along the waterway should be maintained from the intersection of Kellicar Road and Narellan Road.

Kellicar Road Landscape Buffer:
Kellicar Road has been identified as a significant noise source and this landscape buffer will allow for landscape treatment using walls and mounding to mitigate the noise problem. The size of the landscaped edge should enable the creation of an attractive pedestrian frontage to the housing development, without creating a "walled estate" appearance.

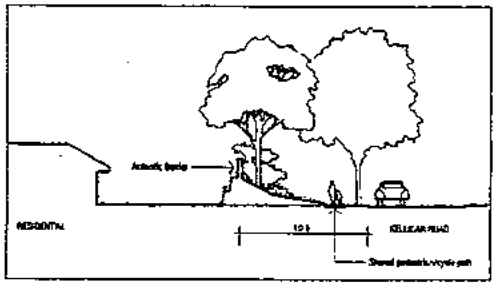


Figure 13: Kellicar Road Landscape Buffer

Gilchrist Drive and Therry Road Ridge-Top Landscape Buffer:
Within this landscape reserve, preservation of some of the existing stands of eucalyptus is required and should be supplemented with the addition of further planting. Open planting is encouraged to allow for the development of a safe pedestrian/cycleway along the western perimeter of the Link Site. Appropriate landscape mounding should be used within this reserve to mitigate against traffic noise from Gilchrist Drive.

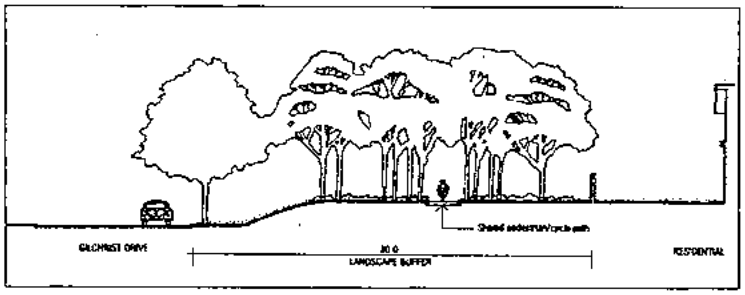


Figure 14: Gilchrist Drive Landscape Buffer

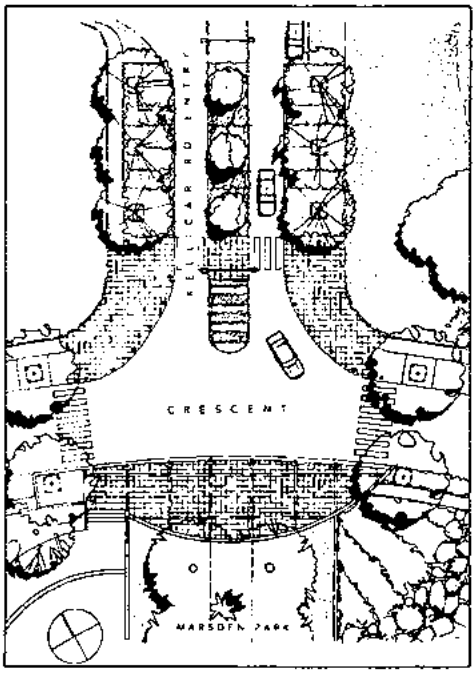


Figure 15: Example of Public Domain Street Treatment

Public Domain Streets:

The streets throughout the site should form an integral part of the open space network. The design of street tree planting verges, fencing, entry crossovers and lighting will assist in defining the character of individual precincts and the main roadways. A combination of deciduous exotics and appropriate native trees will be used to define the character of streets in the Link Site. The use of single street tree species to define each street will provide legibility and a clear delineation of the road hierarchy. The major entry roads will primarily be planted with colourful exotics and the minor residential streets with informal natives. Street widths have been designed to create a safe urban character.

4.4 Design Guidelines

Precinct Specific controls are provided below. These controls aim to meet the precinct objectives and will influence the design to meet the desired character of the precinct

Landscaping Structures and Lighting

Proposed landscaping structures such as gazebos, fountains, park furniture and the like should be consistent with the objectives of the Open Space Precinct. These structures should be of an appropriate size and form which respects their location and intended function.

All park, street and pedestrian path lighting should be designed to minimise nuisance to adjoining dwellings. Details of proposed lighting is to be submitted with any development application.

Landscaping Specifications

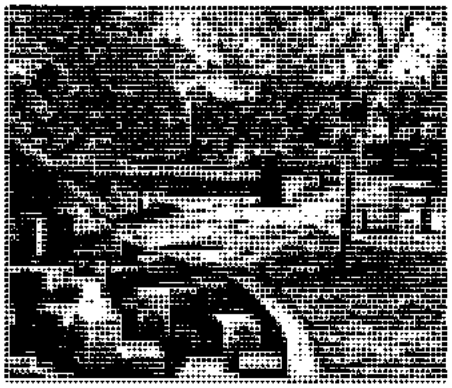


Figure 16: Suggestions for Landscaping Structures

A detailed landscape master plan is required for each component of the Open Space Precinct.

Pedestrian Paths and Cycleways

Shared pedestrian and cycleways must be a minimum of 2m wide.

Roadways

The minimum standards for streets and pathways within the Link Site are provided in Annexure 2.

5 Business Commercial Precinct

5.1 Introduction

The Business Commercial Precinct is strategically located opposite Marsden Park and in close proximity to Campbelltown Hospital (see Figure 17).

This Precinct is designed to create high quality commercial buildings with prime views across the parkland.

The design of this precinct will be realised through the following objectives, desired character and design guidelines.

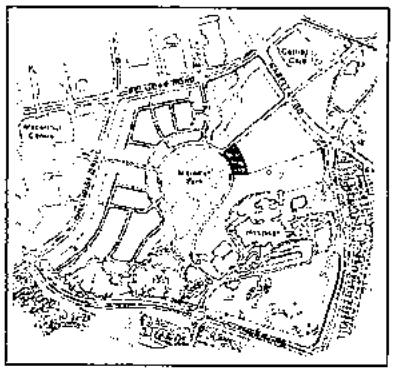


Figure 17: Business Commercial Precinct Location Plan

5.2 Precinct Objectives

The objectives of the precinct are:

a. To provide active street frontages at ground level to enhance the urban character, security and surveillance of the area and the adjacent park.

b. To provide for a range of business uses that may be medically orientated to complement the adjoining hospital.

c. To ensure that buildings opposite Marsden Park address the park in a formal way with elevations scaled to suit the civic nature of the park.

5.3 Desired Character

Commercial development is the preferred type of development in this precinct. Given its proximity to the existing hospital, the Business Commercial precinct will ideally contain professional suites possibly for medically oriented specialists and other uses associated with the hospital. Some ground floor retail uses which are complementary to medically oriented uses and the adjoining hospital, may be permitted.

The predominant building form within this precinct should comprise buildings up to 4 storeys in height. The corner of City Link Road and Parkside Crescent should be accentuated with special design elements, such as pop up roof forms or other articulated elements to provide visual interest and strongly define the street character. Building and landscape design should adequately address Marsden Park. A formal and continuous street elevation should be provided for all commercial buildings with a clear and legible entry sequence.

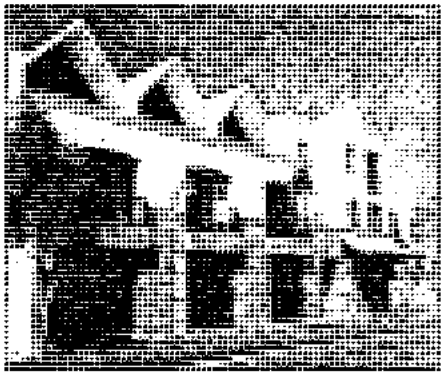


Figure 18: The Business Commercial Precinct should comprise a building with a front facade which adresses the street and Marsden Park.

Figure 19: Design Suggestion for Commercial Building

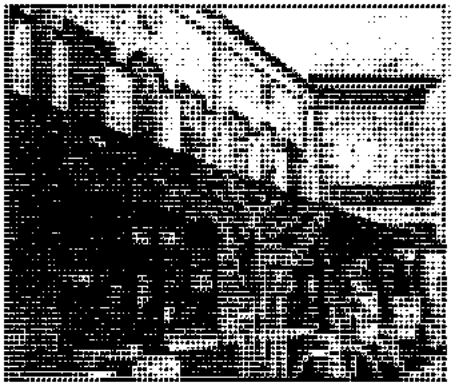


Figure 20: A Continuous Awning should be provided where necessary.

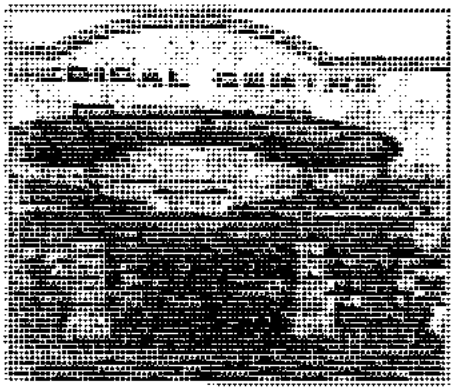


Figure 21: Medical Related Facilities are Encouraged in this Precinct.

Precinct Specific controls are provided below. These controls aim to meet the precinct objectives and will influence the design of preferred buildings to meet the desired character of the precinct.

Design and Massing

The facade of commercial buildings are to provide for an active street frontage and surveillance of the adjacent park.

Parapet walls and/or street facing gables are encouraged for all commercial buildings. Blank facade walls must be avoided and appropriate wall and window articulation is to be provided.

Building facades should incorporate high quality durable finishes. A schedule of finishes must be submitted with any development application.

A continuous awning should be provided over the pavement, where required, to provide weather protection for pedestrians and visitors at all major building entries.

All commercial buildings on corner sites should adequately address the corner and make provision for continuing design features, such as balconies around the corner.

Setbacks

A maximum front setback of 4m is required to Parkside Crescent. A maximum 5m setback is required to City Link Road, with a 2.5m projection area permitted within this setback. A minimum 3m side and rear setback applies to the other boundaries.

Height

The maximum height of buildings within this precinct is four storeys.

Car Parking

No vehicular access is to be provided from Parkside Crescent. Any above ground car parking areas should be adequately landscaped with planting occurring between parking areas. Parking and servicing arrangements must be provided at the rear of the site to avoid conflict with ground level uses and pedestrian spaces.

Commercial developments are to meet the requirements of Campbelltown Development Control Plan 52 – Off-Street Car Parking in relation to car parking, access and loading requirements.

6 Special Commercial Precinct

6.1 Introduction

The Special Commercial Precinct is located along the northern side of the "City Link" entry road from Narellan Road (see Figure 22). This precinct provides an extension to the retail environment of Queen Street.

It is intended that the Special Commercial Precinct may contain a variety of specialist commercial uses, such as leisure and entertainment facilities including cafes and restaurants. These will complement the existing general commercial uses in the surrounding area and provide residents with a variety of facilities.

The design of this precinct will be realised through the following objectives, desired character and design guidelines.

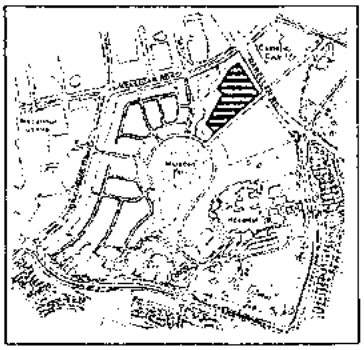


Figure 22: Special Commercial Precinct Location Plan

6.2 Precinct Objectives

The objectives of the precinct are:

a. To provide opportunities for the development of specialist commercial uses including entertainment and leisure facilities, in close proximity to the residential precincts and to existing commercial and civic uses of Campbelltown Town Centre.

b. To ensure that special consideration is given to the expression of building facades and ancillary facilities that are orientated towards Marsden Park, in order to maintain the visual amenity of the open space area.

c. To ensure that development in the precinct does not disrupt the view corridors to Marsden Park from the intersection of Narellan and Kellicar Roads.

6.3 Desired Character

The Special Commercial precinct should provide a variety of specialist commercial uses in a centralised park side location. A mixture of building forms and expressions is envisaged. However, a distinct building form which edges the northern side of the "City Link" road with buildings that present to both the street frontage and the park to the west and south, is encouraged.

Building design that provides active frontages to adjoining parkland and to City Link Road, is encouraged.

Figure 23: Special Commercial Precinct Desired Character

6.4 Design Guidelines

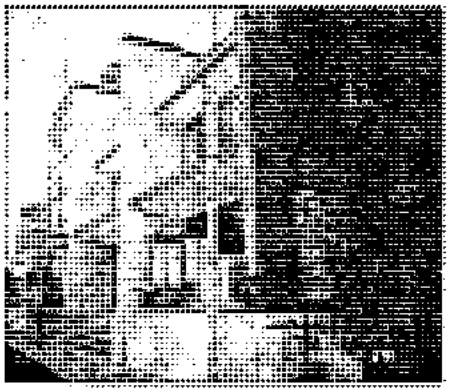


Figure 24: Design Suggestions for Commercial Building

Precinct Specific controls are provided below. These controls aim to meet the precinct objectives and will influence the design of preferred buildings to meet the desired character of the precinct

Design and Massing

The predominant bulk of buildings should be sited towards the street. Buildings adjacent to Marsden Park should address the park in a formal way with elevations scaled to suit the civic nature of the park. Blank facade walls must be avoided while appropriate wall and window articulation is to be provided.

Buildings along "City Link" Road should form a continuous street elevation with a clear and legible entry sequence. Parapet walls and/or street facing gables are encouraged for all buildings.

A continuous awning should be provided over the pavement, where required, to provide weather protection for pedestrians and visitors at all major building entries.

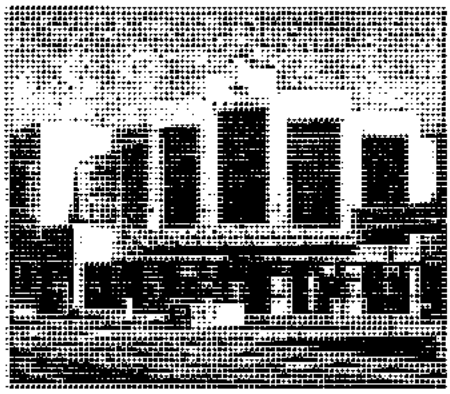


Figure 25: Corner Accent should be provided

Corner accent is to be provided for the key corner site at City Link and Narellan Roads which could for example, be in the form of a roof tower or corner balcony.

General

Parking and servicing arrangements should not alienate the street and/or the ground floor level activities or conflict with the pedestrian spaces. The design of buildings should consider the safety of pedestrians.

Any ancillary facilities or security fencing should not be visually intrusive to the street or Marsden Park.

Setbacks

A maximum 5m setback is required to City Link and Narellan Roads with a 2.5m projection area permitted within this setback. Side and rear setbacks are to be in accordance with the setback control diagram provided in Figure 27.

Height

The maximum height of buildings within this precinct is three storeys.

Figure 26: Another example of Corner Accent. Continuous awnings should be provided where required.

Car Parking

Any above ground car parking areas should be adequately landscaped with planting occurring between parking areas. Parking and servicing arrangements must not alienate the street and ground floor level activities or conflict with pedestrian spaces.

Commercial developments are to meet the requirements of Campbelltown Development Control Plan 52 – Off-Street Car Parking in relation to car parking, access and loading requirements. The provision of underground car parking for commercial developments is encouraged.

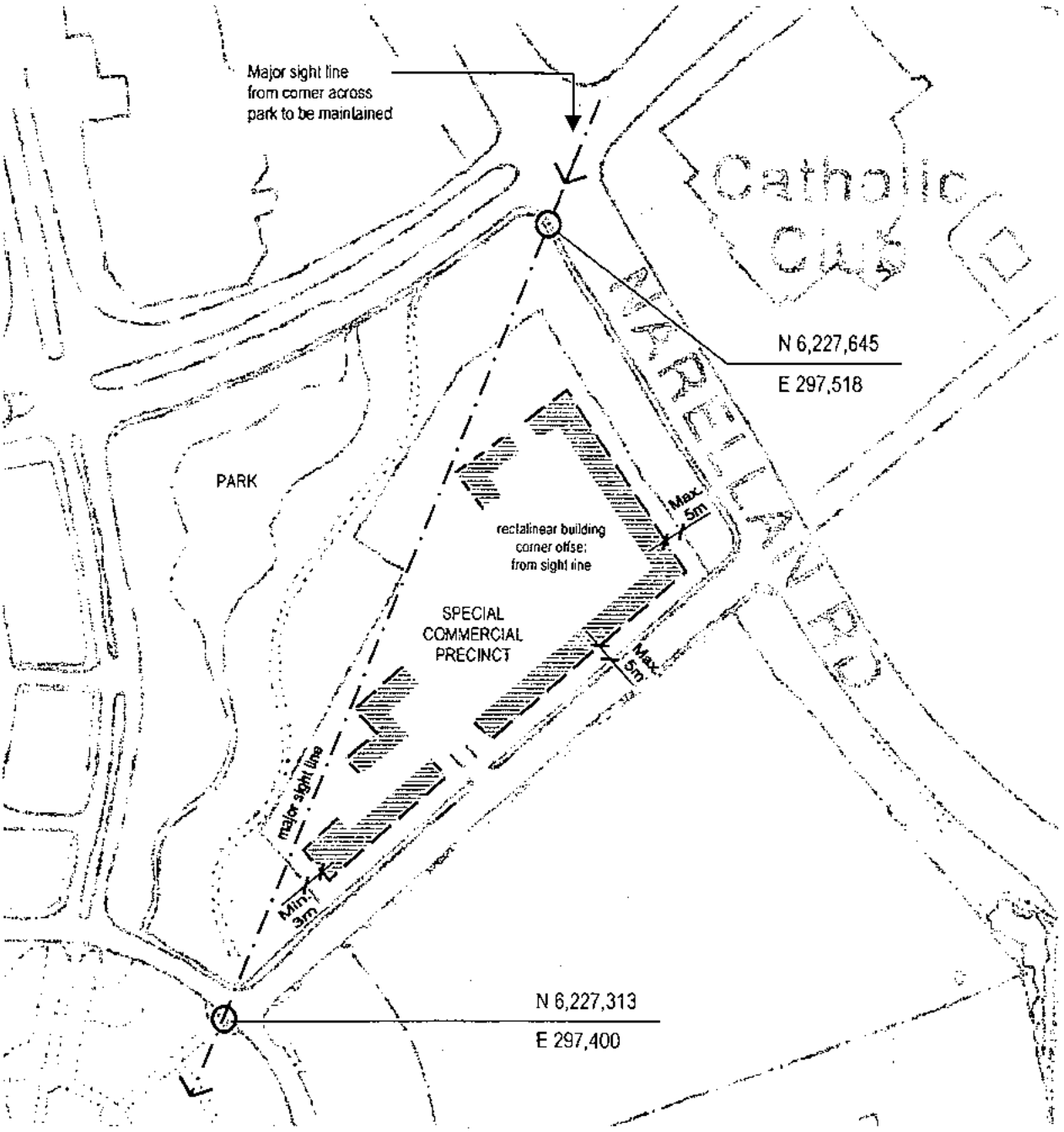


FIGURE 27

SETBACK CONTROL DIAGRAM SPECIAL COMMERCIAL PRECINCT

CAMPBELLTOWN LINK SITE DCP

7 Aged Persons Precinct

7.1 Introduction

The Aged Persons Precinct is located in the north-eastern part of the site, adjoining Narellan Road. A range of existing and proposed retail, commercial, entertainment, transport, medical facilities and Marsden Park are located nearby (see Figure 28).

This precinct has been designed to create a specialised community that may offer different types of aged care accommodation and associated facilities such as self-care units and nursing home.

The design of this precinct will be realised through the following objectives, desired character and design guidelines.

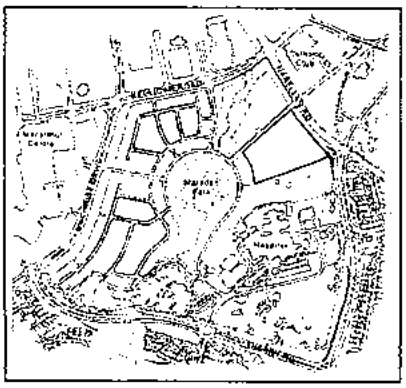


Figure 28: Aged Persons Precinct Location Plan

7.2 Precinct Objectives

The objectives of the precinct are:

a. To encourage a range of aged care accommodation and associated facilities that integrates with surrounding sites and facilities.

b. To ensure all buildings fronting City Link Road address the street and present a unified facade.

7.3 Desired Character

The Aged Persons Precinct may comprise a variety of building types suitable for different levels of aged care accommodation and associated services.

At the City Link Road frontage, buildings are to achieve a consistent building alignment to the street with easily identifiable pedestrian entries. Buildings of a larger bulk and height should be sited on the southern side of the precinct, adjoining the hospital site to provide graduation in building scale to nearby development.

Figure 29: Aged persons housing could be in the form of self-contained terraces.

7.4 Design Guidelines

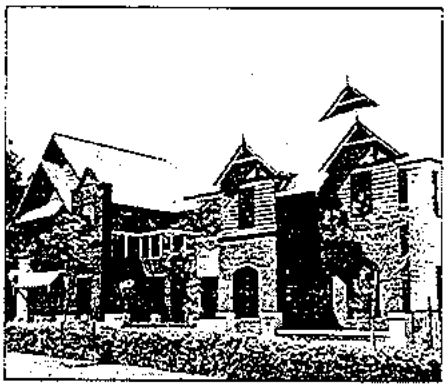


Figure 30: Aged Housing could be provided in a hostel building or nursing home.

To meet the precinct objectives and will influence the design of preferred buildings to meet the desired character of the precinct

Design and Massing

Those buildings located adjacent to the Narellan Road boundary should be designed to provide adequate acoustic insulation to mitigate against traffic noise. The Narellan Road frontage to the Aged Persons Precinct has a minimum 5m set back to allow for landscape acoustic treatment.

Design of buildings should consider safety of pedestrians. Any security fencing should not be visually intrusive to the "City Link" streetscape.

Setbacks

A 5m setback is required to City Link and Narellan Roads. A 2.5m projection area is permitted within the setback area to City link Road. A minimum 5m side and rear setback applies to the other boundaries.

Height

The maximum height of buildings within this precinct is two storeys for sites which adjoin City Link Road and four storeys for sites which adjoin the hospital site .

8 Entry Avenue Precinct

8.1 Introduction

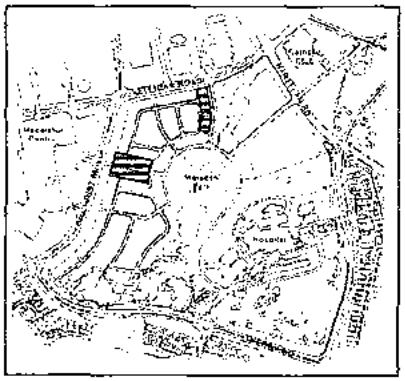


Figure 31: Entry Avenue Precinct Location Plan

The Entry Avenue Precinct comprises the two main entries to the site from Kellicar Road and Gilchrist Drive (see Figure 31).

This precinct is designed to create a unique sense of arrival to the Campbelltown Link Site, through building form and streetscape pattern. The Kellicar Road and Gilchrist Drive entries will be distinct in form and function, although they will have a similar theme encompassing formal landscaped avenues, a continuous street facade and a formal building pattern.

The design of this precinct will be realised through the following objectives, desired character and design guidelines.

8.2 Precinct Objectives

The objectives of the precinct are:

a. To promote hard edge building design which complements the street layout and landscape characteristics to create functional and aesthetic gateways to the site.

b. To provide a variety of medium density housing to meet the changing demand for housing in the Campbelltown Area and the requirements of Council's Housing Strategy.

c. To provide opportunities for residential-mixed use development in close proximity to the special commercial and business commercial precincts.

