



MAROUBRA JUNCTION TOWN CENTRE Development Control Plan



Approved 18 November 2003
Effective Date 18 May 2004

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1.1 INTRODUCTION

This Development Control Plan [DCP] provides a framework for future development in the Maroubra Junction Town Centre. The DCP specifies built form controls for each block, outlines desired future character for the precinct, and urban design guidelines to help achieve the vision of Maroubra Junction as a vibrant community, a place to live, work, and visit.

This DCP was developed through a process of ongoing discussion with Randwick City Council and through a series of community workshops. The controls in this DCP are based on an extensive site and built form analysis undertaken by The Urban Design Advisory Service (UDAS), in conjunction with Randwick City Council.

1.2 CITATION

This Plan may be cited as the 'Maroubra Junction Town Centre Development Control Plan 2003'.

1.3 LAND COVERED BY THIS DCP

This Plan applies to all land zoned General Business 3A in the Maroubra Town Centre. The land covered by this DCP is generally bounded by Shepherd Street on the north, Wise Street on the south, Garden Street on the east and Hannan Street on the west.



1.4 INTERPRETATION

Terms in this DCP generally have the meaning ascribed to them in the Environmental Planning and Assessment Act 1979. Where the meaning of terms differ, definitions have been included in the Glossary.

1.5 PURPOSE OF THIS DCP

This document is a Development Control Plan as provided for under section 72 of the Environmental Planning and Assessment (EP&A) Act 1979. The purpose of this DCP is to provide background, objectives, controls and design criteria to achieve desirable development outcomes for the Maroubra Junction Town Centre. This DCP supplements the Randwick Local Environmental Plan 1998 by providing detailed development principles, controls and guidelines. Compliance with the provisions of this Plan does not guarantee that consent will be granted to a development application. A number of other documents and Council policies set out requirements which must also be taken into account when making a development application.

1.6 HOW TO USE THIS DCP

Part 1 is the purpose and introduction to the DCP.

Part 2 of this DCP contains analysis of the study area, opportunities and constraints, vision statement, and a proposed urban strategy for the town centre. It sets out the overall design principles underlying the controls in Part 3. After considering the relationship between the development site and its context, use Part 3 of this DCP to determine the specific built form controls for your site.

Part 3 The first section (3.1) outlines the primary development controls that apply generally to all sites within the town centre. The second section (3.2) provides detailed building envelope controls for each block within the town centre. Maroubra Junction town centre is divided into 12 blocks, with specific controls for each. To establish the building envelope for a specific site:

- 1 Identify the site's block number using the map in 3.2;
- 2 Review the primary development controls which apply to ALL sites within the precinct. These controls include amalgamation, subdivision, building height, building depth, building separation, articulation zone, street setbacks, side + rear setbacks and site access;
- 3 Identify the building envelope for the subject site, comprising: building height, building use, building zone/depth, front setback, side setback, rear setback and deep soil zone location;
- 4 Now use Part 4 of the DCP to guide the detailed design of the development proposal.

Part 4 includes guidelines and controls for best practice urban and building design, including:

- Site configuration
- Site amenity
- Site access
- Building configuration
- Building amenity

PART 1 PRELIMINARY

- Building form
- Building performance
- Heritage and conservation areas

Following a review of the detailed design guidelines, prepare a site analysis and develop the design proposal.

1.7 PREPARING A SITE ANALYSIS

A site analysis identifies existing conditions of the site in relation to surrounding land and buildings. A site analysis is necessary to ensure that the development is of high quality, sensitive to its environment and positively contributes to its context. The site layout and building design must demonstrate how the existing and future opportunities and constraints of the site and its surrounds have been addressed or considered, such as minimising issues relating to noise, overshadowing, community safety, access, views, privacy, energy consumption and waste generation.

Within the suggested envelopes, there are numerous ways in which a building design can be resolved.

The Applicant must demonstrate to Council that the site analysis has been utilised in preparing the design for the site and that due consideration has been given to the opportunities and constraints identified.

A site analysis drawing must be based on a survey drawing produced by a qualified surveyor. Information required in a site analysis includes but is not limited to:

- site dimensions, area and north point
- location of site in relation to shops, community facilities and transport
- location and use of any existing buildings on the site
- details of adjacent and opposite buildings, including both sides of any street that the development fronts
- location and characteristics of adjacent public, communal and private open space
- location, use, overall height (in storeys and metres) and important parapet/datum lines of adjacent buildings
- location and height of existing windows and balconies on adjacent properties, adjacent walls and fences
- location and size of major trees on site, on adjacent properties, and any street trees
- topography, showing spot levels and contours
- views to and from the site
- prevailing winds
- orientation and overshadowing of the site and adjoining properties
- pedestrian and vehicular access points (existing and proposed) and bus stops (if any)
- location of utility services, including electricity poles, stormwater drainage lines, natural drainage, kerb crossings, and easements
- noise, odour or pollution sources on and in the vicinity of the site

Refer to Council's DA Guide for further details.

1.8 PRE-DEVELOPMENT APPLICATION PROCESS

The Applicant is encouraged to have a pre-lodgement meeting with Council prior to lodgement of the DA.

Pre-lodgement meetings allow discussion of development proposals (preliminary designs) with Council officers before a detailed building design is developed. Ideally, the site analysis should be available at this stage so that the issues and constraints identified can be discussed.

The material to be submitted by the Applicant to Council at pre-DA stage is detailed in **Council's DA Guide**.

Applicants should contact Council prior to submitting a Development Application to determine whether a **flood study** may be required.

Where applicable, development applications will be referred to Council's Design Review Panel (the Panel), established under **State Environmental Planning Policy No. 65 (SEPP 65)** - Design Quality of Residential Flat Development. Referral to the Panel is encouraged at pre-lodgement stage. Applications may also be referred to the Panel (again) at the development assessment stage.

1.9 DEVELOPMENT APPLICATION (DA) PROCESS

Submission requirements are outlined in Council's DA Guide.

Applicants should also prepare a brief statement which demonstrates how the proposed development addresses the 10 design quality principles of **SEPP 65** (where applicable). As outlined in 1.8 above, where relevant, applications will be referred to Council's Design Review Panel. Applicants are advised to contact Council's Panel Coordinator for further details.

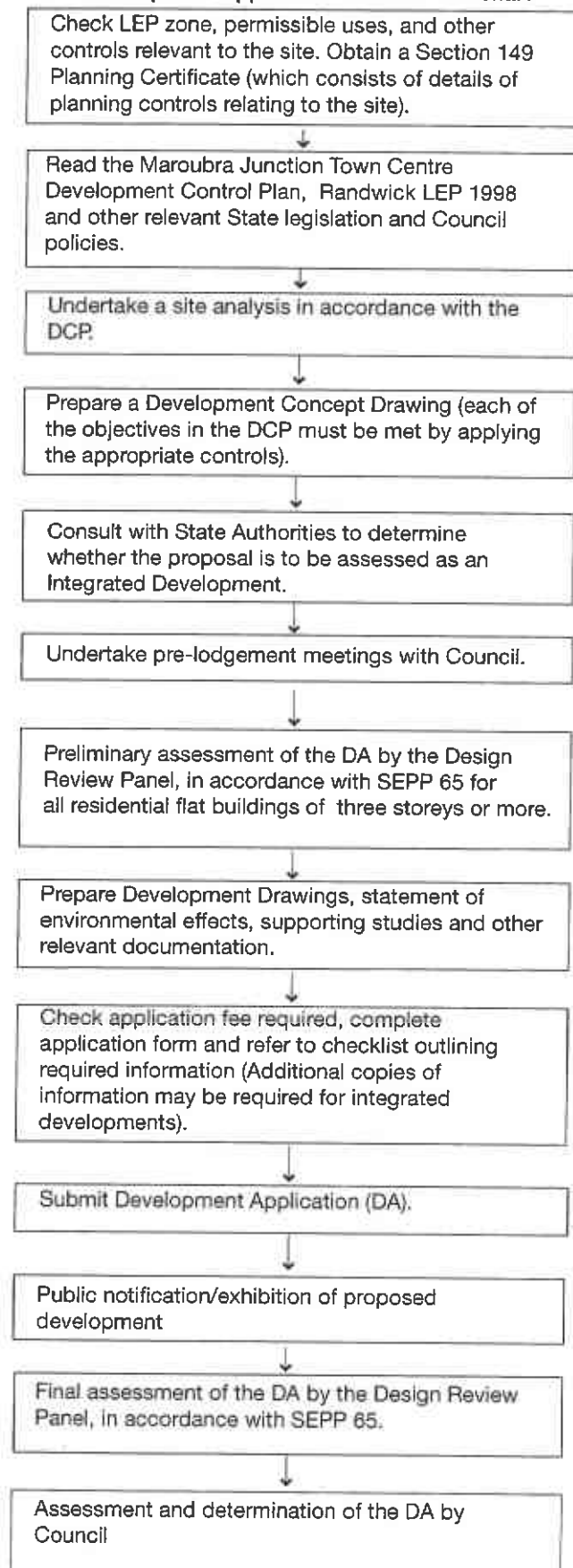
In addition to the requirements outlined in Council's DA Guide, check that the following documents are included with the DA:

- Site Analysis: statement and diagrams (*section 1.7*)
- Landscape Plan (*section 4.1.3*)
- Right of Carriageway evidence (*section 3.1.10*)
- Heritage Impact Assessment: if applicable (*section 4.1.8*)
- Crime Risk Assessment (*section 4.3.3*)
- Noise and Vibration Assessment (*section 4.5.1*)
- NatHERS Certificate and/or ABGR Commitment Agreement, plus Total Energy Report (*section 4.7.1*)
- Total Water Cycle Strategy, including a Flood Study if required (*section 4.7.3*)
- Waste Management Plan (*section 4.7.4*)
- Environmental Education Kit (*section 4.7.5*)

Note: these documents must be prepared by suitably qualified professionals as described in this plan.

In the Statement of Environmental Effects, comprehensive justification of non-compliance with any control in the DCP is to be provided, having regard to the objectives of the control.

1.9.1 Development Application Process Flowchart



1.10 RELATIONSHIP TO OTHER DOCUMENTS

This DCP should be read in conjunction with the provisions of the EP&A Act 1979, Randwick Local Environmental Plan 1998, and other relevant planning instruments, DCPs, Codes and Policies of the Council. You can find out the relevant instruments that apply to your site by obtaining a Section 149 Certificate from Council. The onus is on any prospective Applicant to check with Council if there are any additional or updated documents relevant to the town centre that should be considered when making a development application.

Should there be any inconsistency between the provisions of this DCP and the Randwick Local Environmental Plan 1998, then the provisions of the Randwick Local Environmental Plan 1998 shall prevail.

Should there be any inconsistency between the provisions of this DCP and any other Development Control Plan, Policy or Code of the Council, the provisions of this DCP shall prevail, unless otherwise stated.

1.11 THE CONSENT AUTHORITY

Randwick City Council is the consent authority for all development in the Maroubra Junction Town Centre.

1.12 DATE OF APPROVAL AND COMMENCEMENT OF THIS DCP

This Plan was adopted by Randwick City Council on 18 November 2003 and came into effect on 18 May 2004.

PART 2 **BACKGROUND / URBAN STRUCTURE**

2.0 Introduction

This part of the document contains the background information and analysis on which the development controls in this document have been based. It also contains broad objectives and urban strategies for the town centre, from which the block by block controls evolved. In addition, it contains desired future street sections and artist impressions of various areas in the town centre, from which detailed public domain plans for the town centre can evolve.

PART 2 **BACKGROUND / URBAN STRUCTURE**

2.1.1 Regional context



Maroubra Junction Town Centre lies approximately 8 kilometres south of Sydney CBD, 4.5 kilometres east of Sydney Kingsford Smith Airport and 2kms from Maroubra Beach. The closest competitive commercial centre is located at Eastgardens, 1.5kms to the southwest of Maroubra. The developing Green Square project is located north west in the adjoining LGA of South Sydney.

PART 2 BACKGROUND / URBAN STRUCTURE

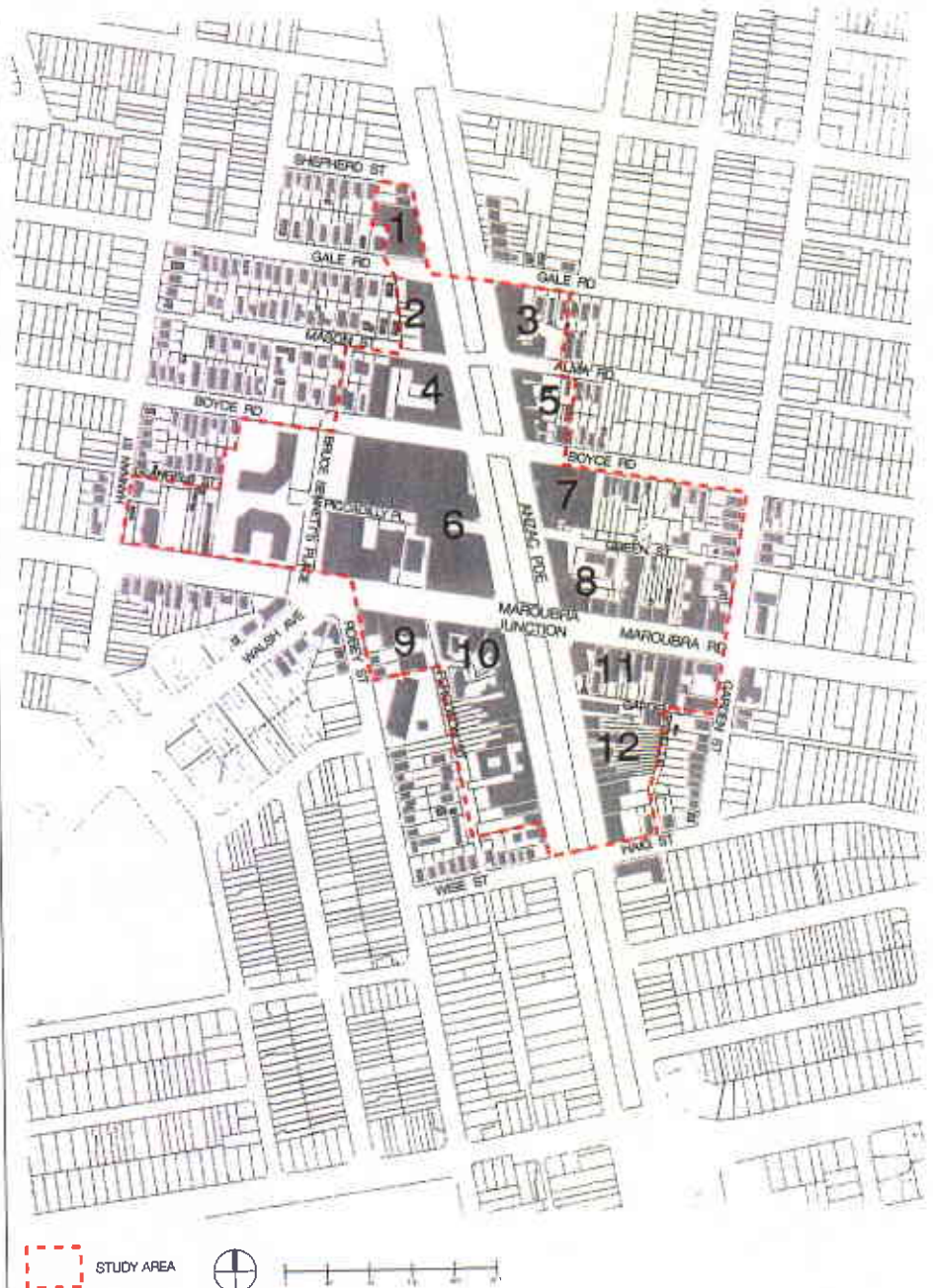
2.1.2 Local context

Maroubra Junction is defined by the intersection of two wide roads: Anzac Parade and Maroubra Road. The Maroubra Junction Town Centre has been defined as shown in the adjacent diagram. It is generally bound by Shepherd Street to the north, Haig Street to the south, Garden Street to the east and Hannan Street to the west. The study area is approximately 163 000m² or 16.3ha. Maroubra Junction Town Centre includes both an enclosed mall and on-street strip shopping. In addition to commercial uses the town centre is characterised by large scale residential developments.

From its beginnings as vacant subdivided crown land, market gardens and army land, Maroubra Junction experienced its first boom around the turn of the century. Whilst there are a few heritage items in the town centre left today, some of the smaller scale commercial buildings exhibit Art Deco and Federation style features.

