Campbelltown (Sustainable City) Development Control Plan 2015

VOLUME 2

Site Specific DCPs

Part 1: Minto Renewal DCP

Creating Campbelltown's Future 2025

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:

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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.

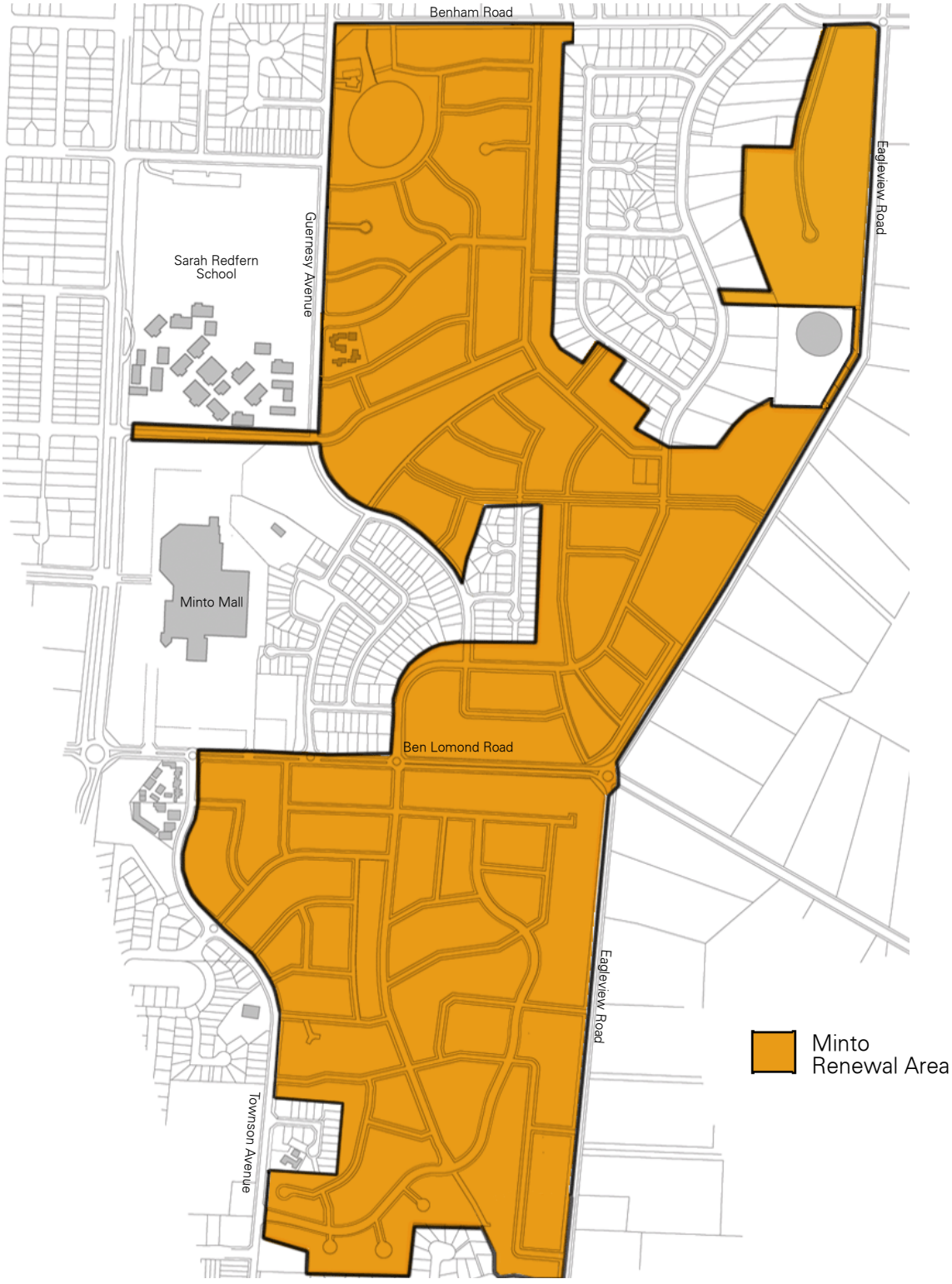


Figure 1: Land to Which the DCP Applies

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.

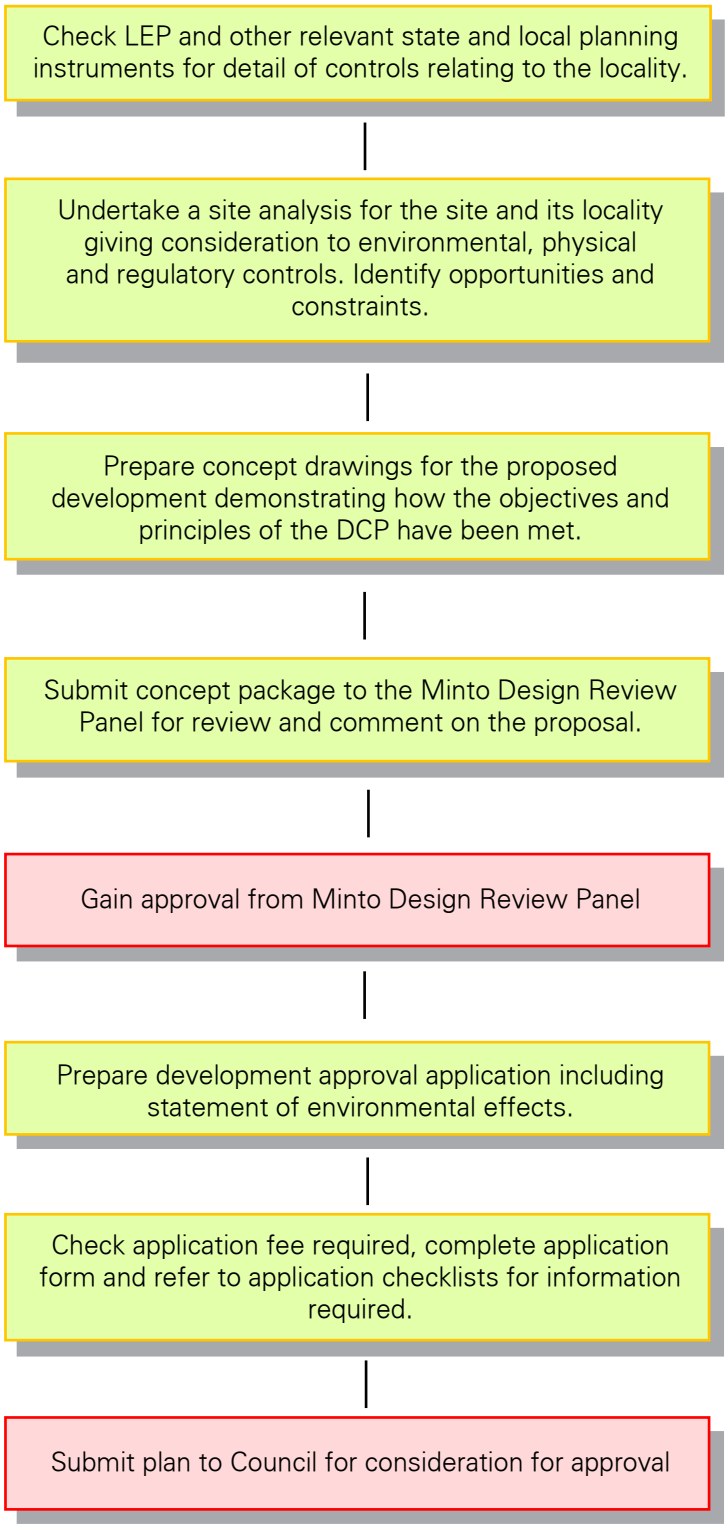


Figure 2: Development Approval Process

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



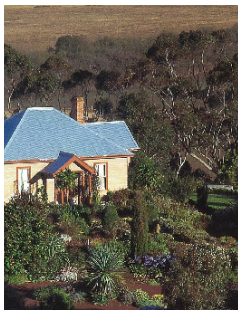


Figure 4: Development Character Images

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.

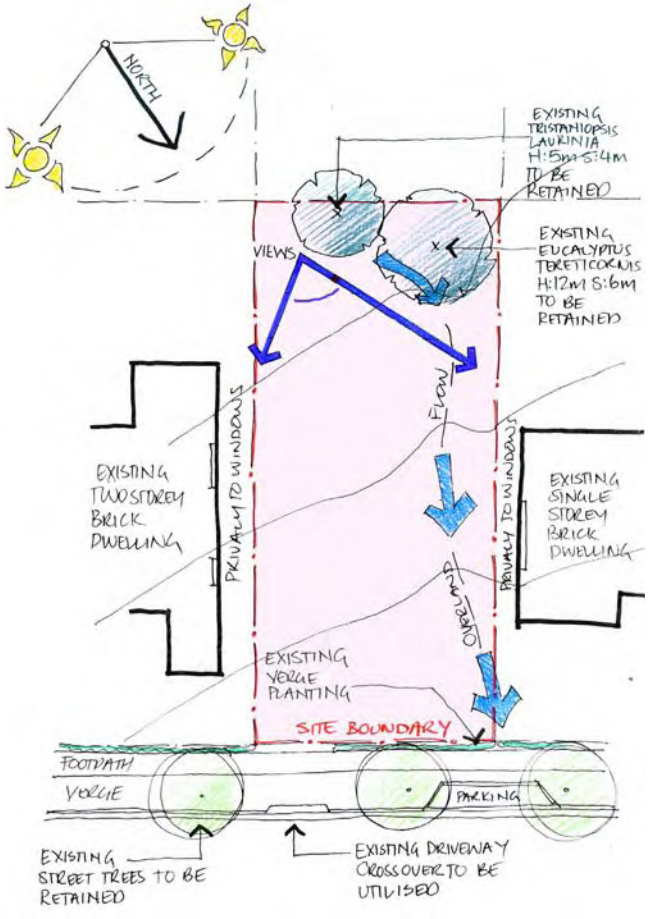


Figure 5: Example Site Analysis

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.

Figure 7: Examples of Three Storey Elements

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 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.

Maximum Fill 1 Metre

Maximum Sum of Cut and Fill 1 Metre

Maximum Cut 1 Metre

Figure 10: Cut and Fill Levels

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.

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:

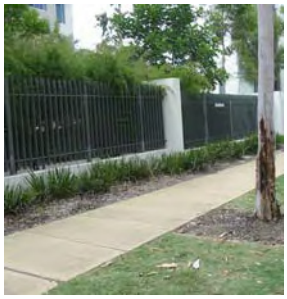
1. Development shall not impact on adjoining sites by way of overland flow of stormwater. All overland flow shall be maintained in the pre-development form or be directed to designated overland flow paths such as roads.

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.

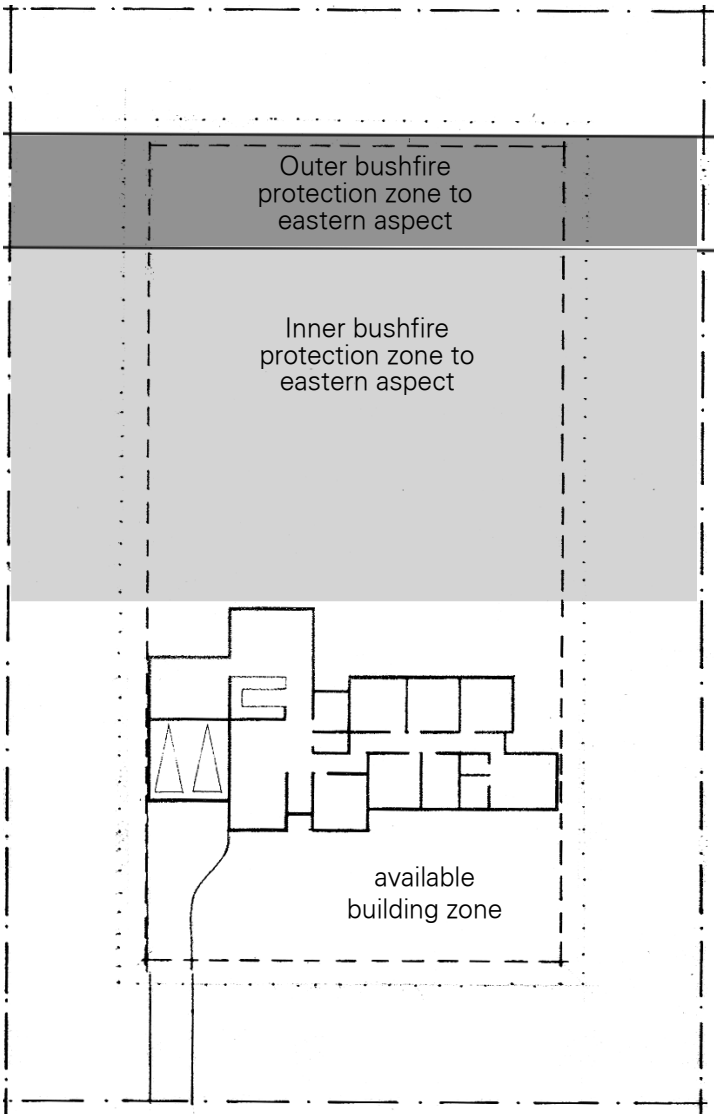


Figure 12: Typical Principles for Bushfire Protection Zones

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).