8.3 Desired Character

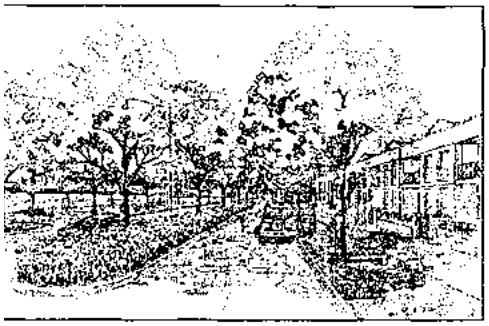


Figure 32: Kellicar Road Desired Character

The Entry Avenue precinct, comprising Kellicar Road and Gilchrist Drive entries, are to provide a sense of arrival with subtle differences of character. The design of these entry roads and the complementary built forms will provide a distinctive character for this precinct. Landscaping will also play a major role in realising the desired character and function of this precinct.

Kellicar Road Entry

The Kellicar Road entry should comprise a divided road with a formal planted median in the centre and street trees on either side. A mixture of trees species comprising Grevillea robusta, Flindersia and Populus should be provided to give the street a distinctive character. No driveway crossovers will be permitted to the Kellicar Road entry road. All garages are to be located at the rear of dwellings and accessed from the rear lane.

This area may include residential/mixed use with residential building forms that provide for possible ground floor commercial/retail uses. Preferred building types in this area comprise terraces and apartments.

Gilchrist Drive Entry

The Gilchrist Drive entry should comprise a formal tree lined avenue sloping towards Marsden Park. Use of ornamental exotic species including Ulmus and Pistacia are preferred and an entry landscape feature is desired. Land use should be predominantly residential and building forms should step evenly down both sides of the street towards Marsden Park.

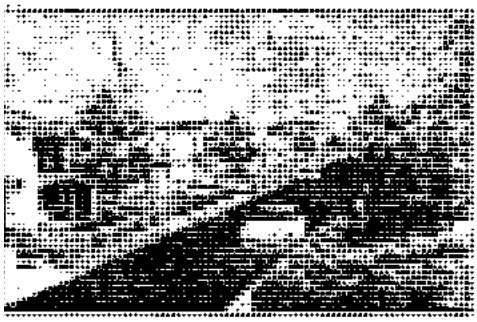


Figure 33: Gilchrist Drive Desired Character

Preferred building types in this area may comprise a mix of zero-lot line dwellings, apartment buildings and terraces, generally two to three storeys in height. The development of corner sites for residential flat buildings is encouraged.

8.4 Design Guidelines and Requirements

Precinct specific controls are provided below. These controls aim to meet the precinct objectives and will influence the design of preferred buildings to meet the desired character of this precinct.

Design and Massing

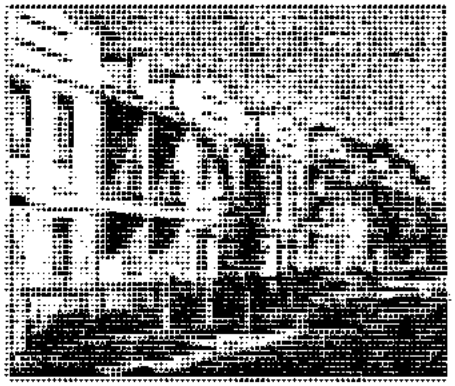


Figure 34: Suggested Design & Massing of Terraces

Street elevations should be formal in design, continuous and uniform in massing, however, differences should be provided in the architectural detailing to create some variety in design.

Parapet walls and or street facing gables are encouraged in this precinct.

Buildings of different heights should be comparable in form and be built parallel to the street alignment.

Building design should be consistent in terms of wall and roof treatment and expression of architectural elements to achieve the desired formal uniformity.

Corner Buildings

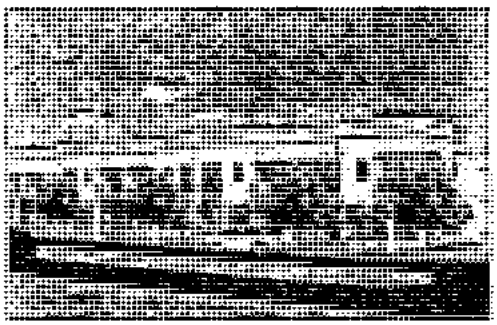


Figure 35: Example of Home/Work Terraces

The primary and side street elevations of buildings on corner lots are to be designed so that the building effectively turns the corner.

Accent to buildings in the form of roof features and/or corner balconies are to be provided at key corner lot locations. Apartment buildings on corner lots should have clearly defined entries.

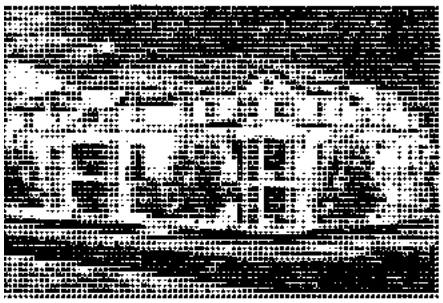


Figure 36: Design Suggestions for Apartment Buildings

Setbacks

Front: A front setback of 2.5m applies to all buildings. A further 1.5m setback behind the 2.5 front setback is permitted for indentation areas. Garage bays are to be setback a minimum of 5.5m from the front boundary, where rear access is not provided.

Side: Side setbacks should be a maximum of 1.5m for all buildings, except for apartments. The side setbacks for apartments should be nil where they adjoin terrace buildings and a minimum of 5m where they adjoin other building types, including other apartments.

Rear: A minimum rear setback of 1m applies to all structures.

Car Parking

Carparking is to be provided at the rear of the dwelling for all lots with rear street access.

9 Parkside Crescent Precinct

9.1 Introduction

Parkside Crescent is located in the centre of the Link Site and adjoins Marsden Park to the west (see Figure 37).

This precinct is designed to complement the adjacent open space by providing a built form that frames the park and thereby creates a sense of enclosure.

The design of this precinct will be realised through the following objectives, desired character and design guidelines.

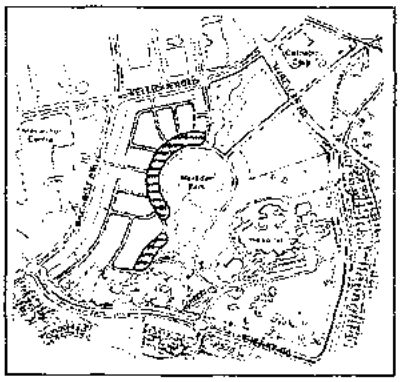


Figure 37: Parkside Crescent Precinct Location Plan

9.2 Precinct Objectives

The objectives of the precinct are:

a. To reinforce formality of the Crescent by providing a hard-edged building form which complements the landscaped roadway and defines the perimeter of the adjacent open space, creating a sense of enclosure.

b. To ensure buildings are designed to address and provide casual surveillance of Marsden Park.

c. To achieve higher density housing which provides good access to a public open space.

d. To provide a variety of medium density housing types to meet the changing demand for housing in the Campbelltown area and the requirements of Council's Residential Strategy.

9.3 Desired Character

The Parkside Crescent precinct will be defined by the formal alignment of the roadway and adjacent open space.

The precinct should comprise a continuous frontage of terraces and apartment buildings, which address the park. Taller buildings located on key corner sites are encouraged to further frame the park. Frontage size should be consistent to create a sense of enclosure and reinforce the desired formality of the crescent.

To allow the desired sense of enclosure to be created, driveway crossovers to Parkside Crescent are not permitted to all dwellings which have rear lane access.

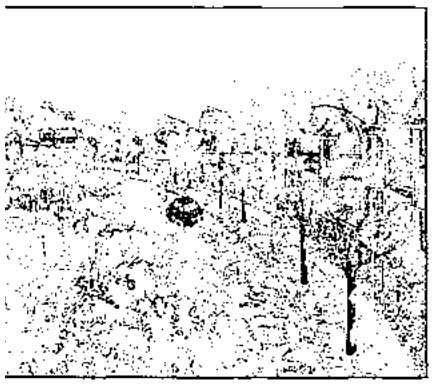


Figure 38: Parkside Crescent Desired Character

Figure 39: Parkside Crescent Desired Character

9.4 Design Guidelines

Figure 40: Apartment buildings which frame the Park are encouraged

Precinct specific controls are provided below. These controls aim to meet the precinct objectives and will influence the design of preferred buildings to meet the desired character of this precinct.

Design and Massing

In the northern area of the precinct, a continuous street facade of 2-3 storey terraces with 3 storey apartment buildings at key corner locations is desired, to frame the park and create a sense of enclosure. In the southern area of the precinct, 4 storey apartment buildings adjoining the park are preferred.

Differences in architectural detailing are encouraged within a basic architectural composition that is continuous and uniform in massing. Off street parking in the southern area of the precinct should be integrated into the building design.

Apartments overlooking the park in the southern area of this precinct should have a strong built frontage with projecting balconies overlooking the park. The building pattern should adjust to the natural landform, with taller buildings sited to take advantage of the landscape setting along the park in the southern area of this precinct.

Setbacks

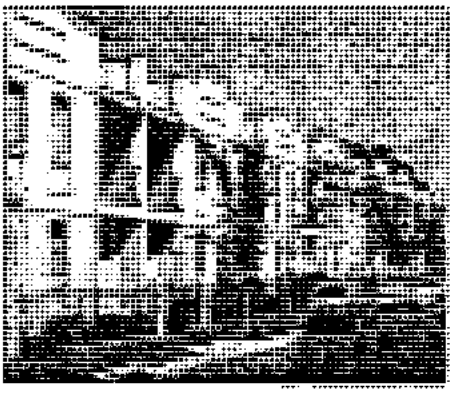


Figure 41: Example of typical terrace development

Front: A front setback of 3.5m applies to all buildings. A projection area of 1.5m is permitted within this setback area.

Side: A nil side setback applies to all dwellings, other than apartment buildings and dwellings on corner lots. The side setbacks for apartments should be nil where they adjoin terrace buildings and a minimum of 5m where they adjoin other building types, including other apartments. A maximum 1.5m side setback applies to corner lots for all buildings except for apartments.

Rear: A minimum rear setback of 1.0m applies to all structures on lots in the northern area of the precinct, which have rear street access. For all lots in the southern area of the precinct which adjoin the Park, a minimum rear building setback of 3.0m is required.

Car Parking

Carparking is to be provided at the rear of the dwelling for all lots with rear street access.

10 Rolling Green Precinct

10.1 Introduction

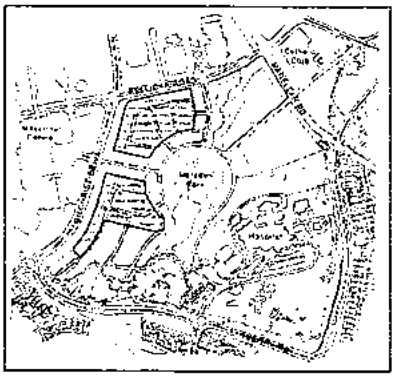


Figure 42: Rolling Green Precinct Location Plan

The Rolling Green precinct comprises two areas and forms the largest residential precinct in the Link Site. The northern area of this precinct adjoins Kellicar Road to the north and Gilchrist Drive to the west. The southern area is unique as it borders each of the other residential precincts in the Link Site, in addition to part of Marsden Park (see Figure 42).

This precinct is designed to provide a mix of medium density and traditional housing types.

The design of this precinct will be realised through the following objectives, desired character and design guidelines.

10.2 Precinct Objectives

The objectives of the precinct are:

a. To encourage a building form predominantly comprising one to two storey dwellings set within a less formal streetscape.

b. To encourage view sharing where possible by stepping buildings down the hill.

c. To provide a variety of housing types to meet the changing demand for housing in the Campbelltown area and the requirements of Council's Residential Strategy.

10.3 Desired Character

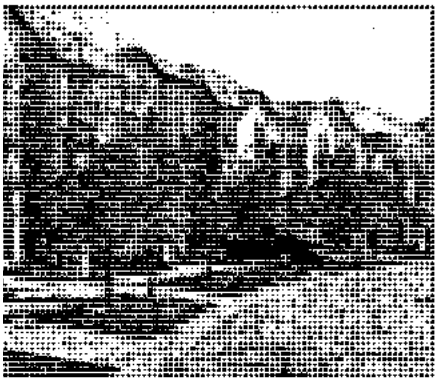


Figure 43: Rolling Green Precinct Desired Character

The landscape character of the Rolling Green Precinct will be defined by the topographic ridgeline of the Link Site which runs parallel to Gilchrist Drive and overlooks Marsden Park.

A more open building pattern is envisaged for this area consisting of a mixture of 1 and 2 storey dwellings, set within a less formal streetscape. Preferred building types in this precinct include single detached dwellings, semi-detached dwellings, terraces and zero lot-line dwellings.

Buildings should be built parallel to the street with additional streetscape character being achieved through varied facade modulation and through garage door setbacks. Free-standing dwellings should step down the hill in this precinct to take advantage of the slope and facilitate view sharing.

Figure 44: Clearly Defined Entry Pathways are encouraged.

Figure 45: Example of Preferred Dwelling Types.

10.4 Design Guidelines

Precinct Specific controls are provided below. These controls aim to meet the precinct objectives and will influence the design of preferred buildings to meet the desired character of the precinct.

Design and Massing

A less formal streetscape treatment is encouraged through the use of a variety of building forms and masses. Street elevations should be modelled through the use of entry porches and clearly defined entry pathways. Garages are to be integrated into the design of the streetscape. Single street facing gables with or without eaves is encouraged.

Setbacks

Front: A minimum front setback of 3.5m applies to all buildings. Projection areas are permitted to encroach 1m within the front setback. A setback of 5.5m applies to the face of garage doors.

Side: A minimum side setback of 1.0m applies to all sites with the exception of zero-lot line, terrace and semi-detached dwellings where they adjoin a side boundary. A minimum side setback of 1.5m applies to all corner lots.

Rear: A minimum rear setback of 5.5m and 8.0m applies to all 1 and 2 storey dwellings, respectively.

11 Bushland Precinct

11.1 Introduction

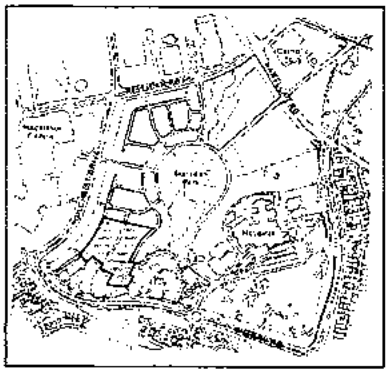


Figure 46: Bushland Precinct Location Plan

The Bushland Precinct is located in the southern part of the site and features remnant bushland pockets and steeper landscape slopes (see Figure 46).

This precinct which is nestled within an existing bushland landscape will be characterised by larger dwellings interspersed with apartments, creating a more open and diverse building pattern. A more varied subdivision pattern will facilitate the creation of a less formal streetscape pattern.

The design of this precinct will be realised through the following objectives, desired character and design guidelines.

11.2 Precinct Objectives

The objectives of the precinct are:

a. To encourage a building form comprising predominantly detached dwellings interspersed with apartment buildings.

b. To encourage building forms which complement the adjoining bushland reserve.

c. To encourage view sharing where possible by stepping buildings down the hill.

d. To provide a variety of housing types to meet the changing demand for housing in the Campbelltown area and the requirements of Council's Residential Strategy.

11.3 Desired Character

Figure 47: Bushland Precinct Desired Character

The bushland precinct is a residential precinct that is designed to relate to the bushland setting that it adjoins. The streets within the precinct will be orientated generally along the contours of the land allowing residential development to step down with the slope of the land.

A local street network will be developed in this precinct and street tree planting is to be in an informal staggered arrangement. A mix of native tree species is encouraged along these streets.

An open and diffuse building pattern is to be provided and it is desirable that wider lots should occur at corner lots and on steeper parts of the site, to allow for an adequate site area. In order to maintain an open and informal streetscape, the use of formal street fencing will be discouraged.

Figure 48: Apartment buildings which respond to the topography are encouraged.

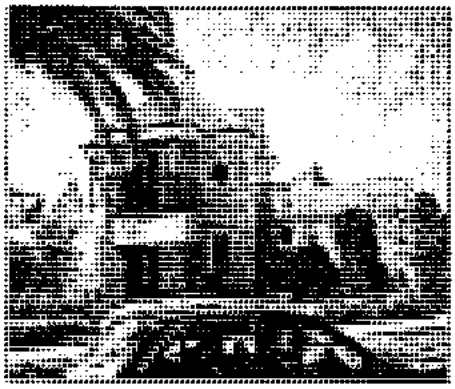


Figure 49: Design Suggestions for Single Detached Dwellings.

The built form in this precinct should generally not dominate the landscape and larger building lots should allow for buildings to be sited in a more sympathetic way.

Preferred building types in this precinct should comprise single detached dwellings interspersed with apartment buildings that respond to the topography.

11.4 Design Guidelines

Precinct Specific controls are provided below. These controls aim to meet the precinct objectives and will influence the design of preferred buildings to meet the desired character of the precinct

Design and Massing

A variety of building form, roof treatment and design solutions are encouraged. Roof design for single detached dwellings should consist of a collection of roof forms. Careful planning of buildings will be required to respect the proximity of the adjoining bushland reserve together with the steeper gradients of the site.

Street elevations are to be modelled in a less formal way with the opportunity for garages to be sited close to the street edge for the wider blocks. The design of buildings within this area should optimise an appreciation of the surrounding bush park with buildings sited sympathetically on sloping sites.

Free-standing dwellings should step down the hill in this precinct to take advantage of the slope.

Apartments are encouraged on key corner sites.

Setbacks

Front: A minimum front setback of 3.5m applies to all buildings.

Side: A minimum side setback of 1.0m applies to all buildings with the exception of a minimum 5m side setback for apartment buildings.

Rear: A minimum rear setback of 5.5m applies to all structures.

12 Hilltop Drive Precinct

12.1 Introduction

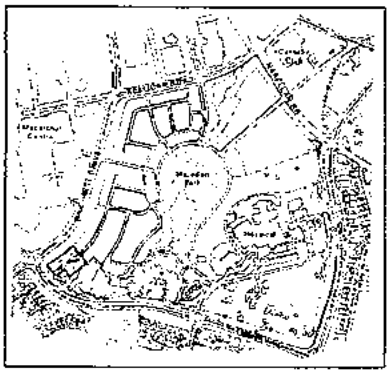


Figure 50: Hilltop Drive Precinct Location Plan

The Hilltop Drive Precinct is located in the south western corner of the site (see Figure 50). This precinct is located on the highest part of the site.

This precinct should create an urban feature on the hilltop. Development within this precinct should frame the view corridor from the central alignment of the precinct across the site and beyond.

The design of this precinct will be realised through the following objectives, desired character and design guidelines.

12.2 Precinct Objectives

The objectives of the precinct are:

a. To create a design feature at the top of the hill that will provide an interesting skyline silhouette which relates to the surrounding development.

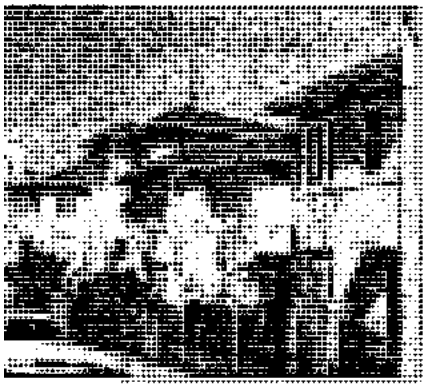
b. To encourage a closed and more formal building pattern which frames views out from the site.

c. To provide a variety of housing types including medium density housing to meet the changing demand for housing in the Campbelltown area and the requirements of Council's Residential Strategy.

12.3 Desired Character

The Hilltop Drive precinct is located on the highest part of the site and as such should provide a streetscape that allows appreciation of views across lower areas of the site and surrounding areas.

The Hilltop Drive roadway will form a central feature of the precinct and will comprise a formal landscaped drive with street trees planted evenly on both sides and a landscaped central median.



igure 51: Hilltop Drive Desired Character

A formal streetscape is to be created that has a commonality of massing on either side of Hilltop Drive. Buildings on each side of the drive are to have a consistent architectural form and character.

Preferred building types in this precinct are a mix of single detached and semi-detached dwellings up to a height of 2 storeys and apartment buildings up to 4 storeys in height.

12.4 Design Guidelines

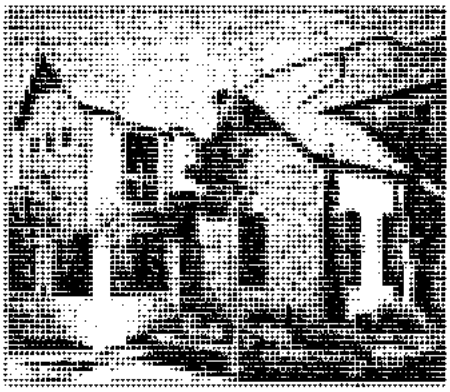


Figure 52: Design Solutions for Preferred Dwelling Types.

Precinct Specific controls are provided below. These controls aim to meet the precinct objectives and will influence the design of preferred buildings to meet the desired character of the precinct

Design and Massing

The design and massing of buildings should be uniformed along each side of the street, though each side of the street need not imitate each other.

The design of roofs should be modelled to encourage a distinct silhouette and a visually interesting skyline.

Buildings of consistent architectural form and uniformed building mass on either side of the street should complement the road alignment and landscaping design to frame views to the north-east. Lots should be evenly spaced where the same building type is used.

Figure 53: Apartment Buildings are encouraged in this Precinct.

Setbacks

Front: A front setback of 4.0m applies to all buildings. Projection areas are permitted to encroach 2m within this front setback. A front setback of 5.5 m applies to garage bays only. Garage bays will only be permitted where no rear access is available to the site.

Side: A minimum side setback of 1.0m applies to all sites, with the exception of a 5.0m minimum side setback for Apartments.

Rear: A minimum rear setback of 6.0m applies to all buildings, with the exception of a 1.0m minimum rear setback for garage and carport structures.