The next boom experienced by the town centre occurred in the 1980's and 1990's. Preceded by a period of gradual decline due to competition from Westfield Shopping Centre at Eastgardens, the late 1980's and 1990's saw the boom of apartment building within the town centre.

The area surrounding the town centre is characterised by smaller scale residential development which is quite different to that of the town centre. The built form surrounding the town centre comprises a mix of post-World War II red brick bungalows, and two-three storey walk up flats. Other more recent housing styles present include Spanish mission style houses, and 1960's and 70's style brick houses.



PART 2 BACKGROUND / URBAN STRUCTURE

2.1.3 Built form and open space

General

The building heights within the study area are polarised. The traditional shopping strip lends itself to 2 storey shopfront development, while the more recently developed large scale residential buildings are 7-13 storeys in height. There are relatively few 4-6 storey buildings in the study area.

Building types

A significant increase in the construction of residential apartments has occurred since the 1990s. These multi-unit developments ring the junction of Maroubra Road and Anzac Parade and are characterised by large building footprints.

Building condition

The majority of residential buildings constructed in the 1990s are still in relatively good condition because of their recent construction. However, some of the large scale residential buildings which have used poor quality building materials have already begun to deteriorate. Most of the older shopfront buildings lining Anzac Parade and Maroubra Road are in reasonable condition.

Open space

Anzac Parade has a central reserve which makes it very wide by Sydney standards (approx 60m). The central reserve area between Green Street and Maroubra Road is utilised as public open space. The remainder of the reserve is used for car parking.



PART 2 BACKGROUND / URBAN STRUCTURE

2.1.4 Building heights and zoning

Zoning throughout the town centre is 3A General Business. As can be seen from the building heights diagram, the taller buildings lie towards the periphery of the study area, while the lower buildings lie right in the core of the town centre. To reinforce the junction of Maroubra Road and Anzac Parade, it is suggested that the taller buildings should be in the core of the town centre at the junction, gradually decreasing in height towards the periphery.

Prior to the town centre study and planning review, the key planning controls for Maroubra Junction were a Floor Space Ratio (FSR) of 3:1 and a height limit of 24 metres (7-8 storeys). This FSR and height limit applied throughout the town centre.

This DCP replaces these controls with a building envelope approach. Building envelopes have been designed for each block within the town centre, recognising the need to have different building sizes, heights and setbacks in different parts of the town centre. Building heights have been lowered at the edge of the town centre to help create a more gradual transition between the town centre and the surrounding residential areas.

Key

-  1 storey
-  2 storeys
-  3 storeys
-  4 storeys
-  5 storeys
-  6 storeys
-  7 storeys
-  8 storeys
-  9 storeys and above
-  town centre boundary



PART 2 BACKGROUND / URBAN STRUCTURE

2.1.5 Vegetation



Significant vegetation occurs in strips of trees along Anzac Parade. Isolated trees and small groups of shrubs exist along the streets west and east of Anzac Parade. Maroubra Road lacks vegetation of any kind. There are small pockets of vegetation within the town centre, but these are not well integrated nor consistent.

Both Maroubra Road and Anzac Parade would benefit from more tree planting.

Heritage buildings within the town centre are as follows:

1. Maroubra Junction Hotel (Maroubra Road) - 3 storeys
2. Dudley's Corner (Maroubra Junction) - 2 storeys
3. 817 Anzac Parade - 2 storeys

Maroubra Junction Hotel

(Maroubra Road, Maroubra) is an impressive 1920s Classical Revival building, notable for its decorative rendered bands over brickwork. The hotel features an excellent parapet with an impressive roof lantern. This building was one of the early commercial buildings in Maroubra Junction and has local historic and architectural interest, despite some alterations and recent renovations.

Dudley's Corner

(corner Anzac Parade and Maroubra Road) is one of the oldest surviving buildings in Maroubra Junction and one of the best known. This is a two storey stuccoed brick Edwardian style commercial building. Despite substantial alterations, this building retains local historic interest.

817 Anzac Parade

is a good example of an Art Deco style flat building (circa 1930s) with a simple symmetrical design with a hipped tile roof. This building has a typical central brick feature and pairs of double hung lead lights windows. It is considered to be one of the best examples in the Maroubra area.



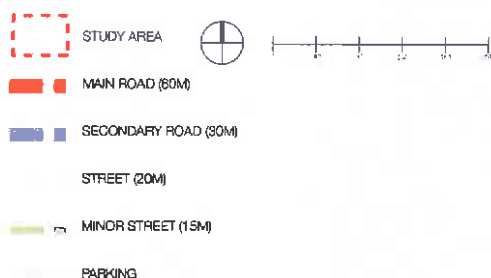
PART 2 BACKGROUND / URBAN STRUCTURE

2.1.7 Street hierarchy



The widest streets form the intersection of Anzac Parade and Maroubra Road creating the 'Junction' and creating a very strong north-south axis. The east-west streets follow an interesting pattern: Every second east-west street is 20m wide and the alternate street is 15m wide.

The strong street grid of the town centre facilitates easy vehicular movement.



PART 2 BACKGROUND / URBAN STRUCTURE

2.1.8 Pedestrian circulation

Anzac Parade and Maroubra Road experience heavy pedestrian traffic. There are only two designated pedestrian crossings along Anzac Parade at the intersections of Boyce Road and Maroubra Road. The lack of frequent pedestrian crossings along Anzac Parade separates the eastern and western sides of the road.



PART 2 BACKGROUND / URBAN STRUCTURE

2.1.9 Colonnades and awnings

Continuous awnings cover most of the length of the commercial precinct along Anzac Parade and Maroubra Road. Colonnades exist in isolated areas. The north-west corner of the intersection between Maroubra Road and Anzac Parade would benefit from awning cover. Similarly the south-eastern corner noticeably lacks awnings.



PART 2 BACKGROUND / URBAN STRUCTURE

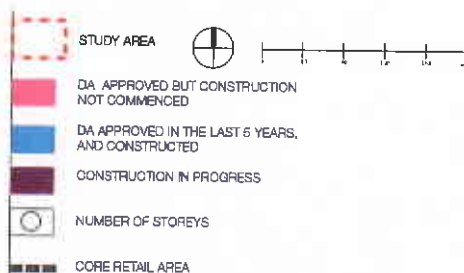
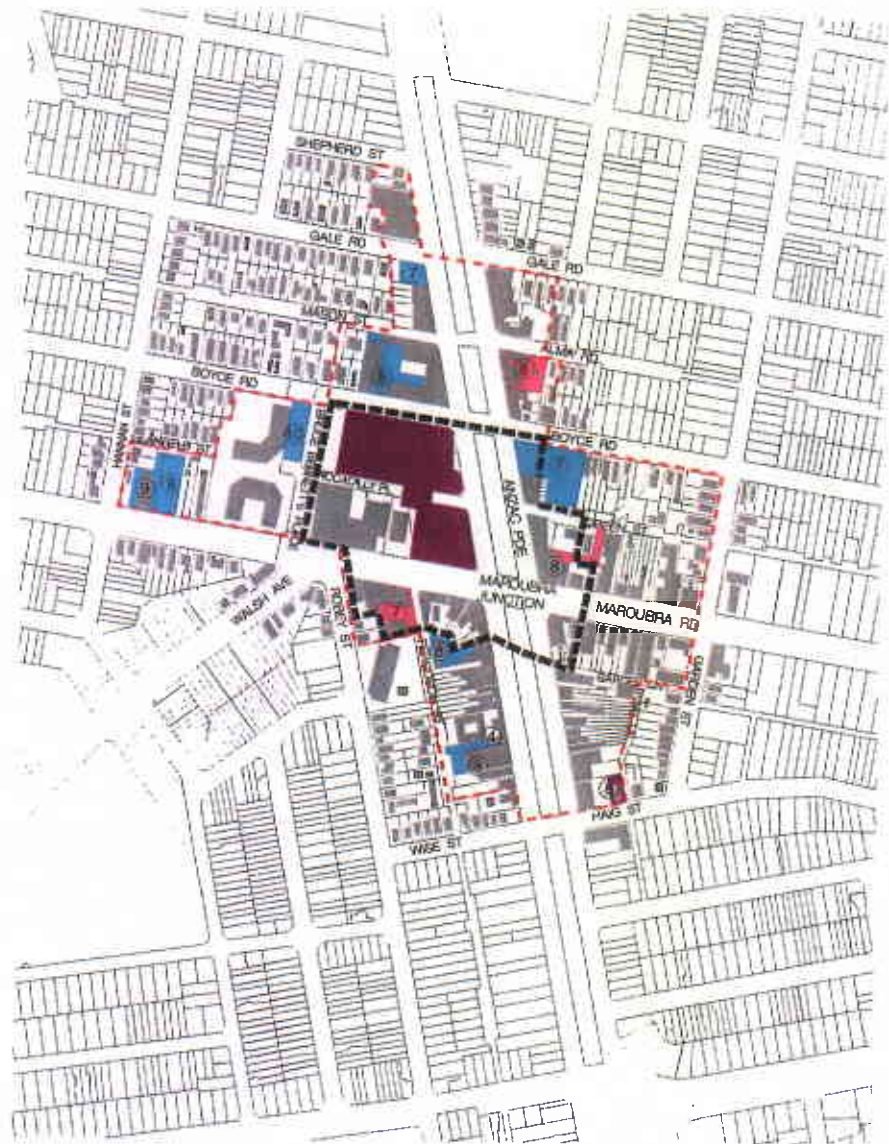
2.1.10 Potential development

Many of the major developments in the last 5 years surround the main intersection of Maroubra Road and Anzac Parade.

The redevelopment of Maroubra Mall will have a significant effect on the town centre. Larger scale development associated with the Mall on the corner of Anzac Parade and Maroubra Road (north-west corner) will act to reinforce this important intersection.

Presently, the highest development is along Maroubra Road. Anzac Parade, being the widest road, as well as the key commercial road, would be better suited to higher development. The key commercial area of the Maroubra Junction Town Centre (i.e. the area of study) is envisaged to have higher and denser development, which then scales down towards the periphery of the study area, into lower and less dense residential zones.

A commercial centre study, undertaken as part of the town centre review, recognised that sufficient commercial/retail space exists in the town centre. Future commercial/retail development should focus within the 'core retail' area.



As on Dec 31 2001

PART 2 BACKGROUND / URBAN STRUCTURE

2.1.11 Strata-titled buildings

There are a number of strata-titled buildings in the town centre, several of which are not likely to change in the next 5-10 years. These are to be considered as constraints whilst proposing building envelopes for specific blocks.



As of December 31 2001

PART 2 BACKGROUND / URBAN STRUCTURE

2.1.12 Topography

Most of the study area is flat with a slight rise of 2m towards the north of Anzac Parade. Maroubra Road has a steeper rise of around 10m from east to west. There is a rise of 6m from Anzac Parade towards the west along Gale Road.



PART 2 BACKGROUND / URBAN STRUCTURE

2.2 Opportunities and constraints

The opportunities and constraints in the Maroubra Junction Town Centre have been derived from community input at the first public consultation workshop held on the 26th of September 2001 at the Trade Winds Hotel in Maroubra.

Constraints

The community workshop 1 for the Maroubra Junction Town Centre indicates the following constraints in the town centre:

- Pedestrian traffic along Maroubra Road needs to be given consideration
- Lack of communication of authorities with local residents
- Existing development
- Loss of 'character' from the town centre
- Excessive traffic
- Parking
- Difficulty in acquiring land for amalgamation
- Existing laws/controls
- Signage
- Not enough shops
- Lack of 'vision' for Maroubra Junction
- RTA's vision for the town centre
- Excessive building heights
- Lack of anchor retailers
- Competition from other centres
- Large ageing population
- Lack of performance-based standards

Opportunities

The community workshop 1 for the Maroubra Junction Town Centre indicates the following opportunities in the town centre:

- Make it a 'junction' again
- Make it 'community based'
- Bring back more businesses and offices
- Give consideration to aesthetics – more fountains, gardens, good shopfronts, etc
- Create a good 'atmosphere' to enhance the shopping and living environment
- Create a 'natural environment' rather than a 'concrete jungle'
- Create a good 'image' for the town centre
- DCP for the town centre should reflect a unifying theme for the town centre
- Community-based initiatives/actions should be undertaken

A vision statement for the town centre has been derived from community input at the first public consultation workshop held on the 26th of September 2001 at the Trade Winds Hotel, and the second one held on the 31st of October 2001 at the Bowen Library, Maroubra.

Maroubra Junction Town Centre is envisaged to be a vibrant place, well-designed, bustling with activity, easily accessible to all, which attracts people from all over to come to it and be a part of it.

Maroubra Junction Town Centre will continue its role as the main centre within Randwick City, and will provide a mix of commercial, retail and residential uses that serve the needs of the local community. A mix of high quality medium and higher density built forms that enhance the town centre and provide better amenity for residents and the public domain is envisaged, and the controls and performance criteria in this DCP have been designed to facilitate this.

Also central to the vision for the Maroubra Junction Town Centre is an emphasis on Anzac Parade as the centre's mainstreet, and creation of a smoother transition between the town centre and its surrounds. This will be achieved through building height and scale controls which vary throughout the town centre under this DCP.

PART 2 BACKGROUND / URBAN STRUCTURE

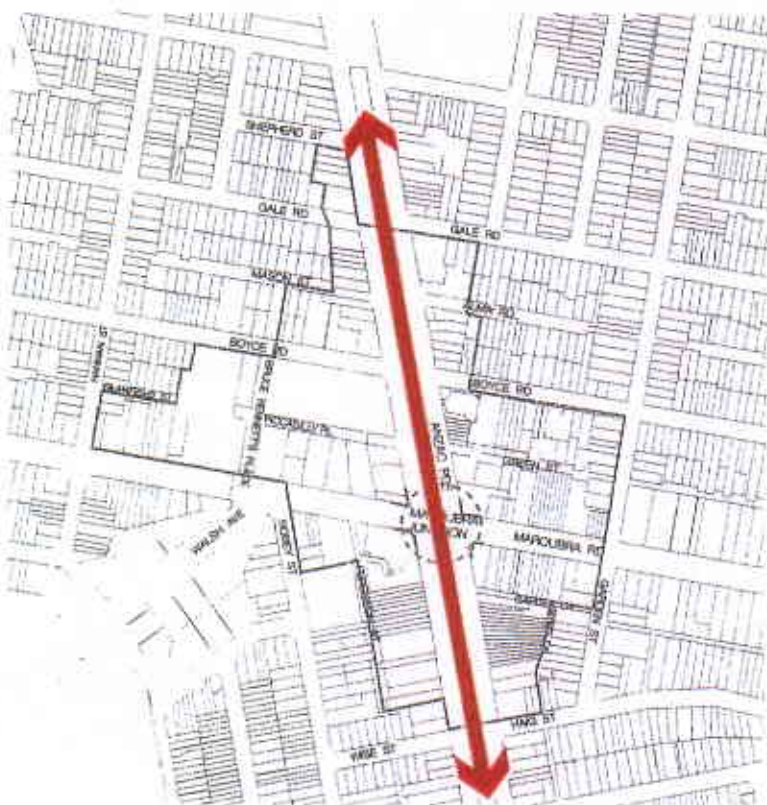
2.4 Urban strategy

2.4.1 THE JUNCTION

The intersection of Anzac Parade and Maroubra Road has historically been and still is the main focus of the Maroubra Junction Town Centre. The junction of these two main roads will be reinforced/emphasised as much as possible by an increase in building heights (8 storeys).