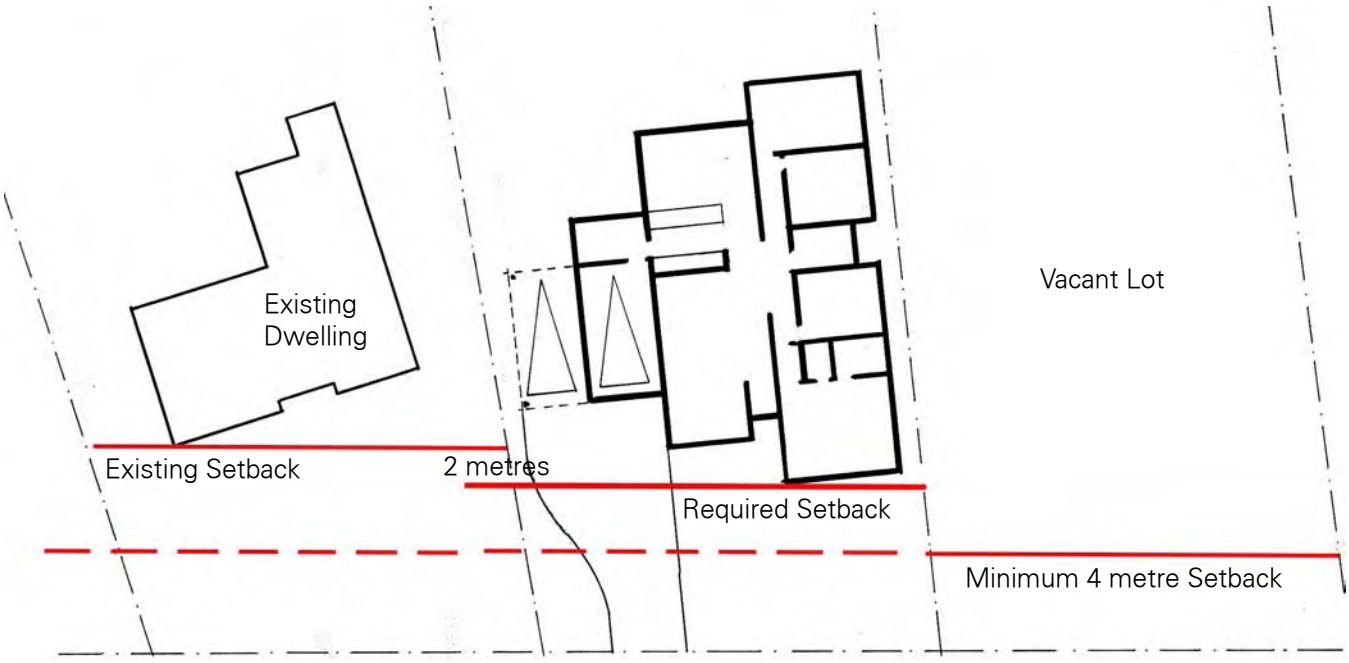


Figure 14: Front Setback for Dwellings (One Adjacent Existing Dwelling)

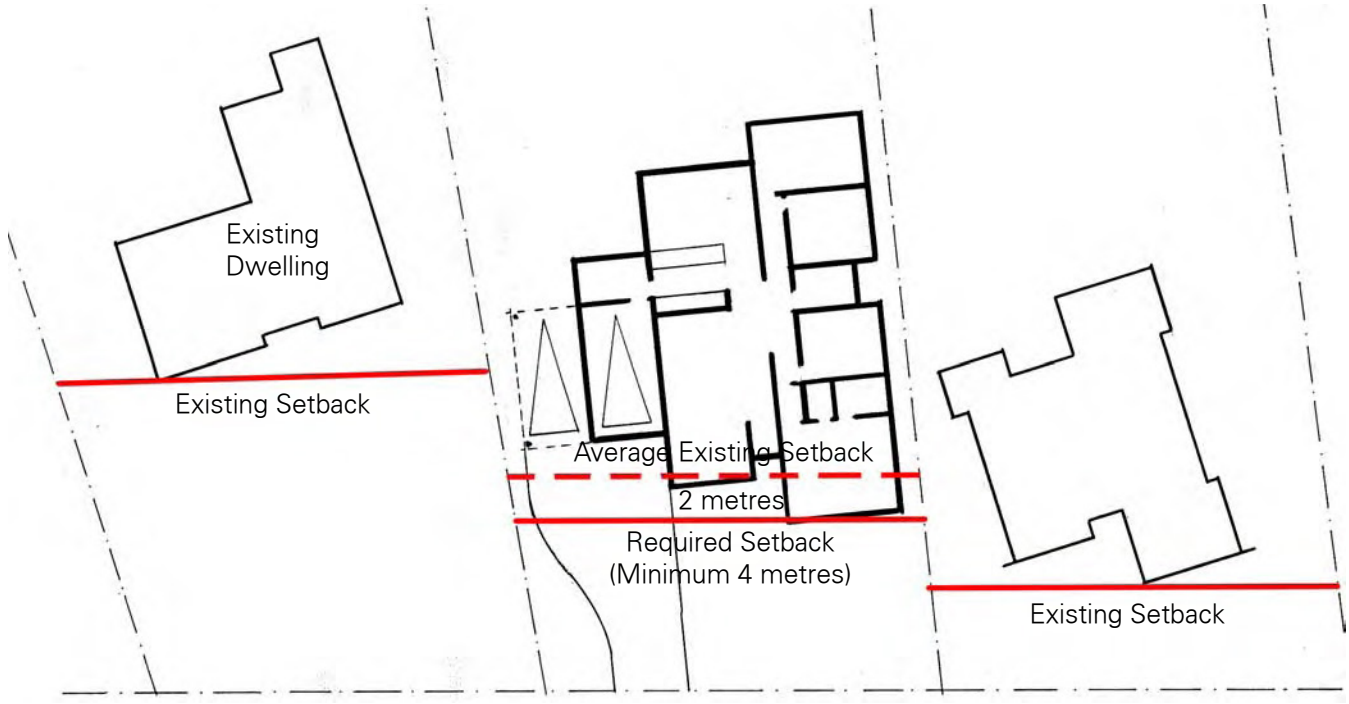


Figure 15: Front Setback for Dwellings (Two Adjacent Existing Dwellings)

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.

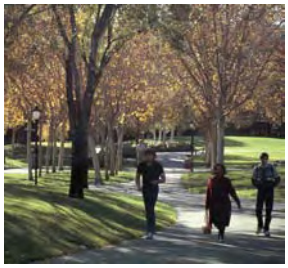
3. Appropriate traffic calming measures shall be installed to ensure a safe speed environment and denote traffic priority.

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.

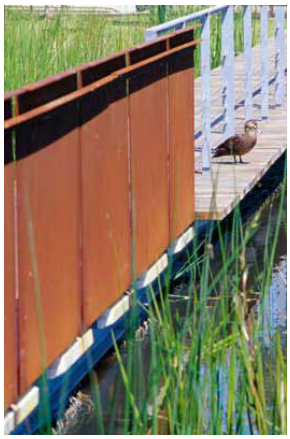
Design Requirements:

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

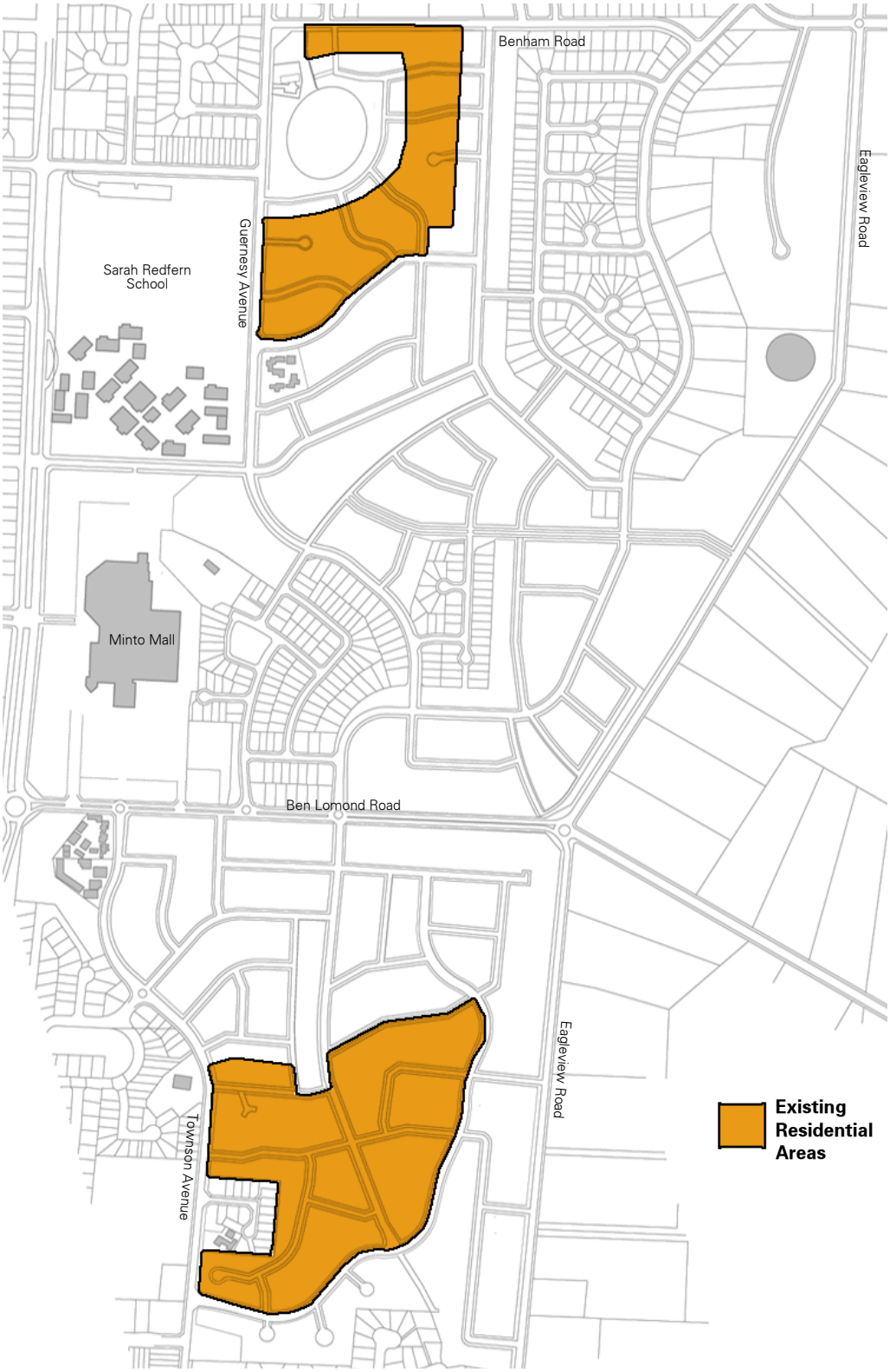
Appendix L – Open Space Network

appendix A

Dwelling Type Locations

appendix B

Existing Residential Areas



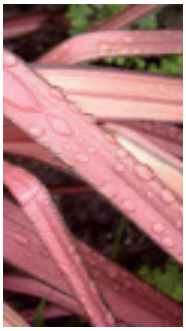
appendix C

Examples of Suitable Natural Colours

appendix D

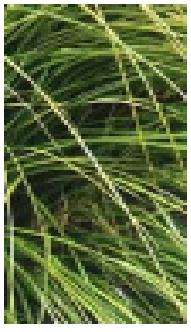
Three Storey Development Sites

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 6
Angophora floribunda	Rough Barked Apple Gum	20 x 6
Angophora subvelutina	Broad-leaved Apple	20 x 6
Araucaria cunninghamii	Hoop Pine	30 x 6
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 cerbra	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 6
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 6
Fraxinus oxycarpa	Golden Ash	16 x 12
Fraxinus oxycarpa '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 6
Lagestroemia indica	Crepe Myrtle	6 x 3
Liquidambar styraciflua	Sweet Gum	20 x 10
Lophostemon confertus	Brush Box	12 x 6
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 6
Pyrus calleryana "Chanticlaire'	Manchurian Pear	10 x 5