Annexure 1

Recommended Tree and Shrub Species for Public Domain Areas

Shrubs

Botanical Name	*Common Name*	*Mature Height*	*Description*
Acacia spp.	Acacia	2-3m	native evergreen flowering
Baeckea densifolia	Baeckea	1m	native evergreen flowering
Callistemon citrinus 'Endeavor'	Bottlebrush	4m	native evergreen flowering
Callistemon viminalis 'Little John'	Bottlebrush	1m	native evergreen flowering
Camellia sasanqua	Sasanqua	3m	exotic evergreen flowering
Crinum pedunculatum	Swamp Lily	600mm	native evergreen flowering
Gardenia augusta 'Florida'	Gardenia	1-1.5m	exotic evergreen flowering
Leptospermum flavescens 'Cardwell'	Tantoon Tea Tree	1.5m	native evergreen flowering
Murraya paniculata	Orange Jessamine	2-3m	exotic evergreen flowering
Phormium tenax /'Purpureum'/'Rubrum'	NZ Flax	1.8-3m	exotic evergreen coloured foliage
Photinia 'Red Robin'	Red Robin Photinia	2-4m	exotic evergreen coloured foliage
Plumbago auriculata 'Royal Cape'	Blue Plumbago	2-3m	exotic evergreen flowering

Groundcovers and climbers

Botanical Name	*Common Name*	*Mature Height*	*Description*
Acanthus mollis	Oyster Plant	500mm-1m	exotic evergreen flowering
Agapanthus orientalis (Mauve and White)	Lily of the Nile	500mm-1m	exotic evergreen flowering
Dianella revoluta	Spreading Lily	500mm-1m	native evergreen flowering
Dietes grandiflora	Wild Iris	750mm	exotic evergreen flowering
Dietes iridioides	African Iris	750mm	exotic evergreen flowering
Erigeron karvinskianus	Fleabane	200mm	exotic evergreen flowering
Gardenia augusta 'Radicans'	Prostrate Gardenia	prostrate	exotic evergreen flowering
Hardenbergia violacea	Purple Coral Pea	prostrate/climber 3m	native evergreen flowering
Hemerocallis spp	Day Lily	500mm	exotic evergreen flowering
Liriope spicata	Turf Lily	300mm	exotic evergreen flowering
Lomandra longifolia	Mat Rush	700mm	native evergreen
Myoporum parvifolium	Myoporum	prostrate	native evergreen flowering
Ophiopogon japonicus	Mondo Grass	200mm	exotic evergreen
Themeda australis	Kangaroo Grass	1.2m	native evergreen
Viola hederacea	Native Violet	prostrate	native evergreen flowering

Street Trees

Botanical Name	*Common Name*	*Mature Height*	*Description*
Acacia melanoxylon	Blackwood	15-20m	native evergreen flowering
Backhousia myrtifolia	Aniseed Tree	10m	native evergreen flowering
Brachychiton acerifolius	Flame Tree	25m	native deciduous
Casuarina glauca	Swamp Oak	20m	flowering native evergreen
Eleocarpus reticulatus	Blueberry Ash	8m	native evergreen flowering
Eucalyptus amplifolia	Cabbage Gum	15m	native evergreen
Eucalyptus crebra	Narrow Leafed Ironbark	20m	native evergreen
Eucalyptus moluccana	Coastal Grey Box	18m	native evergreen
Eucalyptus tereticornis	Forest Red Gum	20m	native evergreen
Ficus rubiginosa	Port Jackson Fig	40m	native evergreen
Flindersia brayleyana	Flindersia	20m	native semi evergreen flowering
Flindersia shottiana	Bumpy Ash	20m	native semi evergreen flowering
Fraxinus excelsior 'Aurea'	Golden Ash	10m	exotic deciduous
Fraxinus oxycarpa 'Raywood'	Claret Ash	10m	exotic deciduous
Grevillea robusta	Silky Oak	15-25m	native evergreen
Jacaranda mimosifolia	Jacaranda	10m	exotic deciduous flowering
Koelreuteria paniculata	Golden Rain Tree	9-15m	exotic deciduous flowering
Lagerstroemia indica	Crepe Myrtle	5-7m	exotic deciduous flowering
Liquidambar styraciflua	Liquidamber	9-15m	exotic deciduous
Lophostemon confertus	Brush Box	15-30m	native evergreen
Magnolia grandiflora	Magnolia	7-10m	exotic evergreen flowering
Malus floribunda	Crab Apple	5-8m	exotic deciduous flowering
Melaleuca decora	Paperbark	6-9m	native evergreen flowering
Pinus canariensis	Canary Island Pine	20m	exotic evergreen
Pistacia chinensis	Chinese Pistacia	8m	exotic deciduous
Pittosporum rhombifolium	Diamond Laurel	10m	native evergreen flowering
Pittosporum undulatum	Sweet Pittosporum	8-12m	native evergreen flowering
Platanus orientalis 'Digitata'	Cut Leaf Plane	30m	exotic deciduous
Podocarpus elatus	Illawarra Pine	20m	native evergreen
Populus nigra 'Italica'	Lombardy Poplar	25m	exotic deciduous
Prunus spp.	Flowering Cherry/Plum	6-8m	exotic deciduous flowering
Pyrus calleryana	Carltery Pear	15m	exotic deciduous flowering
Syzygium paniculatum syn australe	Brush Cherry	10m	native evergreen
Tristaniopsis laurina	Water Gum	6-10m	native evergreen flowering
Waterhousia floribunda	Weeping Lilly Pilly	15m	native evergreen

Annexure 2

Minimum Standards: Streets and Pedestrian Pathways

PRECINCT	ROAD WIDTH (Carriageway)	VERGE	FOOTPATH	MEDIAN	PARKING (All Within Carriageway)
Road A Kellicar Entry	5.5m each way (divided)	2.5m (along dwelling edge) 3.5m park edge	1.5m (along dwelling edge)	4.0m	On street parking to both sides of street
Road B Parkside Crescent	8.3m two way	2.4m (along dwelling edge) 3.5m park edge	1.5m (along dwelling edge set 0.6m away from property line for planting strip)	N/A	To dwelling side: adjacent to kerb and within carriageway; To park side: indented parking bays within footpath reserve
Road C Gilchrist Entry	10.2m two way	3.0m (both sides)	1.5m (both sides adjacent to property line)	N/A	On street parking to both sides of street
Road D1 Local Road	6.0m two way	2.3m (on footpath side) 3.0m (to other edge)	1.2m (to one edge only along property line)	N/A	On street parking to one edge only
Road D2 Local Road	6.0m two way	2.3m (on footpath side) 1.0m (to other edge)	1.2m (to one edge only along property line)	N/A	On street parking to one edge only
Road D3 Local Road	5.5m two way	2.3m (on footpath side) 1.0m (to other edge)	1.2m (to one edge only along property line)	N/A	On street parking to one edge only
Road D4 Local Road	5.5m one way loop at Hilltop Drive precinct	3.0m (to both sides)	N/A	3.0m	On street parking to one edge only
Road D5 Local Road	7.0m two way	2.3m (to footpath side) 3.0m (to other side)	1.2m (to one edge only)	N/A	On street parking to one edge only
Road E City Link	11.0m two way	2.0m (to both sides)	1.5m (to both sides along property line)	N/A	On street parking to both sides of street
Passage way P1 Rolling Green Bushland	9.0m min reservation	N/A	2.0m min shared with cyclist	N/A	N/A

Annexure 3

Definitions

Apartment means a form of residential building containing three or more dwellings on one allotment of land, whether contained in one or more buildings, where dwellings share a common access, stairs and foyer.

Attic means the top storey of a building, generally a habitable room, formed within the space of a roof and usually ventilated by a dormer window.

Awning means a structure that is cantilevered out from the exterior wall line of a building.

Balcony means an open area, not being an enclosed room or area, attached to or integrated with and used for the exclusive enjoyment of the occupant or occupants of a dwelling.

Bay window means a window or group of windows within a room that projects outward from the general line of the exterior wall.

Building envelope means the three dimensional space within which a building is to be confined.

Car Parking Structure means an enclosure for a vehicle. This may have walls (garage) or may have only a roof (carport).

Communal open space means shared open space for the recreation and relaxation of residents of a housing development and which is under the control of a body corporate or equivalent.

Development means all new buildings and new lot sub-division.

Development Control Plan means a plan made under Section 72 of the Environmental Planning and Assessment Act 1979 to provide more detailed provisions than those included in a local environmental plan.

Dormer Window means a window construction framed into and projecting through a steeply sloping roof. The dormer shall not visually dominate the roof.

Dwelling means a room or suite of rooms, occupied or used, or so constructed or adapted, as to be capable of being occupied or used as a separate domicile.

Ecologically Sustainable Development is a conceptual framework for dealing with the decreasing ability of the earth to continue to support humanity.

Frontage means the street alignment at the front of a lot and in the case of a lot that abuts two or more streets, the boundary of which, when chosen, would enable the lot to comply with the DCP provisions.

Ground floor apartment means an apartment located at the first finished level of an apartment building.

Habitable room is a room used for normal domestic activities and includes a bedroom, living room, lounge room, music room, television room, kitchen, dining room, sewing room, playroom, study, and sun room. It excludes a bathroom, laundry, water closet, food storage pantry, walk-in wardrobe, corridor, hallway, lobby, photographic darkroom, clothes drying room, and any other spaces of a specialised occupied neither frequently or for extended periods.

Indentation Area is a street setback control that allows additional modulation and rhythm within the streetscape. It permits indentation from the facade line away from the street and is taken to include elements such as indented porches and balconies.

Landscape Plan means a plan or document outlining the extent, type and location of proposed landscaping and planting.

Link Site refers to the entire site of this Plan. ***Refer to Figure 1.***

Living Room is the principal room or suite of rooms in a dwelling used for entertaining and relaxation activities and which may include a lounge room, dining room and/or family room.

Lot means an area of topographical space shown on an approved plan of subdivision and on which it is intended to construct a dwelling or dwellings.

Natural Ground Level is the existing level after civil and road works of any land to which this policy applies.

Neighbourhood Dwelling Density is the number of dwellings per neighbourhood area. Neighbourhood area is defined to include land used for housing, neighbourhood or local facilities such as primary schools, local or neighbourhood retail centres and local service easements. It excludes all roads, open space, regional facilities (eg TAFE) and all other land uses.

Parapet is a low wall or barrier placed at the edge of roof or balcony of a building.

Pop-up means a roof element that is to sit higher than the adjoining roof.

Porch means an open structure providing an area of formality and shelter at the entry into a building.

Projection Area is a street setback control that allows additional modulation and rhythm within the streetscape. It permits projection from the facade line towards the street and is taken to include bay windows, projecting porches and balconies.

Private open space means that area of land, which is suitable for private outdoor living activities. This may include any balconies and terraces and the unbuilt upon area of a site but does not include driveways and parking areas. Private open space may be located at the front, rear and /or sides of a site.

Public Domain means land used or intended to be used by the public and included roads, parks, reserves and landscaped edges.

Semi-detached Dwelling means a single freestanding dwelling sharing a common boundary with the adjoining neighbour. Generally described as two dwellings made to look like one larger building.

Setback means the distance of the external wall of a building from the lot boundary.

Single Detached Dwelling is a freestanding residential building which contains one but not more than one dwelling on its own allotment generally set within a landscaped garden.

Site means the lot(s) of land on which a building stands or is to be erected.

Site Analysis involves the identification and analysis of the existing urban character and adjacent properties to assist in understanding the locality and the development of a range of appropriate design responses.

Site Area refers to the area of land on which it is proposed to locate a development.

Site coverage means the area of a site covered by buildings (including balconies, terraces, garages and carports).

Storey means a space within a building which is situated between one floor level and the floor level next above, or if there is no floor above, the ceiling or roof above. It does not include a room contained wholly within the roof space where the roof has a maximum pitch of 36 degrees or a parking area which is no more than one metre above finished ground level.

Terrace means a single dwelling which shares both side boundary lines with adjoining neighbours and is generally built from side boundary to the other side boundary. This building type is repeated to form a row of attached dwellings.

Unbuilt Upon Area means that area of the site not occupied by buildings, driveways and car parking structures.

Waste means any substance that is no longer used for the purpose for which it is intended, and defined under the Waste Minimisation and Management Act, 1995.

Width means the dimension between two side boundaries of a lot.

Zero-Lot Line Dwelling means a dwelling built to one side boundary line. The plan configuration shall form a courtyard space usually to the rear of the lot.

Acknowledgments

Acknowledgments

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Advisors from Business Land Group
Michael Pring
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Project Architect
Robin Bradley

Campbelltown City Council Contributors
Gail Connolly
Keith Richardson
Fiona Mann

Previous Documents
The initial draft of the document was prepared by Hassell Pty Ltd in April 2001.

Other Source Material
Photographs and figures were provided by Bradley Residential Design, dem gillespies, Peter Annand and Hassell.

AMCORD, 1995 and the NSW Model Code, 1997 were used as source material, and for figures and definitions.

Volume 2

Site Specific Development Control Plans

Part:5

University of Western Sydney Campbelltown Development Control Plan 2008

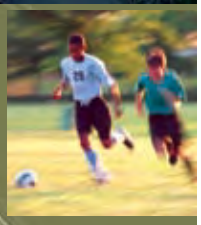
Note:
The University of Western Sydney DCP came into effect on 24 February 2009 and has been incor-porated as Part 5 , Volume 2 of Campbelltown (Sustainable City) DCP .

UNIVERSITY OF WESTERN SYDNEY CAMPBELLTOWN

Development Control Plan
October 2008





UNIVERSITY OF WESTERN SYDNEY CAMPBELLTOWN

Development Control Plan
October 2008

Prepared on behalf of
Landcom and University of Western Sydney

Prepared by
MG Planning

in conjunction with
Cox Richardson
APP Corporation

CONTENTS

CONTENTS

FIGURES

TABLES

PART 1: Preliminary

1.1 VISION

The vision for the DCP is:

"To provide for a community which offers a unique lifestyle of learning, living, working and playing within an education precinct."

Supporting this vision the following aims and objectives have been identified for the site:

- Develop a comprehensive framework that:
  - provides for a residential community,
  - provides for the long term needs of the academic campus,
  - better connects the site to its surroundings,
  - recognises the site's location in relation to the Campbelltown City Centre and Macarthur Regional Centre,
  - preserves the significant natural features of the site.
- Provide for quality urban design throughout the site.
- Develop a network of streets, pedestrian and open space linkages within the site and connecting to adjoining places.
- Create high quality riparian corridors that integrate and consolidate the functions of drainage with the preservation of significant flora and fauna.
- Create an attractive landscape setting for the future residential community.
- Build on and improve links to Macarthur Station,
- Encourage commercial and research partners to the central academic precinct.
- Provide high quality housing that will set a benchmark for development in the Campbelltown area.
- Provide public transport and vehicular linkages to the Macarthur Regional Centre.

1.2 INTRODUCTION

This Development Control Plan is generally consistent with the Campbelltown (Sustainable City) Development Control Plan (CSCDCP).

1.2.1 Name of the DCP

This Plan is called University of Western Sydney Campbelltown Development Control Plan (the DCP).

1.2.2 PURPOSE OF THE DCP

The DCP has been prepared in accordance with Section 72 of the *Environmental Planning and Assessment 1979* (the Act) and Clause Nos 16–24 of the Environmental Planning and Assessment Regulation 2000 (the Regulation). The DCP supplements the existing Campbelltown (Urban Area) Local Environmental Plan 2002 (LEP 2002).

Council (the consent authority) is required under Section 79C of the Act to take into consideration relevant provisions of the DCP in determining development applications on land located in the University of Western Sydney Campbelltown Campus lands and Landcom lands (herein referred to as 'the site') shown at Figure 1.

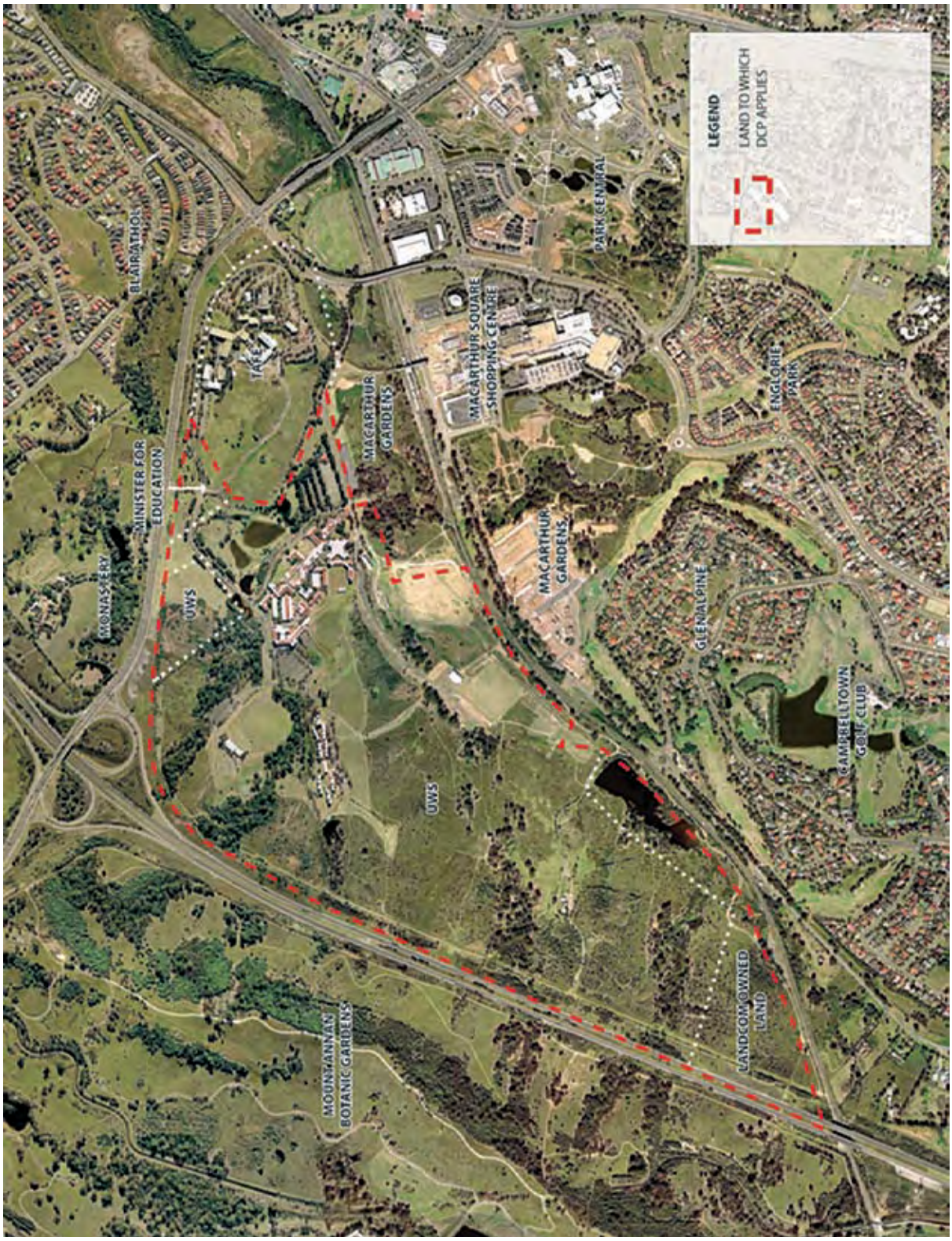
1.2.3 Land to which the DCP applies

The DCP applies to all land contained within the development area as identified in Figure 1 known as 'the site'.

1.2.4 The Consent Authority

Campbelltown City Council (Council) is the consent authority for 'local' development within the site.

Figure 1: Area to which this DCP applies



1.2.5 Development Categories

Anticipating the longevity of this DCP, there are 5 categories of development that Council is likely to experience.

Exempt Development

Exempt development is incidental development that is of minimal environmental impact and may be carried out without the need to obtain development consent from Council. The type of development that is exempt from the need to obtain development consent is set out in Campbelltown LEP No. 209 Exempt Development.

Complying Development

Complying development is development that meets specific criteria set out in SEPP No 60 – Exempt and Complying Development.

Local Development

Local development requires development consent from Council.

Integrated Development

Integrated development is local development that requires the consent of another authority as well as Council.

State Significant Development

State significant development is development that is listed under Schedule 3 of the Regulation and SEPP (Major Projects) 2005, for which the Minister of Planning is the consent authority.

1.2.6 Monitoring and Review of the DCP

Council is required to keep its LEP and DCPs under regular and periodic review to ensure that these Plans:

(a) continue to be useful and relevant;
(b) can be judged as to their effectiveness;
(c) reflect an adequate and appropriate capacity for development; and
(d) provide for the appropriate protection of the environment and natural resources.

This DCP shall be reviewed every five (5) years, or earlier, as considered necessary by Council.

1.2.7 Variation to Planning Controls and Standards within the DCP

Council may consider variations to the requirements of this DCP in certain circumstances. Requests for variations are required to be in writing and shall clearly demonstrate the reason(s) why the variation sought would not adversely impact on the environment or local amenity, would not erode the relevant standard and requirement; and that compliance with the objectives and requirements of the DCP are unreasonable or unnecessary in the circumstances of the case. Council gives no assurance that it will permit any variation(s) to the requirements of this DCP. Variations will only be considered in exceptional circumstances.

Compliance with any numerical provisions of the DCP does not guarantee the granting of development consent. Each application will be considered on its merits, having regard to the matters for consideration under Section 79C of the Act.

Consistent application of the provisions of the DCP will be given high priority by Council.

1.2.8 Structure of the DCP

The format of this DCP has been established to identify various objectives and general design requirements for each of the permissible development typologies. It comprises the following structure:

Part 1: Preliminary

Part 2: Requirements applying to all types of development

Part 3: Campus/Academic Development

Part 4: Residential Development

1.2.9 Relationship to other Plans and Documents

The provisions of this DCP are site-specific and reflect the planning and design objectives desired by the relevant stakeholder parties.

The provisions contained in the DCP are in addition to the provisions within SEPPs, REPs and the LEP. In the event of any inconsistency between the DCP and SEPPs, REPs, and/or the LEP, the SEPPs, REPs and/or LEP will prevail. Where there is an inconsistency between this DCP and any other DCP to which the Plan applies, the provisions of this DCP shall prevail.

1.2.10 How to use the DCP

The following steps provide a general guide of how to use this DCP:

STEP 1

- Check the permissibility of the development under the relevant EPI(s).
- Determine the category of the development by referring to Section 1.2.5.
- If the development is 'exempt development' refer to LEP No. 209 – Exempt Development.
- If the development is 'complying development' refer to SEPP No. 60 – Exempt and Complying Development.
- If the development is not exempt or complying development, proceed to Step 2.

STEP 2

- Read Part 2 (Requirements applying to All Types of Development) and observe the stated requirements for all development applications.

STEP 3

- Determine whether the proposed development is campus/academic development or residential development.
- Read the relevant part of the DCP that applies to the type of development proposed (Part 3 or 4);
- Ensure that the development satisfies the objectives and design requirement of each of the relevant sections of the DCP.

STEP 4

- Follow the process for seeking development consent from Council.

1.2.11 Definitions

The words used in the Plan have the meaning outlined in Appendix 1.

1.3 BACKGROUND

This DCP has been prepared following a detailed analysis of the site's environmental characteristics and capability (discussed in the UWS Background Environment Report) and the formulation of the UWS Campbelltown Master Plan which outlines the vision and development principles for the site.

The development framework for the future development of the site including both residential and academic development is identified in the UWS Master Plan. It outlines the design intent for the evolving residential community to be accommodated within the site. The Master Plan illustrates how the vision for the site is to be achieved and details the:

(i) Overall structure and indicative subdivision layout
(ii) Proposed Network of Streets, Cycleways and Pedestrians Pathways
(iii) Location and character of Open Space Areas
(iv) General Building Character
(v) Building Typologies

The Master Plan provides the background to this DCP and includes the principles and rationale for the overall layout as well as the basis for the development controls contained herein.

1.4 DCP OBJECTIVES

The objectives of the DCP are:

(i) Allow the University to develop to accommodate the education needs of the expanding local and regional community.

(ii) Provide for employment and economic development which will complement and create synergies, but not compete, with the University and Campbelltown CBD.

(iii) Provide for the enhancement of the environmental qualities of the site while at the same time accommodating the long term needs of the University and demand for housing by the wider community.

(iv) Provide for an environmentally sustainable residential community that is benefited by its proximity to and integration with the education facilities.

Responding to the objectives this DCP will guide:

(i) the orderly expansion of the University,

(ii) the development of businesses and employment opportunities with close links to the University and research institutions,

(iii) the development of a residential community with strong physical and social links to the campus, and

(iv) the development of sport and recreation facilities to cater for the needs of the community.

The objectives and development controls of this DCP are targeted at the creation of a vibrant and caring community that enjoys the stimulation of living and working with people of diverse cultural, social and demographic backgrounds. The creation of businesses and employment opportunities linked to the University will further contribute to the development of a strong and dynamic campus/community relationship. The campus core will be activated as a pedestrian place, creating more life and energy, connected to the community and public transport.

1.5 DESIGN APPROVAL PROCESS

1.5.1 Standard Lot and Large Lot Housing

All Applicants that wish to develop Standard Lot and Large Lot Housing must comply with the provision of this Plan and any other design controls as specified in the sales contract.