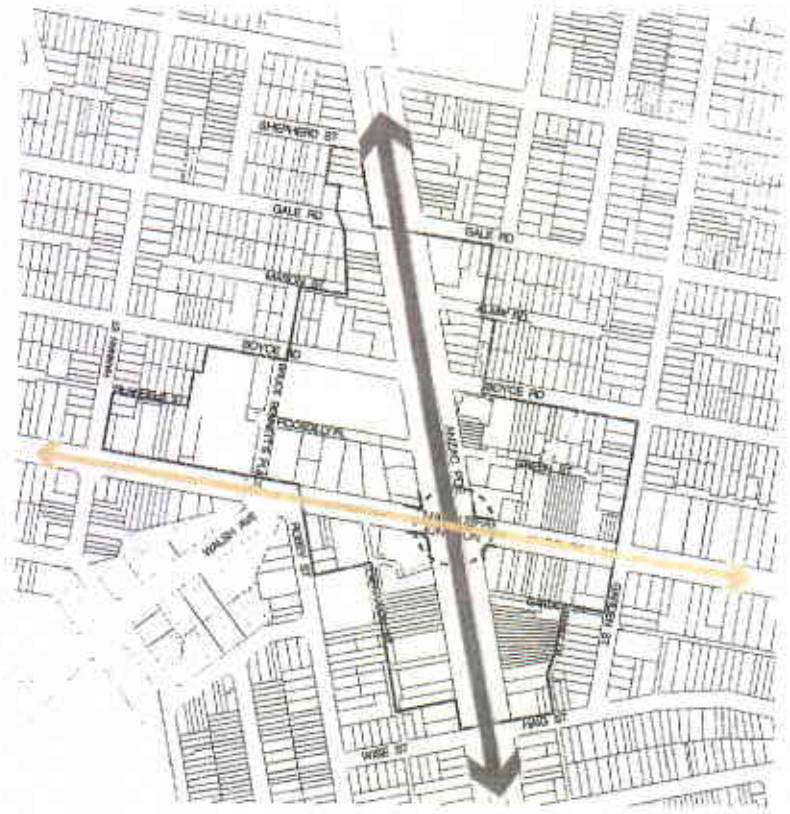
2.4.2 THE MAIN STREET

The main north-south street is Anzac Parade. The extra width of this street (60m) created by the central tram reserve, contributes to its position as the most prominent and important street in the area. The extra width of this street also allows for taller buildings to edge the street (7 storeys). More street planting along the Anzac Parade and the median will strengthen its character and improve quality of the street environment.



2.4.3 THE CROSS STREET

As the main east-west street, Maroubra Road is less dominant than Anzac Parade, owing to its lesser width. Therefore, the building heights recommended along this street are lower than the ones recommended on Anzac Parade (6 storeys). This strategy reinforces the existing hierarchy of these two main streets.



2.4.4 THE TOWN SQUARE

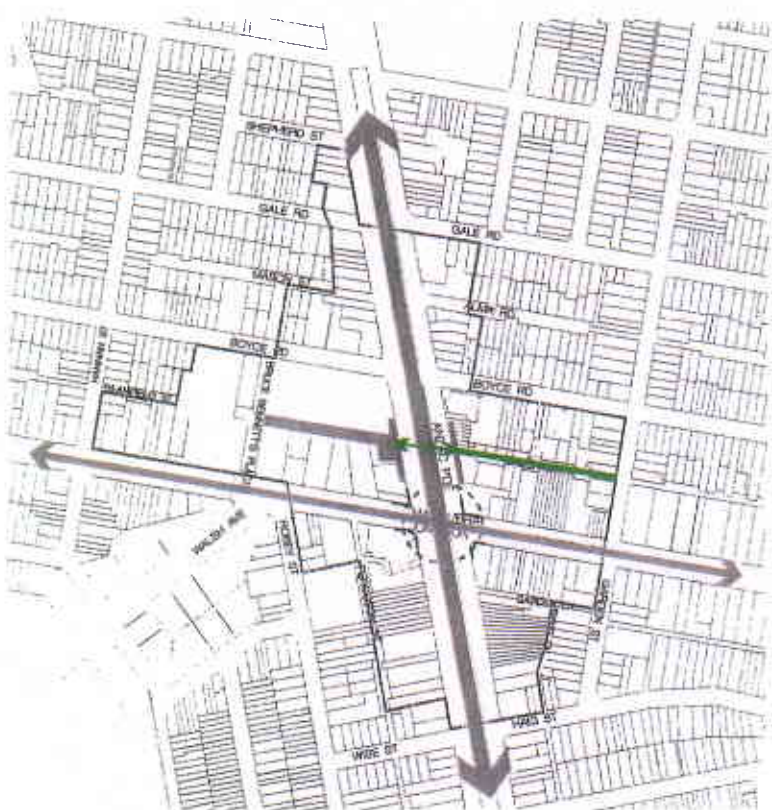
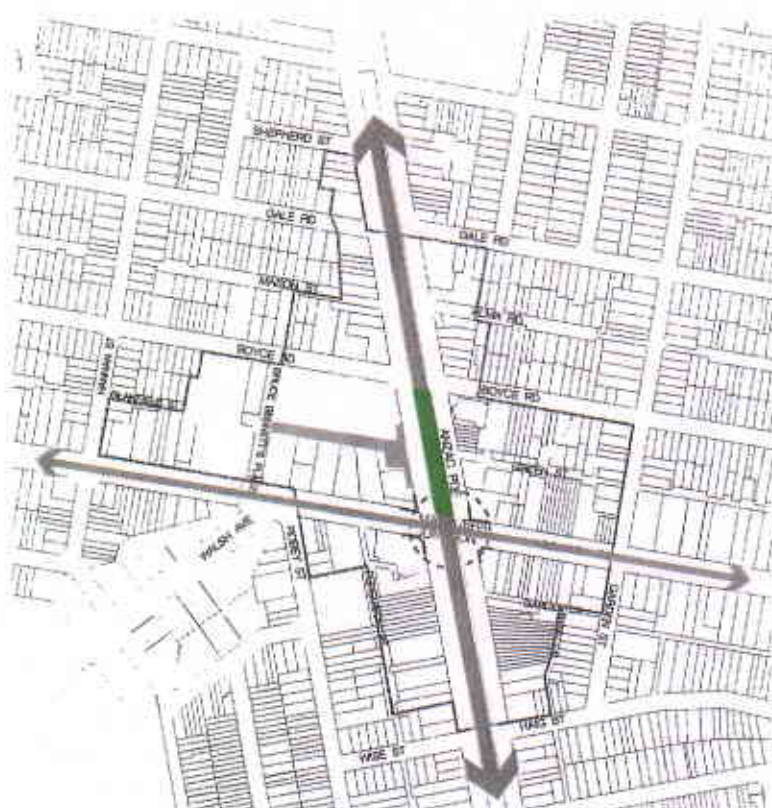
The introduction of a **town square** at the entrance to the Maroubra Mall facing Anzac Parade will provide a focus for the town centre. At present, public open space is limited to the central tram reserve along Anzac Parade. The proposed public square will provide public open space of a different character to what exists at the moment. It will provide an open space in the middle of the town centre, away from the traffic noise, and surrounded by shopping activity. It is important that the proposed town square is of an adequate size to function effectively as an active and successful public space.

Tree-planting along Anzac Parade should be reinforced, giving the town centre a more environment-friendly atmosphere, providing pedestrians with shelter from the sun, and creating green links to other town centres.



PART 2 BACKGROUND / URBAN STRUCTURE

2.4 Urban strategy



2.4.5 THE MEDIAN

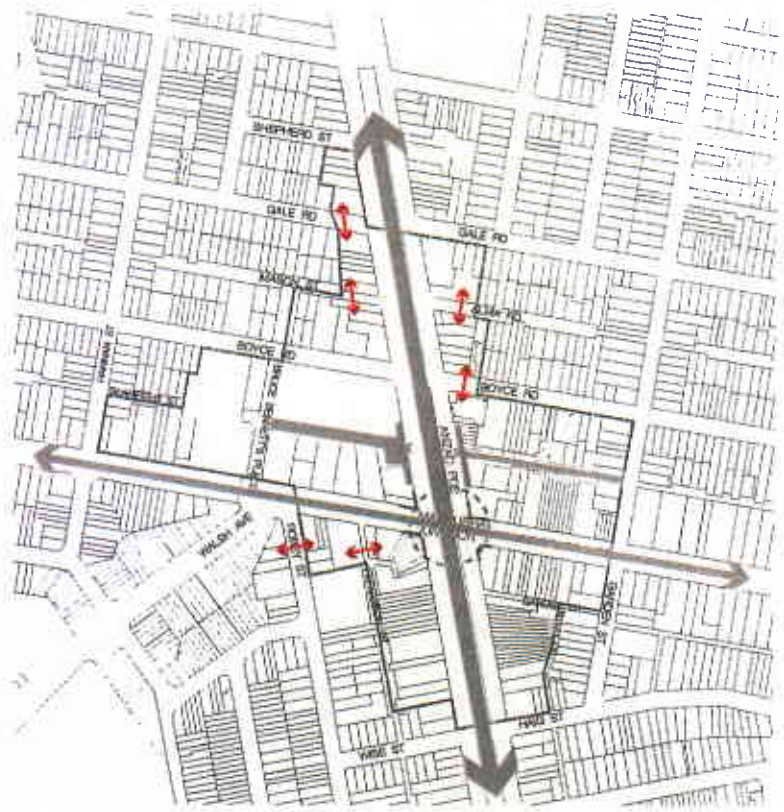
The central *median* on Anzac Parade opposite the town square will be a green zone, and will form part of the 'town square'. It is suggested that the car parking from this part of the median be relocated further north and south of the median. The median is envisaged to be a place for public events (music, buffets, etc) to occur over the weekends. It is envisaged to have trees, fountains, greenery, and a place which would attract people to come to it and relax, socialise or gather.

2.4.6 GREEN STREET

At present, Maroubra Junction Town Centre is dominated by the commercial activity of the Maroubra Mall and the two large scale streets: Anzac Parade and Maroubra Road. The activating of a smaller scale, more intimate street as a shopping strip would provide an alternative shopping environment. Green Street occupies a key position opposite the proposed town square. This street presently lacks definition as a Council street-widening policy makes it difficult to determine property boundaries. This street is envisaged as having outdoor eating areas adjacent to restaurants and coffee shops, particularly on the southern side, as this has the best solar orientation. The development of the street as a tree-lined restaurant precinct interspersed with boutique shopping would provide a street environment that is presently lacking in the Maroubra Junction Town Centre.

2.4.7 ACCESSWAYS

All traffic associated with the amalgamation and/or development of sites controlled under this DCP shall be provided with access via 6m wide rear rights-of-carriageways linked to, and having entrance from, internal streets. This access arrangement is required because direct access from Anzac Parade and Maroubra Road to lots fronting these streets is not encouraged and is unlikely to be achievable under current Roads and Traffic Authority policy. Randwick City Council requires that any rear accessway for the purposes of amalgamation and/or development of sites under this DCP, be created and maintained as rights-of-carriageway with the appropriate covenants for use and maintenance held on the property title.



2.4.8 THE WHOLE

The overall strategy for the Maroubra Junction Town Centre is to develop a good quality mixed use precinct that will facilitate a potential increase in residential density without compromising amenity.

The design strategy lays the foundation for a good long-term framework for the area which will deliver a highly desirable, quality urban neighbourhood.

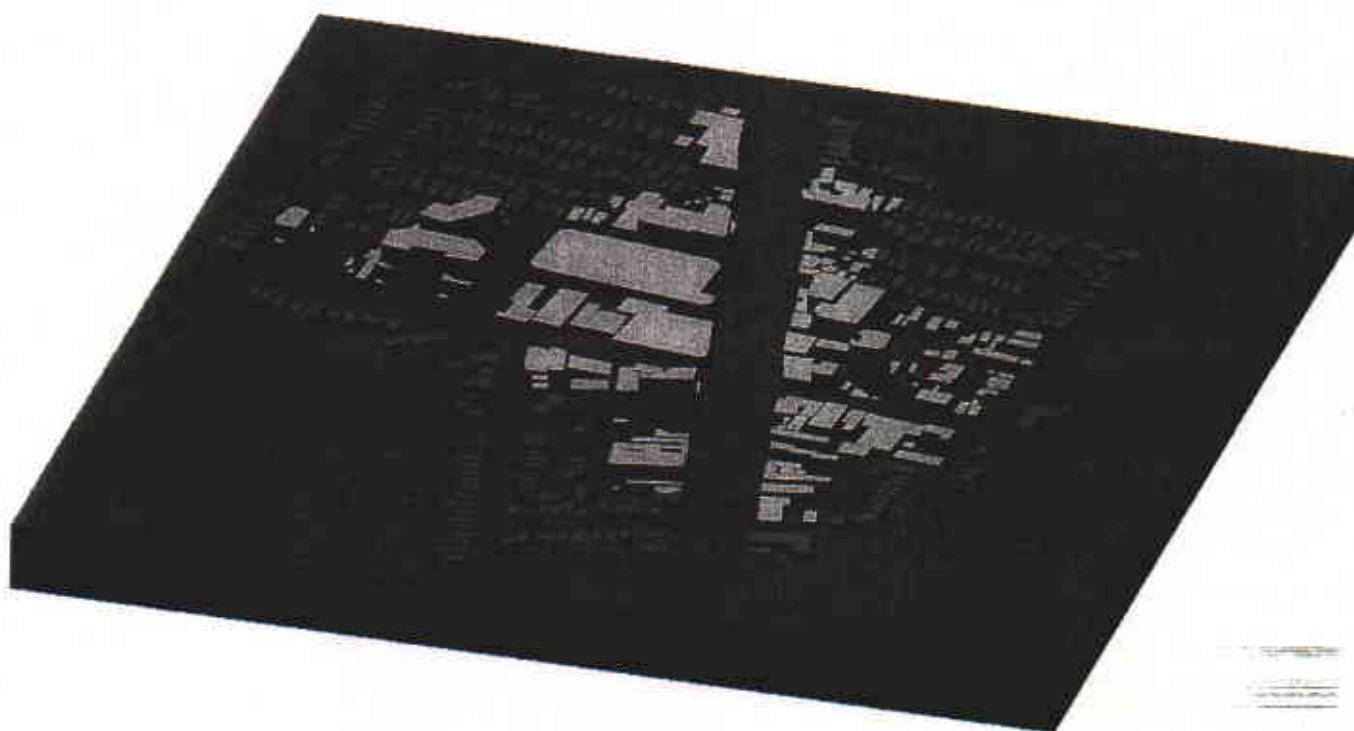


PART 2 **BACKGROUND / URBAN STRUCTURE**

2.5 Town centre models

2.5.1 Existing town centre model

The diagram below is a 3D indication of the Maroubra Junction Town Centre as it currently exists. The buildings in beige indicate those which fall within the area of study (the commercially zoned area of the town centre), and those in grey indicate buildings that fall outside of the study area. It can be observed that there are particularly tall buildings, especially on Maroubra Road.



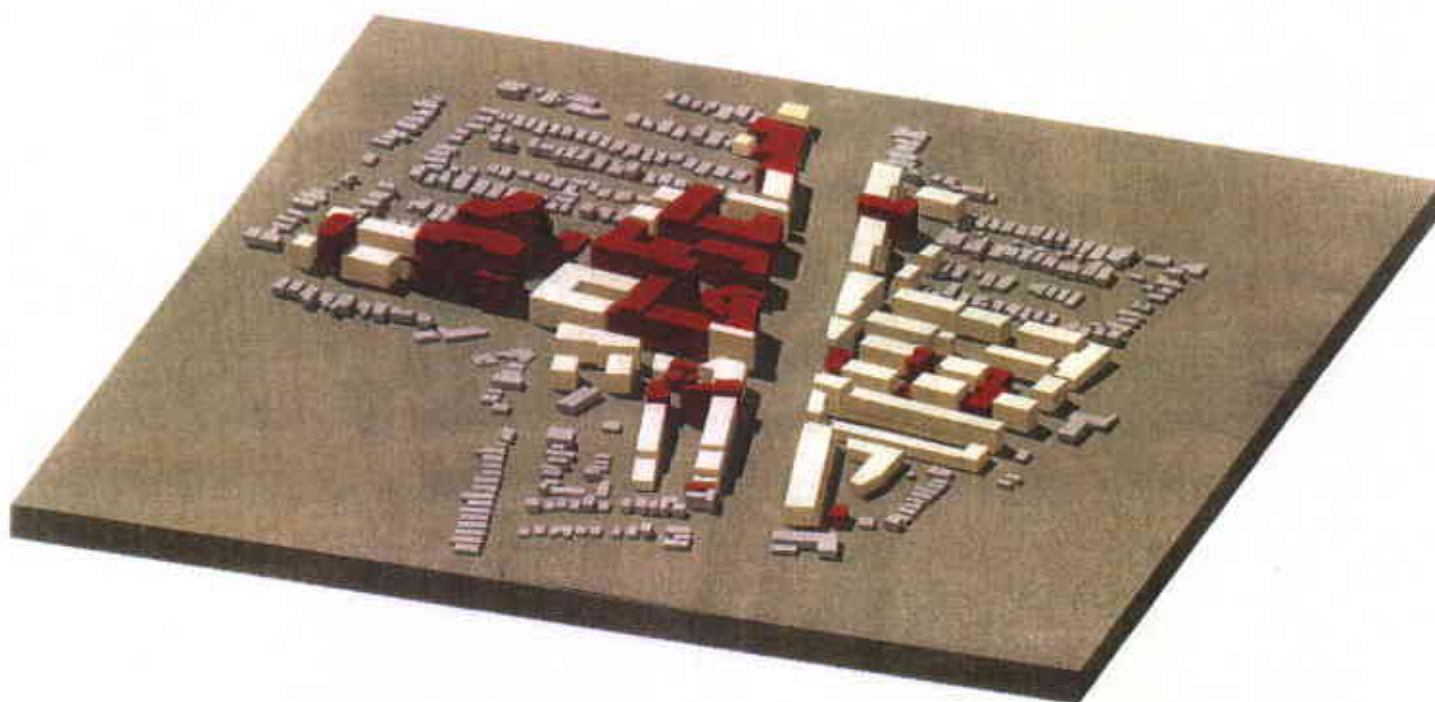
Existing town centre model

PART 2 BACKGROUND / URBAN STRUCTURE

2.5 Town centre models




2.5.2 Proposed town centre model

The diagram below is a 3D indication of the Maroubra Junction Town Centre as proposed. The buildings in beige indicate those which fall within the area of study (the commercially zoned area of the town centre) and those in grey indicate buildings that fall outside of the study area. Buildings in maroon indicate strata-titled buildings, heritage buildings and approved DA's, which have all been considered as *constraints*, and have been assumed to remain unchanged. The hierarchy of the two main roads (Anzac Parade and Maroubra Road) has been clearly established by way of higher buildings along Anzac Parade and lower buildings along Maroubra Road. Maroubra Junction has been reinforced by the placement of tallest buildings on the Junction. The transition in scale from the commercial centre to the residential areas is evident by the lowering of scale in buildings towards the periphery of the study area.