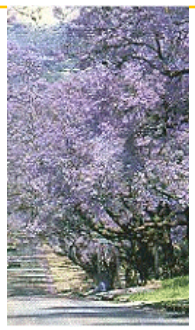


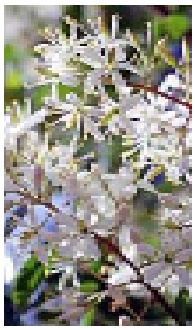
Suggested Species Schedule

Robinia pseudoacia 'Frisa'	Golden Robinia	10 x 5
Sapium sebiferum	Chinese Tallow Tree	10 x 5
Spathodia campanulata	West African Tulip Tree	10 x 5
Syncarpia glomulifera	Turpentine	50 x 5
Tristaniopsis laurina	Water Gum	6 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'	Minature 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

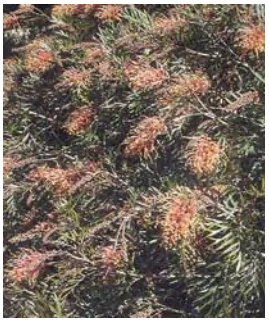
Lomandra longifolia	Mat Rush	0.7 x 0.7
Lomandra multiflora	Spiny Leafed Mat Rush	0.8 x 0.8
Lomatia silaifolia	Crinkle Bush	2 x 2
Melaleuca nesophila	Showy Honey Myrtle	4 x 2
Melaleuca nodosa	Ball Honeymyrtle	4 x 2
Melaleuca styphelioides	Prickly-leaved Paperbark	5 x 3
Melaleuca thymifolia	Prickly Paperbark	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 aloepecuroides	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 Dusky	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
Verbimum Tinus	Vibernum	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 Sarsparella	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
Trachelospermun jasminiodes	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
Metrosideros "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
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

appendix G

Road Hierarchy Plan

appendix H

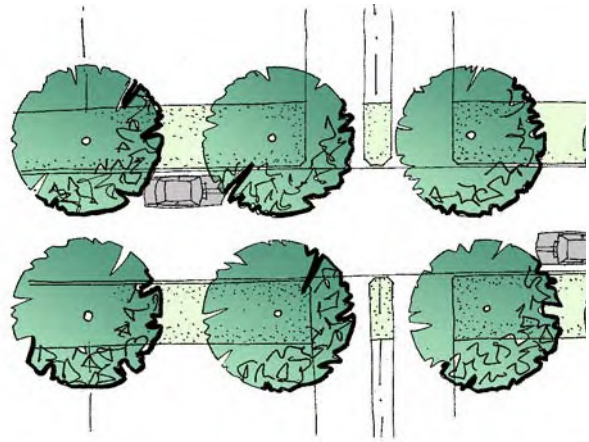
Road Hierarchy Schedule

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	Roll	No	No	No
Road Type 2 Access St Under 12m Lots	16.6	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	17.6	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	15.2	7.2	4.0/4.0	Standard K & G	Yes Both Sides	No	No
Road Type 3 Lots at Parks	13.6	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	22.2	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)	19.6	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	3.25	4.65	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	5.975	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)	3.25	Eagleview 3.5 Shareway 2.0	Standard K & G	No	Yes Shareway	Yes

1. Increases in width where lot frontage is above 6
2. Includes fully paved 5.5 wide streetscape for café seating
3. Measured to include landscaped strip between Eagleview and shared way adjacent to Valley Vista Park.

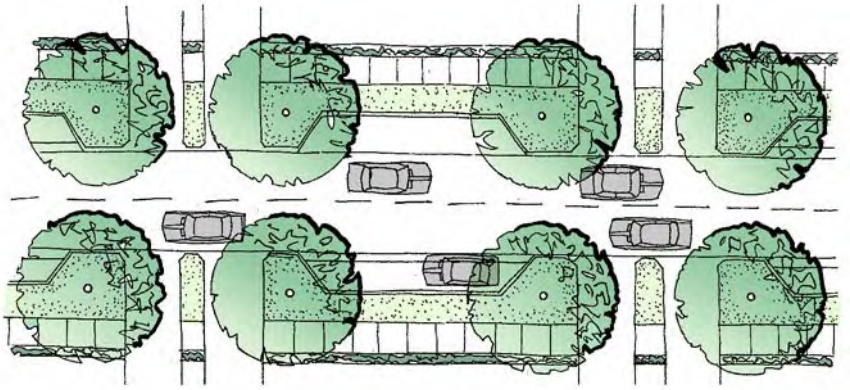
appendix I

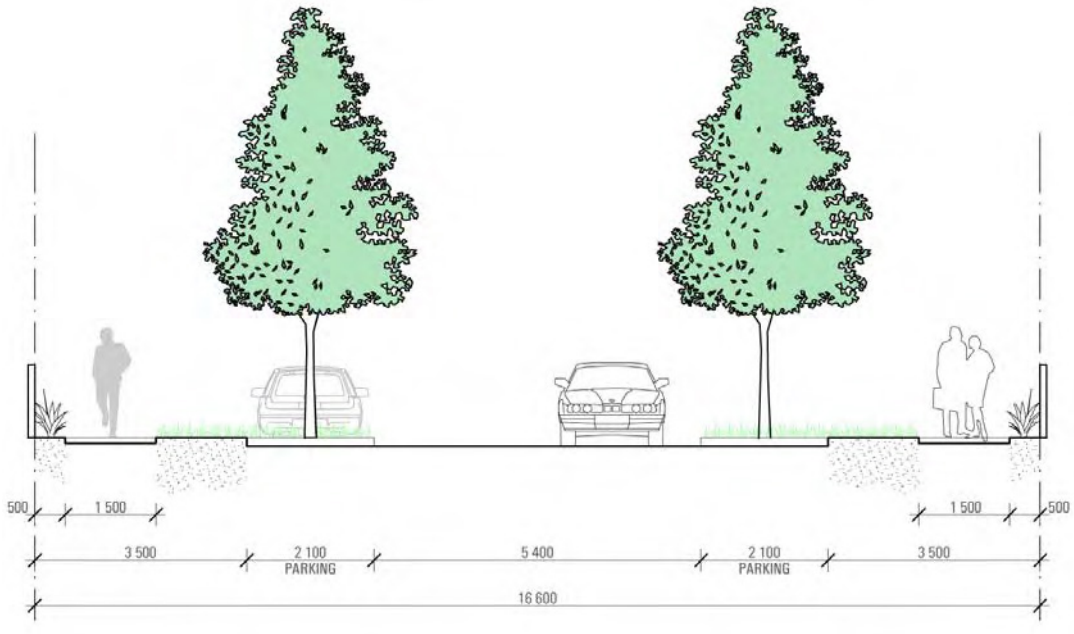
Subdivision Road Network Design Requirements.



appendix I

Subdivision Road Network Design Requirements.

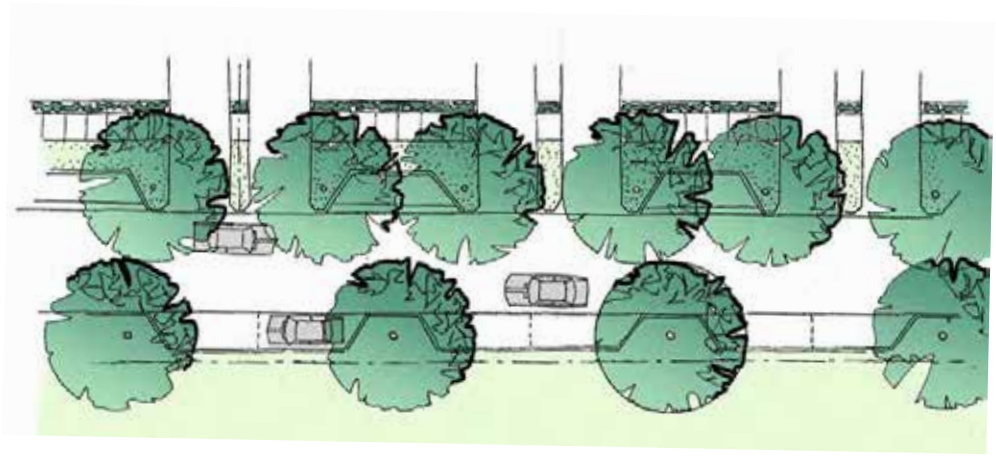


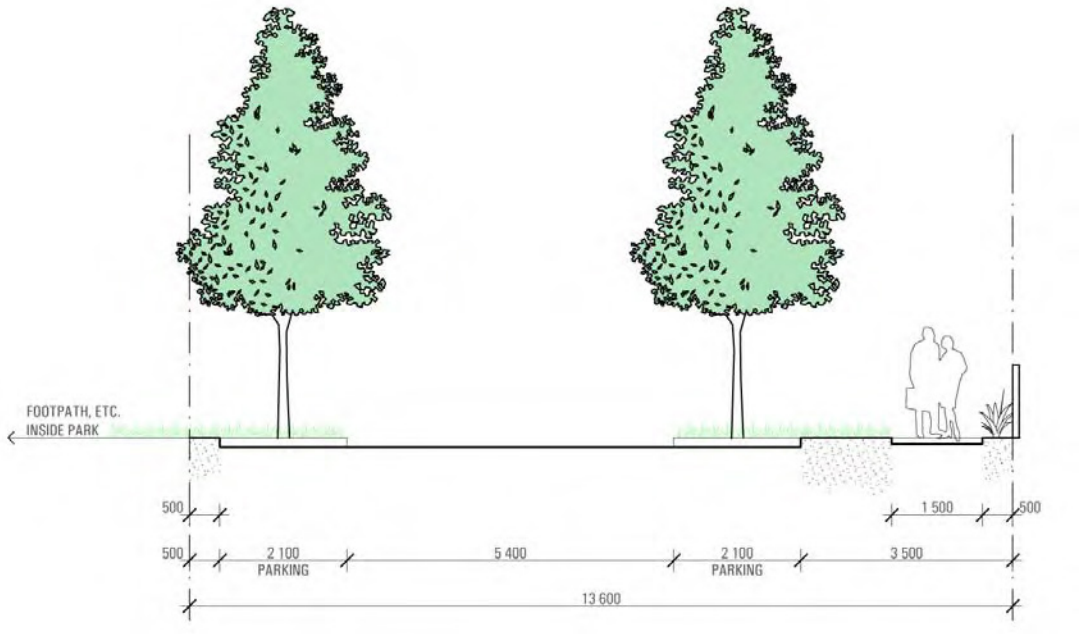


ACCESS STREET - LOTS UNDER 12m FRONTAGE

appendix I

Subdivision Road Network Design Requirements.