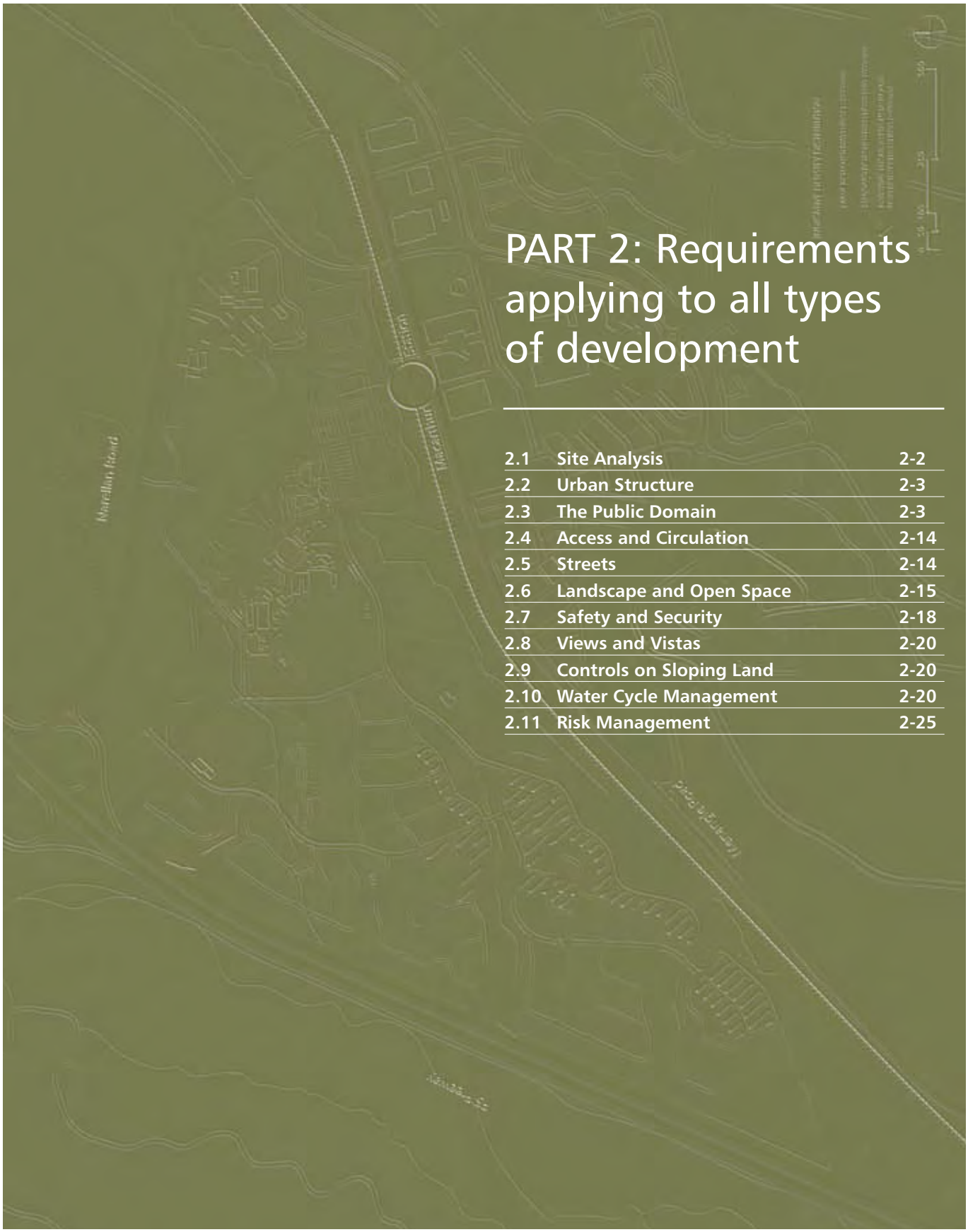
1.5.2 Small Lot Housing

Prior to lodgement of a Development Application with Council, all applicants that wish to develop Small Lot Housing must first obtain approval from the UWS Design Review Panel (UWS DRP). There are specific requirements applying to land purchased in the UWS Campbelltown Lands area as specified in the sales contract.

The UWS DRP consists of representatives from the University, Landcom, Council and expert consultants having expertise in architecture, urban design, environmental planning, landscape architecture and building.

A design concept shall be prepared by the applicant and must address the relevant objectives and design requirements applying to the development. Subject to approval by the UWS DRP, applicants may then proceed to lodge their Development Application with Council.

To make an application to the UWS DRP, please refer to the contact details in the sales contract.



PART 2: Requirements applying to all types of development

This part applies to all land covered by this DCP.

2.1 SITE ANALYSIS

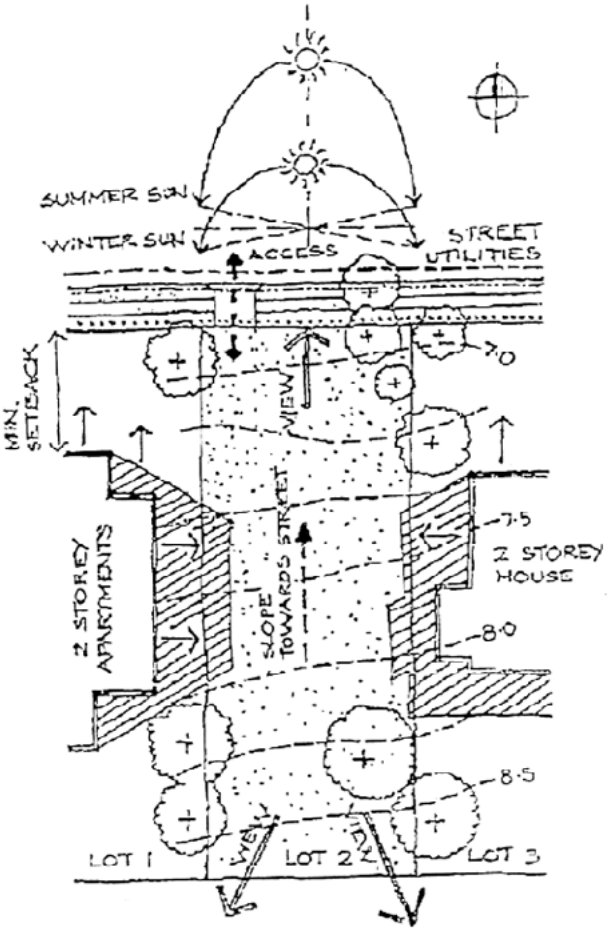
Objectives:

- Identify the constraints and opportunities for the development of the site.
- Identify the capability and suitability of the site for development.

Design Requirements:

1. A site analysis shall be lodged with the development application for all development involving the construction of a building. The scope of the site analysis will depend on the scale and nature of the development and shall address:
   - (i) contours, slope and north point;
   - (ii) existing landscaping and vegetation;
   - (iii) existing buildings and structures;
   - (iv) roads, access points, parking, and traffic management devices and the like;
   - (v) linkages; open space networks, pedestrian/ cycle paths and the like;
   - (vi) easements, services, existing infrastructure and utilities;
   - (vii) hydraulic features; drainage lines, water features, drainage constraints, and the like;
   - (viii) natural hazards (e.g. flooding, slip);
   - (ix) solar orientation, overshadowing, prevailing winds, rainfall;
   - (x) views and vistas to, from and within the site; and
   - (xi) a streetscape analysis.

Figure 2: Example Site Analysis



2.2 URBAN STRUCTURE

Figures 3 to 7 show the intended urban structure for the future development of the site. Medium and high density residential development areas have been identified in locations which are:

- adjacent to open space,
- along the main transport spine,
- near potential future mixed use precincts, and
- on the areas of lower slope.

Lower density residential development is identified for those areas of steeper land, or which are otherwise less suited for higher density development.

Objectives:

- Create a residential community which is environmentally sustainable, which has links to and which acts as a catalyst for future growth in the University.
- Allow for higher residential densities in areas which have higher levels of accessibility.
- Capitalise on the site's accessibility to the Macarthur Square and facilities and services beyond.
- Encourage an enhanced sense of identity for the area that is distinctive and reflects the site's function as well as its natural setting.

Design Requirements:

1. Development shall be consistent with the Indicative Density Distribution at Figure 3.

2.3 THE PUBLIC DOMAIN

Objectives:

- Create a network of open spaces, focal points and recreation and community facilities which meet the needs of the new residential community as well as the University.
- Establish quality public domain spaces which add to the visual and environmental amenity of the site, and which are designed to maximise safety and security.
- Incorporate water sensitive urban design and other sustainable development practices in the creation of the public domain.

Design Requirements:

1. Development shall be generally consistent with the Indicative Street Hierarchy (refer Figure 4).
2. The developer shall provide a network of local roads that reflects road function and desired character as outlined by the street type cross section shown below (Refer Figures 8–16).
3. Design shall clearly distinguish between the public and the private domain.
4. Significant landscape nodes and precincts such as the main entrances to the campus and residential areas, major parklands, natural corridors, green links and site boundaries are to be highlighted with appropriate landscaping to create a unified setting.
5. Development shall be consistent with the Indicative Pedestrian Circulation Plan, Indicative Cycle Circulation Plan and Indicative Public Transport Network Plan (refer Figures 5, 6 and 7).

Figure 3: Indicative Density Distribution

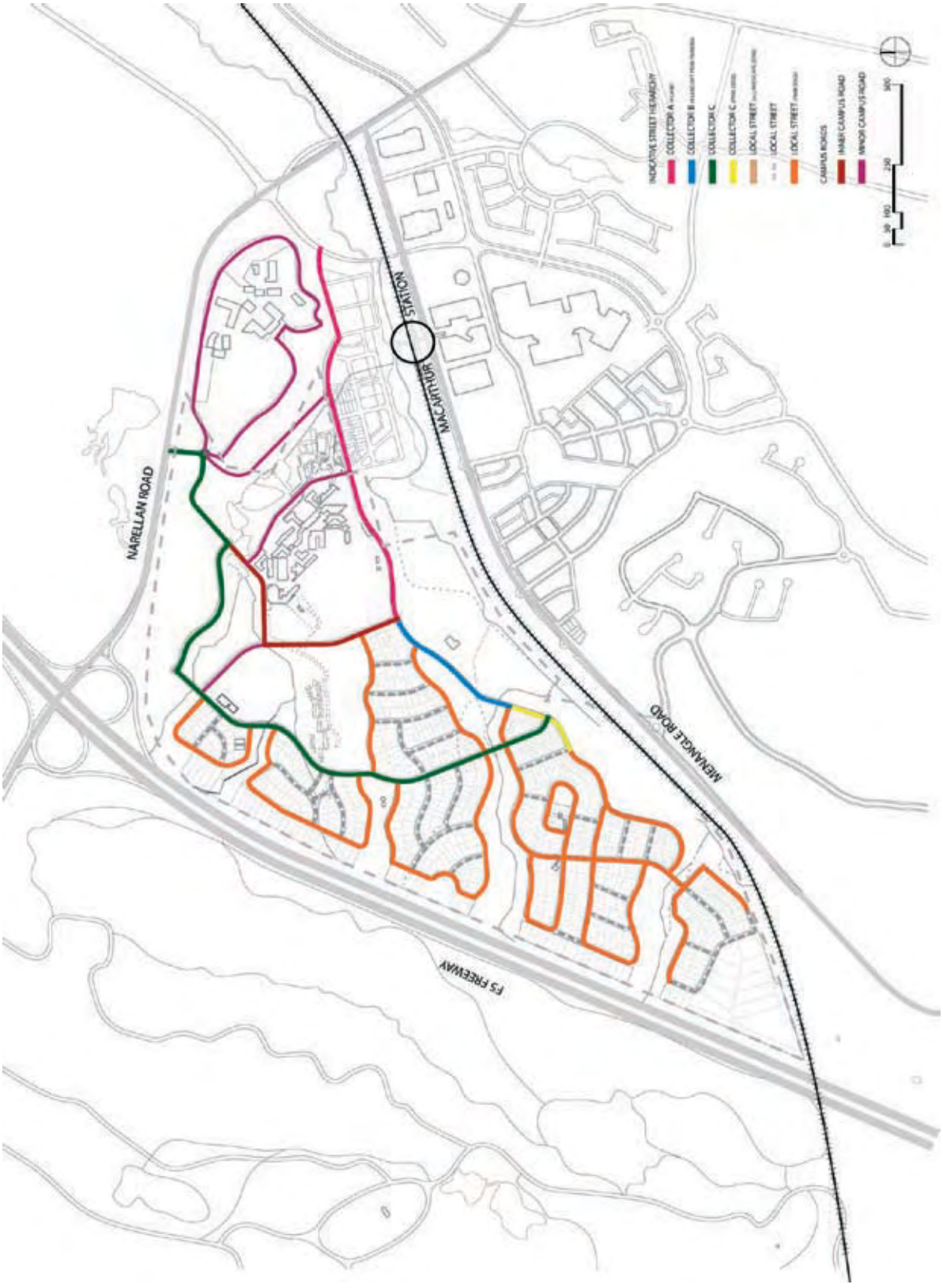


Figure 4: Indicative Street Hierarchy

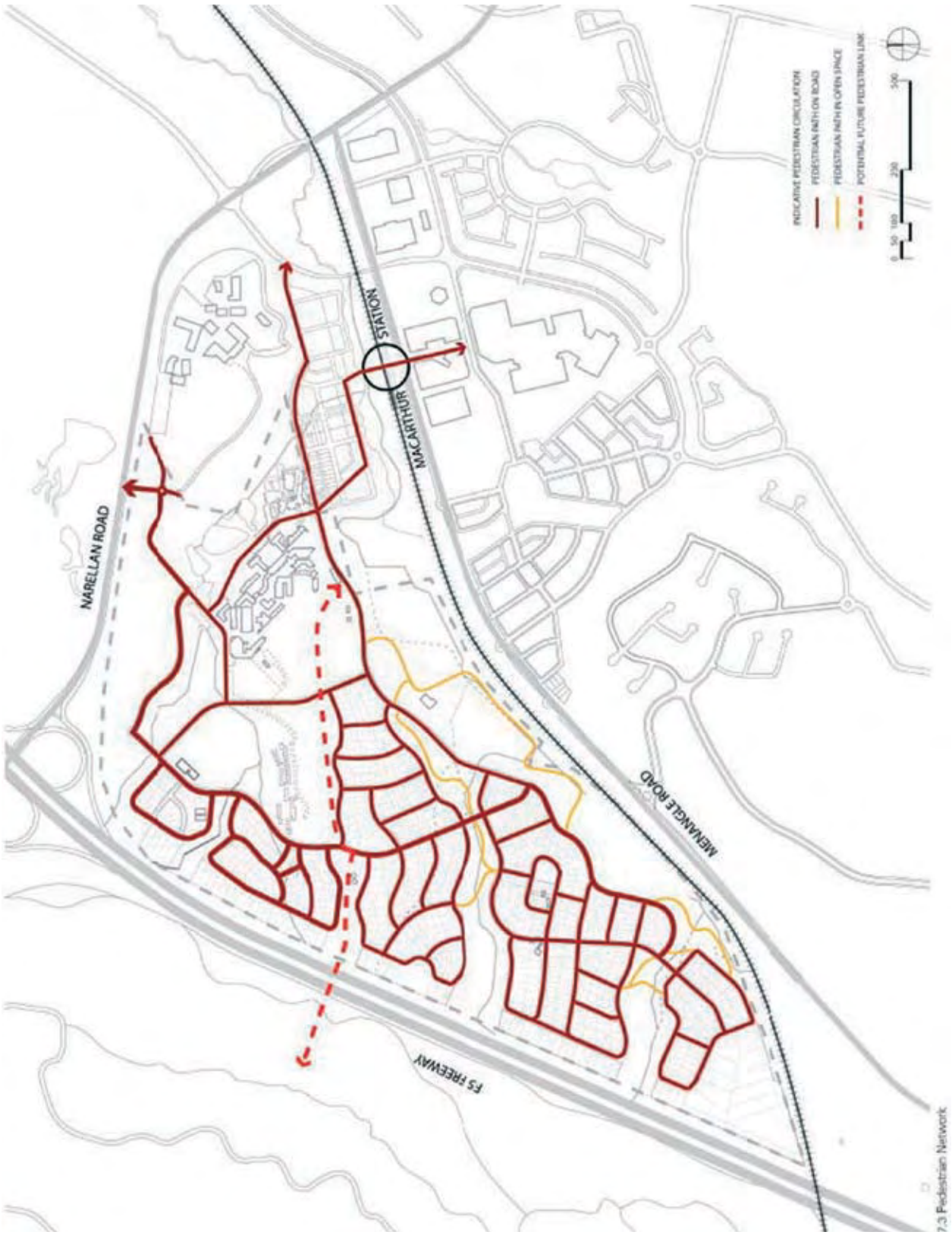


Figure 5: Indicative Pedestrian Circulation Plan

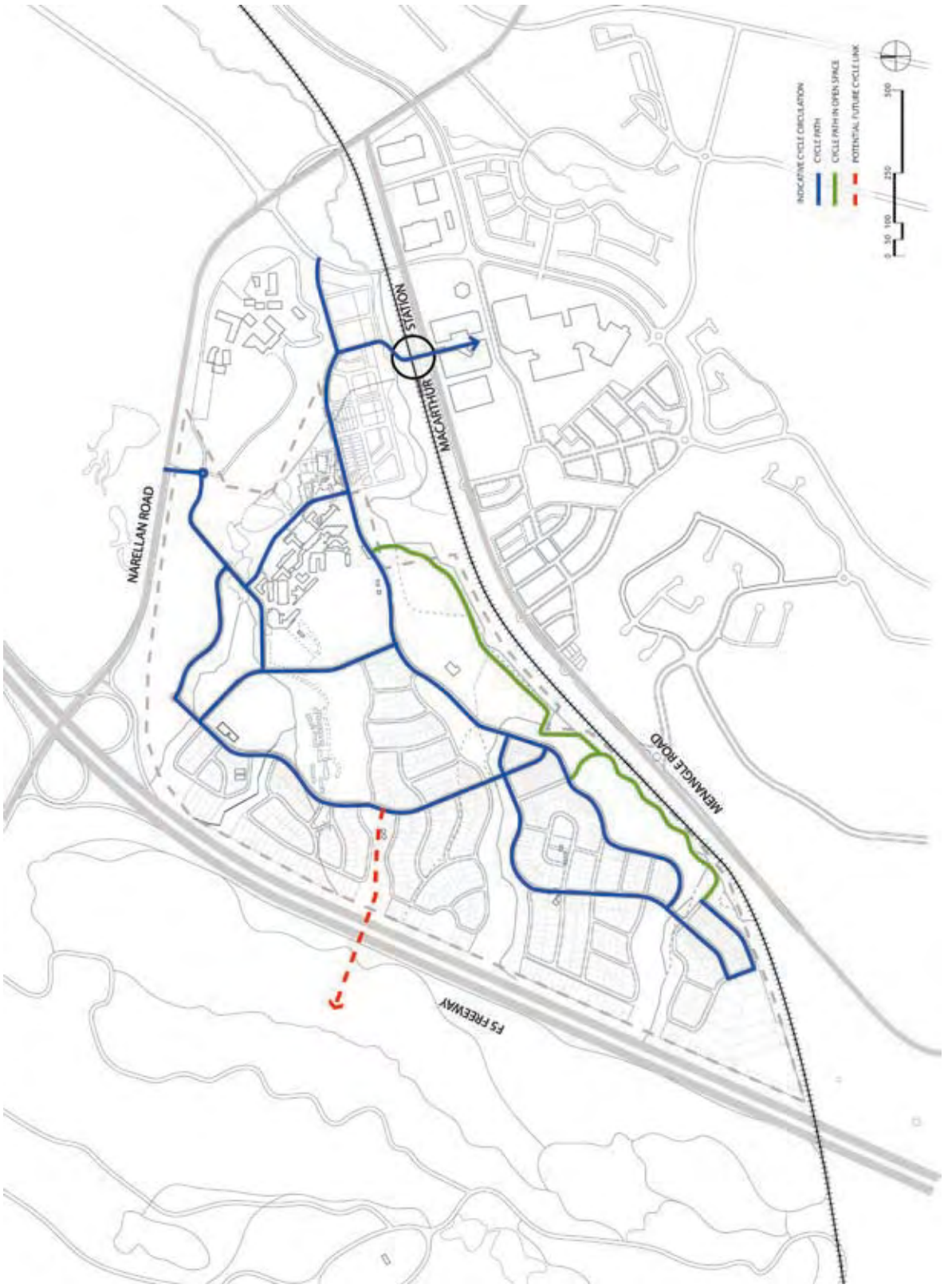


Figure 6: Indicative Cycle Circulation Plan

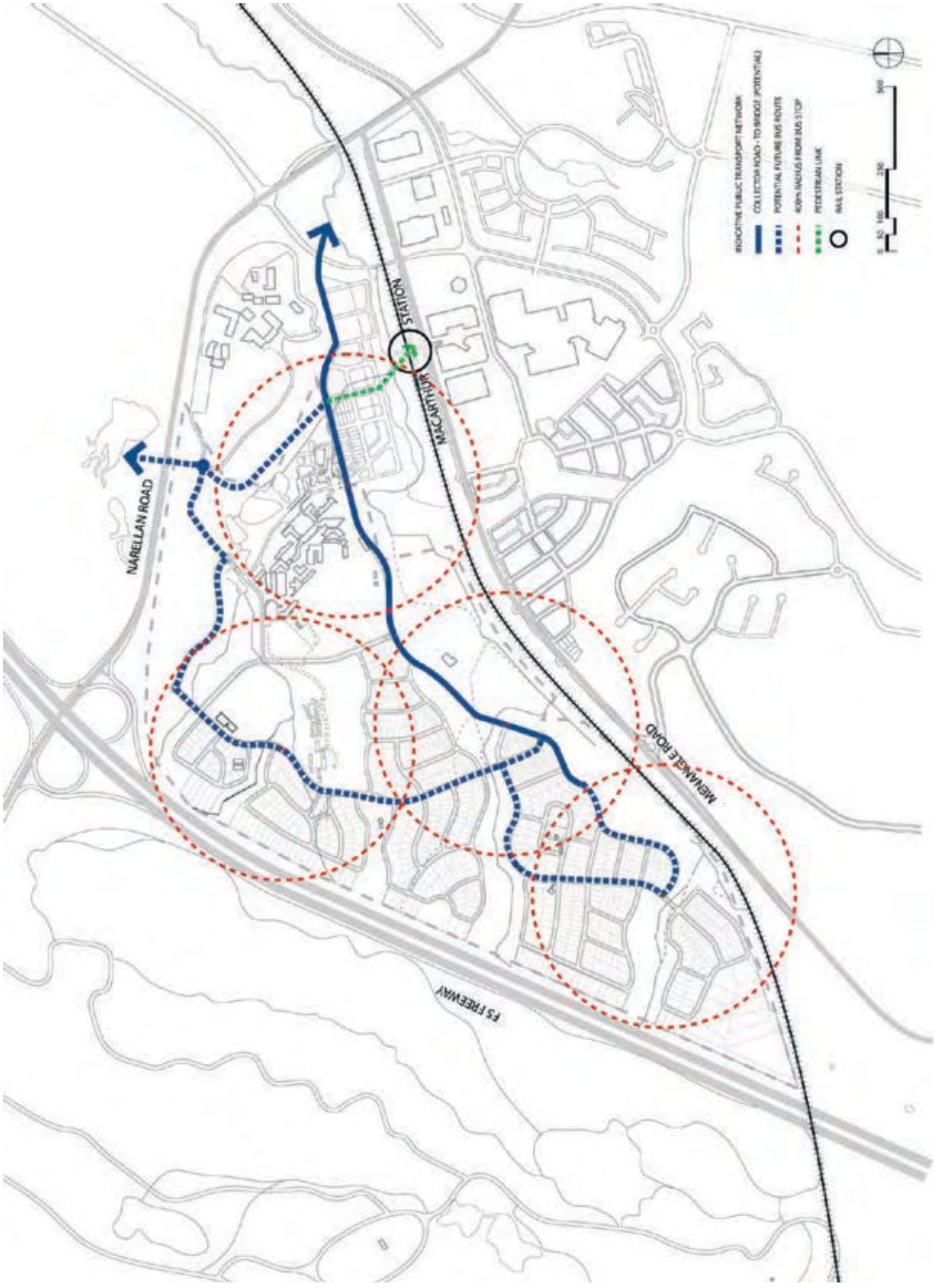
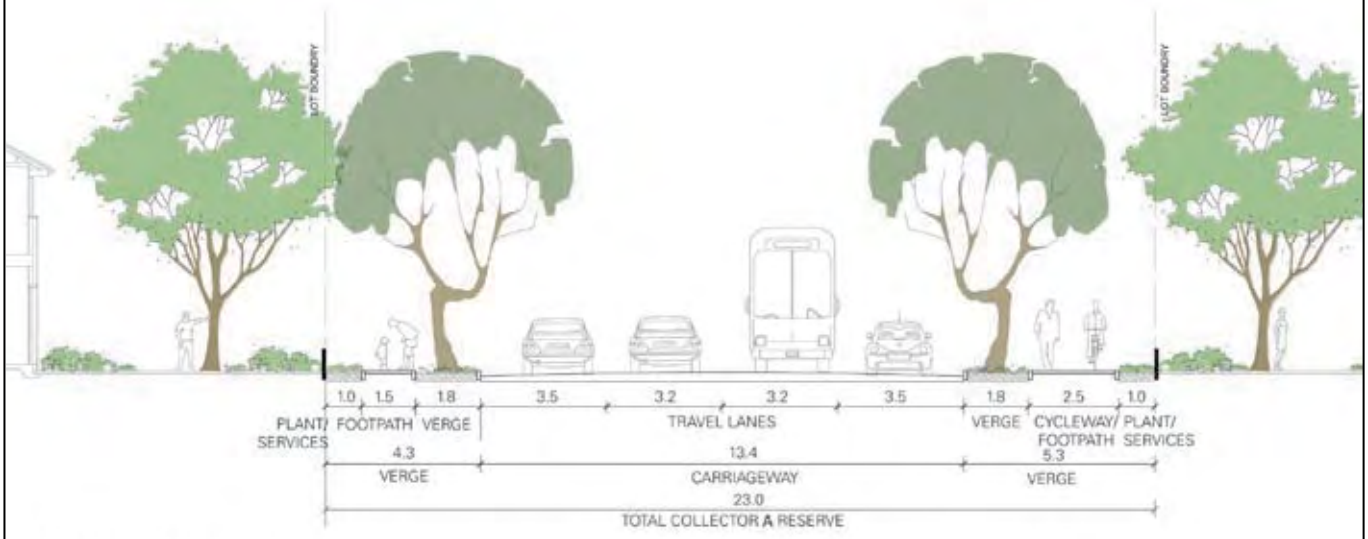