Proposed town centre model

Key

-  buildings in study area
-  buildings outside study area
-  strata-titled buildings, heritage buildings, approved DA's

PART 2 BACKGROUND / URBAN STRUCTURE

2.6 Built form for town centre



PART 2 BACKGROUND / URBAN STRUCTURE

2.7 Building heights in town centre



PART 2 BACKGROUND / URBAN STRUCTURE

2.8 Indicative street sections

The following street sections (2.8.1, 2.8.2, 2.8.3) are illustrative of suggested approaches for improving the public domain.

- They are indicative only.
- Any proposals for public domain improvements are to be designed in detail and are required to include consideration of Section 94 contributions and statutory requirements, and be supported by traffic assessments and necessary RTA approvals.

Any reduced car parking in Anzac Parade and Green Street will be further addressed in terms of possible new car parking facilities or locations, subject to the findings and recommendations of the Randwick Transport Study, being finalised as of June 2003, and related parking studies.

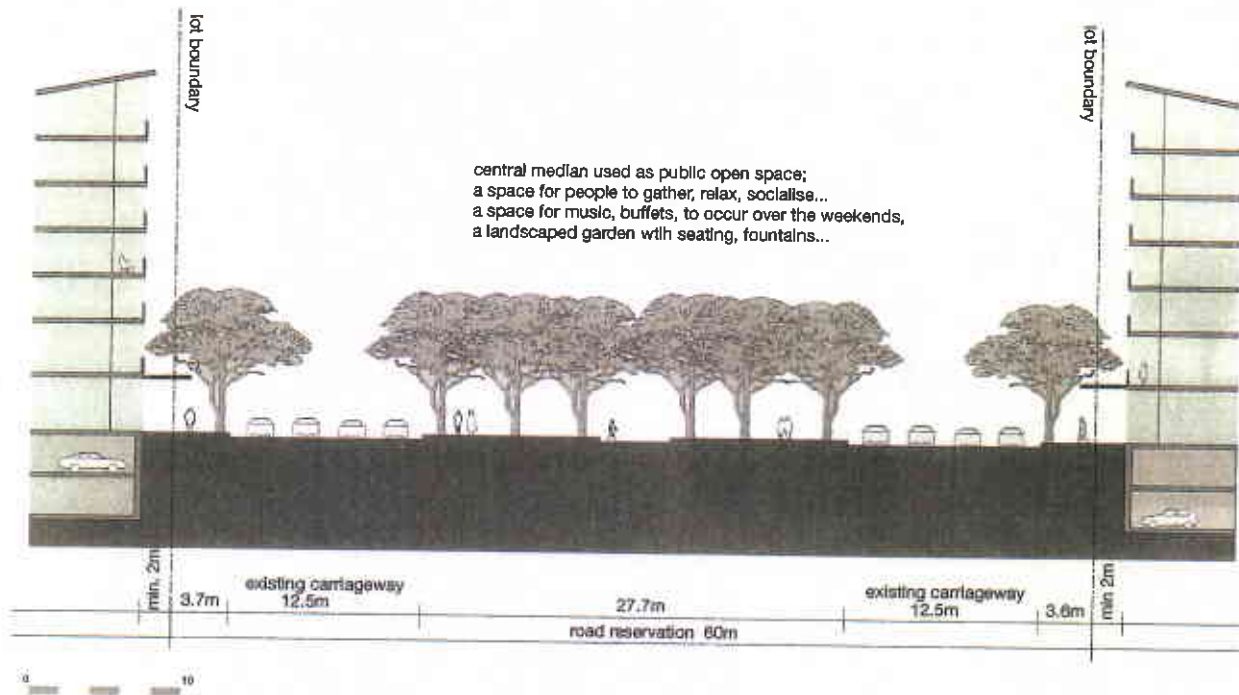


Key map

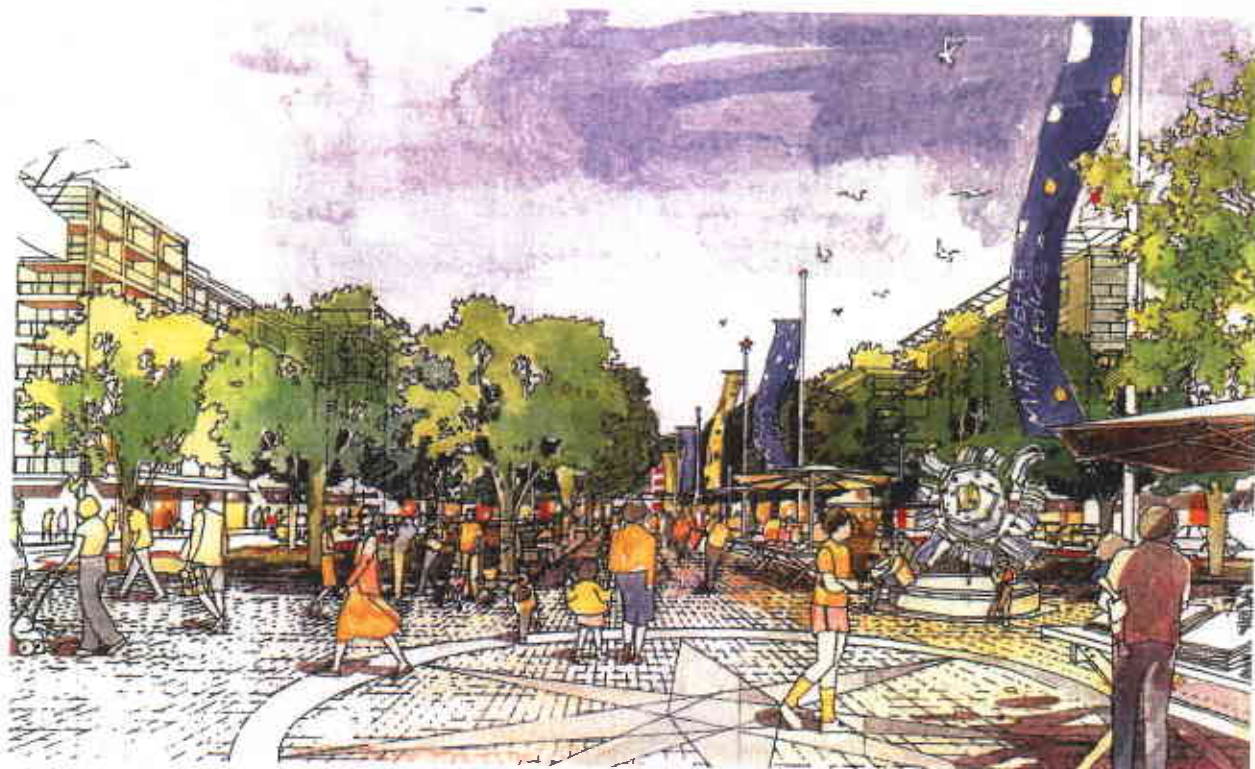
PART 2 BACKGROUND / URBAN STRUCTURE

2.8 Indicative street sections

2.8.1 Section through Anzac Parade



Section A-A
Section through Anzac Parade

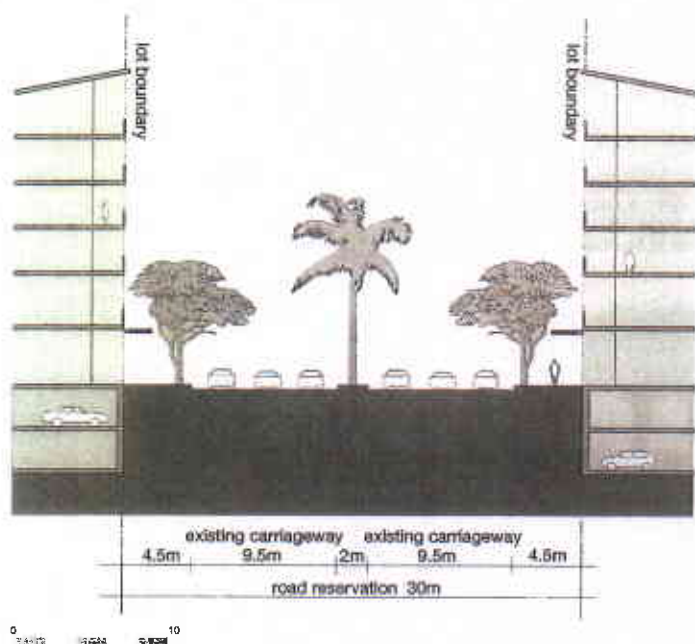


Artist's impression of Anzac Parade median, showing bustle and activity, greenery, public art, people relaxing, socialising, markets...

PART 2 BACKGROUND / URBAN STRUCTURE

2.8 Indicative street sections

2.8.2 Section through Maroubra Road



Section B-B
Section through Maroubra Road

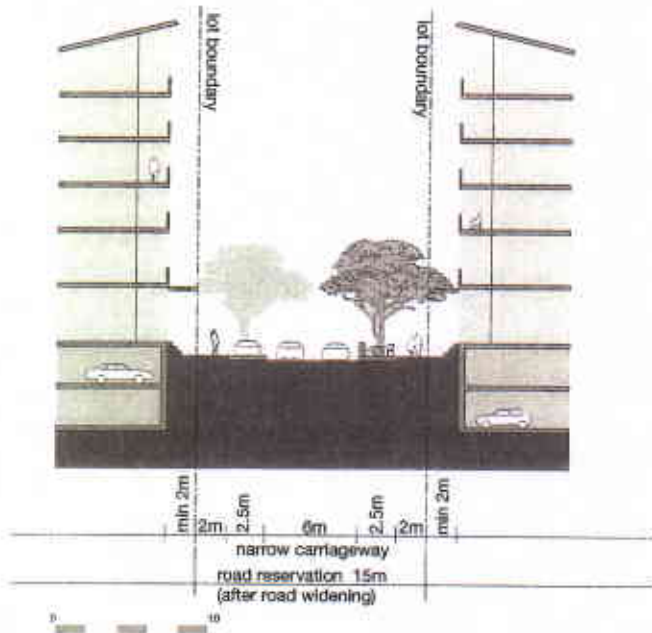


Artist's impression of Maroubra Road showing cabbage tree palms along the centre median (reflecting the proximity to Maroubra Beach), shade trees along the footpaths, and decreasing building height moving away from the Junction....

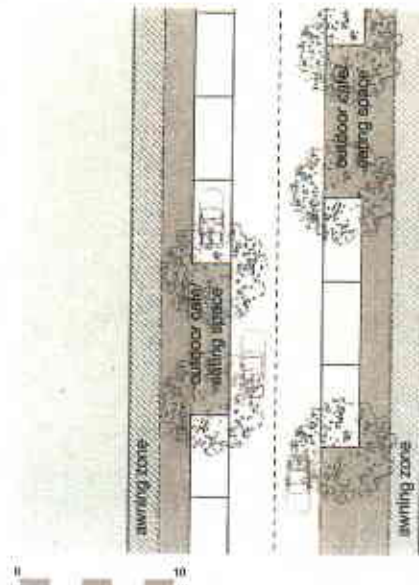
PART 2 BACKGROUND / URBAN STRUCTURE

2.8 Indicative street sections

2.8.3 Section through Green Street



Section C-C
Section through Green Street



Plan of Green Street



Artist's impression of Green Street showing mews-type development, an alternate environment to the main road, with outdoor eating spaces, shade trees, traffic calmed street, boutique-style shops, intimate in scale.....

PART 3 **DEVELOPMENT CONTROLS**

3.0 Using the Development Controls

This part of the document contains controls designed to guide and control development on all sites in the town centre. There are two levels of development controls that apply to all sites within the town centre. They are:

1. Primary development controls, and
2. Block by block controls

PRIMARY DEVELOPMENT CONTROLS

These are controls which apply to **ALL sites** within the town centre, irrespective of the special / specific conditions and characteristics of each block. Primary development controls include the following:

- Amalgamation
- Subdivision
- Building Envelope
- Building Height
- Building Depth
- Building Separation
- Articulation
- Street Setbacks
- Side and Rear Setbacks
- Rights of Carriageway

BLOCK BY BLOCK CONTROLS

The block by block controls contain development controls that are **SPECIFIC** to each block. The town centre has been divided into twelve blocks. Each block has controls which relate to it specifically and these have been outlined in detail in this section of the DCP.

PART 3 DEVELOPMENT CONTROLS

3.1 Primary development controls

3.1.1 AMALGAMATION

Amalgamation is the combination of two or more lots for the purpose of redevelopment. When considering amalgamation, applicants are encouraged to seek advice from a land economist on the economic viability of a particular built form outcome. In cases where amalgamation is desirable but not possible, suitable evidence of discussions with/approaches to adjoining lot owners should be provided to Council. The maximum allowable building depth/height on a block may not be achievable on small allotments.

Objectives

- To ensure coherent redevelopment of the town centre and avoid isolation of smaller land parcels.
- To facilitate high quality residential amenity.
- To minimise the number of driveway crossings and car park entries along a street.
- To maintain street rhythm and expression.

Performance Criteria

- i. If a building/development requires vehicular access, then the site should:
 - a) **have a minimum street frontage of 20m;**
 - or
 - b) **have dual street frontage, with vehicular access from the secondary street**
- ii. Minimum lot widths are to be tested against the desired building types for each block to determine where amalgamation is necessary.
- iii. When development/redevelopment/amalgamation is proposed, sites between and adjacent to developable properties are not to be limited in their future development potential.

PART 3 DEVELOPMENT CONTROLS

3.1 Primary development controls

3.1.2 SUBDIVISION

The division of large land holdings into blocks and/or lots for the purpose of redevelopment.

Objectives

- To ensure the development parcel and the building type are compatible and promote good site design and amenity.
- To accommodate the desired development in the precinct.

Performance Criteria

- i. The following site design issues are to be addressed with any subdivision application:
 - Open space provisions (including deep soil zones).
 - Pedestrian access, vehicular access and parking.
 - Residential amenity: light, air, and privacy.
- ii. New blocks are to relate to the existing street hierarchy and promote a permeable block pattern.
- iii. Underground infrastructure is to be located along the street or between lot boundaries within easements.

PART 3 DEVELOPMENT CONTROLS

3.1 Primary development controls

3.1.3 BUILDING ENVELOPE

A building envelope is a three dimensional space which defines the maximum extent of a building in any direction, that is: maximum building height, maximum building length, and maximum building depth. Buildings are to be designed to fit *within* the applicable building envelopes.

The building envelopes shown illustrate the absolute *maximum* envelope allowed on a site, *provided* that all other criteria in this DCP are satisfied.

The building envelopes shown in the Block-by-Block controls vary throughout the town centre. The envelopes have been designed in response to lot size, position within the town centre, relationship to adjacent buildings (such as heritage items, residential buildings outside the town centre, and strata buildings unlikely to change), the desired future character of the town centre, and street pattern and width, all of which vary throughout the town centre.