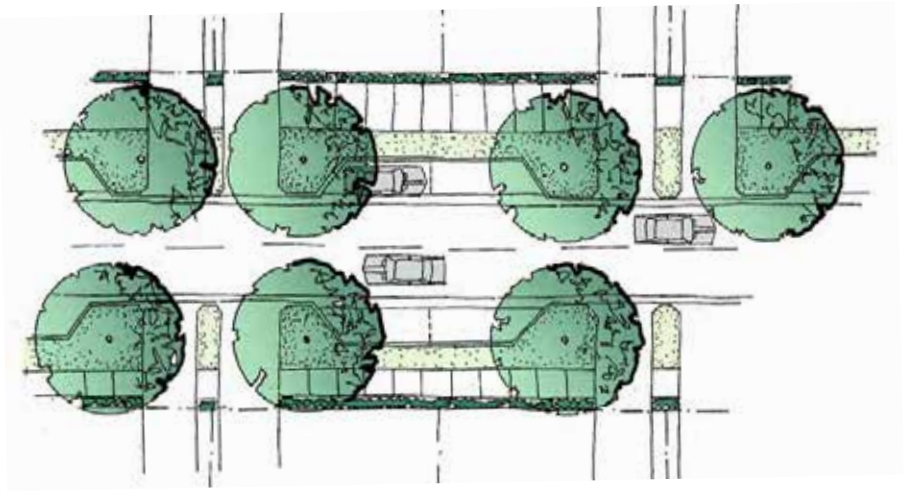


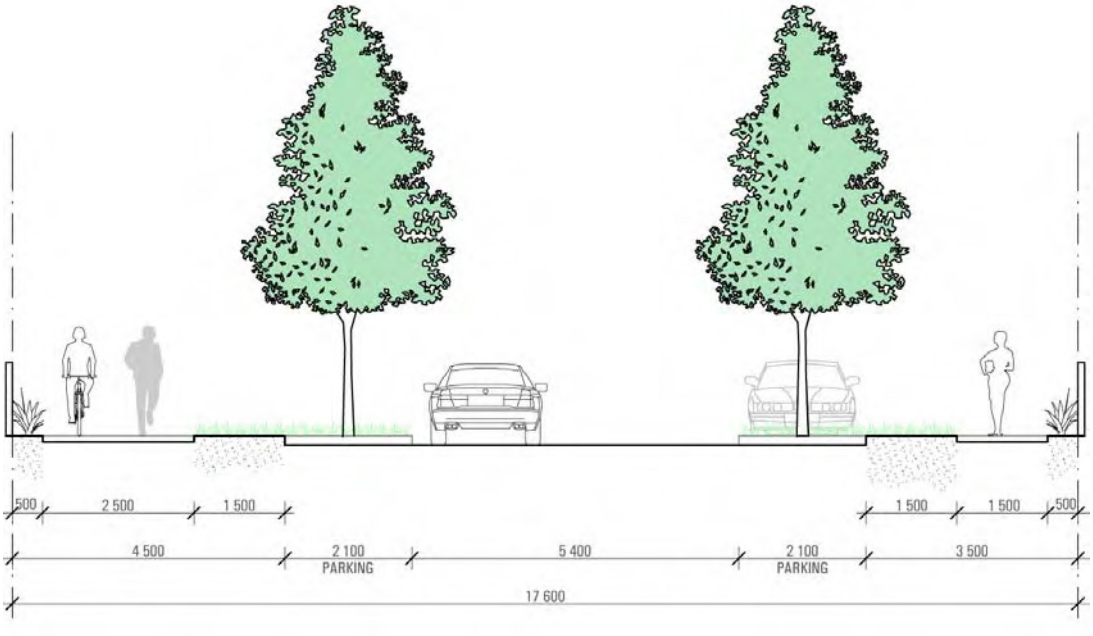


ACCESS STREET - **LOTS UNDER 12m FRONTAGE** AT PARKS

appendix I

Subdivision Road Network Design Requirements.

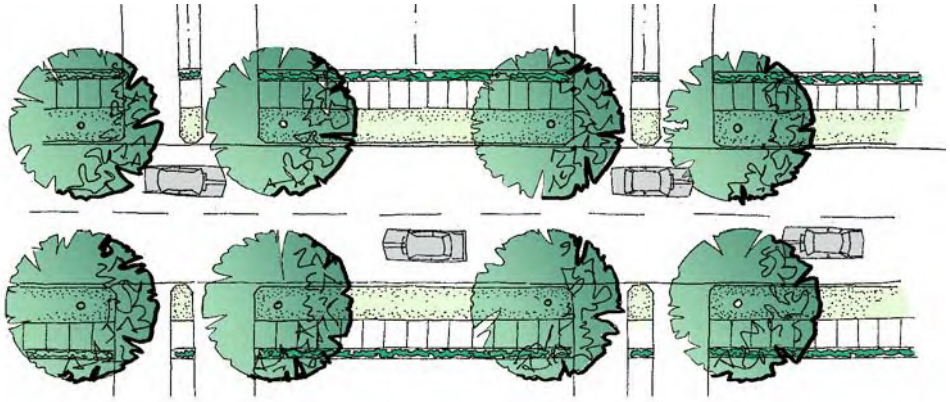




ACCESS STREET - **LOTS UNDER 12m FRONTAGE** WITH SHARED WAY

appendix I

Subdivision Road Network Design Requirements.

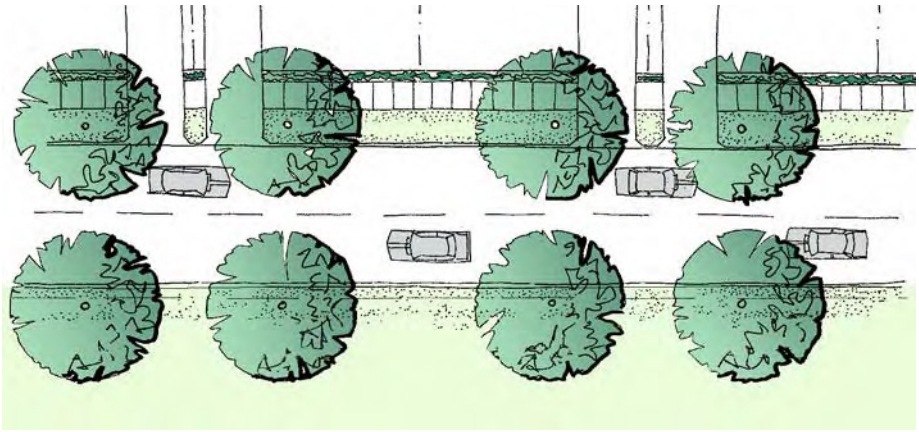


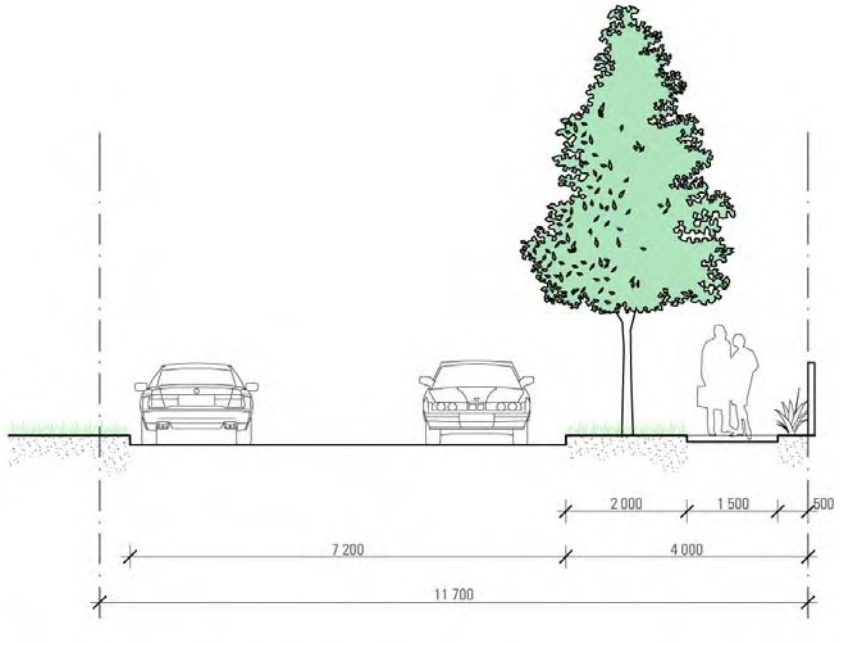
ACCESS STREET - LOTS OVER 12m FRONTAGE

NO LINE MARKINGS

appendix I

Subdivision Road Network Design Requirements.

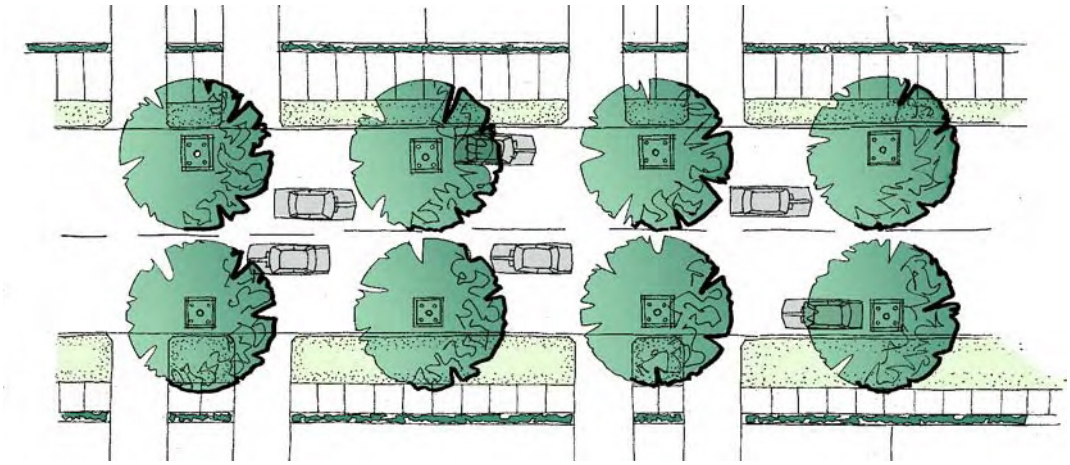


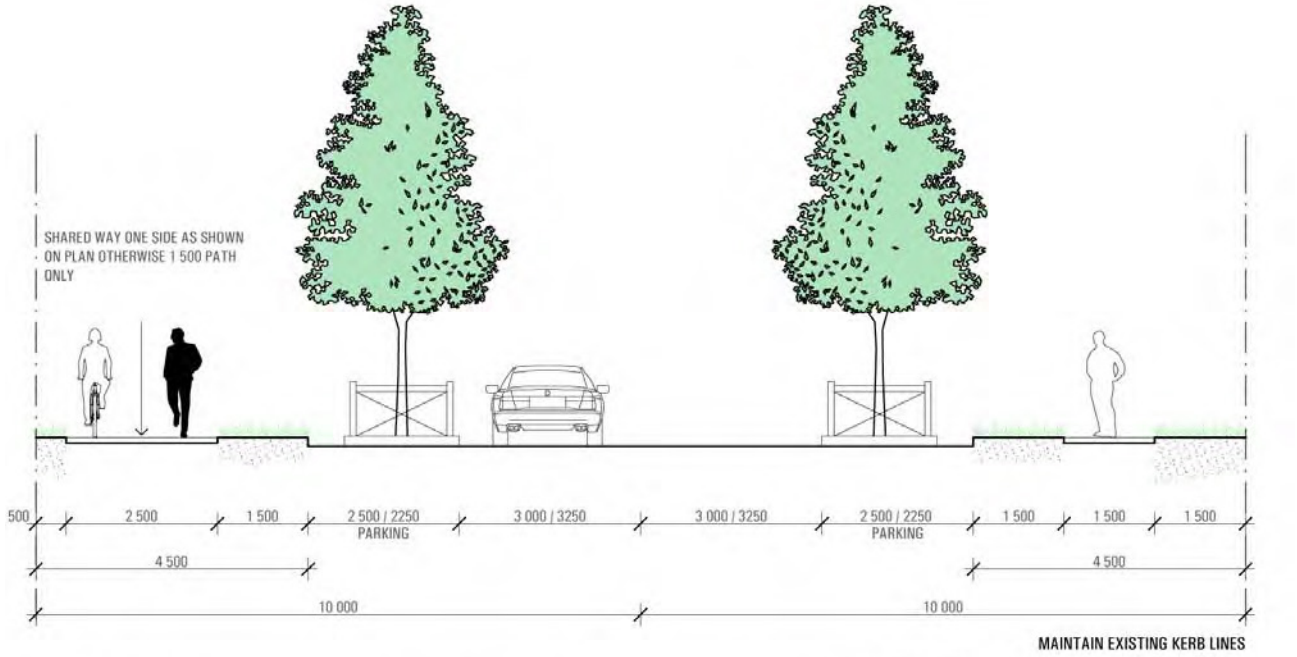


ACCESS STREET - LOTS OVER 12m FRONTAGE AT PARKS NO LINE MARKINGS

appendix I

Subdivision Road Network Design Requirements.