Figure 7: Indicative Public Transport Network Plan

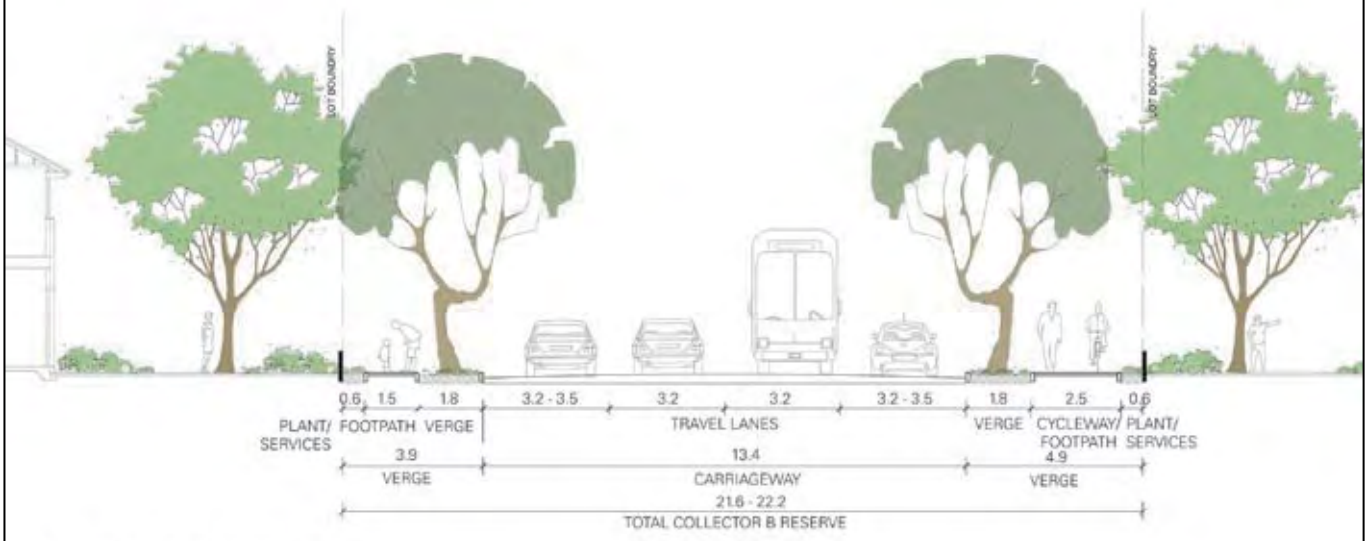
Figure 8: Street Type – Collector Street A



COLLECTOR STREET A

23.00 M ROAD RESERVE

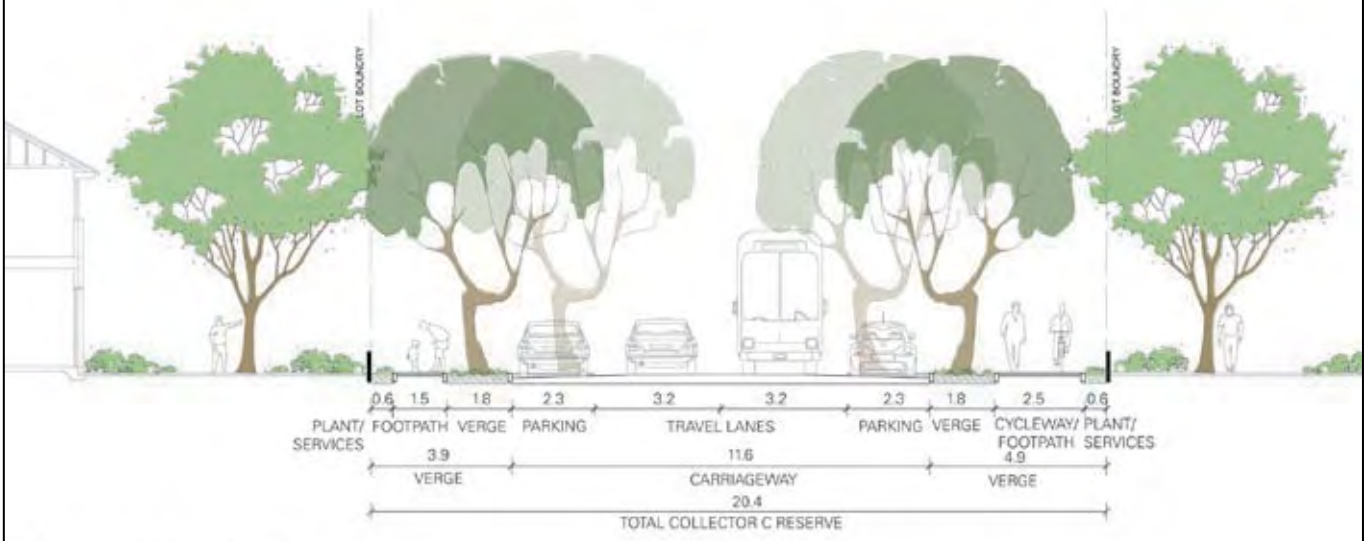
Figure 9: Street Type – Collector Street B



COLLECTOR STREET B

21.60 - 22.20 M ROAD RESERVE

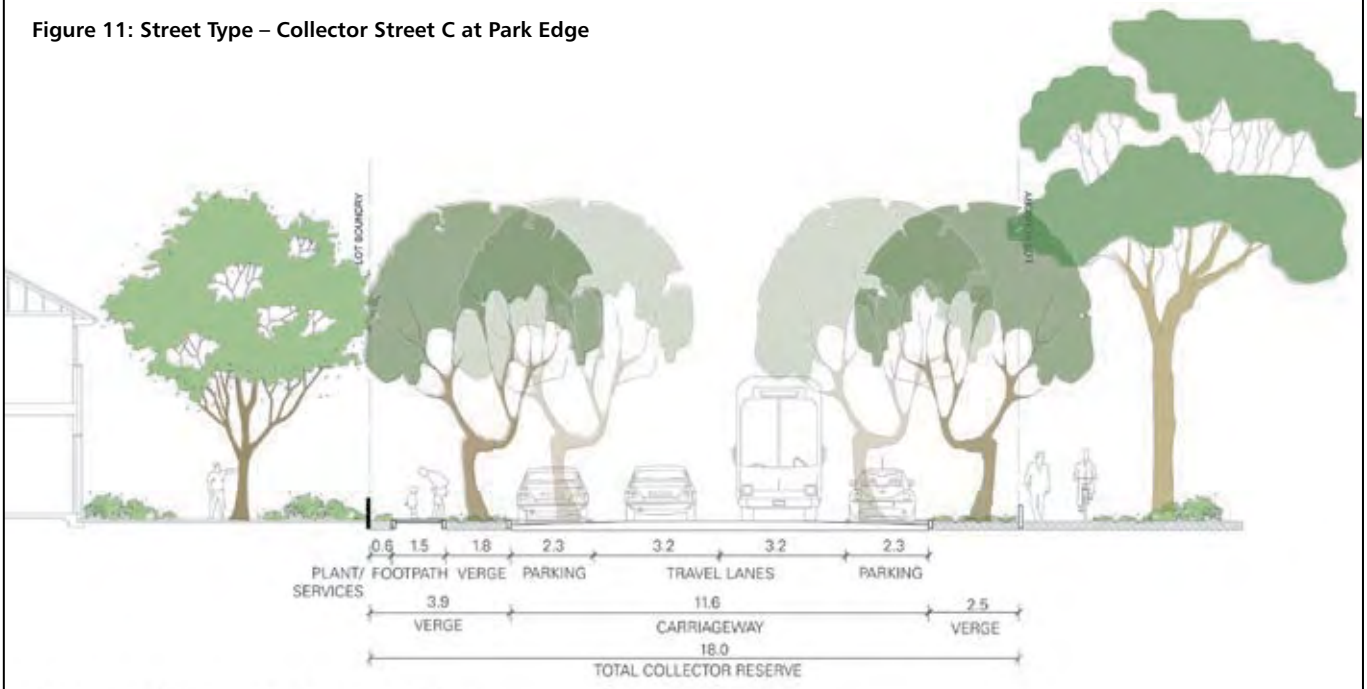
Figure 10: Street Type – Collector Street C



COLLECTOR STREET C

20.40 M ROAD RESERVE

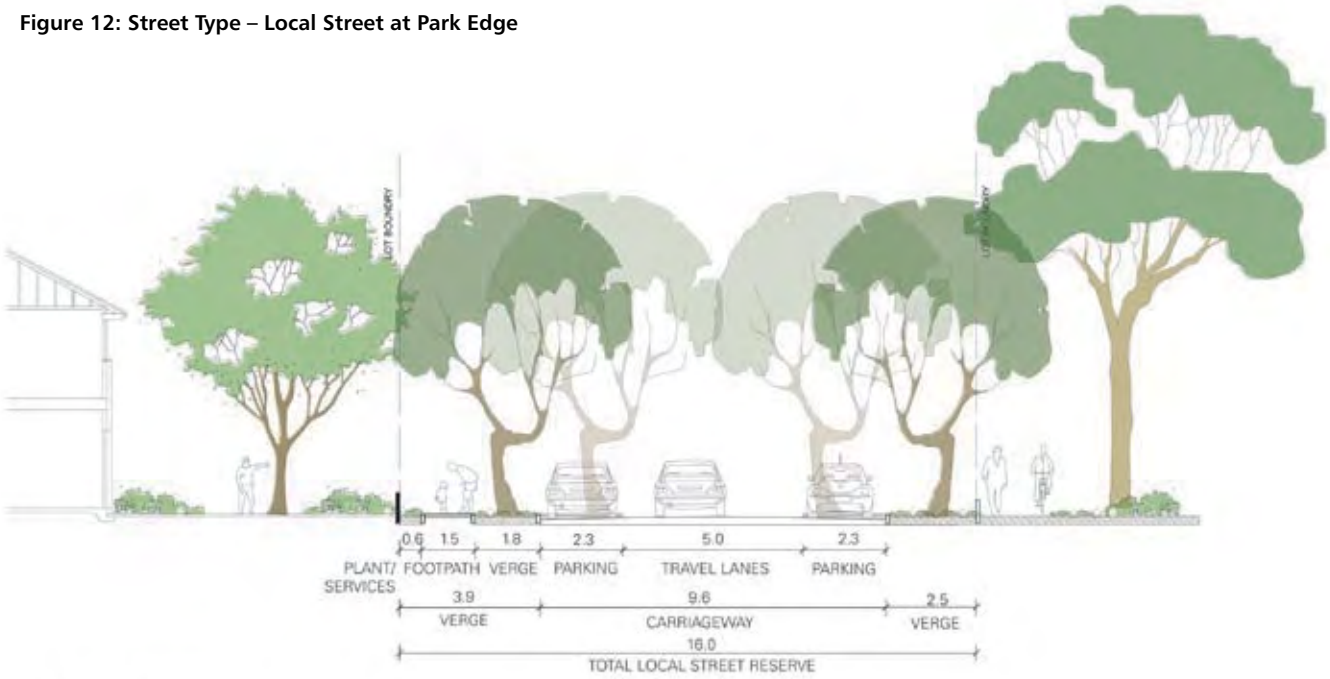
Figure 11: Street Type – Collector Street C at Park Edge



COLLECTOR STREET C PARK EDGE

18.00 M ROAD RESERVE

Figure 12: Street Type – Local Street at Park Edge



LOCAL STREET AT PARK EDGE

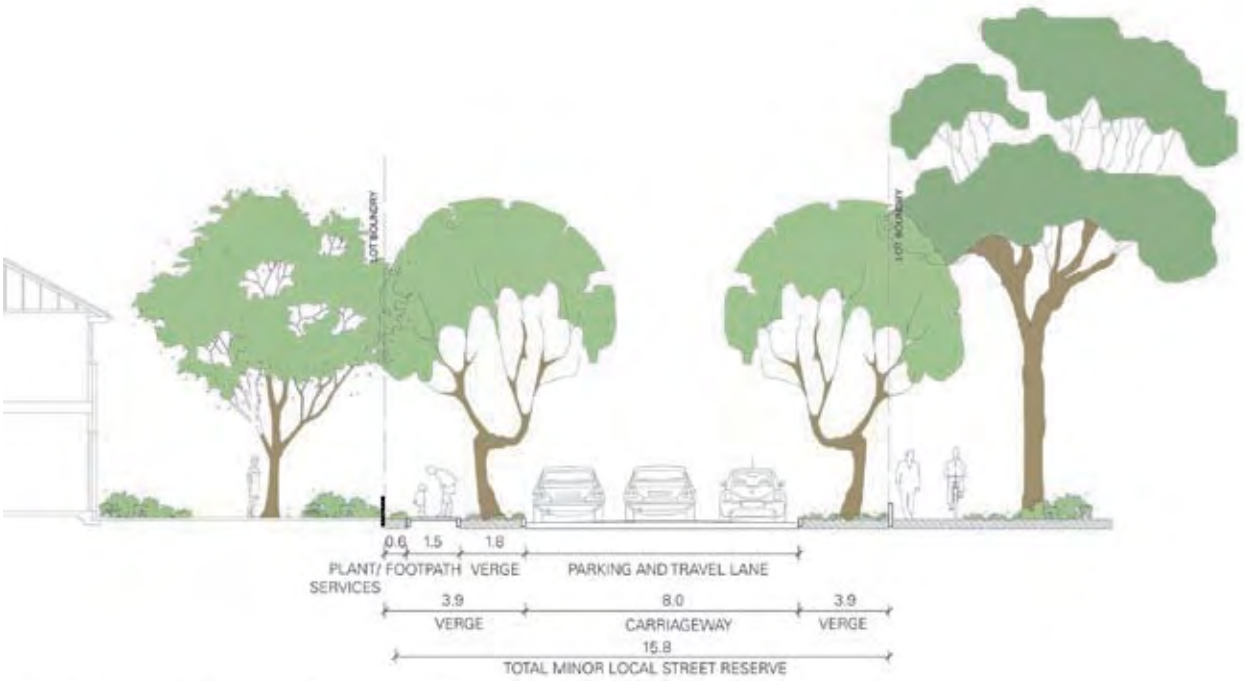
16.00 M TOTAL STREET RESERVE

Figure 13: Street Type – Local Street at Reserve Edge

LOCAL STREET AT RESERVE EDGE

14.0 M TOTAL STREET RESERVE

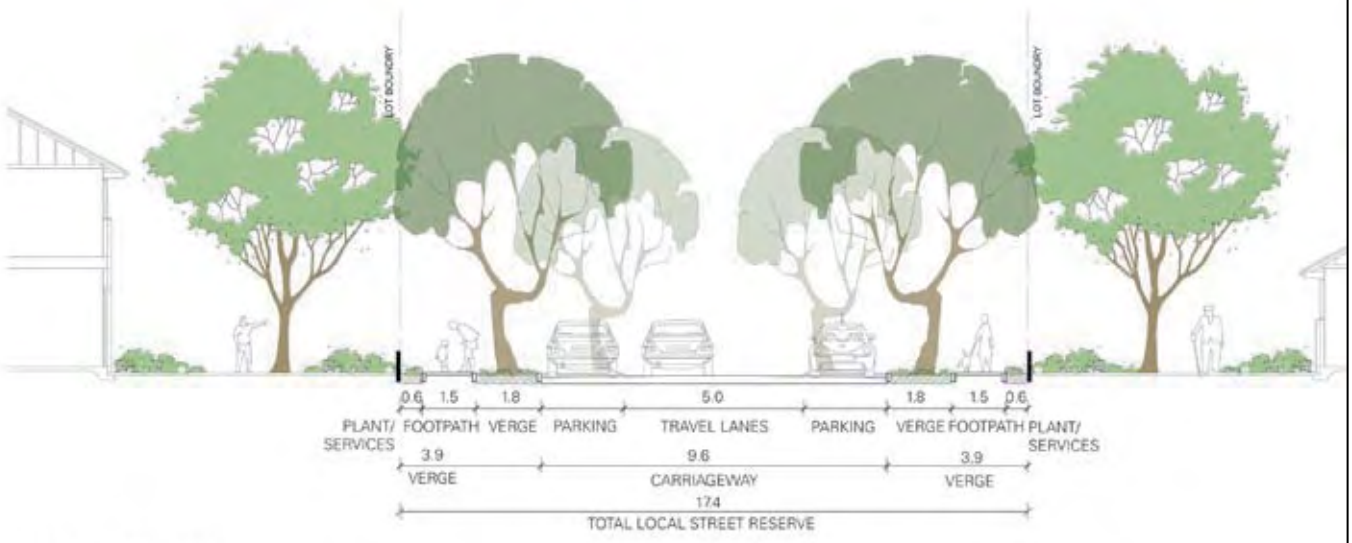
Figure 14: Street Type – Minor Local Street at Park Edge



MINOR LOCAL STREET AT PARK EDGE

15.80 M TOTAL STREET RESERVE

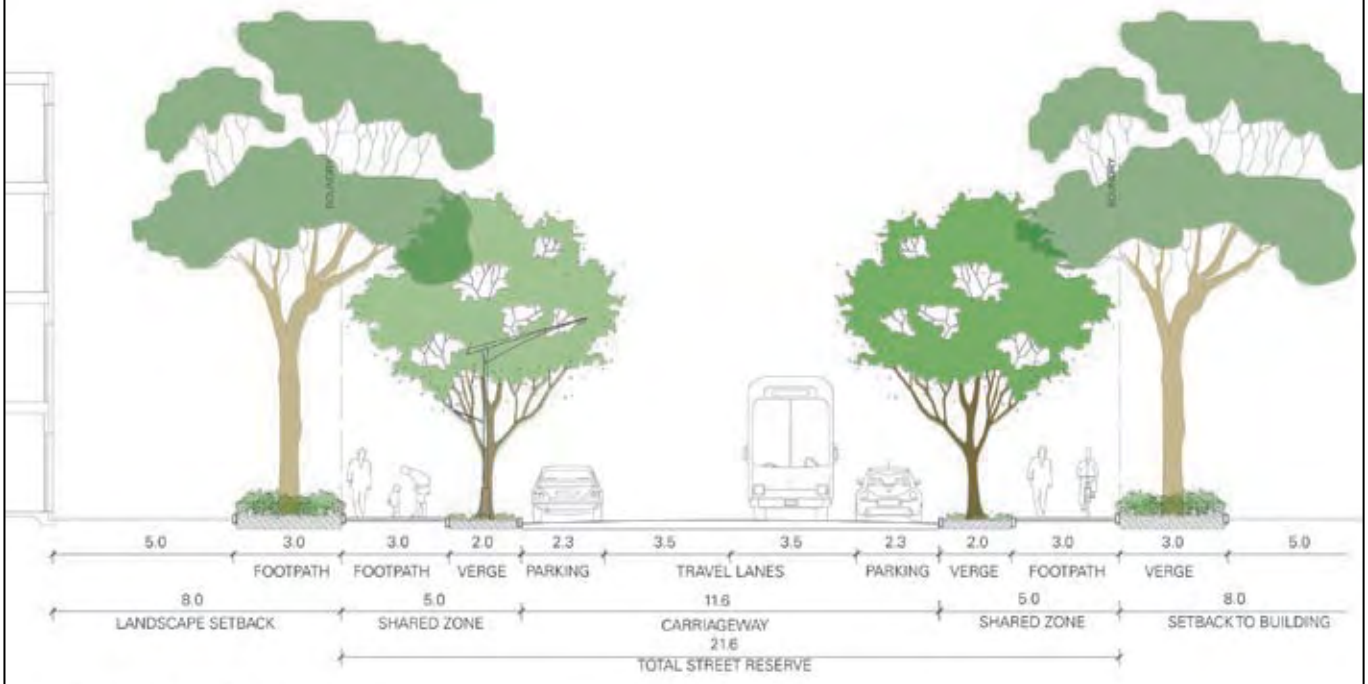
Figure 15: Street Type – Local Street



LOCAL STREET

17.40 M TOTAL STREET RESERVE

Figure 16: Street Type – Inner Ring Campus Road



INNER RING CAMPUS ROAD

21.60 M TOTAL ROAD RESERVE

2.4 ACCESS AND CIRCULATION

Objectives:

- Ensure adequate access by a variety of modes to development on the site that does not negatively impact on the road network surrounding the site.
- Encourage use of public transport and cycling/ walking to reduce dependency on fossil fuels and private vehicle use.
- Maximise connections between the site and surrounding areas, particularly the existing connection to Macarthur station and the proposed bus interchange.
- Create a legible and functional road network that provides good connections with the surrounding areas and which clearly distinguishes between Campus and residential roads.
- Make adequate provision for bus services to service the site.

Design Requirements:

1. Development shall be consistent with the Indicative Street Hierarchy, Pedestrian and Cycle Network Plans and Public Transport Network Plan at Figures 4, 5, 6 and 7.
2. Pedestrian footpaths and cycleways shall be designed in accordance with Council's Engineering Design Guide for Development.
3. The developer shall provide street lighting to current Australian Standards and furniture including garbage bins, seating, bollards, signage etc, which relate to the street hierarchy and enhance the character of the development.
4. Within the Academic lands all bus stops shall be off road, within dedicated bus bays. Bus shelters shall be provided in locations determined to have high demand.
5. Within the Residential lands bus stops shall be on road utilising the parking lane provided for on collector roads. Bus shelters shall be provided in areas of high demand.

2.5 STREETS

Objective:

- Create a hierarchy of streets, each street type having its own character in terms of street setbacks, street trees, street quality and overall street character.
- Provide for street trees to create a distinctive landscape, to reinforce themes, frame views and create attractive walking experiences.
- Use streets to define the edges between development and open spaces and to provide good levels of surveillance between the two.