Existing strata-titled buildings are considered unlikely to change and as such controls for these allotments have not been reflected in the proposed envelope plans for each block. If redevelopment of these sites does occur then controls consistent with controls for neighbouring allotments and the urban strategy proposed in this DCP will be used for consideration by Council.

The *building separation requirements* in 3.1.6, the *setback requirements* (particularly rear setback) in the Block-by-Block controls in 3.2, and the communal open space requirements in 4.1.4 *may reduce the maximum allowable building envelope*. Where there is conflict, these controls override the maximum allowable building envelope.

Objectives

- To define the bulk, height and scale of development throughout the town centre.
- To create a transition between the town centre and the surrounding residential area.

Performance Criteria

- Residential floors:** All developments are to demonstrate that the gross floor area achieved occupies not more than **70% of the maximum building envelope** for residential floors.
- Commercial floors:** All developments are to demonstrate that the gross floor area achieved occupies not more than **80% of the maximum building envelope** for commercial floors above the ground floor.



A building envelope is not a building. It defines a three dimensional space within which a building can occur.

Refer to 3.1.6 for building separation requirements, 3.2 (Block by Block controls) for setback requirements, and 4.1.4 for communal open space requirements.

These may reduce the size of the maximum allowable building envelope.

PART 3 DEVELOPMENT CONTROLS

3.1 Primary development controls

3.1.4 BUILDING HEIGHT

Height is an important control because it has a major impact on the physical and visual amenity of a place. It can also reinforce an area's existing character or relate to an area's desired character.

Height is calculated as the distance measured vertically from existing ground level taken from each point on the boundary of the site to the underside of the ceiling of the topmost floor.

Storeys means the number of habitable floors, including mezzanines, and excluding underground car parking.

Objectives

- To ensure future development within the town centre responds to the desired scale and character of the street and the town centre.
- To ensure development at the edges of the town centre responds to the scale and character of development and the streets surrounding the town centre.
- To allow reasonable daylight and solar access to all developments and the public domain.

Performance Criteria

- i. Developments are to be appropriately scaled with consideration to the broader urban structure principles on which the town centre is based.
- ii. Development is to comply with the building heights shown in colour in the block by block diagrams in Section 3.2.
- iii. The prominence of certain street corners should be reinforced by concentrating the tallest portion of the building on the corner, both the overall building height, and predominant street wall height (eg higher buildings on Maroubra Junction).
- iv. The maximum allowable height on Anzac Parade is 7 storeys, unless otherwise specified in 3.2 Block-by-Block Controls.
- v. The maximum allowable height on Maroubra Road is 6 storeys, unless otherwise specified in 3.2 Block-by-Block Controls.
- vi. Maximum allowable building heights in metres [calculated as the distance measured vertically from ground level taken from each point on the boundary of the site to the underside of the ceiling of the topmost floor] are as follows:

1 storey	4.5m
2 storeys	9.0m
3 storeys	12.0m
4 storeys	15.0m
5 storeys	18.0m
6 storeys	21.0m
7 storeys	24.0m
8 storeys	26.7m
- vii. For existing buildings shown as 9 storeys or more in Section 3.2, any redevelopment of these sites will be limited to the current maximum height of the existing building on the site.

Refer to the Block by Block controls in Section 3.2 for maximum building heights throughout the town centre.

PART 3 DEVELOPMENT CONTROLS

3.1 Primary development controls

3.1.5 BUILDING DEPTH

Building depth is the horizontal cross section dimension of a building. It generally refers to the dimension measured from front to back (from the street to the inside of the block). Where buildings are oriented differently, the depth will be the dimension of the shorter axis. Refer to **3.2 Indicative Sections** for diagrams illustrating maximum building depth and glass line to glass line depth.

The depth of a building will have a significant impact on residential amenity for the building occupants. In general, narrow cross-section buildings have the potential for dual aspect apartments with natural ventilation and optimal daylight to internal spaces.

Building depth is also related to building use. Mixed-use buildings may have wider commercial/retail floors and narrower residential floors, to maximise the amenity of living spaces.

Different site conditions (such as orientation, surrounding development) will require different design solutions for building depth. For example, shallow sites may require slim buildings to protect the amenity of neighbouring uses. The maximum building depths set out in Section 3.2 of this DCP have been designed in response to site conditions.

Objectives

- To ensure that the bulk of the development is in scale with the existing and desired future context.
- To provide adequate amenity for building occupants in terms of sun access and natural ventilation.
- To provide for dual aspect apartments.

Performance Criteria

- i. Maximum allowable depth of **residential** building envelopes is 22m (max 18m glass line to glass line), unless otherwise specified in Section 3.2 Block by Block Controls.
- ii. Maximum allowable depth of **commercial/retail** building envelopes is 25m (max 23m glass line to glass line above the ground floor), unless otherwise specified in Section 3.2 Block by Block Controls.

Refer to the indicative sections and the Block by Block controls in Section 3.2 for maximum building depths throughout the town centre.

PART 3 **DEVELOPMENT CONTROLS**

3.1 Primary development controls

3.1.6 BUILDING SEPARATION

Buildings which are too close together can create internal amenity problems both for the proposed new building, its neighbours and the space between buildings. These problems include lack of visual and acoustic privacy, loss of daylight access to apartments and to private and shared open spaces.

Building separation controls work in conjunction with height controls and controls for private/communal open space and deep soil zones. They are measured in metres, from balcony to balcony or from external wall to external wall.

Objectives

- To ensure that the scale of new development is consistent with the desired character of the area as identified in this DCP (Parts 2 and 3).
- To provide visual and acoustic privacy for existing and new residents.
- To control overshadowing of adjacent properties and private and shared open space.
- To allow for the provision of usable open space between buildings.
- To provide deep soil zones for stormwater management and tree planting, where site conditions allow.

Performance Criteria

- i. Building separation is to increase in proportion to building height to ensure appropriate urban form, adequate amenity and privacy for building occupants. The following building separation requirements apply to all new development:

Building heights	Building separation requirements
up to four storeys/15 metres	12 metres between habitable rooms and balconies 9 metres between habitable rooms and balconies/non-habitable rooms 6 metres between non-habitable rooms
five to eight storeys/18-27 metres	18 metres between habitable rooms and balconies 13 metres between habitable rooms and balconies/non-habitable rooms 9 metres between non-habitable rooms

PART 3 DEVELOPMENT CONTROLS

3.1 Primary development controls

3.1.7 ARTICULATION

Articulation of building facades can result in interesting buildings and greater amenity for occupants. Buildings can be articulated through the use of architectural elements such as balconies and building entries.

Provision for building articulation is included **within** the building envelopes in the Block-by-Block controls. These elements may extend into the building envelope beyond the maximum glass line to glass line depth.

Objectives

- To promote articulated building facades that contribute to the character of the street.
- To provide active, continuous commercial retail frontages.
- To promote buildings with high quality amenity and usable private outdoor spaces.
- To ensure buildings respond to environmental conditions such as noise, sun, breezes, privacy and views.
- To promote integration of building and private open space.

Performance Criteria

- i. All buildings are to be articulated to a minimum depth of 1 m at the rear and the front, above any ground floor commercial/retail.
- ii. Balconies may extend beyond the maximum building envelope by a maximum of 600mm (to further encourage facade articulation), but **must not** extend beyond the property boundaries.

PART 3 DEVELOPMENT CONTROLS

3.1 Primary development controls

3.1.8 STREET SETBACKS

Street setbacks establish the front building line. They help create the proportions of the street and can contribute to the public domain by enhancing streetscape character and the continuity of street facades. Street setbacks can also be used to enhance the setting for the building. They provide for landscape areas, entries to ground floor apartments and deep soil zones.

Street setbacks are measured from the street boundary to the outside face of the external wall of the building.

Objectives

- To establish the desired spatial proportions of the street and define the street edge.
- To create a clear threshold by providing a transition between public and private space.
- To assist in achieving visual privacy to apartments from the street.
- To create good quality entry spaces to lobbies, foyers or individual dwelling entrances.
- To allow an outlook to and surveillance of the street.
- To allow for street landscape character.

Performance Criteria

- i. No setback is required from Anzac Parade and Maroubra Road, in order to maintain an urban street edge on the major streets, unless otherwise specified in Section 3.2 Block-by-Block controls.
- ii. All development is to comply with the street setbacks outlined in Section 3.2 Block-by-Block controls.

PART 3 DEVELOPMENT CONTROLS

3.1 Primary development controls

3.1.9 SIDE AND REAR SETBACKS

Side and rear setbacks help ensure that the height and distance of the building from the boundaries maintains the amenity of neighbouring sites and the amenity of new development. Setbacks vary according to the building context and type.

Side and rear setbacks can be used to create usable space, which contributes to the amenity of the side and rear of the buildings through landscape design.

Objectives

Side Setbacks:

- To minimise the impact of development on light, air, sun, privacy, views and outlook for neighbouring properties, including future buildings.
- To retain or create a pattern of development that positively defines the streetscape so that the area between buildings is not just "left over" space.

Rear setbacks:

- To maintain deep soil zones to maximise natural site drainage and protect the water table.
- To maximise the opportunity to retain and reinforce mature vegetation.
- To optimise the use of land at the rear and surveillance of the street at the front.
- To maximise building separation to provide visual and acoustic privacy.

Performance Criteria

- i. All development must comply with:
 - the building separation requirements in Section 3.1.6; and
 - the side and rear setback requirements in Section 3.2 Block-by-Block controls.
- ii. Development fronting Anzac Parade and Maroubra Road may have a zero side setback unless otherwise specified in the Block-by-Block controls.

PART 3 DEVELOPMENT CONTROLS

3.1 Primary development controls

3.1.10 RIGHTS OF CARRIAGEWAY

The Roads and Traffic Authority has advised that new vehicular access to developments fronting Anzac Parade and Maroubra Road will not be allowed from these streets and vehicular access must be via side streets. Most blocks within the town centre can be accessed via side streets, however where access from a side street is not possible, access may be provided via a Right of Carriageway. The locations where Rights of Carriageways may be required are shown on the proposed building envelope diagrams for each block within the town centre.

Where a Right of Carriageway is required, the timing and order of development of land will depend on market forces and the ability of landowners to successfully negotiate with adjoining property owners to achieve reciprocal Rights of Carriageway created under Section 88 of the Conveyancing Act 1919. These Rights of Carriageway will allow access across adjoining properties for owners, residents, staff, visitors, customers and service vehicles.

Applicants should note that if an individual owner within a development block refuses to grant a Right of Carriageway to benefit adjoining properties then a legal avenue exists under Section 88K of the Conveyancing Act 1919 for an aggrieved land owner to commence proceedings in the Supreme Court to seek an order of that Court granting a right of access across an adjoining property in circumstances where such access is necessary for the reasonable development of such land.

Objectives

- To facilitate vehicle access to properties fronting Anzac Parade and Maroubra Road whilst meeting the RTA's requirements.
- To maximise pedestrian safety and maintain traffic flow.

Performance Criteria

Where Rights of Carriageway are required (in locations identified in the Building envelope plans in 3.2 Block by Block Controls):

- i They are to be a minimum of 6 metres wide. For larger developments, a carriage way width greater than 6 metres wide may be required.
- ii Applicants are to negotiate Rights of Carriageway with adjoining property owners.
- iii Evidence of adjoining property owners' agreement to a Right of Carriageway is to be submitted as part of the Development Application.
- iv If agreement cannot be reached, applicants are to submit evidence that an action under Section 88K of the Conveyancing Act 1919 has commenced in the Supreme Court.
- v Doors and windows of habitable rooms are not to be located next to accessways.

PART 3 DEVELOPMENT CONTROLS

3.2 Block by Block Controls



Key map

INTRODUCTION

The town centre has been divided into twelve blocks as shown in the key map above. The following pages contain Block-by-Block controls for each block in the town centre.

EXPLANATION

At the start of each block, there is a description of the existing character/conditions on the block, the desired future character for the block, and outline of the controls that apply to the block.

KEY MAP

After the explanatory text, there is a small key map on the next page which tells you where the block is located in relation to other blocks in the town centre.

EXISTING PLAN

The existing plan shows what currently exists on the block including existing building heights, strata titled buildings unlikely to change and approved DAs.

[Disclaimer: Existing buildings and their scale as shown on blocks have been mapped approximately only].

BUILDING ENVELOPE PLAN

The building envelope plan shows the permitted building envelopes (maximum building depth and height) on the block. It also shows rights of carriageways that are to be provided, deep soil zone locations and open space locations.

Existing strata-titled buildings are considered unlikely to change and as such controls for these allotments have not been reflected in the proposed envelope plans for each block. If redevelopment of these sites does occur then controls consistent with controls for neighbouring allotments and the urban strategy proposed in this DCP will be used for consideration by Council.

3-D VIEW OF BUILDING ENVELOPES

Below the building envelope plan for the block is a three-dimensional view of the proposed building envelopes, showing proposed buildings, approved DAs and strata-titled buildings which are unlikely to change.

SECTIONS

Indicative generic block section diagrams are provided on the following pages. The configuration of basement and sub-basement parking shown in sections is indicative only. The design of basement and sub-basement parking will need to take into account flooding and other site constraints and is subject to Council's flood mitigation requirements (see Section 4.7.3 Total Water Cycle Management for more detail). Applicants are advised to contact council prior to submitting a development application, to determine whether flooding may be an issue, and whether a flood study may be required.

WRITTEN CONTROLS

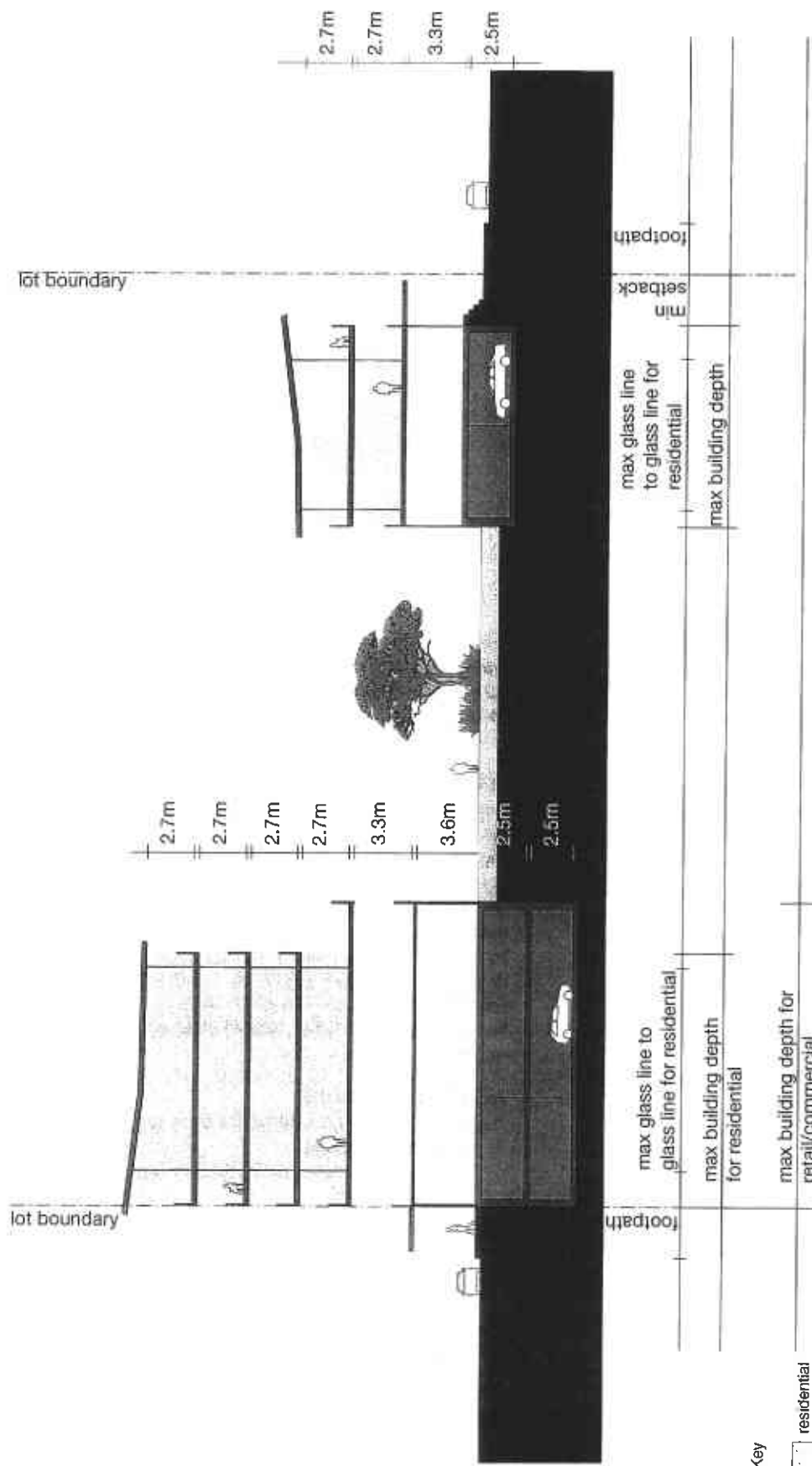
There are also written controls for each block including:

- Building Envelope
- Building use (commercial/retail or residential)
- Building depth
- Setbacks (front, side and rear setback)
- Deep soil zone (the area on the site which cannot be built over and where deep root planting is required) and open space (the area on site where landscaping is required).
- Vehicle Access

PART 3 DEVELOPMENT CONTROLS

Indicative Block Sections

indicated dimensions show
minimum required finished floor
level to finished ceiling level

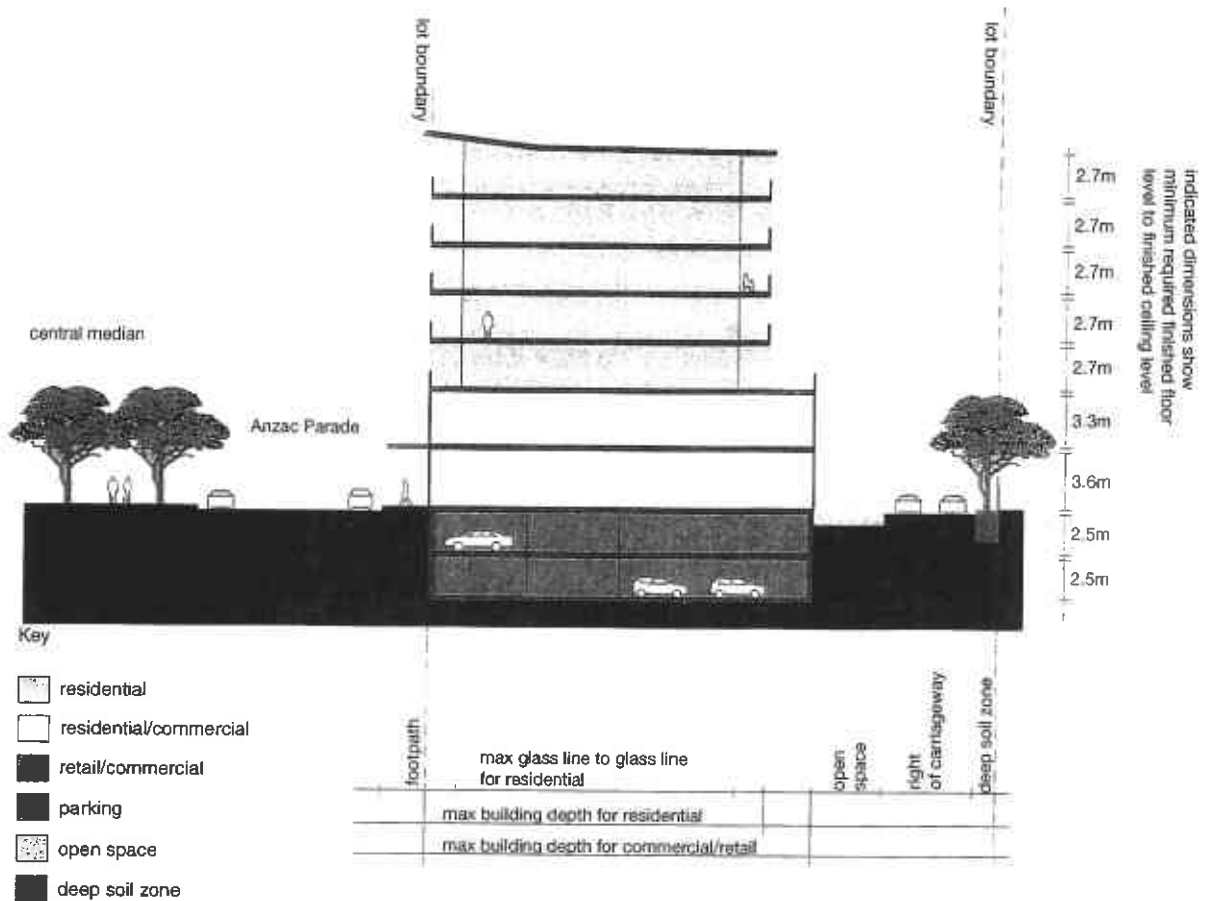


Notes:

- 1) In some instances parking may extend beyond the building envelope where deep soil zone is not required
- 2) uses are outlined in the controls for each block and envelope depths

PART 3 DEVELOPMENT CONTROLS

Indicative Block Sections



Notes:

- 1) in some instances parking may extend beyond the building envelope where a deep soil zone is not required
- 2) uses are outlined in the controls for each block and envelope depths

PART 3 DEVELOPMENT CONTROLS

3.2.1 Block 1

Description

Block 1, which marks the northern boundary of the town centre, is bound by Shepherd Street to the north, Gale Road to the south and Anzac Parade to the east. It contains the Bowen Library which is owned by Randwick Council. The existing library building is three storeys high, and there is an approved DA for the site which is six storeys. There are one and two storey residential buildings north of the library. To its immediate west is a three storey residential building.

Objectives

- Reinforce Anzac Parade as the main street.
- Provide a transition in scale from the town centre to the lower scale residential buildings on its periphery.
- Maintain the amenity of the residential buildings by providing a green buffer between the busy commercial/retail activities and any low scale residential uses on properties adjacent.



Images of existing buildings on block



Block 3.3.1

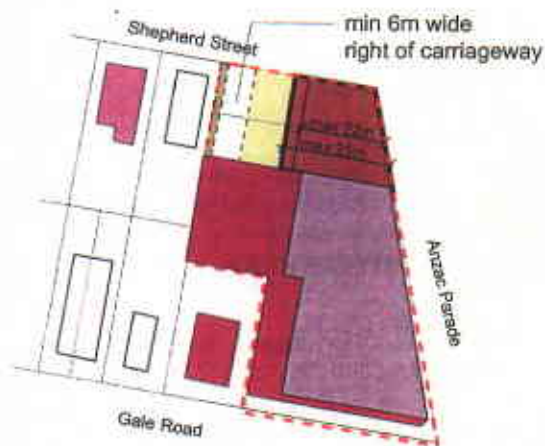
Key

- 1 storey
- 2 storeys
- 3 storeys
- 4 storeys
- 5 storeys
- 6 storeys
- 7 storeys
- 8 storeys
- 9 storeys and above
- town centre boundary
- proposed building envelope
- proposed building envelope if amalgamation occurs
- preferred development parcel
- deep soil zone
- open space
- strata-titled buildings unlikely to change/approved DA's in 3-D
- proposed buildings in 3-D
- buildings outside town centre boundary in 3-D

Existing plan

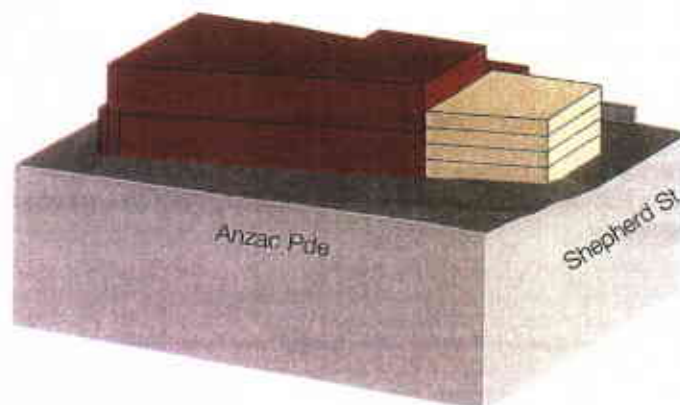


Building envelope plan



0 10m 20m 25m

3D view of building envelopes



PART 3 DEVELOPMENT CONTROLS

3.2.1 Block 1

Controls

The Primary Development Controls in Section 3.1 and the Design Controls in Part 4 of this plan apply to all blocks.

BUILDING ENVELOPE PLAN

The building envelope plan shows the **maximum** envelope. Development Applications are to demonstrate that the gross floor area occupies not more than 70% of the maximum building envelope in the case of residential floors and 80% in the case of commercial/retail floors above ground floor.

The Building Envelope plan for this block shows four storeys to the north of the library along Anzac Parade. All lots within the town centre in this block front Anzac Parade.

BUILDING USE:

Along Anzac Parade - two floors of retail/commercial with residential above

Any variation to the above should be accompanied by an assessment of the economic impact on existing commercial development in the town centre.

BUILDING DEPTH:

On all lots:

Commercial/retail floors

- max 25m (max 23m glass line to glass line above ground floor)

Residential floors

- max 22m (max 18m glass line to glass line)

SETBACKS:

In addition to the setback requirements listed below, the requirements in Section 3.1.6 Building Separation also apply. If any inconsistency between the maximum building envelope and setbacks arises, the setback requirements (below) and the requirements in Section 3.1.6 override the maximum building envelope.

Front setback

Along Anzac Parade	0m
--------------------	----

Side setback

Along Anzac Parade and Shepherd St	0m
Along Gale Road	min 3m

Rear setback

Lots fronting Anzac Parade	min 10m
----------------------------	---------

DEEP SOIL ZONE + OPEN SPACE:

- min 25% of total site area is to be provided as communal open space in residential developments
- provide a min 1.5m wide tree planting strip along rear boundary (deep soil)

VEHICLE ACCESS:

All lots fronting Anzac Parade are required to provide vehicle access via a minimum 6m wide rear of carriageway.

PART 3 **DEVELOPMENT CONTROLS**

3.2.2 Block 2



Description

Block 2 is bound by Gale Road to the north, Mason Street to the south and Anzac Parade to the east. It contains a relatively new six storey strata-titled building which is unlikely to change in the next 10-15 years. The buildings to the south of this apartment building are one and two storeys high.

Objectives

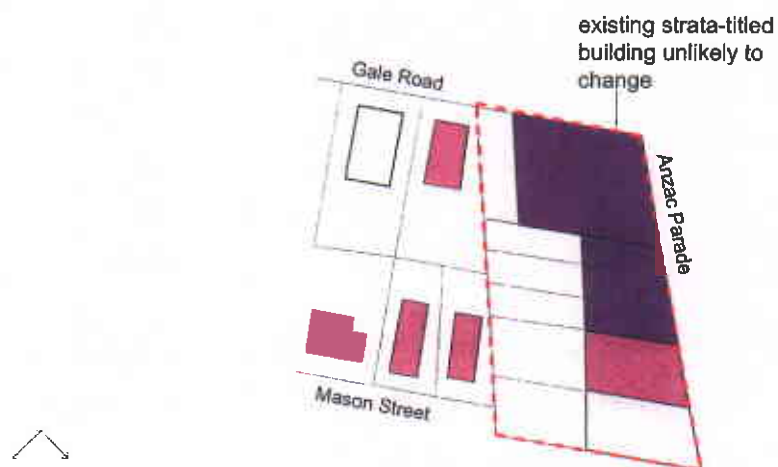
- Reinforce Anzac Parade as the main street.
- Provide a transition in scale from the town centre to the lower scale residential buildings on its periphery.
- Maintain the amenity of the residential buildings by providing a green buffer between the busy commercial/retail activities on Anzac Parade and low scale residential uses on properties adjacent.



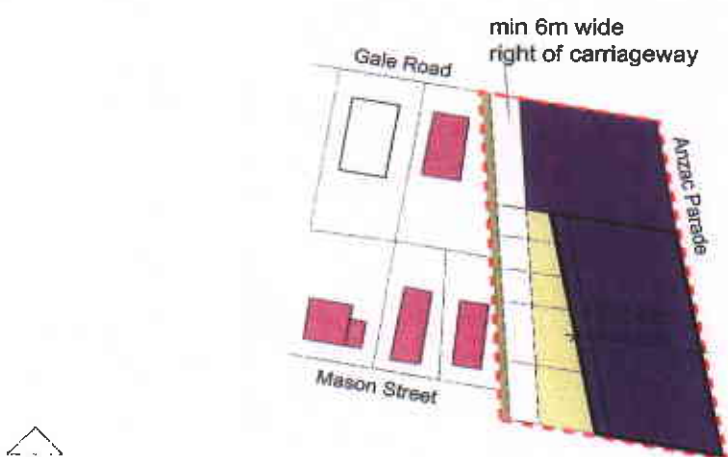
Images of existing buildings on block

PART 3 DEVELOPMENT CONTROLS

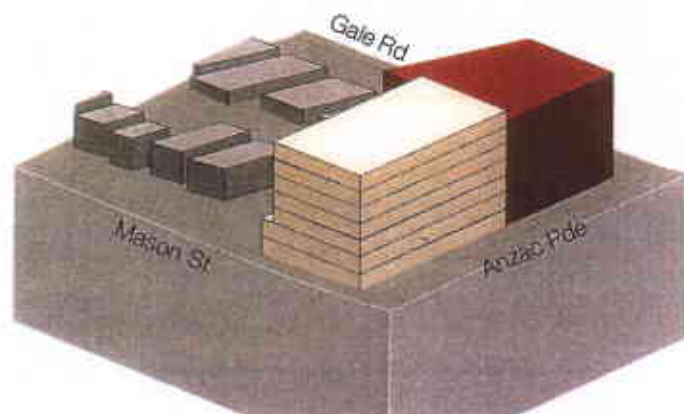
3.2.2 Block 2



Existing plan



Building envelope plan



3D view of building envelopes



Block 3.3.2

Key

- 1 storey
- 2 storeys
- 3 storeys
- 4 storeys
- 5 storeys
- 6 storeys
- 7 storeys
- 8 storeys
- 9 storeys and above
- town centre boundary
- proposed building envelope
- proposed building envelope if amalgamation occurs
- preferred development parcel
- deep soil zone
- open space
- strata-titled buildings unlikely to change/approved DA's in 3-D
- proposed buildings in 3-D
- buildings outside town centre boundary in 3-D

Controls

The Primary Development Controls in Section 3.1 and the Design Controls in Part 4 of this plan apply to all blocks.

BUILDING ENVELOPE PLAN

The building envelope plan shows the **maximum** envelope. Development Applications are to demonstrate that the gross floor area occupies not more than 70% of the maximum building envelope in the case of residential floors and 80% in the case of commercial/retail floors above the ground floor.

The building envelope plan for this block shows a seven storey envelope along Anzac Parade.

BUILDING USE:

All buildings - two levels of retail/commercial with residential above

Any variation to the above should be accompanied by an assessment of the economic impact on existing commercial development in the town centre.

BUILDING DEPTH:

On all lots:

commercial/retail floors

- max 25m (max 23m glass line to glass line above ground floor)

residential floors

- max 22m (max 18m glass line to glass line)

SETBACKS:

In addition to the setback requirements listed below, the requirements in Section 3.1.6 Building Separation also apply. If any inconsistency between the maximum building envelope and setbacks arises, the setback requirements (below) and the requirements in Section 3.1.6 override the maximum building envelope.

Front setback

Along Anzac Parade 0m

Side setback

Along Anzac Parade 0m

Rear setback

All lots min 10m

DEEP SOIL ZONE + OPEN SPACE:

- min 1.5m wide tree planting strip along rear boundary (deep soil)
- min 25% of total site area is to be provided as communal open space in residential developments.

VEHICLE ACCESS

All lots fronting Anzac parade are required to provide access via a minimum 6m wide rear of carriageway.

OTHER CONTROLS:

Road widening: Lots with frontage to Mason Street are to comply with Randwick City Council's Subdivision Code [Policy No 6.01.22] Clause C - *Subdivisions to lanes*

PART 3 DEVELOPMENT CONTROLS

3.2.3 Block 3

Description

Block 3, on the eastern side of Anzac Parade, is bound by Gale Road to the north, Alma Road to the south and Anzac Parade to the west. There are existing buildings which are 7-8 storeys high along Anzac Parade, including one fully commercial building and 1-2 storey buildings along Gale Road. There are one and two storey residential buildings east of the town centre boundary.