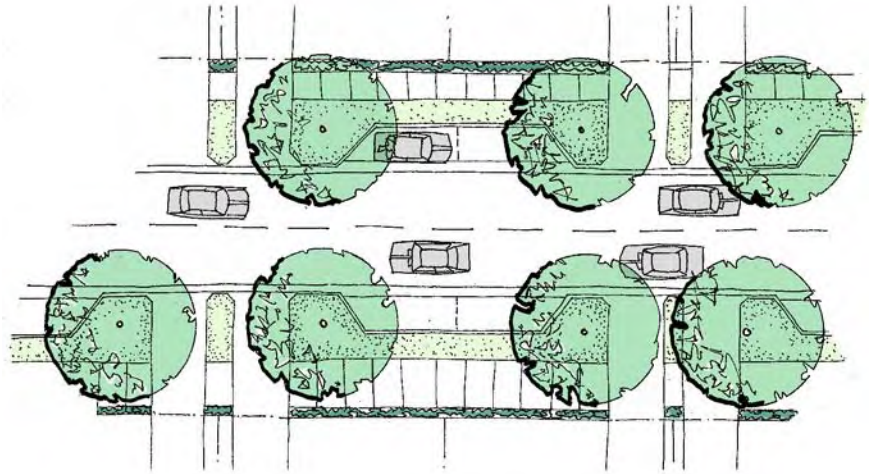
UPGRADE OF EXISTING STREETS TO ACCESS STREET,
UPGRADE OF EXISTING STREETS TO MINOR COLLECTOR &
CONTINUATION OF EXISTING STREETS

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

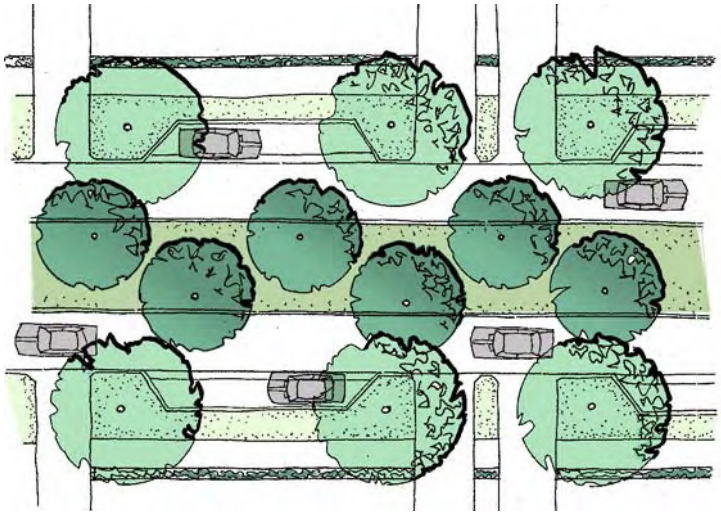
appendix I

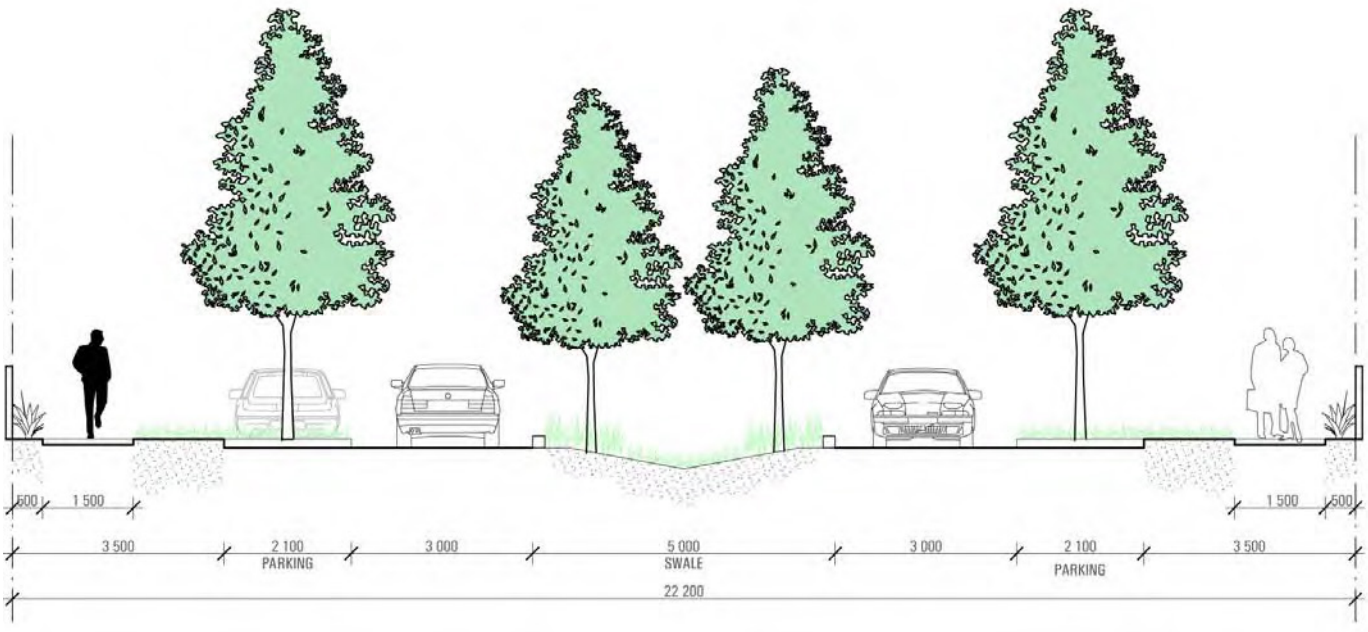
Subdivision Road Network Design Requirements.



appendix I

Subdivision Road Network Design Requirements.



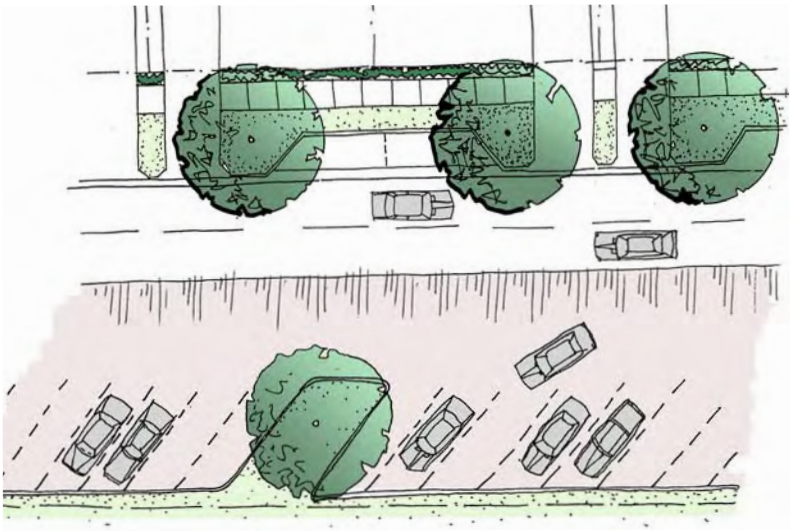


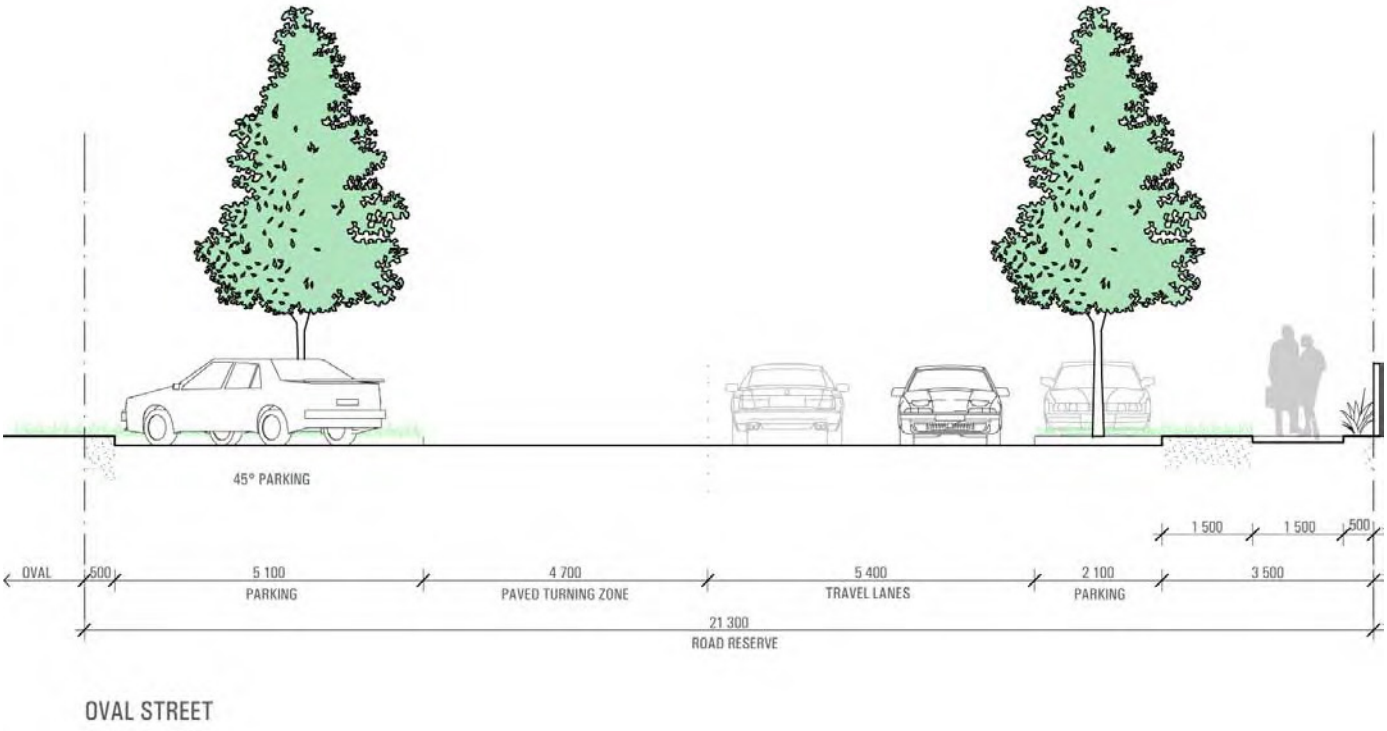
STREET WITH SWALE

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

appendix I

Subdivision Road Network Design Requirements.





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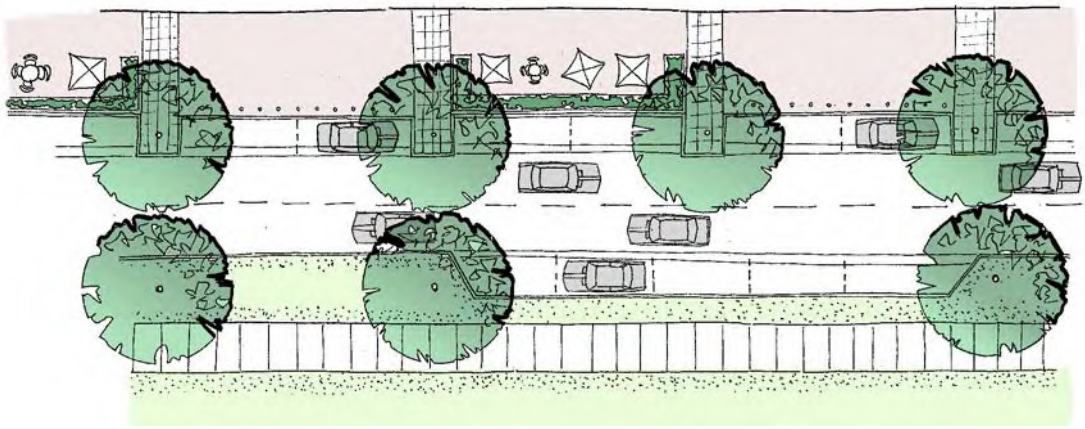
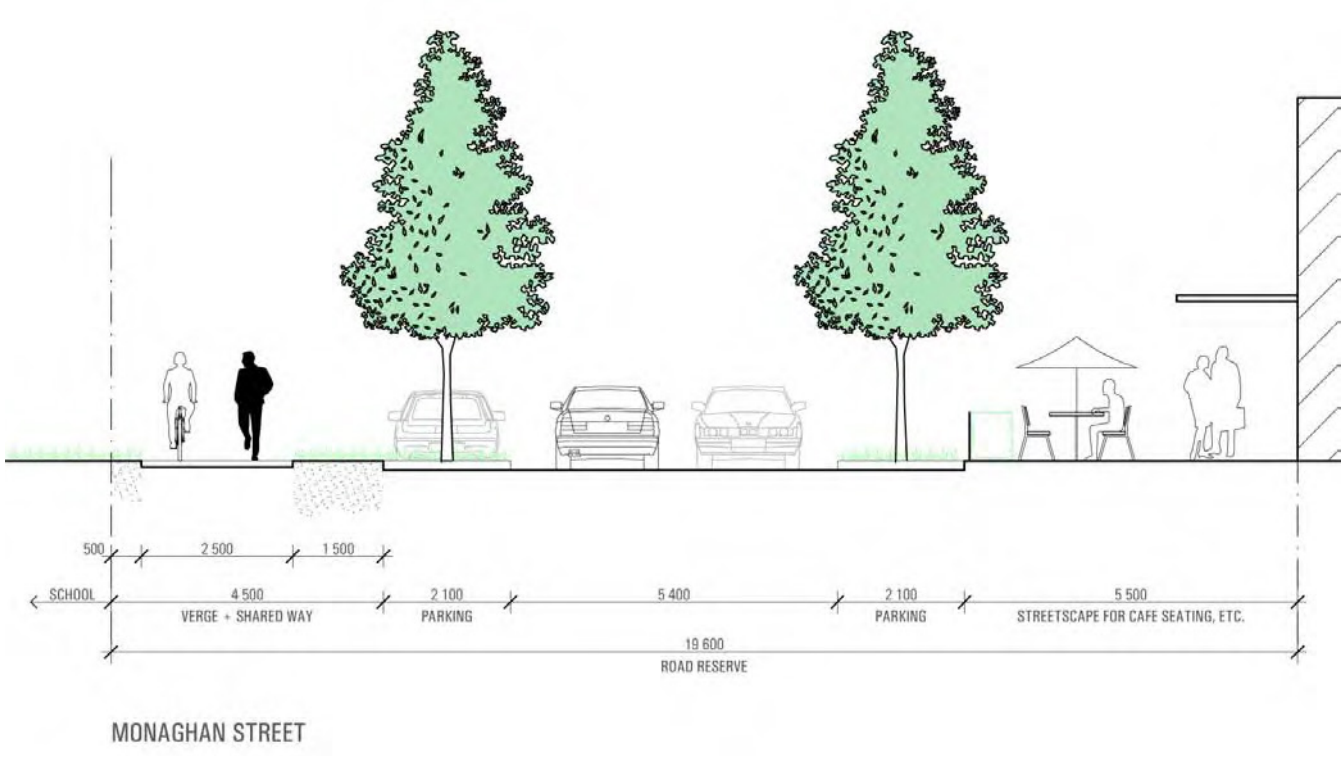
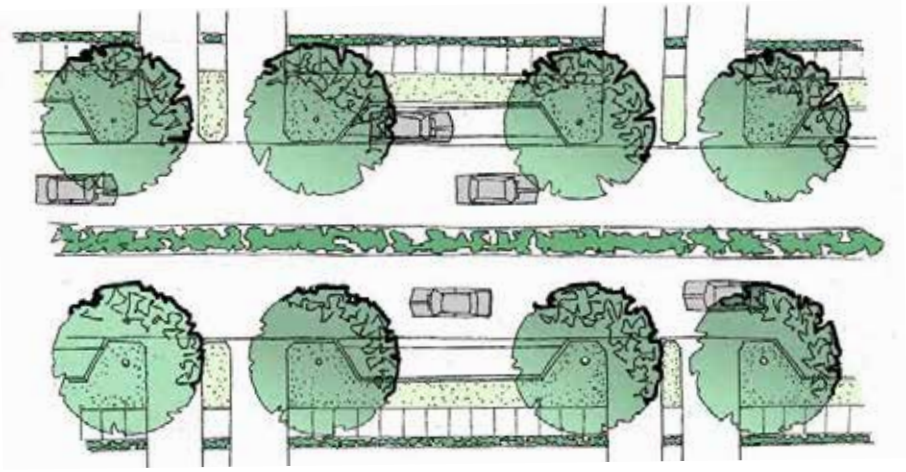
Subdivision Road Network Design Requirements.