Design Requirements:

1. The developer shall construct the proposed street network generally in accordance with the Indicative Street Hierarchy Plan at Figure 4.
2. Individual road design, construction and landscaping shall be in accordance with the typical street types (refer Figures 8-16) and have regard to Council's Engineering Design Guide for Developments and Specification for Construction of Subdivision Roads and Drainage Works.
3. Kerbs shall generally be upright kerbing and not roll over.
4. Street planting shall be coordinated with subdivision layout, traffic plan and services layouts to ensure appropriate configuration with vehicle crossovers, sight lines, lighting and other services and be generally in accordance with the species list (Appendix 2).
5. A 500mm planting zone between public footpath and lot boundary shall be planted with non evasive low ground cover species.
6. All street trees shall have root control barriers installed.

2.6 LANDSCAPE AND OPEN SPACE

Objectives:

- Build on the existing site character to create a distinctive and high quality campus and residential public domain.
- Create a network of open spaces, focal points and community facilities which provide for the active and passive needs of the community.
- Encourage planting and landscape treatments which build the environmental value of the site including biodiversity and which minimise water usage.

Design Requirements:

1. Parks and open spaces shall generally be located as shown on the Illustrative Landscape Master Plan at Figure 17 and shall include facilities generally in accordance with the park type, character and proposed activities as detailed in Table 2.1 (see page 2-16).
2. Landscape design shall enhance the visual character of the development and complement the design/use of spaces within and adjacent to the site.
3. Street landscaping shall comply with Figures 8–16 and the streetscape character outlined in Table 2.2 (see page 2-17).

Table 2.1: Park Character and Activities

PARK	CHARACTER	ACTIVITIES	CONCEPT
Major Ridge Park	**Theme: Culture/Knowledge** Linear park with informal ridge planting of native trees and trees with distinctive silhouettes to create site identity; extension of university campus landscape	Passive recreation; Picnics; Children's playground; Education; Outdoor exhibitions; Lookouts	Large scale passive open space, green backdrop Pedestrian and cycle ways with signature plantings; opportunity to integrate sculpture walk.
Riparian Park A	**Theme: Lifestyle/Riparian corridor** Link to lake; enhance existing vegetation; reinstate riparian woodland character; bridge crossing	Passive recreation; Wildlife watching/education; pedestrian pathway,	Informal parkland; Natural character created by enhanced and restored creek line vegetation; Create landscape links, provide seating area and pathway links to adjacent open spaces and streets.
Riparian Park B	**Theme: Wildlife/Habitat corridor** East-west orientation link to sports and recreation park; dense existing vegetation	Passive recreation; Wildlife watching/education; pedestrian and cycle way; Drainage function	Enhanced and restored creek line vegetation; Create landscape links, provide seating area and pathway links to adjacent open spaces and streets.
Riparian Park C	**Theme: Green link/Sports park** Link to adjacent sports field; green corridor links between campus zone and residential zone;	Passive recreation; Sports; pedestrian pathway; Drainage function	Integrated informal indigenous vegetation with groups of formal planting to highlight adjacent green corridors in the campus area; Create landscape links, provide pathway links to adjacent open spaces and streets.
Riparian Park D	**Theme: Campus Entry/Water Feature Corridor** Adjacent to campus entry road; landscape feature ponds	Passive recreation; Outdoor exhibition; pedestrian art walk	A series of water features near campus entry road; varied open turfed areas defined by informal planting with public art display
Recreation Park	**Theme: Sport and Ecology** Passive recreation and active sports; Existing vegetation retained and enhanced with copses of trees with lakeside activities, timber decks, waterside platforms playgrounds and bird watching	Passive and active recreation activities appealing to all age groups, Water bird watching; promenade; jogging; picnics, active ball games. Bicycle path.	Park landscape with lake, ecological wetlands setting. Variety of landscape spaces and lake edges; Upgraded sports fields and potential expansion of sports centre facilities; continuous pathway links to residential and academic precincts and lake edge; habitat protection; Drainage flood basin.
Knoll Park	**Theme: Green park** Small local parks	Passive recreation, interpretation; Small Children's playground	Informal local park accessible by immediate housing lots Pathway and seating area shaded by trees.

Table 2.2: Streetscape Character

STREET TYPE	STREETSCAPE CHARACTER
Collector Streets On The Open Space	Generous informal character, overhanging shade, native tree species.
Local Streets Generally	Intimate character with regular street tree planting, mixture of native and deciduous species, concrete footpaths, minimize impact of driveways.
Local Streets Along Riparian Edges	Open informal character, native canopy trees to blend in with character of riparian corridor.
Local Streets Along Ridges And Hillside Parks	Strong local character, reinforce ridge tops and curvy street layouts with robust tree canopies, tall species with distinctive silhouettes.
Main Campus Streets	Pedestrian friendly streets, Shaded tree canopies, mixture of deciduous and native trees.
Shared Zones	Shaded overhanging canopies, trees planted in roadway to slow traffic, mixture of deciduous and native trees.
Entrance Drive	Maintain existing colourful deciduous character. Enhance views to campus.
Ring Road	Distinctive Campus-style avenue effect with large native trees and deciduous highlights (such as at thresholds gateways and entrances).

4. Where existing significant trees are located within park areas consider detailed grading to provide for the retention of existing ground levels and trees.
5. Lighting within open space and recreation areas shall conform to the current Australian Standards, including AS1158, AS1680 and AS2890 (as amended).
6. Landscaping and structures shall not create obscured areas. Ensure tree species selected in public areas can be retained with a clear trunk to a minimum of 2m.
7. Incorporate planting of indigenous species and vegetation communities to enhance native fauna habitats.
8. Reduce water usage by using indigenous and low water tolerant species, as well as efficient irrigation systems.
9. Native planting should be considered deep root planting to reduce salinity risk.
10. Existing vegetation shall be retained where possible however all noxious weeds shall be removed. A report shall be provided with any Development Application detailing measures to be taken to ensure tree protection during construction prepared by a suitably qualified professional.
11. Due to the topography immediately adjacent to many of the proposed ridgeline reserves and parks, the access from the adjacent public road system will be limited to those located where access can be safely and easily provided for people of all mobility levels. These access points shall be detailed upon the landscape plans for each proposed park or reserve.
12. Provide seating areas, timber decks, directional signs and interpretive signage related to the detention ponds and wildlife.
13. Provide shade trees and establish windbreaks where possible from southerly and westerly winter winds.
14. Provide landscape screening to the railway line using indigenous trees and shrubs.
15. Landscape plans to be prepared by a qualified landscape architect.

2.7 SAFETY AND SECURITY

Objectives:

- Ensure developments are safe and secure for occupants and visitors and contribute to the safety of the public domain.
- Ensure that development incorporates security features in accordance with the principles of Crime Prevention through Environmental Design (CPTED).

Design Requirements:

1. Development should:
   (i) maximise casual surveillance opportunities to the street and surrounding public places.
   (ii) use streets fronting parks to provide opportunities for casual surveillance and improve safety of these areas.
   (iii) ensure design does not give rise to dead ends and other possible entrapment areas.
   (iv) clearly identify and illuminate access points.
   (v) create a sense of ownership for the public domain through design to encourage community guardianship.
   (vi) provide signage to make orientation and identification of public buildings and facilities clear.
   (vii) ensure sight lines to all public areas shall be maximised. Concealed areas for possible hiding shall be avoided. Building designs shall minimise built elements which assist in providing illegitimate access. Service areas shall be secured or have surveillance.
   (viii) ensure entrances shall be visible from the street.
   (ix) ensure external lighting shall be designed to:
   – encourage the use of safe areas,
   – define safe corridors for movement of people,
   – allow facial recognition of approaching pedestrians at 15m.
   (x) minimise the use of external grilles, roller doors, downpipes and shelves which allow access to upper stories.

Figure 17: Illustrative Landscape Master Plan

2.8 VIEWS AND VISTAS

Objectives:

- Ensure significant views and vistas from and to public places are protected.

Design Requirements:

1. Development applications which relate to land within the University's significant view catchment as identified in Figure 18 shall be accompanied by a landscape plan which addresses view corridors and screening to adjacent properties and the Freeway.

2.9 CONTROLS ON EXCAVATION, FLOOD LIABLE AND/OR SLOPING LAND

Objectives:

- Minimise the extent of earth works associated with development.
- Ensure that development appropriately responds to site conditions with proper consideration given to land capability and privacy/amenity of the proposed dwelling and adjoining properties.
- Ensure that excavation is minimised and properly retained.
- Ensure that adequate freeboard is provided to protect development from flooding and overland flows.

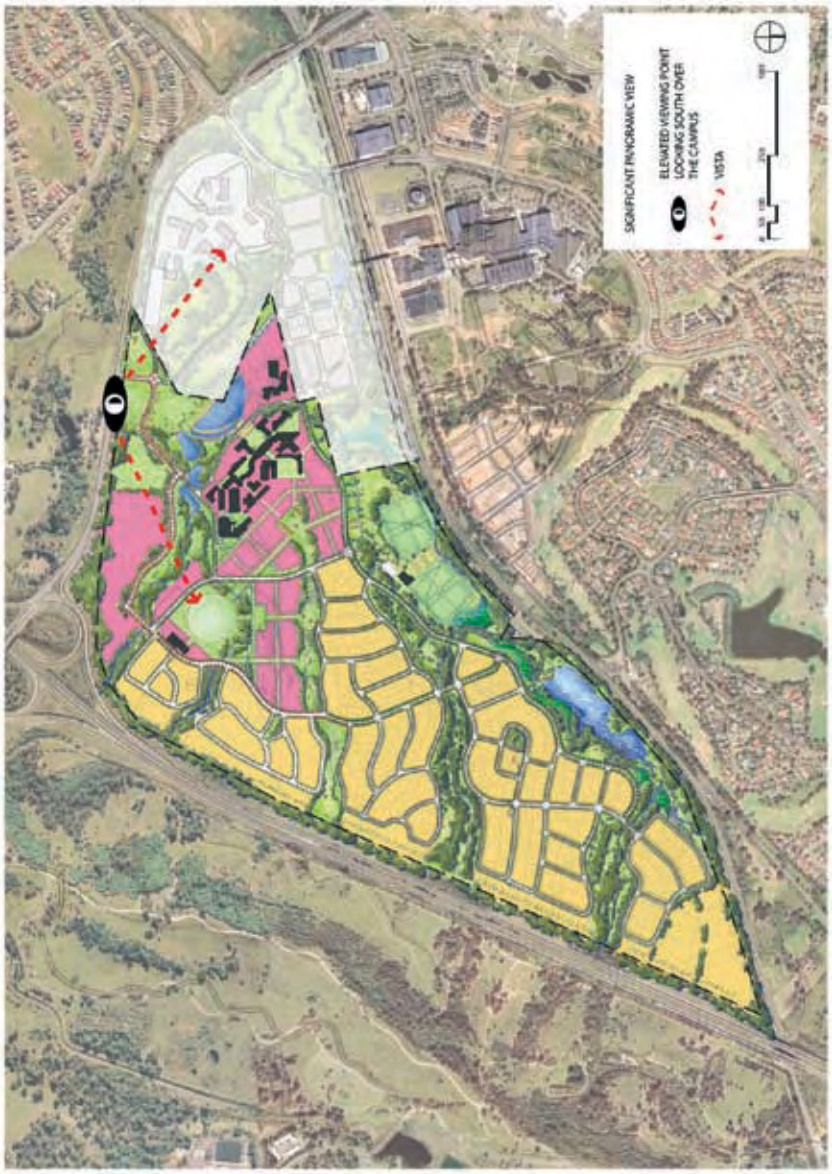
Design Requirements:

1. A cut and fill management plan (CFMP) shall be submitted with the Development Application where a development incorporates cut and/or fill operations. The CFMP shall be in accordance with the requirements of the "Campbelltown (Sustainable City) Development Control Plan – Appendix 6".
2. Any proposed excavation or structure within the zone of influence of any existing structure or utility, on or adjacent to the land, requires a 'structural report' (prepared by a suitably qualified professional) which demonstrates that adequate ameliorative measures can be implemented to protect the integrity of any existing structure or utility. This report shall be lodged with the CFMP as part of the Development Application.

Subsequent to the issue of Development Consent and prior to the issue of a Construction Certificate, a "dilapidation report" (prepared by a suitably qualified professional) shall be prepared upon all existing structures and utilities that lie within the zone of influence of an approved excavation or construction. A copy of the dilapidation report shall be provided to Council, the Principal Certifying Authority, and the owner(s) of each existing structure or utility.

3. Development incorporating fill shall comply with the following requirements:
   (i) minimum site fall of 1% to any adjoining waterway or public road reserve, except where the Lot is serviced by an inter-allotment drainage easement.
   (ii) fill batters to be no steeper than 3(H):1(V) unless otherwise confirmed by a suitably qualified professional.
4. Any proposed fill must be Virgin Excavated Natural Material (VENM) which has also validated by a suitably qualified professional as being "clean fill".
5. All fill deposited in the vicinity of existing endemic vegetation shall comprise local material, placed in layers, in order of their naturally occurring soil horizon.
6. Land affected by the 100 year ARI storm event shall not be developed unless Council is satisfied that the development would be consistent with the NSW Government "Floodplain Development Manual – The Management of Flood Liable Land (April 2005) or its replacement.
7. Any solid fence constructed across an overland flow path shall be a minimum 100mm above the predicted 1% AEP flow depth, as determined by a suitably qualified professional, of the overland flow path.
8. Any allotments located on land that has been filled, shall be burdened by a 88B restriction regarding that fill and shall be noted on the respective Section 149 Certificate.

Figure 20: Significant panoramic view



Requirements applying to Civil and Subdivision Works:

9. The civil bulk earthworks undertaken during the subdivision phase will create the "engineered natural ground level". All filling works shall have regard to Council's Specification for Construction of Subdivision Roads and Drainage Works and AS 3798 Guidelines for Earthworks for Commercial and Residential Development.
10. The interface between proposed public reserves and adjacent public roads shall be constructed as:
    (i) Batters having a maximum 1(V):6(H) grade within "public reserves" where it is the intention of the proposed landscape plan for the batter to remain grassed.
    (ii) Batters having a maximum 1(V):4(H) grade within "public reserves" where it is the intention of the proposed landscape plan for the batter to be vegetated so as to require minimal maintenance.
    (iii) Batters having a maximum 1(V):3(H) grade within "drainage reserves". These batters are to be landscaped to reduce erosion, require minimal maintenance and provide a suitable transition from the riparian zones.
    (iv) Retaining walls, having a maximum height of 3m, which must be screened by vegetation.
    (v) Where site filling, at subdivision phase, requires a retaining wall element to be greater than 3m in height, the wall shall be terraced at a maximum grade of 3(V):1.5(H). All vertical face elements of the terrace shall be screened by vegetation planted upon the terrace immediately below the vertical face.
    (vi) Rock cut face, having a maximum 1(V):0.25(H) for a maximum height of 3m which must be screened by vegetation.
    (vii) Where site cutting, at the subdivision phase, requires a cut rock face element to be greater than 3m in height, the rock face shall be terraced at a maximum grade of 3(V):1.5(H). All vertical face elements of the terrace shall be screened by vegetation planted upon the terrace either immediately above or below the vertical element.

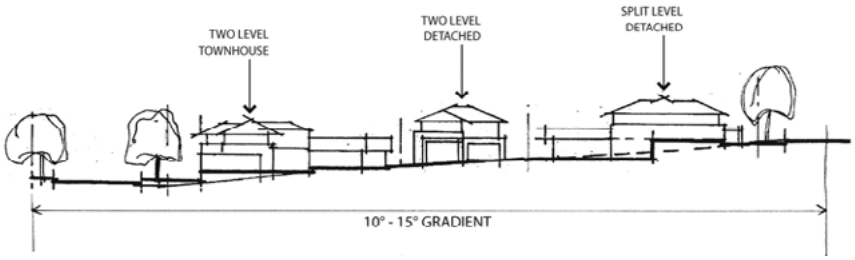
Requirements applying to Individual Lots:

11. For the purpose of creating a building platform, the sum of the maximum cut below the "engineered natural ground level" and the maximum depth of fill above the "engineered natural ground level" shall not exceed 1m, unless the interface between cut and fill is located more than 4m from any boundary in which case the sum shall not exceed 2.5m.
12. All development shall satisfy the relevant floor level requirements as specified in Table 2.3, page 2-24.
13. The proposed finished floor levels to non habitable rooms, including garages and outbuildings, must satisfy the relevant floor level requirement as specified in Table 2.3 for all sides except at their entrances where a 20mm to 30mm lip or ease may be provided below the freeboard.

SLOPE PRINCIPLES

1. Gentle gradient (10° - 15°)

- Generally standard house designs can be used on gentle gradients.
- high side setback of 2m is required.
- An edge beam on the low side of the dwelling may be required



SLOPE PRINCIPLES

2. Moderate gradient (15° - 25°)

- On moderate sloping sites a retaining wall between lots will be provided by the developer as part of the site works.
- Site specific house designs will be required to take up the level differences on a lot that cannot practically be taken up by a retaining wall between sites.

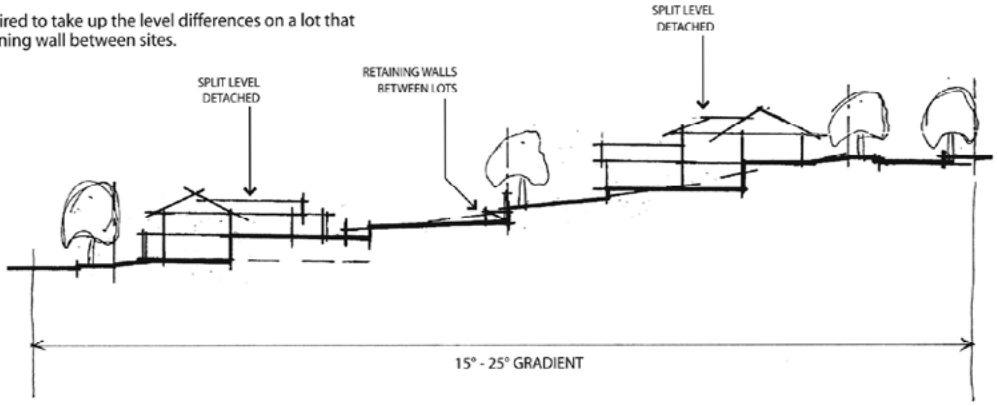


Table 2.3: Floor level requirements for developments

DEVELOPMENT	PREDICTED 1% AEP FLOW DEPTH OR WATER LEVEL OF: AN ADJACENT OFP; TRUNK DRAINAGE CHANNEL OR BASIN OR WATER COURSE IS	FLOOR LEVEL SHALL BE SET AT THE NOMINATED HEIGHT ABOVE THE 1% AEP FLOOD LEVEL (FREEBOARD DEPTH)
Non-habitable (including garages and outbuildings **not adjacent to** an OFP	0mm	100mm
Habitable rooms **not adjacent to** an OFP	0mm	150mm
Non habitable (including garages and outbuildings) **affected by** an adjacent OFP	≤300mm	100mm
Habitable rooms **affected by** an adjacent OFP	≤300mm	300mm
Non habitable (including garages and outbuildings) **affected by** an adjacent OFP	>300mm	300mm
Habitable rooms **affected by** an adjacent OFP	>300mm	500mm
All buildings (Habitable and Non Habitable) **affected by** an adjacent trunk drainage channel or basin or a watercourse	Any depth	500mm

Note: OFP – Overland Flow Path

2.10 WATER CYCLE MANAGEMENT

Objectives:

- Incorporate Water Sensitive Urban Design (WSUD) principles into development.
- Improve the quality and reduce the quantity of stormwater leaving the site, and reduce potable water usage.

Design Requirements:

1. Development shall not impact on adjoining sites by way of overland flow of stormwater. All overland flow shall be maintained in the pre-development form or be directed to designated overland flow paths such as roads.
2. Development shall be consistent with Council's Engineering Design Guide for Development.
3. A suitable easement and drainage system shall be created over all downstream properties for development that cannot directly dispose of stormwater (under gravity) to the street or directly to Council's trunk stormwater system.
4. All rainwater tanks shall comply with AS3500 (as amended) – National Plumbing and Drainage Code Guidelines for Plumbing Associated with Rainwater Tanks in Urban Areas and Sydney Water's Guideline for Rainwater Tanks on Residential Properties.

2.11 RISK MANAGEMENT

Objectives:

- Ensure that hazards associated with development and the site are addressed so as to minimise the risk of:
  - injury to persons/property
  - damage to the environment and
  - financial loss

Salinity

Design Requirements:

1. Native vegetation and deep rooted trees shall be incorporated into gardens.
2. Damp proof membranes shall be used in building construction for slabs on ground with a 50mm think layer of sand.

Erosion and Sediment Control

Design Requirements:

1. An Erosion and Sediment Control Plan (ESCP) or Soil and Water Management Plan (SWMP) as applicable, shall be prepared and submitted with a development application proposing construction and/or activities involving the disturbance of the land surface.
2. ESCPs or SWMPs to be prepared in accordance with Managing Urban Stormwater – Soils and Construction 2004".
3. Site activities shall be planned and managed to minimise soil disturbance.
4. Catch drains or diversion banks shall be designed and constructed to divert water around any area of soil disturbance.
5. All stockpiles shall be located within the sediment control zone and shall not be located within an overland flow path.
6. A water pollution sign, supplied with the development consent, must be displayed on the most prominent point of the development site and be clearly visible to the street.

Bushfire

Design Requirements:

1. Development shall be located so as to minimise the risk of loss from bushfire.
2. Development on bush fire prone land (as detailed on the Campbelltown Bush Fire Prone Lands Map) shall comply with the requirements of Planning for Bushfire Protection 2001 as amended from time to time.
3. Asset protection zones are to be provided in accordance with the recommendations of the Bushfire Assessment prepared by Ecological Australia and dated January 2007.
4. Adequate water reserves for fire fighting shall be available and accessible on site as specified in Planning for Bushfire Protection 2001.

2.12 NOISE

Objectives:

- Ensure all dwellings on site provide an appropriate level of amenity particularly in terms of noise for occupants.

Design Requirements:

1. Development applications for land affected by noise from the F5 Freeway shall be accompanied by a noise management plan.

PART 3: Campus/ academic development

3.1 DESIRED FUTURE CHARACTER

The desired future character of this area is as follows:

The existing UWS Campbelltown Campus is one of the most cohesive in Sydney, designed in response to the very distinct landscape and topographical character of the site. The proposed campus extension will continue this approach with new areas of development defined by an expanded public domain of linked pedestrian walkways and open spaces. While it is expected that the density of the campus will increase over time, as it is envisaged that the campus will remain a 'compact' one, the open space and landscape character of the campus will continue to be reinforced.

The view of the central campus buildings seen from Narellan Road will be protected. The proposed ring roads will maintain a defined edge between the campus and the proposed new residential areas.

3.2 OBJECTIVES

The objectives for future academic/campus development are as follows:

- Accommodate university growth.
- Accommodate employment, research and development uses closely related to the University.
- Provide greater integration and connectivity within the campus and between the campus and surrounding areas.
- Strengthen the links between the campus and Macarthur Square and Station.
- Intensify and activate the campus core as a pedestrian place that is strongly connected to the community and public transport.
- Establish a vital and energetic campus that provides a diverse range of activities for students, workers and the surrounding community.
- Create a public domain that will be distinctive and memorable as it links existing places, including existing campus places as well as significant landscape features such as the ridge and lake areas.

All development is to be consistent with the above objectives.