Objectives

- Reinforce Anzac Parade as the main street.
- Provide a transition in scale from the town centre along Gale St to the lower scale residential buildings on the periphery.
- Maintain the amenity of the residential buildings by providing a green buffer between the busy commercial/retail activities on Anzac Parade and the low scale residential uses on properties adjacent.



Images of existing buildings on block

PART 3 DEVELOPMENT CONTROLS

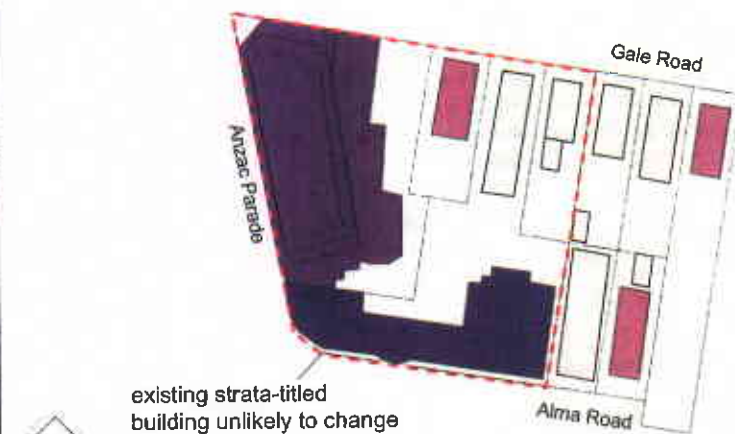
3.2.3 Block 3



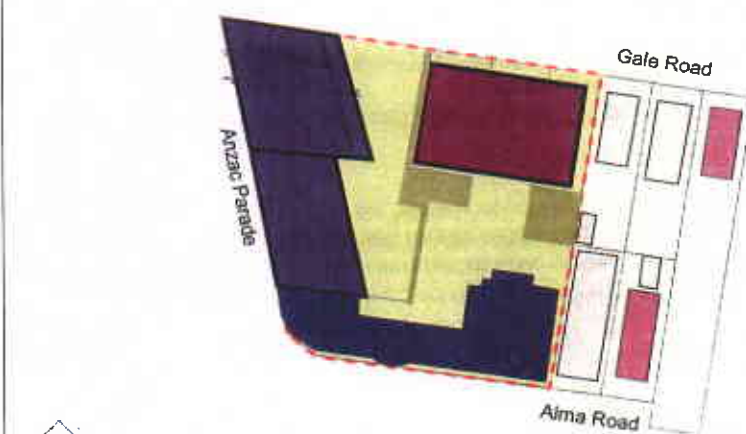
Block 3.3.3

Key

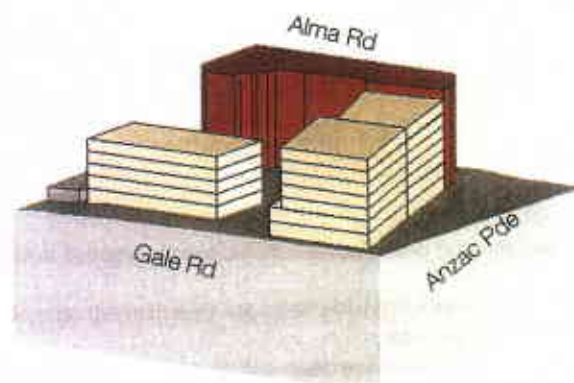
- 1 storey
- 2 storeys
- 3 storeys
- 4 storeys
- 5 storeys
- 6 storeys
- 7 storeys
- 8 storeys
- 9 storeys and above
- town centre boundary
- proposed building envelope
- proposed building envelope if amalgamation occurs
- preferred development parcel
- deep soil zone
- open space
- strata-titled buildings unlikely to change/approved DA's in 3-D
- proposed buildings in 3-D
- buildings outside town centre boundary in 3-D



Existing plan



Building envelope plan



3D view of building envelopes

PART 3 DEVELOPMENT CONTROLS

3.2.3 Block 3

Controls

The Primary Development Controls in Section 3.1 and the Design Controls in Part 4 of this plan apply to all blocks.

BUILDING ENVELOPE PLAN

The building envelope plan shows the **maximum** building envelope. Development Applications are to demonstrate that the gross floor area occupies not more than 70% of the maximum building envelope in the case of residential floors and 80% in the case of commercial/retail floors above the ground floor.

The building envelope plan for this block shows seven storey building envelopes for lots on Anzac Parade, and five storey building envelopes for lots on Gale Road.

BUILDING USE:

Along Anzac Parade

- two levels of commercial with residential above

Along Gale Road and Alma Road

- one level of commercial with residential above (home office uses are encouraged)

Any variation to the above should be accompanied by an assessment of the economic impact on existing commercial development in the town centre.

BUILDING DEPTH:

Along Anzac Parade

- commercial/retail floors - max 25m (max 23m glass line to glass line above the ground floor)
- residential floors - max 22m (max 18m glass line to glass line)

SETBACKS:

In addition to the setback requirements listed below, the requirements in Section 3.1.6 Building Separation also apply. If any inconsistency between the maximum building envelope and setbacks arises, the setback requirements (below) and the requirements in Section 3.1.6 override the maximum building envelope.

Front setback

- | | |
|-------------------------|--------|
| Along Anzac Parade | 0m |
| Along Gale and Alma Rds | min 3m |

Side setback

- | | |
|-------------------------|---|
| Along Anzac Parade | 0m |
| Along Gale and Alma Rds | 0m with properties fronting Anzac Parade
min 3m from properties outside town centre boundary |

Rear setback

- | | |
|-------------------------|---------|
| Along Anzac Parade | min 10m |
| Along Gale and Alma Rds | min 6m |

DEEP SOIL ZONE + OPEN SPACE:

Min 25% of total site area is to be provided as communal open space in residential developments.

- | | |
|-------------------------|---|
| Along Anzac Parade | - min 1.5m wide deep soil tree planting strip along rear boundary |
| Along Gale and Alma Rds | - min 6m wide deep soil zone along rear boundary |

OTHER CONTROLS:

Road widening: Lots on Alma Road are to comply with Randwick City Council's Subdivision Code [Policy No 6.01.22] Clause C - *Subdivisions to lanes*.

PART 3 DEVELOPMENT CONTROLS

3.2.4 Block 4



Description

Block 4 is bound by Mason Street to the north, Boyce Road to the south and Anzac Parade to the east. There are existing strata-titled buildings which are 8 storeys high along Anzac Parade and Boyce Road, which are unlikely to change in the next 10-15 years, and one storey buildings (shops) on the corner of Anzac Parade and Mason Street. There are balconies on the northern side of the apartment block on Anzac Parade which makes it impossible for the lots on the north to build to the boundary, and reduces the development potential of these lots.

Objectives

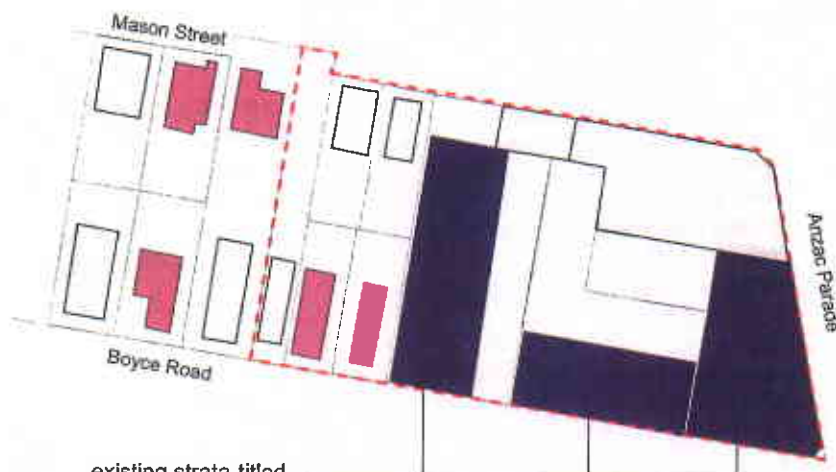
- Reinforce Anzac Parade as the main street.
- Provide a transition in scale from the town centre along Mason St and Boyce Rd to the lower scale residential buildings on the periphery.
- Maintain the amenity of the residential buildings by providing a green buffer between the busy commercial/retail activities on Anzac Parade and low scale residential uses on properties adjacent.
- Facilitate development of the corner of Anzac Parade and Mason St in the context of the existing strata buildings on its southern boundary.



Images of existing buildings on block

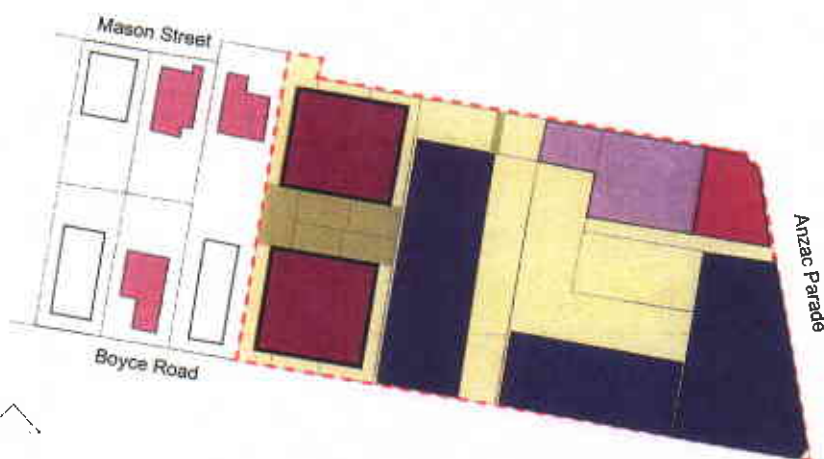
PART 3 DEVELOPMENT CONTROLS

3.2.4 Block 4

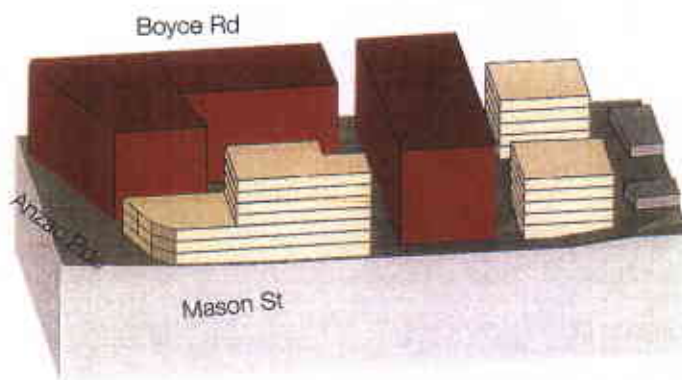


existing strata-titled
buildings unlikely to change

Existing plan



Building envelope plan



3D view of building envelopes



Block 3.3.4

Key

- 1 storey
- 2 storeys
- 3 storeys
- 4 storeys
- 5 storeys
- 6 storeys
- 7 storeys
- 8 storeys
- 9 storeys and above
- town centre boundary
- proposed building envelope
- proposed building envelope if amalgamation occurs
- preferred development parcel
- deep soil zone
- open space
- strata-titled buildings unlikely to change/approved DA's in 3-D
- proposed buildings in 3-D
- buildings outside town centre boundary in 3-D

Controls

The Primary Development Controls in Section 3.1 and the Design Controls in Part 4 of this plan apply to all blocks.

BUILDING ENVELOPE PLAN

The building envelope plan shows the **maximum** envelope. Development Applications are to demonstrate that the gross floor area occupies not more than 70% of the maximum building envelope in the case of residential floors and 80% in the case of commercial/retail floors above the ground floor.

The building envelope plan for this block shows seven storeys for lots on Anzac Parade, three storeys on the corner of Anzac Parade and Mason St to accommodate difficulties resulting from the strata-titled apartment block to its immediate south, and five storey building envelopes on Mason Street and Boyce Road.

BUILDING USE:

Along Anzac Parade

- two levels of commercial with residential above

Along Mason Street and Boyce Road

- one level of commercial with residential above (home office type uses are encouraged)

Any variation to the above should be accompanied by an assessment of the economic impact on existing commercial development in the town centre.

BUILDING DEPTH:

On all lots:

- | | |
|--------------------------|---|
| commercial/retail floors | - max 25m (max 23m glass line to glass line above the ground floor) |
| residential floors | - max 22m (max 18m glass line to glass line) |

SETBACKS:

In addition to the setback requirements listed below, the requirements in Section 3.1.6 Building Separation also apply. If any inconsistency between the maximum building envelope and setbacks arises, the setback requirements (below) and the requirements in Section 3.1.6 override the maximum building envelope.

Front setback

Along Anzac Parade	0m
Along Mason St and Boyce Rd	3m

Side setback

Corner lot (cnr Anzac Pde/Mason St)	6m setback from existing strata building; 0m from Mason St
Along Mason St and Boyce Rd	min 3m

Rear setback

All lots	min 6m.
----------	---------

DEEP SOIL ZONE + OPEN SPACE:

Min 25% of total site area is to be provided as communal open space in residential developments.

- | | |
|-----------------------------------|---|
| Along Anzac Parade | - min 1.5m wide deep soil tree planting strip along rear boundary |
| Along Mason Street and Boyce Road | - min 6m wide deep soil zone along rear boundary with substantial tree planting |

OTHER CONTROLS:

Road widening: Lots fronting Alma Road are to comply with Randwick City Council's Subdivision Code [Policy No 6.01.22] Clause C - *Subdivisions to lanes*

PART 3 **DEVELOPMENT CONTROLS**

3.2.5 Block 5

Description

Block 5 is bound by Alma Road to the north, Boyce Road to the south and Anzac Parade to the west. Existing building heights range from one to four storeys.

Objectives

- Reinforce Anzac Parade as the main street.
- Provide a soft transition in scale from the town centre along Alma Road and Boyce Road to the lower scale residential buildings on the periphery.
- Maintain the amenity of the residential buildings by providing a green buffer between the busy commercial/retail activities on Anzac Parade and low scale residential uses on properties adjacent.



Images of existing buildings on block

PART 3 DEVELOPMENT CONTROLS

3.2.5 Block 5



Block 3.3.5

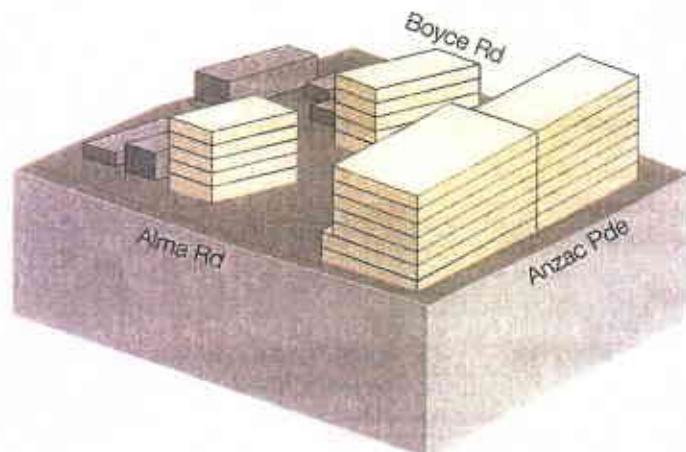
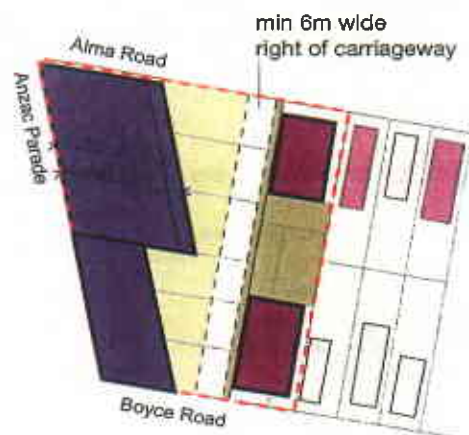
Key

- 1 storey
- 2 storeys
- 3 storeys
- 4 storeys
- 5 storeys
- 6 storeys
- 7 storeys
- 8 storeys
- 9 storeys and above
- town centre boundary
- proposed building envelope
- proposed building envelope if amalgamation occurs
- preferred development parcel
- deep soil zone
- open space
- strata-titled buildings unlikely to change/approved DA's in 3-D
- proposed buildings in 3-D
- buildings outside town centre boundary in 3-D

Existing plan



Building envelope plan



3D view of building envelopes

PART 3 DEVELOPMENT CONTROLS

3.2.5 Block 5

Controls

The Primary Development Controls in Section 3.1 and the Design Controls in Part 4 of this plan apply to all blocks.