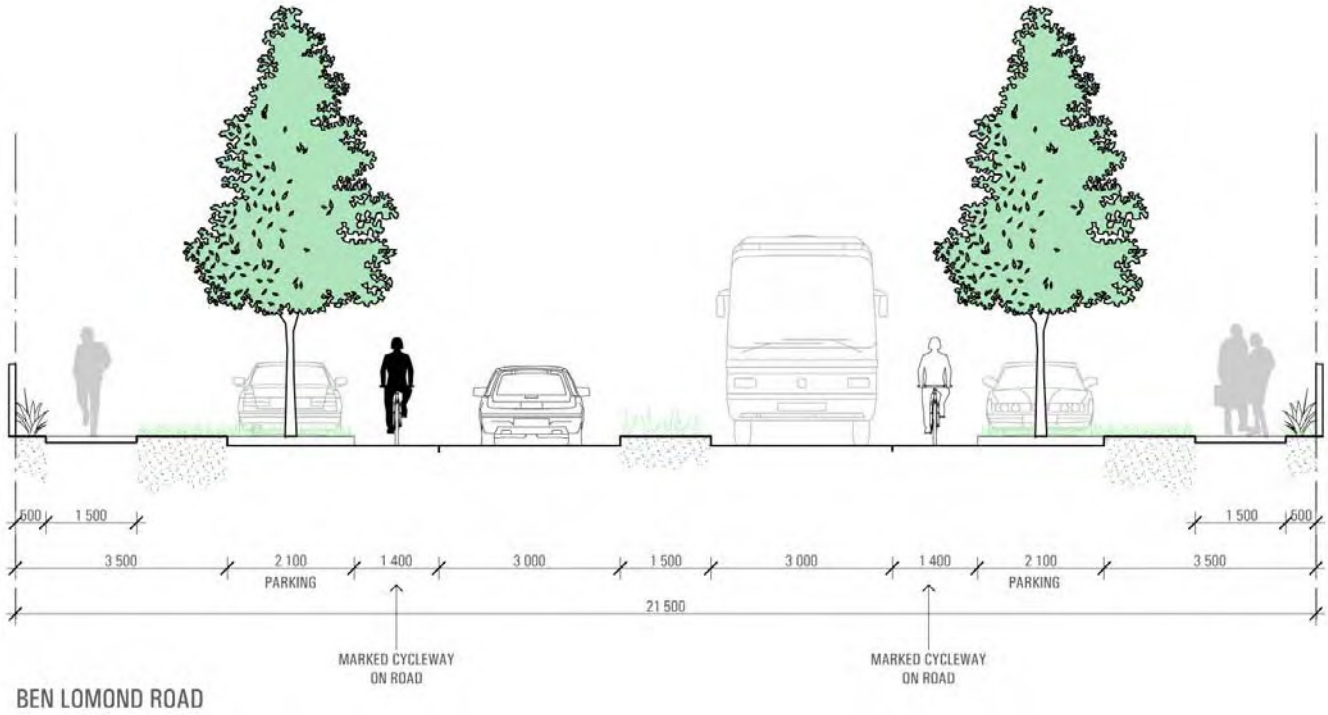




appendix I

Subdivision Road Network Design Requirements.

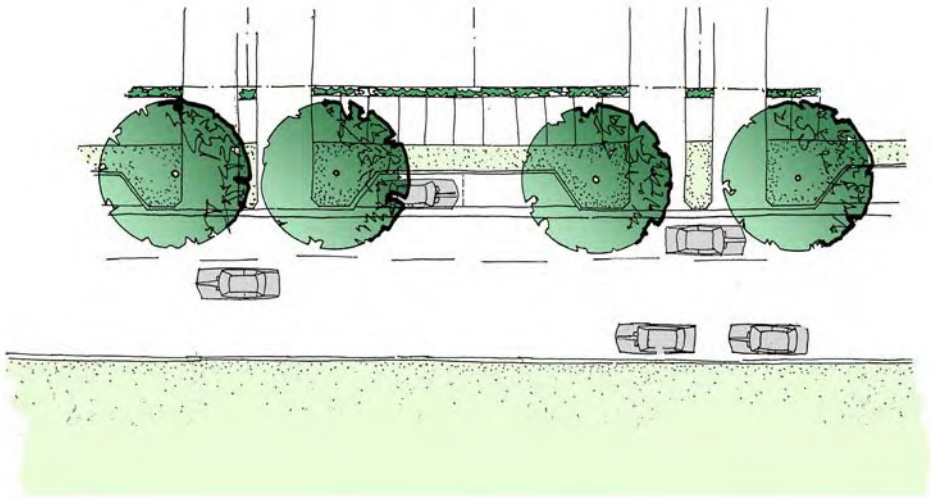


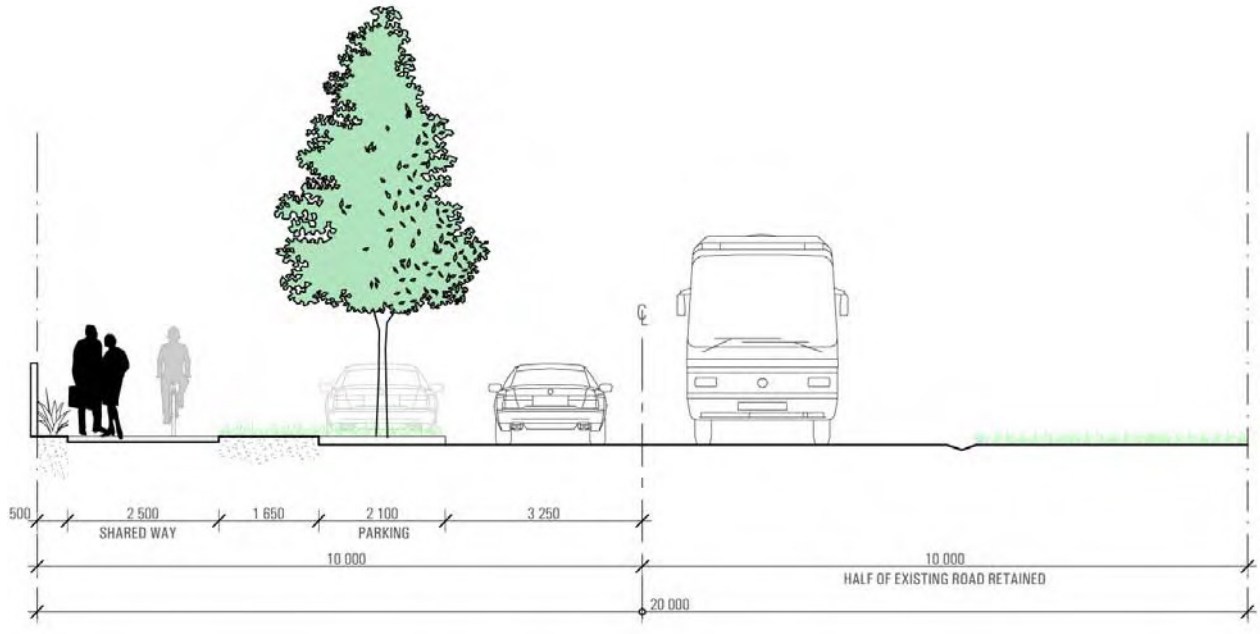


BEN LOMOND ROAD

appendix I

Subdivision Road Network Design Requirements.



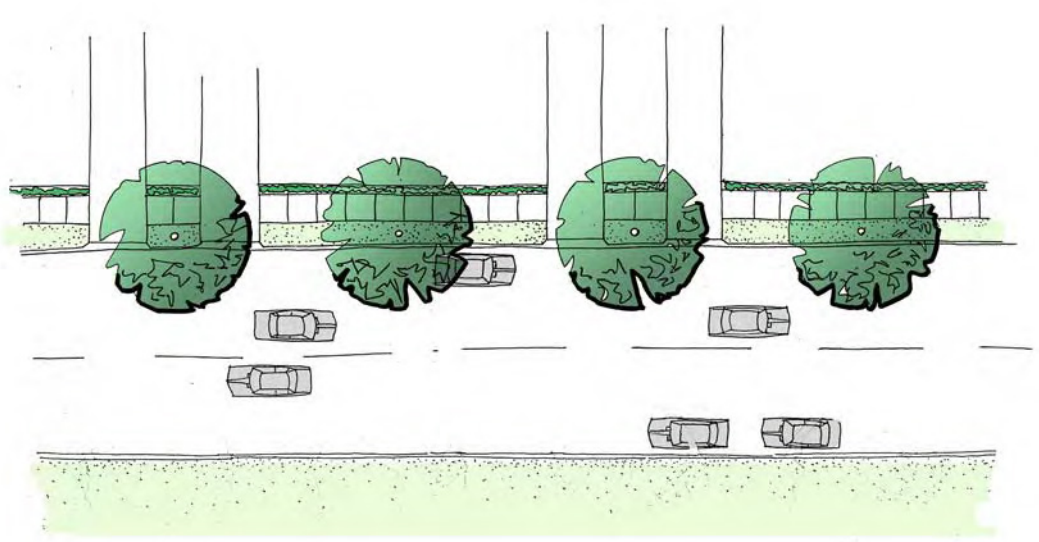


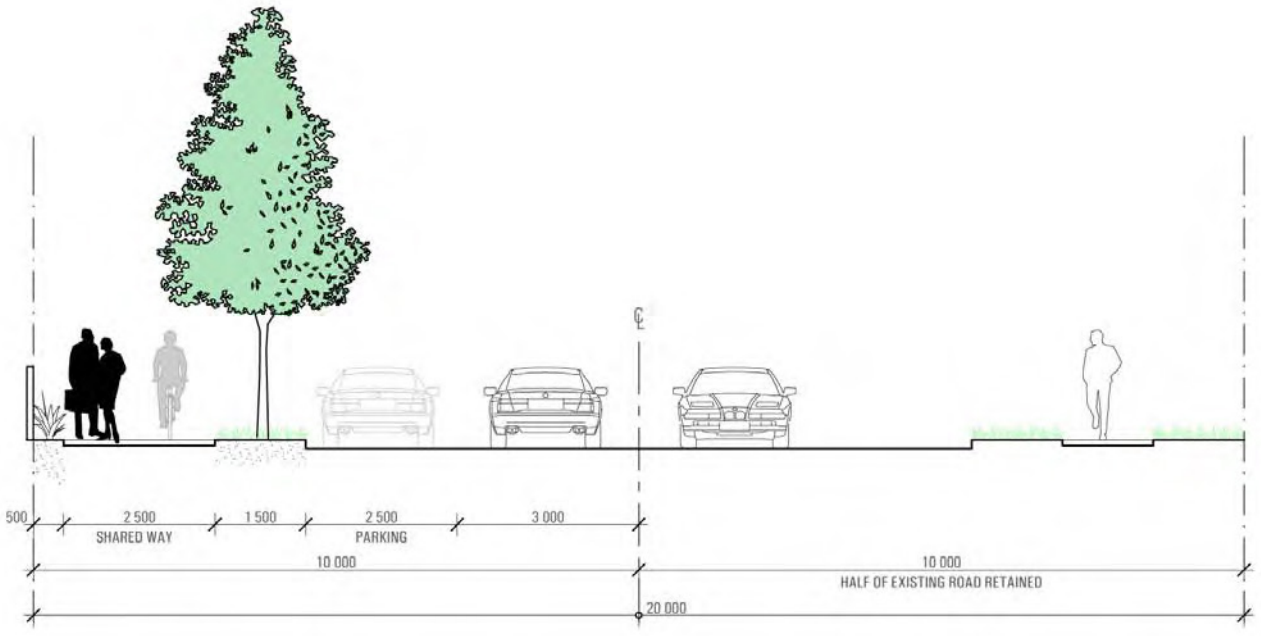
EAGELVIEW ROAD - HALF ROAD UPGRADE

INCLUDE BUSROUTE AND SHARED WAY

appendix I

Subdivision Road Network Design Requirements.