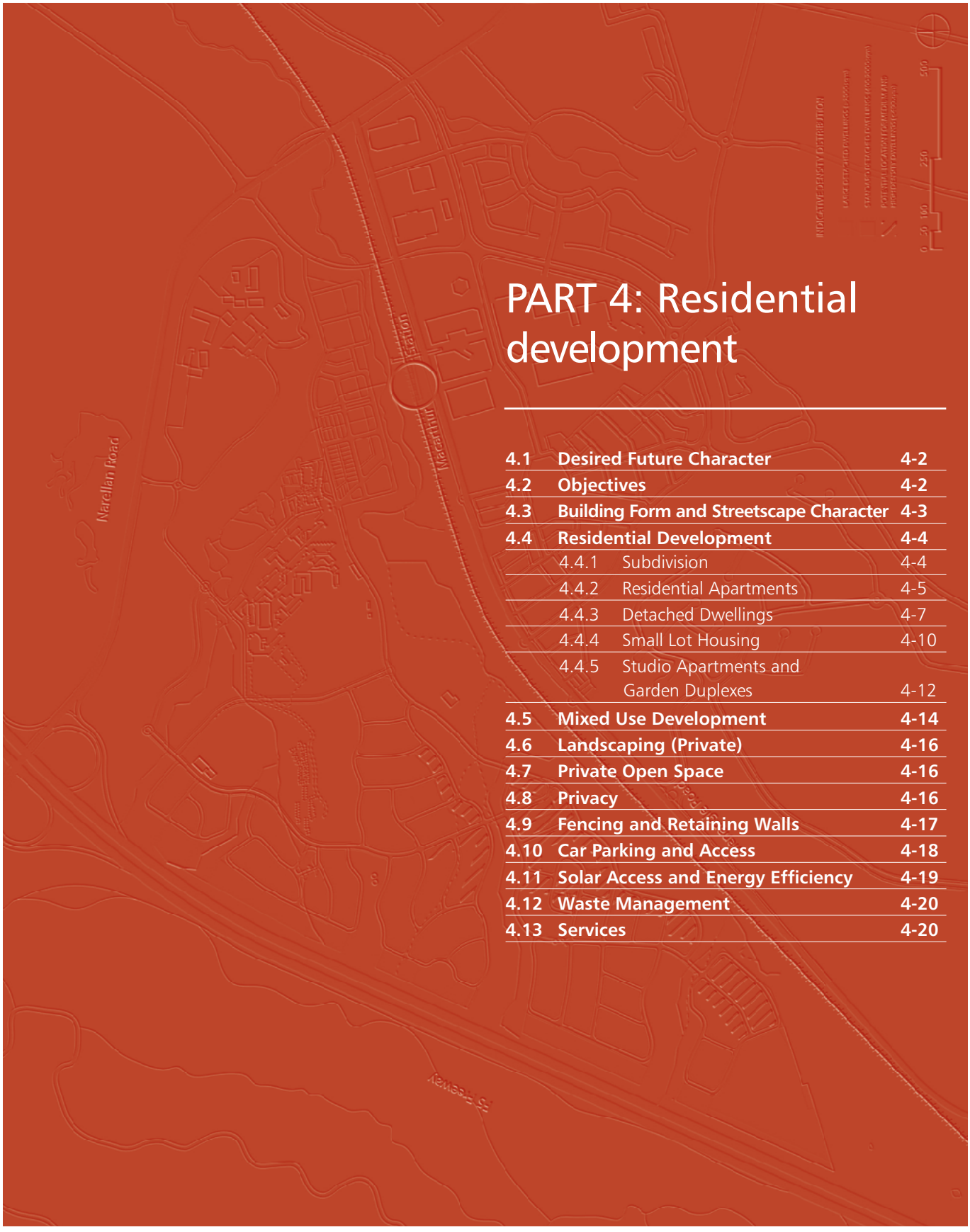
3.3 ACADEMIC/CAMPUS DEVELOPMENT

Objectives:

- Allow development to accommodate the academic and administrative functions of the University as well as any ancillary functions.
- Allow development to accommodate business and other uses closely related to the University.

Design Requirements:

1. Any new development within the academic campus area shall be consistent with the existing campus urban structure and reinforce the notion of a "walkable campus".
2. Proposed campus/academic type development shall be designed to encourage student activity, be welcoming and contribute to the character of the University as a distinctive place with its own "sense of place".
3. Development shall be designed to reinforce the existing network of 'places' within the campus and then link them with clear and direct pedestrian pathways. The paths should follow contours, recognising that this will be the most efficient route for students and staff to take.
4. The proposed built form shall respond to both the topography and visual impact as well as the flexible needs of a growing campus.



PART 4: Residential development

4.1 DESIRED FUTURE CHARACTER

Residential and community development will generally occur within the area delineated as suitable for residential uses as shown on Figure 3.

The desired future character of this area is as follows:

The residential area extends south and west of the existing academic campus. The area will be characterised by the distinctive undulating topography of the Campbelltown hills and pronounced watercourses running through valleys between the hill sides. The residential development sits between the watercourses defined at their edges by a network of public streets. The streets will be generous and 'leafy' with street trees and footpaths on both sides of typical streets, creating walkable neighbourhoods.

House lots are generally sized in response to the character of the site with small lots near the southern open space on flatter land with larger single occupancy lots on the steeper areas.

4.2 OBJECTIVES

- Promote well-designed buildings that make a positive contribution to the streetscape and amenity of the neighbourhood.
- Encourage a variety of forms of housing that are higher in density than traditional dwelling houses in locations which have a high level of amenity or are accessible to public transport and service facilities.
- Ensure development makes the best use of a site's natural and other positive features, and considers amenity, streetscape and energy efficiency at the outset.

All development is to be consistent with the above objectives.

4.3 BUILDING FORM AND STREETSCAPE CHARACTER

Objective:

- Encourage innovative and quality building designs which are distinctive and contemporary and fit harmoniously with their surroundings.
- Ensure that building design is responsive to the site's topography.
- Establish quality streetscapes which respond to the site topography and which add to the visual and environmental amenity of the site.

Design Requirements:

1. Building design (including façade treatment, massing, roof design and entrance features), setbacks and landscaping shall complement the scale of development, character and qualities of the adjoining streetscape.
2. Articulate building frontages facing the street to add visual interest. Use of stepping, material combinations, verandahs, porches and balconies, canopies and blade walls is encouraged.
3. Development on corner sites shall incorporate facade treatments that address both street frontages and achieve articulation in the building design.
4. The built form shall relate to the natural landform and setting, particularly when viewed from a public place, building entrance ways and recognised vantage points outside the immediate locality.
5. A site's natural slope should be used to create visual interest and generate innovative housing forms while minimising cut and fill consistent with the requirements of Section 2.9.
6. All dwellings, mixed use buildings and RABs shall be designed with a contemporary architectural character.
7. Outbuildings and ancillary structures shall be located to the rear of the site.
8. The maximum slope of a pitched roof shall be 36 degrees.
9. Eaves are mandatory on pitched and sloping roofs and are to extend 450mm from the side of the dwelling except for zero lot line and parapet walls.
10. Parapet, skillion and vaulted roof forms may be incorporated to create variety in architectural style.
11. No blank walls shall be presented to any street frontage. Any continuous wall of more than one storey in height shall be no more than 10m in length on a street frontage and 14m on any other side. Walls over the maximum length shall have a minimum offset of 500mm for the remainder of that wall. This does not apply to party walls between attached dwellings.
12. The height of development shall not result in any significant loss of amenity (including loss of solar access and visual and acoustic privacy) to adjacent properties and public places.

13. All dwellings shall have at least one habitable room with sufficient openings for public surveillance at ground level addressing the primary street frontage.
14. When determining appropriate external building materials for residential development, the following guidelines shall be observed:
    (i) External wall materials shall be predominantly masonry and finished in either face brickwork, coloured/painted render or coloured bagging;
    (ii) Lightweight materials can be utilized to provide variety in textures or profiles on dwelling facades (e.g. timber, feature fibre cement sheeting or pre-finished metal sheeting) or if required due to geotechnical constraints;
    (iii) No galvanised iron or plain cement sheeting shall be utilised on external walls;
    (iv) Low profile concrete, terracotta or slate roof tiles or pre-finished and pre-coloured corrugated metal roofing shall be utilised.
15. The colour palette to be used in all dwellings shall consist largely of neutral, natural tones. Feature colours may be utilised for selected elements to create interest and highlights.
16. A detailed schedule of the proposed external finishes, materials and colours shall be submitted for Council's approval as part of the development application.

4.4 RESIDENTIAL DEVELOPMENT

4.4.1 Subdivision

Objectives

- Encourage a variety of lot sizes across the site to promote a variety of housing choice and achieve the desired urban form and density.
- Ensure that subdivision of residential land responds to the physical characteristics of the land.
- Ensure that subdivision of residential land provides safe connections with and extension of existing street patterns, as well as any pedestrian, cycleway and public open space networks.

Design Requirements:

1. The final design of residential allotments shall have regard for the impact of orientation, slope, and aspect to maximise solar access to future development.
2. Subdivisions shall demonstrate compliance with the relevant design requirements contained in this Part.
3. Subdivisions shall promote through street access and minimise the number of cul-de-sacs.
4. Battle axe lots shall only be permitted where a street frontage can not otherwise be provided due to levels or safe street access requirements. Such lots shall have a minimum lot area of 500m^2 excluding the access handle. Access handles shall be straight and have a minimum width of 3.5m or 6m for two adjacent handles with reciprocal rights of way.
5. Car courts shall be accessed by a handle of no more than 40m in length and able to accommodate adequate turning and manoeuvrability in accordance with AS 2890. Through lanes are also permitted.
6. Studio apartments may be strata subdivided subject to compliance with the criteria outlined in Section 4.4.5 below.

4.4.2 Residential Apartment Buildings

Objectives:

- Encourage high quality residential apartments within areas of high amenity, in accessible locations and in close proximity to business centres.
- Ensure that the design of residential apartments responds to the site's environmental characteristics and setting.
- Achieve a high level of amenity for the occupants of residential apartment buildings, adjoining developments and public places.

Design Requirements:

1. All residential apartment buildings shall comply with the requirements set out in Table 4.1 below.
2. All residential apartment buildings shall comply with State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development and the Residential Flat Design Code.
3. Where possible vehicle entry points shall be located at the rear or off side streets.

Table 4.1: Development Standards for Residential Apartment Buildings

CRITERIA	CONTROLS
Minimum Allotment Size	1000 m^2
Minimum frontage width	20m (measured at front property boundary)
Landscape Area	Minimum 20% of site suitable for deep soil planting
Private Open Space (POS) either courtyard or balcony	Minimum 8m^2 for each apartment – directly accessible from living areas Ground floor POS shall be screened for privacy
Minimum clear balcony depth	2m
Setbacks (Min/m) Front	• 4m – Primary frontage • 4m – Secondary frontage (Note: setback may be reduced if appropriate in the streetscape)
Side	• 5m (for buildings up to 4 storeys in height) unless attached to an adjoining building • 9m (for buildings greater than 4 storeys in height)
Rear	9m
Height	Maximum 10 storeys
No. of dwellings accessible from common lobby or corridor in each level of building	Max 10 dwellings
Access	Minimum 1 lift required for access from basement to upper most floor (inclusive) in each RAB Max 30 dwellings accessed from a common lift shaft Access to lifts to be direct and well illuminated
Storage	Each apartment to be provided with an internal storage area with minimum capacity: • Studio Apartment – 6 m^3 • 1 Bedroom Apartment – 8 m^3 • 2 Bedroom Apartment – 10 m^3 • 3 Bedroom Apartment – 12 m^3 • 4 (or more) Bedroom Apartment – 15m^3
Car Parking Spaces	In accordance with AS2890 Parts 1 and Minimum 1 space per dwelling plus: (i) an additional space for every 4 dwellings (or part thereof) (i) an additional visitor space for every 10 dwellings (or part thereof) Where development greater than 3 storeys all car parking is to be at basement level Parking at ground level shall be screened from view
Car Parking Space Dimension	Min 2.5m (2.7m where adjoins hard edge) X 5.5m
Driveway location	Min 6m from splay of any intersection
Bicycle Parking	All residential apartment buildings to provide bicycle storage at a rate of 1 space per 5 dwellings within common property.
Waste	In addition to requirements of 4.12 below all RABs shall provide bins at the following rates: (i) a 240 litre /2dwellings/week for household garbage; or (ii) 1000/1100 litre bulk bin; and (ii) A 240 litre/dwelling/fortnight for dry recyclables; (iii) Garden organic bins as required to be collected fortnightly. Communal bin storage room in accordance with requirements of 4.3.10 of Campbelltown (Sustainable City) DCP

4.4.3 Detached Dwellings

Objectives:

- Encourage quality-designed dwelling houses that make a positive contribution to the streetscape and amenity of the neighbourhood.
- Provide definition of the public domain by ensuring development addresses the streets and open spaces.

Design Requirements:

1. Detached dwellings shall generally take the form of either Standard Detached Dwellings (400–2000m^2) or Large Detached Dwellings – over 2000m^2 as provided for in Tables 4.2 and 4.3 on the following pages. Dwellings shall comply with the specific development controls for the relevant form of dwelling according to allotment size.

Table 4.2: Development Standards for Standard Detached Dwellings (400–2000m²)

CRITERIA	CONTROLS
Minimum Allotment Size	400m²
Maximum Allotment Size	2000m²
Minimum average allotment width	15m
Minimum Lot Depth	20m
Private Open Space (POS)	20% excluding driveways
Minimum width of POS	2m – directly accessible from living areas
Minimum dimension of Principal POS	4m X 5m
Maximum Building site coverage	60%
Setbacks (Min/m) Primary front	 4m
Side	1m 2m (on high side of lot where lot frontage slopes more than 10%)
Rear	• 4m • 8m – Upper Level
Side and Rear (Garage)	Zero
Corner Lots (Secondary Street Frontage)	2m – up to 500m² Greater than 500m²: • 2m – for a maximum length of 9m • 4m – along both street frontages for length of frontages beyond 9m • 3m – where frontage is to open space
Lightweight projections (balconies/verandahs/perches)	2m
Maximum No. of Storeys	2
Maximum building length of any second storey wall component	14m
Max Height of Dwelling	• 7.2m – to uppermost ceiling • 10m – to ridgeline
Car Parking Spaces	refer to Table 4.7
Garage Minimum Internal Dimension	refer to Table 4.8
Maximum Garage Door Width	Not more than 50% of the dwelling width

Table 4.3: Development Standards for Large Detached Dwellings – Over 2000m²

CRITERIA	CONTROLS
Minimum Allotment Size	2000m²
Minimum Lot Depth	30m
Maximum Building site coverage	35%
Setbacks (Min/m) Primary Front (Building)	• 10m – Building Façade (may be reduced to 6m where opposite standard dwellings) • 2.0 – articulation zone (minor architectural features)
Side	3m
Rear	5m 8m (upper level)
Corner Lots (Secondary Street Frontage)	4m
Maximum No. of Storeys	2
Max Height of Dwelling	• 7.2m – to uppermost ceiling • 10m – to ridgeline
Car Parking Spaces	Refer Table 4.7
Garage Minimum Internal Dimension	Refer Table 4.8
Max Garage Door Width	Not more than 50% of the dwelling width
Domestic Outbuilding Max Height	3.6m
Domestic Outbuilding Maximum Area	100m²

4.4.4 Small Lot Housing (Less than 400m^2)

Objectives:

- Encourage quality-designed dwelling houses that make a positive contribution to the streetscape and amenity of the neighbourhood.
- Promote housing choice/variety/ affordability.
- Provide higher density dwellings on collector roads and bus routes, around parks and close to community facilities.

Design Requirements:

1. Small lot housing shall comply with the requirements set out in Table 4.4 below.
2. Terrace housing is encouraged to have garages accessible from a car court, rear or secondary street frontage.

Table 4.4: Development Standards for Small Lot Housing (under 400m²)

CRITERIA	CONTROLS
Minimum Allotment Size	200m² (terrace house) 250m² (zero lot) 350m² (small detached)
Minimum average allotment width (measured at primary building line)	6.5m (terrace house) 10m (zero lot) 12.5m (small detached)
Maximum average allotment width – zero lots only (measured at primary building line)	15m
Minimum Lot Depth	20m
Private Open Space (POS)	20% excluding driveways
Minimum width of POS	2m – directly accessible from living areas
Minimum dimension of Principal POS	4m X 4m
Maximum Building site coverage	65%
Setbacks (Min/m) Primary Front • Terrace houses • Zero Lot • Small detached	 3.5m 4m 4m
Side	1m (except attached and zero lot)
Rear	• 4m • 8m – Upper Level
Side and Rear (Garage)	Zero (this does not constitute a zero lot dwelling)
Corner Lots (Secondary Street Frontage)	2m
Lightweight projections (balconies/verandahs/perches)	2m
Maximum No. of Storeys	2
Maximum building length of any second storey wall component	14m
Max Height of Dwelling	• 7.2m – to uppermost ceiling • 10m – to ridgeline
Car Parking Spaces	refer to Table 4.7
Garage Minimum Internal Dimension	refer to Table 4.8
Maximum Garage Door Width	Not more than 50% of the dwelling width
Easement for Zero Lots	1m

4.4.5 Studio Apartments and Garden Duplexes

Studio apartments are "self-contained" and therefore include a combined living/bedroom area, a bathroom, maisonette kitchen and a separate on site car parking space. Studio apartments promote casual surveillance over car courts and secondary streets. Studio apartments can be strata titled and exclude garage lofts.

Garden duplex dwellings consist of a ground and an upper level single storey dwelling. Garden duplexes may form part of a group of houses or be detached. Garden duplexes can be strata titled.

Objectives:

- Provide housing choice/diversity for families;
- Provide the opportunity for rental accommodation for single occupants; and
- Provide casual surveillance over rear access points.

Design Requirements – Studio Apartments

1. Studio apartments shall comply with the requirements set out in Table 4.5 (see page 4-13).
2. Studio apartments shall be located on top of detached double garages accessible from car courts or secondary street frontages only.
3. A separate off-street car parking space shall be provided for the occupants of the studio apartment in addition to the car parking requirements for the main dwelling.
4. A separate area for clothes drying at ground level shall be provided out of view from the public domain for the studio apartment.

Design Requirements – Garden Duplexes

5. Garden duplexes shall comply with the requirements set out in Table 4.5 (see page 4-13).
6. Each garden duplex shall be provided with a minimum of one off street parking space.
7. A separate area for clothes drying at ground level shall be provided out of view from the public domain for each dwelling.

Table 4.5: Development Standards for studio apartments and garden duplexes

CRITERIA	CONTROLS
Minimum Allotment Size	300m² for duplex dwellings
Minimum frontage width	10m for duplex dwellings (12.5m for corner lot) 6.5m for attached dwellings (9m for corner lot)
Minimum average allotment width (measured at primary building line)	5m
Minimum Lot Depth	25m
Private Open Space (POS)	10m² (studio – minimum balcony width 2m) 16m² (duplex)
Minimum width of POS	2m for studios
Minimum dimension of Principal POS	4m directly accessible from living areas (duplex only)
Maximum Building site coverage	65% for duplex dwellings only
Setbacks (Min/m) Primary Front (Building)	3.5m – Building Façade (as part of terrace group) 4.0m – Building Façade (elsewhere) 2.0 – articulation zone (minor architectural features)
Side	1.0m (except for attached dwellings and zero lots)
Rear	4.0m – Ground Level (duplex only – excluding rear garage) 8m – Upper Level (duplex only)
Corner Lots (Secondary Street Frontage)	2m
Easement for Zero Lot Line	1m
Maximum No. of Storeys	2 (excludes attic)
Maximum building length of any second storey wall component	14m
Max Height of Dwelling	7.2m – to uppermost ceiling 10m – to ridge line
Car Parking Spaces	refer Table 4.7
Garage Minimum Internal Dimension	refer Table 4.8
Max Carport and Garage Door Width	Not more than 50% of the dwelling width

4.5 MIXED USE DEVELOPMENT

Objectives:

- Encourage high quality, high density mixed use development within close proximity to public transport and business centres, which is innovative and responsive to the site's environmental characteristics and setting.
- Ensure a high level of amenity for the occupants of mixed use development, adjoining developments and public places.

Design Requirements:

1. The residential component of any mixed use developments shall comply with State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development and the Residential Flat Design Code.
2. Mixed use development shall comply with the requirements set out in Table 4.6 below.
3. Mixed use development shall incorporate retail and/or commercial office uses at least at the ground floor level.
4. Where possible vehicle entry points shall be located at the rear or off side streets.

Table 4.6: Development Standards for Mixed Use Development

CRITERIA	CONTROLS
Minimum Allotment Size	Not applicable
Minimum frontage width	Not applicable
Landscape Area	Minimum 20% of site suitable for deep soil planting
Private Open Space (POS) either courtyard or balcony	Minimum 8m^2 for each apartment – directly accessible from living areas Ground floor POS shall be screened for privacy
Minimum dimension of POS	2m
Setbacks (Min/m) Front	 Nil – Primary frontage Nil – Secondary frontage
Side	3m or as specified in the RFDC (whichever is the greater) – for ground and first floor 5.5m or as specified in the RFDC (whichever is the greater) – above first floor level
Rear	Nil (for ground and first floor) 5.5m or as specified in the RFDC (whichever is the greater) – above first floor level
Height	Maximum 10 storeys
No. of dwellings accessible from common lobby or corridor in each level of building	Max 10 dwellings
Access	Minimum 1 lift required for access from basement to upper most floor (inclusive) in each RAB Max 30 dwellings accessed from a common lift shaft Access to lifts to be direct and well illuminated Pedestrian access to residential apartments on upper levels to be separated from commercial/retail uses at lower levels.
Storage	Each apartment to be provided with an internal storage area with minimum capacity: Studio Apartment – 6m^3 1 Bedroom Apartment – 8m^3 2 Bedroom Apartment – 10m^3 3 Bedroom Apartment – 12m^3 4 (or more) Bedroom Apartment – 15m^3
Car Parking Spaces	In accordance with AS2890 Parts 1 and 2 Minimum 1 space per dwelling plus: (i) an additional space for every 4 dwellings (or part thereof) (iv) an additional visitor space for every 10 dwellings (or part thereof) Where development greater than 3 storeys all car parking is to be at basement level Parking at ground level shall be screened from view Plus 1 space per 25m^2 of retail floor space and 1 space per 35m^2 of commercial floor space
Car Parking Space Dimension	Min 2.5m (2.7m where adjoins hard edge) X 5.5m
Driveway location	Min 6m from splay of any intersection
Loading/Unloading	Development shall provide adequate space for on site parking, loading and unloading of all delivery/service vehicles
Waste	In addition to requirements of 4.12 below all RABs shall provide bins at the following rates: (iii) a 240 litre/2dwellings/week for household garbage; or (iv) 1000/1100 litre bulk bin; and (v) A 240 litre/dwelling/fortnight for dry recyclables; (vi) Garden organic bins as required to be collected fortnightly. Communal bin storage room in accordance with requirements of 4.3.10 of Campbelltown (Sustainable City) DCP Separate provisions to be made for commercial and residential waste

4.6 LANDSCAPING (PRIVATE)

Objectives:

- Ensure appropriate landscaping of all residential developments.
- Enhance the sustainability of the development by minimising water usage, contributing to biodiversity and enhancing passive energy systems for development.

Design Requirements:

1. A detailed Landscape Plan is required for all Development Applications for residential apartment buildings, mixed use development and small lot housing. This plan shall be prepared by a suitably qualified professional and show the extent and type of materials and finishes, garbage storage area and access, clothes drying area, water storage tank, built elements including fencing and retaining walls, existing trees to be retained or removed, noxious weeds removed, planting layout, species (botanical and common names), numbers, installation size.
2. Landscaping shall incorporate the plant species identified in the Species List attached in Appendix 2.
3. Existing vegetation shall be retained where possible however all noxious weeds shall be removed. A report shall be provided with the Development Application detailing tree protection during construction prepared by a suitably qualified professional.
4. Screen planting shall be used to enhance privacy between dwellings and to assist in climate control.
5. Landscape designs shall have regard for direct and easy access to, and appropriate screening of, bin storage areas, rainwater tanks, hot water units and air conditioning units associated with the dwelling.
6. A variety of landscape treatments shall be incorporated in the front setbacks of dwellings such as lawns, paved areas, mass planting beds and shade trees.

4.7 PRIVATE OPEN SPACE

Objectives:

- Ensure residents are provided with practical, useable and well located outdoor living environments.