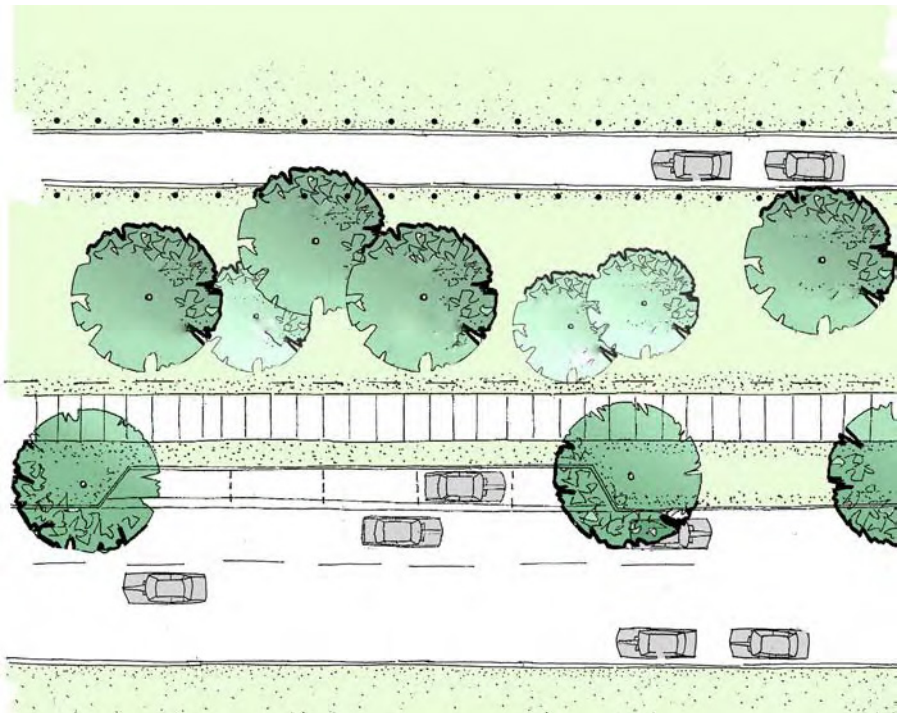


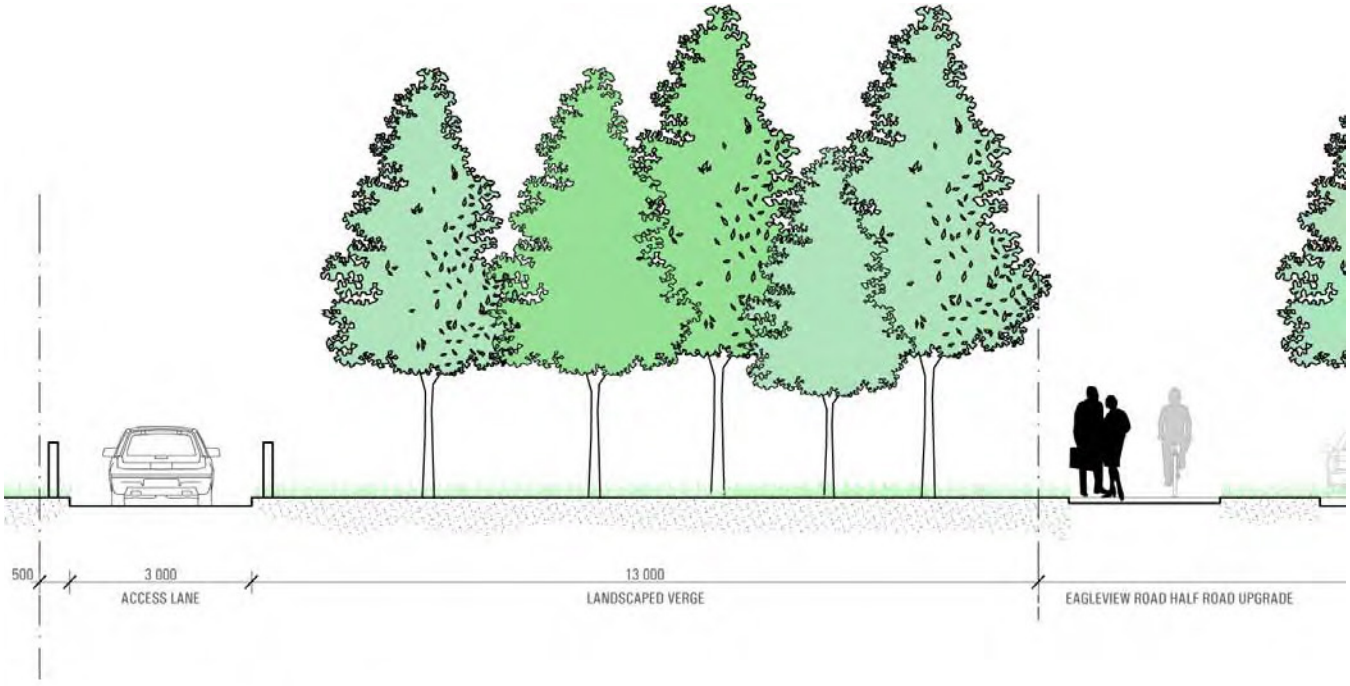
EXISTING STREETS - HALF ROAD VERGE UPGRADE

INCLUDE BUSROUTE AND SHARED WAY
MAINTAIN EXISTING KERB LINES

appendix I

Subdivision Road Network Design Requirements.





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

appendix J

Street Tree Planting Strategy South

SPECIES LIST

1. **Acer palmatum**
2. **Acer buergerianum**
3. **Brachychiton acerifolius**
4. **Casurina galuca**
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**

Note:
Red boundary indicates trees to be installed within the DCP area. Additional trees depicted are suggested for future Council implementation.

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'	Minature White African Lily	0.3 x 0.3
Brachychiton multifida	Happy Face	0.2 x 0.4
Crinum Pedunculatum	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