Design Requirements:

1. Private open space must be:
   (i) clearly defined for the private use of occupants.
   (ii) a useable size and dimension,
   (iii) a suitable slope.
   (iv) directly accessible from a living area, and
   (v) capable of receiving sufficient sunlight
2. Private open space must be located beyond the street-front setback where orientation permits.
3. On corner lots a minimum of 50 percent of the required private open space is to be located outside of the street-front setback where orientation permits.
4. The location of private open space should not adversely affect the privacy of adjoining and nearby properties. (Refer to Section 4.8.

4.8 PRIVACY

Objectives:

- Provide adequate visual and acoustic privacy for residents.

Design Requirements:

1. No window of an upper level habitable room or balcony shall directly face a window of another habitable room, balcony or private open space of another dwelling located within 6m of the proposed window or balcony. Notwithstanding, any window of a habitable room located on an upper level will be considered only where it:
   (i) is offset to limit views between windows; or
   (ii) has a sill height 1.5m above the floor level; or
   (iii) is splayed to avoid direct views between windows; or
   (iv) has fixed translucent glazing in any part of the window within 1.5m of the floor level.
2. Screening of balconies and principal private open space areas of neighbouring properties will be required from upper level windows/balconies.

4.9 FENCING AND RETAINING WALLS

Objectives:

- Ensure that fencing/retaining walls are compatible with the character and scale of development within the streetscape and other public domain areas in the locality;
- Provide clear definition between the public and private domain while encouraging casual surveillance; and
- Create strong, visually integrating element along street frontages.

Design Requirements:

1. All fencing and retaining wall details must be submitted to Council for approval as part of any new development application.
2. All front fencing, secondary street fencing and fencing adjoining common boundaries with public open space areas must be constructed in accordance with the relevant Fencing Strategy for that development stage.
3. Front fencing (i.e. located forward of the front building line including those on corner lots) shall be provided for small lot housing and residential flat buildings and be between 700mm and 1200mm in height and in accordance with the Fencing Strategy for that development stage.
4. Side fences forward of the building line shall comply with the requirements for front fences in height and design.
5. Fencing to all side and rear property boundaries (i.e. to those property boundaries that are not publicly visible) shall be provided. Such fencing shall have a maximum height of 1.8m and shall consist of lapped and capped hardwood timber. Metal sheeting, open mesh steel fencing and the like are not permitted.
6. A separate fencing strategy may be adopted for allotments is excess of 2000m^2 which may not comply with the requirements contained herein but rather may adopt a more rural fencing approach.
7. On corner lots fencing to any secondary street frontage shall comply with the requirements listed above for front fencing. However, where such fencing encloses the rear private open space area, the maximum height of the fencing may be increased to 1.8m for no more than 50% of the length of the long frontage boundary.
8. Fencing shall not obstruct power, water, sewer, gas or telephone services, drainage services (including overland flow paths) or any easements or rights of way.
9. Small lot housing shall incorporate a private letter box to be incorporated within one of the masonry front fencing elements.
10. All retaining walls proposed on site must be simultaneously approved as part of any dwelling development application.
11. Any retaining wall that is proposed within a publicly visible location (e.g. Front and side forward of the building line building setback area) must be constructed of masonry materials (i.e. no timber products) that respond to the streetscape and/or materials to be utilised within the construction of the dwelling.
12. Retaining walls shall be stepped/terraced at a maximum height of 900mm, with the exception of those retaining walls constructed during the subdivision phase, and incorporate a minimum horizontal step of 900mm face to face.

4.10 CAR PARKING AND ACCESS

Objectives:

- Minimise the visual impact of garages on the streetscape.
- Provide adequate on-site car parking for residents and visitors that is convenient, secure and safe.
- Provide safe convenient access for vehicles, pedestrians and cyclists whilst minimising conflict between them.

Design Requirements:

1. Car parking spaces shall be provided in accordance with Table 4.7 below.
2. All driveways shall be located a minimum distance of 6m from the tangent point of the kerb and gutter of an adjacent street corner (regardless of boundary splay).
3. The geometric design of all driveways, including car courts, is to be in accordance with Councils Engineering Guide to Development and AS 2890 (as amended).
4. All driveway crossings between the front property boundary and the road kerb shall be finished in uncoloured natural concrete to match the kerb. Dwellings shall utilise the driveway crossover provided.
5. To reduce the visual impact of garages, built elements such as balconies projecting past the garage frontage shall be encouraged.
6. The minimum dimensions of garages and parking areas shall be as shown in Table 4.8 below.
7. Garages shall be setback a minimum 1.5m behind the building façade.
8. Detached garages may have a zero setback from side or rear boundaries.
9. Garages to rear loading accessways and car courts shall be setback a minimum 1m to accommodate adequate turning and manoeuvrability.
10. Garage setbacks from secondary street frontages can be reduced to 2m and 1m in car courts.
11. Where external space adjoins a building or fence an additional 0.5m width is required.

Table 4.7: Required car parking spaces

DWELLING SIZE	NUMBER OF CAR PARKING SPACES REQUIRED
2 bedroom dwelling or less	1 covered space
3 bedroom dwelling or more	2 spaces with at least one covered

Table 4.8: Car Parking Dimensions

CRITERIA	CONTROLS
Minimum dimensions for enclosed single garage	3.0 x 5.5m
Minimum dimensions for enclosed double garage	5.5 x 5.5m
Minimum dimensions for hard stand car parking space	2.75 x 5.5m
Minimum dimensions for uncovered space	2.5 x 5.2m

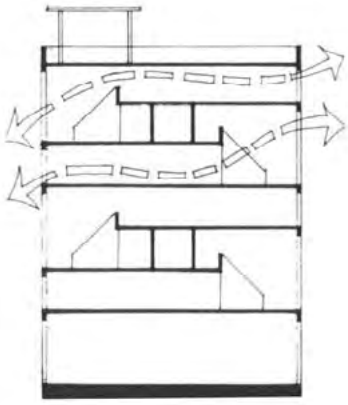
4.11 SOLAR ACCESS AND ENERGY EFFICIENCY

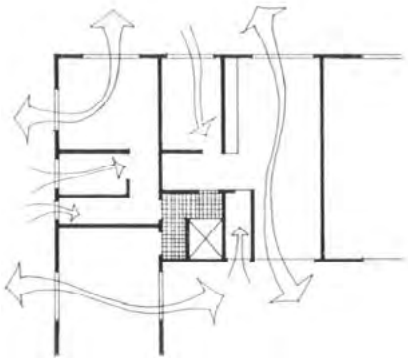
Objectives:

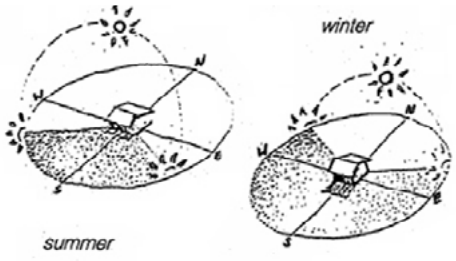
- Encourage building design and siting to take advantage of climatic factors and reduce household energy consumption.
- Encourage features to be incorporated into site and building design to optimize passive solar access to internal and external spaces.

Design Requirements:

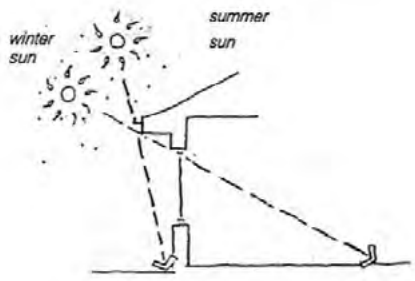
1. Living areas shall generally have a northern orientation and be directly accessible to private open space areas.
2. For dwellings at least 50% of the private open space and all of the nominated outdoor clothing drying area shall receive three hours of direct solar access on 21 June, between 9.00am and 3.00pm, measured at ground level.
3. Dwellings shall be designed to maximise solar access to all private open space areas. Suitable shadow diagrams shall be required.
4. Development shall have appropriate regard to the impact on solar access to usable private open space, solar collectors and clothes drying areas of adjoining residential development.
5. Dwellings shall be designed to reduce the need for artificial lighting during daylight hours.
6. Windows shall be protected from direct summer sun with appropriate hoods, eaves or louvres or adjustable shading devices wherever possible.
7. Materials selection and construction shall respond to orientation and potential for heat retention and protection including insulation.
8. An outdoor clothes line with adequate solar access shall be provided for every dwelling.
9. Windows and doors shall be arranged to encourage cross ventilation.
10. Council may consider the use of deciduous trees at the north and west elevations to protect against hot summer temperature and to allow for solar penetration in winter, where it may otherwise be inappropriate to plant native trees.
11. A BASIX certificate shall be submitted with the development application for all residential dwelling development. Further information is available at www.basix.nsw.gov.au







The sun's path over Sydney in summer and winter



Angle of sun in summer and winter

4.12 WASTE MANAGEMENT

Objectives:

- Ensure waste systems are easy to use, are accessible by collection vehicles and minimise noise generation during collection.
- Ensure healthy and safe practices for the storage, handling and collection of waste and recycling materials.
- Prevent stormwater pollution that may occur as a result of poor waste storage and management arrangements.

Design Requirements:

1. Provision shall be made for all waste and recycling storage containers to be located behind the primary and secondary building alignment and out of public view.
2. Space shall be allocated to store the following bins:
   (i) a 140 litre/dwelling/week for household garbage;
   (ii) a 240 litre/dwelling/fortnight for dry recyclables; and
   (iii) a 240 litre/dwelling/fortnight for garden organics.
3. Any area for storing garbage and recycling shall be located in a position that is convenient for occupants and waste collection staff.
4. The path for wheeling bins between waste storage area(s) and the collection vehicle shall be free of steps or kerbs and have a maximum gradient of 1:8.
5. Collection vehicles must be able to service the development efficiently with minimal need to reverse, from a nominated collection point.
6. Rear loaded, battle axe and car court dwellings shall make provision for bin collection on a public street accessible by collection vehicles.
7. No waste incineration devices shall be permitted.

4.13 SERVICES

Objectives:

- Minimise the visual and acoustic impact of on site services.

Design Requirements:

1. All metre boxes and services plant shall be treated to reduce their visual prominence from the public domain by screening, recessing or colour treatments.
2. TV aerials shall be located to the rear of the dwelling, whilst satellite dishes may only be erected if they are suitably screened from view of the public and neighbours. Only one aerial will be allowed per dwelling.
3. Letter boxes shall be located visible from the street and accessible from the public footpath. If no footpath is present access shall be provided accessible from outside the front boundary of the property.
4. Air-conditioning units shall be located a minimum of 4m from the site boundary or screened for visual and acoustic privacy. They shall not be located along the front site boundary.

APPENDICES

APPENDIX 1: DICTIONARY

"1% AEP" (annual exceedance probability) means that there is a 1% chance in any year that this rain storm event could be exceeded. This does not preclude that two or more events could occur within hours of one another.

"Amenity" means those qualities and characteristics of a site and its neighbouring area that contribute to the comfort and pleasantness of the local environment.

"Asset Protection Zone" means a buffer between development and hazards. The size and location of an asset protection zone is determined by a number of factors detailed in Planning for Bushfire Protection, 2001.

"Average Recurrence Interval" (ARI) means the average period between the recurrence of a storm event of a given rainfall intensity.

"Battleaxe Allotment" means an allotment that does not have primary frontage to a public road and is accessed via a driveway (handle) located between two adjoining allotments.

"Building Sustainability Index" (BASIX) means a web-based planning tool designed to assess the potential performance of new development against a range of sustainability indices including landscape, stormwater, water, thermal comfort and energy.

"Bushfire Prone Land" means land, which has been identified as bush fire prone land on the Campbelltown Bush Fire Prone Lands Map as certified by the Commissioner of the NSW Rural Fire Service.

"Car Courts" means a vehicular accessway provided to the rear of a cluster of up to 4 lots. Car courts shall not be dedicated to Council and will be managed under strata or community title or a reciprocal right of way.

"Character" means the distinctive elements of an area or building.

"DA" means development application.

"Detached Dwelling" means a dwelling house on a separate allotment of land that is not attached to another dwelling.

"Dwelling" means a room or suite of rooms occupied or used or so constructed, designed or adapted as to be capable of being occupied or used as a separate domicile.

"Dwelling House" means a building containing one dwelling and may contain a subordinate structure such as a garage loft, studio apartment or outbuilding.

"Ecologically Sustainable Development" (ESD) means a development that conserves and enhances the community's resources so ecological processes are maintained and the total quality of life, now and in the future, can be increased.

"Engineered Natural Ground Level" means the ground level at completion of the subdivision phase of the development.

"Environmental Planning Instrument" (EPI) means a State Environmental Planning Policy, Regional Environmental Planning Policy, Local Environmental Plan or Interim Development Order.

"Flowpath" means the overland route taken by any concentration of, or significant sheet flow of stormwater on its way to any creek, river, bay or a flood plain in a storm.

"Freeboard" means a factor of safety used in relation to the setting of floor levels. It makes allowance for wave action, localised hydraulic behaviour and system blockages.

"Garden Duplex" means a dwelling consisting of a ground and an upper level single storey dwelling. Garden duplexes may form part of a group of dwellings or be detached.

"Garage Loft" means habitable space over a garage which does not contain a kitchen or bathroom and does not comprise a studio apartment as separately defined.

"Gross Floor Area" in relation to a building, means the sum of the areas of each level of the building, including:

(a) the thickness of all external walls, and

(b) the area of voids, staircases and lift shafts, counted at each level, and

(c) that part of the area of balconies and verandahs which is in excess of 20m^2 per dwelling in the case of a building used or intended for use for residential purposes, or in excess of 10% of the site area in the case of a building used or intended for use for non residential purposes, and

(d) any other areas of the building where the height of those areas exceeds 1.5m above ground level,

and excluding:

(e) car parking to meet the requirements of the Council and any access to the car park, and

(f) any area used or intended for use as a car parking station, and

(g) uncovered roof terraces, and

(h) any area used or intended for use as an arcade.

"Habitable Room" means a room used for normal domestic activities and includes a bedroom, living room, lounge room, music room, television room, rumpus room, sewing room, study, play room, family room, sunroom and the like. It excludes a bathroom, laundry, water closet, pantry, walk in wardrobe, lobby, clothes drying room, and other spaces of a specialised nature that are not occupied frequently or for extended periods.

"Height" in relation to a building means the distance measured vertically from any point on the building to the engineered natural ground level immediately below that point.

"Large Lot Housing" means a dwelling in a lot with an area of greater than 2000m^2.

"Mixed-use Development" means a development that contains a mixture of retail and/or commercial and residential uses.

"Noxious Weed" means a weed declared by an order under the *Noxious Weeds Act 1993*. Note: For the most up to date list refer to www.agric.nsw.gov.au/reader/weeds or contact Council's Planning and Environment Division on 02 4645 4601.

"Open Space" means areas within a development designed exclusively for either private or communal use by the occupants of the development.

"Primary Street Frontage" means the area between the building/structure and the road to which it is orientated.

"Primary Street Setback" means the setback between the building/ development and road upon which it faces and or the road from which the allotment is accessed.

"Principal Private Open Space" means the area of private open space that is directly accessible from living areas of the dwelling, consisting of an appropriately dimensioned square.

"Private Open Space" means open space/landscaped area for the exclusive use of occupants of a dwelling with direct access to the living areas and of a minimum dimension in any direction of 2m.

"Probable Maximum Flood" (PMF) means the largest flood that could conceivably occur at a particular location.

"Public Domain" means an area that is adjacent to the development site, which is under the care, control and/or ownership of a public authority.

"Remnant Vegetation" means the natural vegetation that still exists or, if the natural vegetation has been altered, is still representative of the structure and florisitics of the natural vegetation.

"Residential Apartment Building" means a building that comprises:

(a) three (3) or more storeys (not including levels below ground level provided for car parking or storage, or both, that protrude less than 1.2m above ground level; and

(b) four (4) or more self contained dwellings.

"RFDC" means the Residential Flat Design Code (NSW Government)

"Secondary Street Frontage" means the area between the building/structure and any additional road to which it adjoins.

"Secondary Street Setback" means setback between the building/ development and the road upon which the building does not front.

"Small Lot Housing" means a dwelling in a lot with an area of less than 400m^2.

"Standard Lot Housing" means a dwelling in a lot with an area of greater than 400m^2 but less than 2000m^2.

"Storey" means any separate level within a building (not including levels below existing ground level provided for car parking or storage, or both, that protrude less than 1.2m above existing ground level, or an attic level), where the number of storeys that a building contains is the maximum number of storeys of a building which may be intersected by the same vertical line, not being a line which passes through any wall of the building.

"Studio Apartment" means a self contained dwelling constructed above a double garage fronting a secondary street frontage or car court.

"Suitably Qualified Professional" means a person who through suitable education and or experience, accreditation (trade or professional) and knowledge may be reasonably relied upon by Council to provide advice within an area of expertise related to the relevant task.

"Tree" means a perennial plant with self supporting stem(s) which:

(a) is more than 3m in height; or

(b) has a spread of more than 3m; or

(c) a single trunk plant with a girth of more than 450mm or more, measured at a distance of 1m above the ground level; or

(d) a multi trunk plant with an individual trunk girth of 80mm or more, measured at ground level.

"Waste Management Plan" (WMP) means a plan demonstrating the details of how waste will be managed during the demolition, construction and ongoing operations of a development.

"Zero Lot Line" means the construction of a dwelling or garage wall on top of and/or along the side property boundary of an allotment.

"Zone of Influence" means the area likely to be influenced by building loads, and is a factor of the structure of the ground on which the building is to be located.

UWS CAMPBELLTOWN TREE SPECIES LIST

Streetscape (Local Residential Street)

BOTANICAL NAME	COMMON NAME	MH (m)	CP	IN	DE
Acer palmatum	Japanese Maple	4			•
Jacaranda mimosifolia	Jacaranda	8			•
Lagestroemia indica	Crepe Myrtle	6			•
Magnolia 'Little Gem'		3			•
Magnolia soulangeana		5			•
Malus floribunda	Crabapple	5			•
Prunus serrulata	Flowering Cherry	5			•
Pyrus calleryana 'Chanticlaire'	Manchurian Pear	6			•
Robinia 'mop top'	Robinia	5			•
Syzigium luehmanni	Lilly Pilli	4		•	

Legend:

MH Mature Height
CP Cumberland Plain
IN Indigenous
DE Deciduous

Streetscape (Main Collector)

BOTANICAL NAME	COMMON NAME	MH (m)	CP	IN	DE
Acer palmatum	Japanese Maple	4			•
Angophora floribunda	Rough Barked Apple Gum	20		•	
Angophora subvelutina	Broad-leaved Apple	20		•	
Backhousia myrtifolia	Grey Myrtle	6		•	
Calodendrum capense	Cape Chestnut	10			
Corymbia maculata	Spotted Gum	20	•	•	
Eucalyptus crebra	Narrow Leafed Red Ironbark	20	•	•	
Eucalyptus ficifolia	Red Flowering Gum	10	•	•	
Eucalyptus leucoxylon 'Rosea'	Pink Flowering Yellow Gum	12		•	
Eucalyptus moluccana	Grey Box	20	•	•	
Eucalyptus Paniculata	Coastal Blackbutt	20	•	•	
Eucalyptus robusta	Swamp Mahogany	15		•	
Eucalyptus saligna	Sydney Blue Gum	30	•	•	
Eucalyptus sideroxylon	Ironbark	20	•	•	
Eucalyptus tereticornis	Forest Red Gum	40	•	•	
Flindersia australis	Australian Teak	15		•	
Fraxinus oxycarpa	Golden Ash	16			•
Fraxinus oxycarpa 'Raywood'	Claret Ash	16			•
Jacaranda mimosifolia	Jacaranda	12			•
Lagestroemia indica	Crepe Myrtle	6			•
Liquidambar styraciflua	Sweet Gum	20			•
Lophostemon confertus	Brush Box	12		•	
Pyrus calleryana 'Chanticlaire'	Manchurian Pear	10			•
Sapium sebiferum	Chinese Tallow Tree	8			•
Ulmus parvifolia	Chinese Elm	12			•
Waterhousia floribunda	Lilly Pilli	8		•	

Legend:

MH Mature Height
CP Cumberland Plain
IN Indigenous
DE Deciduous

Park

BOTANICAL NAME	COMMON NAME	MH (m)	CP	IN	DE
Acacia decurrens	Black Wattle	15		•	
Acacia parramattensis	Sydney Green Wattle	10		•	
Acer palmatum	Japanese Maple	4			•
Acer buergerianum	Trident maple	5			•
Angophora bakeri	Narrow-leaved Apple	20		•	
Araucaria cunninghamii	Hoop Pine	25		•	
Backhousia myrtifolia	Grey Myrtle	6		•	
Banksia integrifolia	Coast Banksia	15		•	
Brachychiton acerifoliusa	Aystralian Flame Tree	10	•	•	
Calodendrum capense	Cape Chestnut	10			
Callistemon citrinus	Lemon Scented Bottlebrush	3		•	
Casuarina glauca	Swamp Oak	20		•	
Elaeocarpus reticulatus	Blueberry Ash	8		•	
Eucalyptus amplifolia	Cabbage Gum	20	•	•	
Eucalyptus benthamii	Camden White Gum	30		•	
Eucalyptus eugenioides	Thin Leafed Stringy Bark	20	•	•	
Eucalyptus gummifera	Bloodwood	20		•	
Eucalyptus torquata	Coral Gum	10		•	
Ficus rubiginosa	Port Jackson Fig	12			•
Glochidion ferdinandi	Cheese Tree	4			
Harpephyllum caffrum	Kaffir Plum	10			•
Hymenosporum flavum	Native Frangipani	7		•	
Jacaranda mimosifolia	Jacaranda	12			•
Lagestroemia indica	Crepe Myrtle	6			•
Liquidambar styraciflua	Sweet Gum	20			•
Magnolia grandiflora	Southern Magnolia	12			
Melaleuca stypheliodes	Prickly-leaved Paperbark	10	•	•	
Melaleuca decora	Paperbark	7		•	
Melaleuca linariifolia	Paperbark	10		•	
Pistacio chinensis	Chinese Pistacio	12			•
Pyrus calleryana 'Chanticlaire'	Manchurian Pear	10			•
Sapium sebiferum	Chinese Tallow Tree	8			•
Spathodia campanulata	West African Tulip Tree	10			
Syncarpia glomulifera	Turpentine	50		•	
Tristaniopsis laurina	Water Gum	6		•	
Tilia cordata 'Green Spire'	Small-leaved Linden	15			•
Waterhousia floribunda	Lilly Pilli	8		•	

Legend:

MH Mature Height
CP Cumberland Plain
IN Indigenous
DE Deciduous

Riparian Corridor – Trees

BOTANICAL NAME	COMMON NAME	MH (m)	CP	IN	DE
Backhousia myrtifolia	Grey Myrtle	6		•	
Casaurina glauca	Swamp Oak	20		•	
Elaeocarpus reticulatus	Blueberry Ash	8	•	•	
Hardenbergia violacea	False sarsaparilla		•	•	
Hibbertia scandens				•	
Melaleuca deanei	Dean's Paperbark	8	•	•	
Melaleuca decora	White feather honeymyrtle	8	•	•	
Melaleuca stypheliodes	Prickly-leaved Paperbark	10	•	•	

Riparian Corridor – Shrubs

BOTANICAL NAME	COMMON NAME	DS (plants/m^2)	CP
Carex appressa		8	•
Carex fascicularis		8	•
Carex gaudichadiana		8	•
Carex inversa		8	•
Dianella longifolia var. longifolia		8	•
Ficinia nodosa		6	•
Juncus procerus		10	•
Lepidosperma limicola		10	•
Lepidosperma laterale		8	•
Lepidosperma longitudinale		8	•
Lomandra filiformis		8	•
Lomandra longifolia var. longifolia		6	•
Patersonia sericea		8	•
Stypandra glauca		6	•

Legend:

MH Mature Height
CP Cumberland Plain
IN Indigenous
DE Deciduous
DS Density