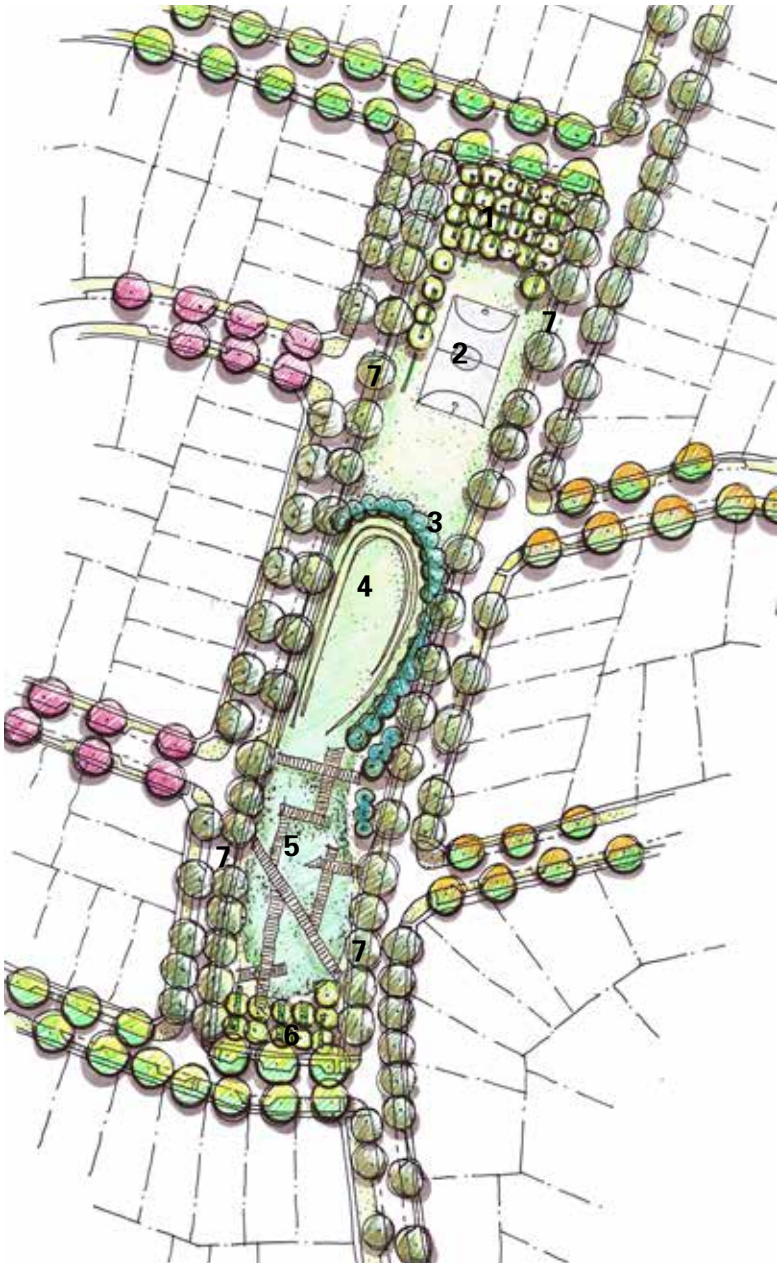
Site Access Plan

appendix L

Open Space Network

appendix L

Scarborough Park Concept



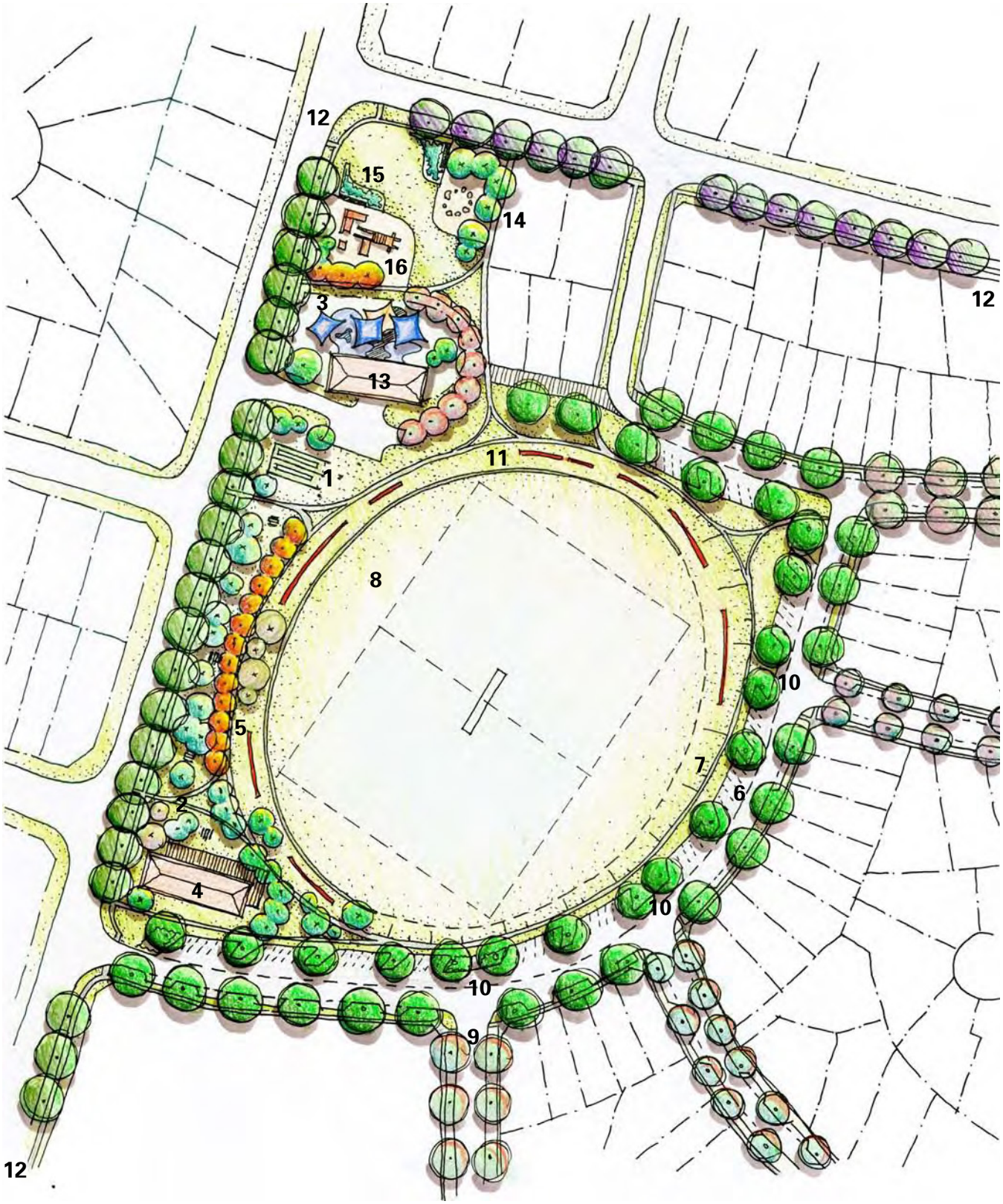
1. Grid of trees and grasses as strong entry statement.
2. Active Play area with full size basketball court for informal games, and grassed kick about area.
3. Feature planting of Exotic deciduous trees to create seasonal interest.
4. Passive recreation area
   Open grassed space with seating.
5. Timber 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 separate Development Application

appendix L

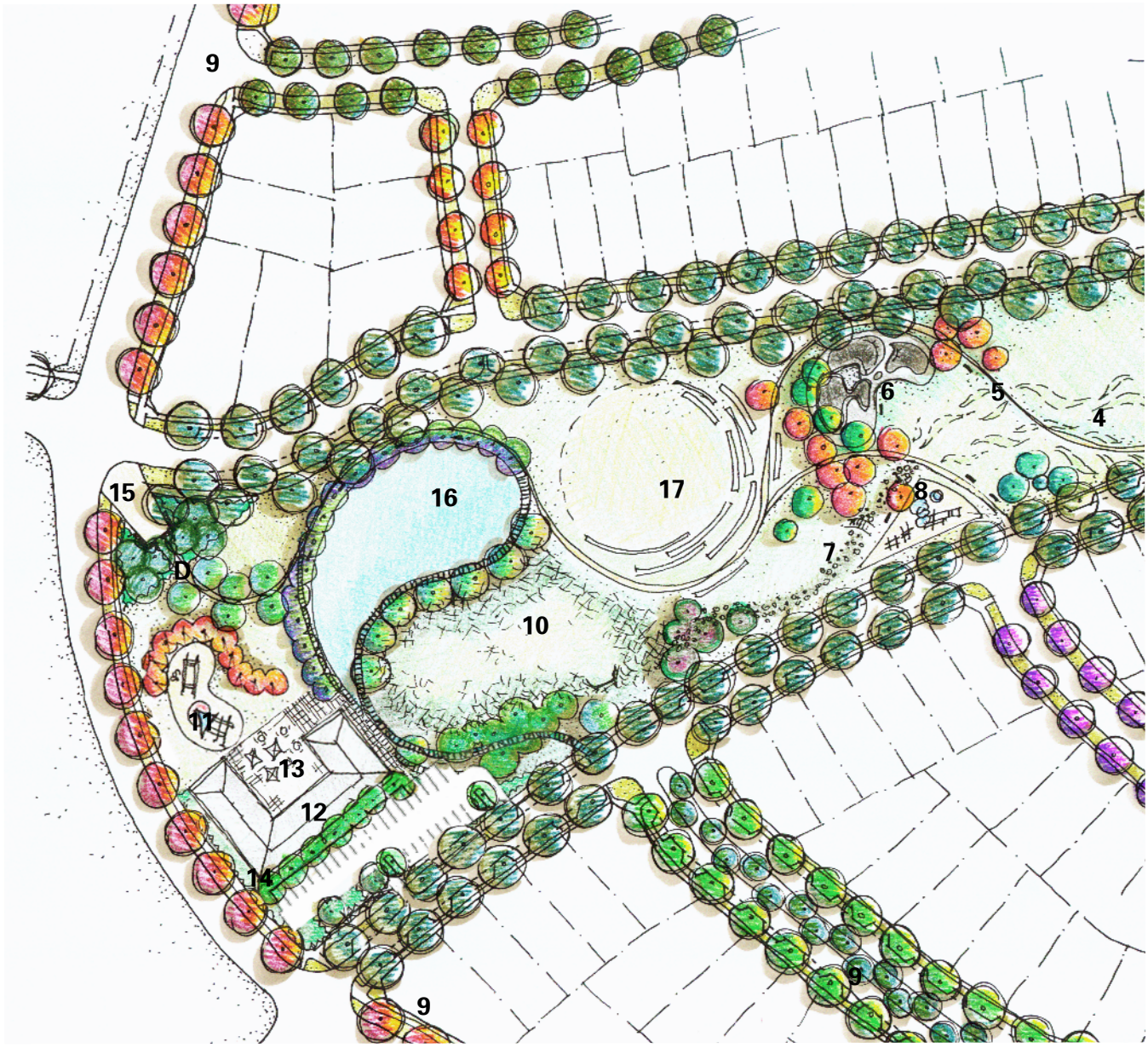
Benham Oval Concept

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

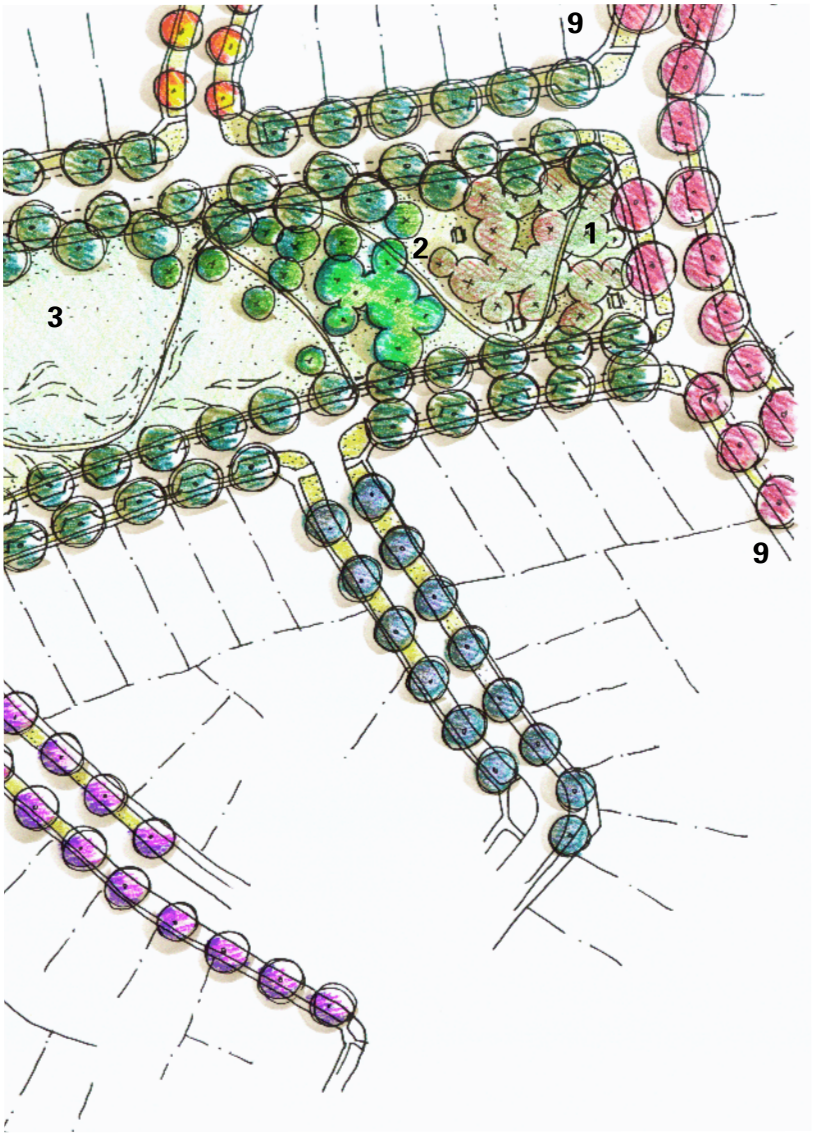


Note: Design subject to separate Development Application

appendix L

Redfern Park Concept



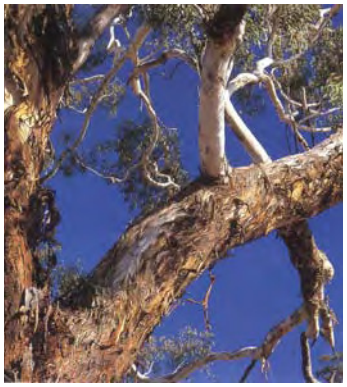



1. Forest- Hill top vegetation open underneath to maintain surveillance. Including seating, and picnic tables.
2. Small seating areas along linking pathway down hill.
3. Largely open grassed area for active recreation.
4. Earth mounding feature directs overland flow.
5. Pedestrian paths linking across 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.

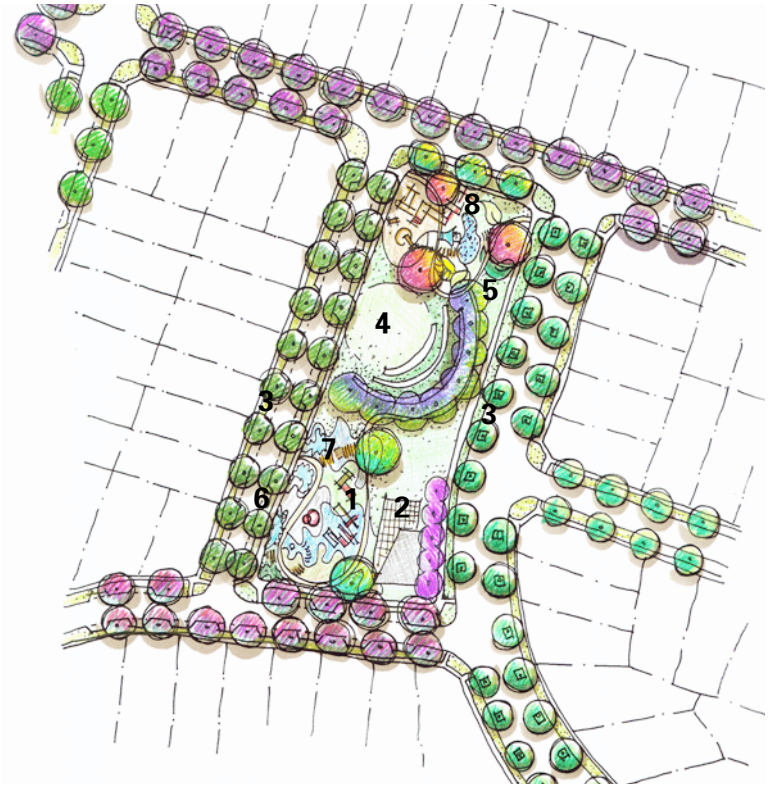
Minimum Development Area: 0.5Ha

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

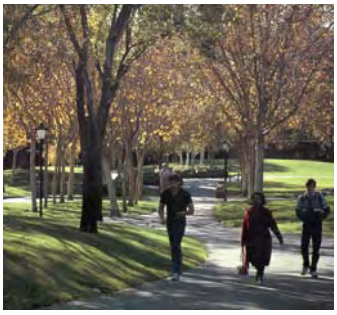
Kyngmount Reserve

Note: Design subject to separate Development Application

appendix L

Kyngmount 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

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