BUILDING ENVELOPE PLAN

The building envelope plan shows the **maximum** envelope. Development Applications are to demonstrate that the gross floor area occupies not more than 70% of the maximum building envelope in the case of residential floors and 80% in the case of commercial/retail floors above the ground floor.

The building envelope plan for this block shows seven storey building envelopes along Anzac Parade and five storey building envelopes for lots along Alma Road and Boyce Road.

BUILDING USE:

Along Anzac Parade

- two floors of commercial, residential above

Along Alma Road and Boyce Road

- one floor of commercial/retail uses, residential above [home office uses encouraged]

Any variation to the above should be accompanied by an assessment of the economic impact on existing commercial development in the town centre.

BUILDING DEPTH:

Along Anzac Parade (northern lots):

commercial/retail floors

- max 25m (max 23m glass line to glass line above the ground floor)

residential floors

- max 22m (max 18m glass line to glass line)

Along Anzac Parade (southern lots):

commercial/retail and residential floors

- max 18m (15m glass line to glass line)

Along Alma Road

- max 18m (max 15m glass line to glass line)

Along Boyce Road

- max 22m (max 18m glass line to glass line)

SETBACKS:

In addition to the setback requirements listed below, the requirements in Section 3.1.6 Building Separation also apply. If any inconsistency between the maximum building envelope and setbacks arises, the setback requirements (below) and the requirements in Section 3.1.6 override the maximum building envelope.

Front setback

Along Anzac Parade	0m
Along Alma and Boyce Rds	min 3m

Side setback

Along Anzac Parade	0m
Along Alma and Boyce Rds	min 3m to lots outside town centre boundary; 0m to lots fronting Anzac Pde

Rear setback

Lots fronting Anzac Parade	min 10m
Lots fronting Alma and Boyce Rds	min 6m

PART 3 DEVELOPMENT CONTROLS

3.2.5 Block 5

DEEP SOIL ZONE + OPEN SPACE:

A minimum of 25% of total site area is to be provided as communal open space in residential developments.

Along Anzac Parade - min 1.5m wide deep soil tree planting strip along rear boundary

Along Alma and Boyce Rds - min 6m wide deep soil zone along rear boundary with substantial tree planting

VEHICLE ACCESS

All lots fronting Anzac parade are required to provide access via a minimum 6m wide rear right of carriageway.

OTHER CONTROLS:

Road widening: Lots fronting Alma Road are to comply with Randwick City Council's Subdivision Code [Policy No 6.01.22] Clause C - *Subdivisions to lanes*

PART 3 DEVELOPMENT CONTROLS

3.2.6 Block 6

Description

Block 6 is generally bound by Boyce Road to the north, Maroubra Road to the south, Anzac Parade to the east and Hannan Street to the west. This block contains the Maroubra Mall site, the biggest shopping centre in the town centre. There is an approved DA for this site. The lot on the corner of Anzac Parade and Maroubra Road, adjacent to the Maroubra Mall site does not form part of the approved DA for the Maroubra Mall. The approved design for Maroubra Mall, however, makes provision for this corner site to be connected to the redeveloped Maroubra Mall if developed in the future. This block also contains the Centrelink and Police Station sites. There are three thirteen storey towers along Maroubra Road, which are strata-titled and unlikely to change in the next 10 -15 years. There are also one to two storey residential buildings on Glanfield Street.

Objectives

- Reinforce Anzac Pde as the main street
- Reinforce Maroubra Rd as the cross street.
- Reinforce the 'Junction' of Maroubra Rd and Anzac Pde as the main focus of the Maroubra Junction Town Centre.
- To encourage a mix of commercial/retail uses within the retail core.
- Provision of an open space in the middle of the town centre away from the traffic noise and surrounded by shopping activity providing the focus for the town centre. This is proposed through the introduction of a Town Square at the entrance to the Maroubra Mall facing Anzac Pde, which will provide a visual and pedestrian link from the square to Bruce Bennetts Place to the west and across Anzac Pde to Garden St to the east.
- Provide a transition in scale from the town centre along Boyce Rd, Maroubra Rd and Glanfield St to the lower scale residential buildings on the periphery.
- Maintain the amenity of the residential buildings by providing a green buffer between the busy commercial/retail activities on Anzac Parade and low scale residential uses on properties adjacent.



Images of existing buildings on block

PART 3 DEVELOPMENT CONTROLS

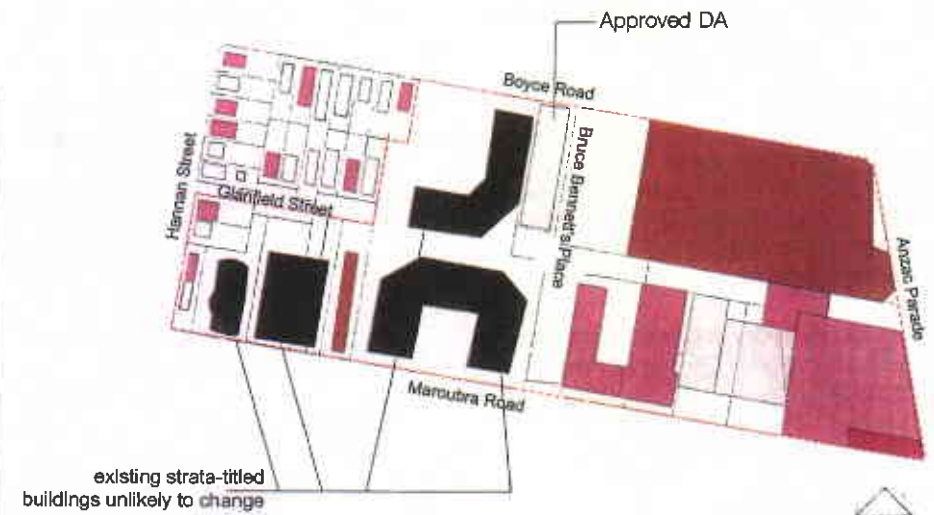
3.2.6 Block 6



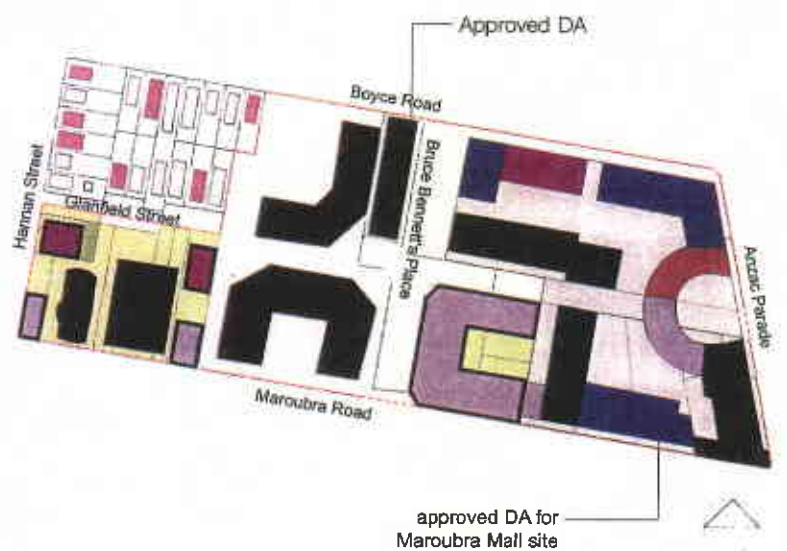
Block 3.3.6

Key

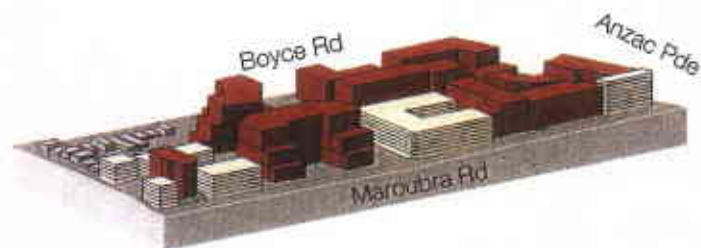
- 1 storey
- 2 storeys
- 3 storeys
- 4 storeys
- 5 storeys
- 6 storeys
- 7 storeys
- 8 storeys
- 9 storeys and above
- town centre boundary
- proposed building envelope
- proposed building envelope if amalgamation occurs
- preferred development parcel
- deep soil zone
- open space
- strata-titled buildings unlikely to change/approved DA's in 3-D
- proposed buildings in 3-D
- buildings outside town centre boundary in 3-D



Existing plan



Building envelope plan



3D view of building envelopes

PART 3 DEVELOPMENT CONTROLS

3.2.6 Block 6

Controls

The Primary Development Controls in Section 3.1 and the Design Controls in Part 4 of this plan apply to all blocks.

BUILDING ENVELOPE PLAN

The building envelope plan shows the **maximum** envelope. Development Applications are to demonstrate that the gross floor area achieved occupies not more than 70% of the maximum building envelope area in the case of residential floors and 80% in the case of commercial/retail floors above the ground floor. The building envelope plan for this block shows approved DA for Maroubra Mall site, six storey envelopes along Maroubra Rd, and five storey envelopes along Glanfield St.

Should the redevelopment not proceed as per the approved DA for the Maroubra Mall site, a redesign of the town square including non-circular configurations would be considered by Council. Any development proposals or amendments to current DAs for the Maroubra Mall site or 751 Anzac Parade (cnr Anzac Pde/ Maroubra Rd) the building envelopes shown in black have a maximum allowable height of 9 storeys.

BUILDING USE:

Along Anzac Parade	- two levels of retail/commercial, residential above
Maroubra Rd (between Anzac Pde - Bruce Bennetts Pl)	- two levels of retail/commercial, residential above
Maroubra Rd (between Bruce Bennetts Pl - Hannan St)	- all floors residential
Hannan St, Glanfield St, Bruce Bennett's Pl	- all floors residential

Any variation to the above should be accompanied by an assessment of the economic impact on existing commercial development in the town centre.

BUILDING DEPTH:

For all lots west of Bruce Bennetts Place:

commercial/retail floors	- max 22m
residential floors	- max 22m (max 18m glass line to glass line)

For all lots east of Bruce Bennetts Place:

commercial/retail floors	- max 25m (max 23m glass line to glass line above the ground floor)
residential floors	- max 22m (max 18m glass line to glass line)

SETBACKS:

In addition to the setback requirements listed below, the requirements in Section 3.1.6 Building Separation also apply. If any inconsistency between the maximum building envelope and setbacks arises, the setback requirements (below) and the requirements in Section 3.1.6 override the maximum building envelope.

Front Setback

Maroubra Rd and Bruce Bennetts Pl	0m
Hannan and Glanfield Sts	3m

Side Setback

Maroubra Rd and Bruce Bennetts Pl	0m
Hannan and Glanfield Sts	1.5m; 0m with existing strata title lots

Rear Setback

Lots fronting Hannan St	6m
-------------------------	----

DEEP SOIL ZONE + OPEN SPACE:

Min 25% of total site area is to be provided as communal open space in residential development.

Hannan Street - min 6m wide deep soil zone at rear boundary, substantial tree planting

OTHER CONTROLS:

Road widening: Lots on Glanfield Street are to comply with Council's Subdivision Code [Policy No 6.01.22] Clause C - *Subdivisions to lanes*

PART 3 DEVELOPMENT CONTROLS

3.2.7 Block 7



Description

Block 7 is bound by Boyce Road to the north, Green Street to the south, Garden Street to the east and Anzac Parade to the west. It contains a seven storey building on Anzac Parade, and lower residential buildings (one to four storeys) on the secondary streets. A number of lots have dual frontage (ie frontage to both Boyce Road and Green Street).

Objectives

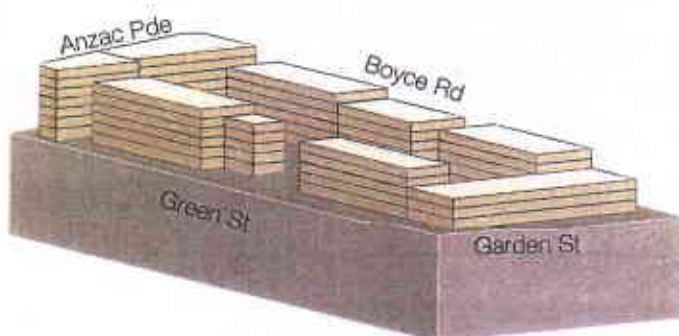
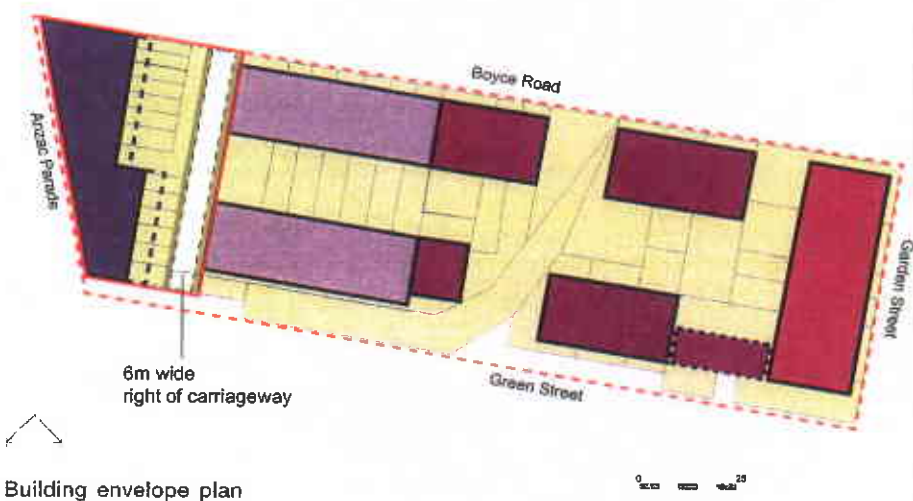
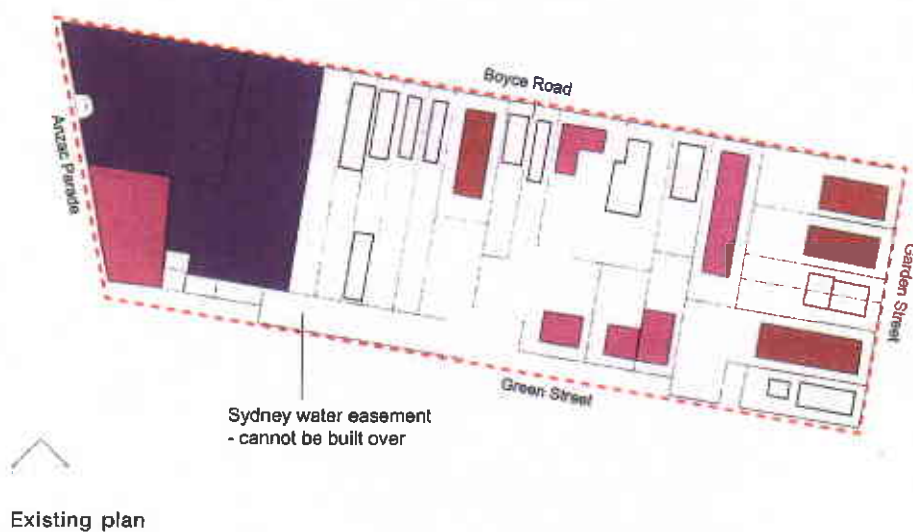
- Reinforce Anzac Parade as the main street
- To encourage a mix of commercial/retail uses within the retail core.
- Provide a transition in scale from the town centre along Boyce Road, Green Street and Garden St to the lower scale residential buildings on the periphery.
- Maintain the amenity of the residential buildings by providing a green buffer between the busy commercial/retail activities on Anzac Parade and low scale residential uses on properties adjacent.
- Development of Green Street is to promote an intimate scale shopping and café laneway.



Images of existing buildings on block

PART 3 DEVELOPMENT CONTROLS

3.2.7 Block 7



Key

- 1 storey
- 2 storeys
- 3 storeys
- 4 storeys
- 5 storeys
- 6 storeys
- 7 storeys
- 8 storeys
- 9 storeys and above
- town centre boundary
- proposed building envelope
- proposed building envelope if amalgamation occurs
- preferred development parcel
- deep soil zone
- open space
- strata-titled buildings unlikely to change/approved DA's in 3-D
- proposed buildings in 3-D
- buildings outside town centre boundary in 3-D

Controls

The Primary Development Controls in Section 3.1.6 and the Design Controls in Part 4 of this plan apply to all blocks.

BUILDING ENVELOPE PLAN

The building envelope plan shows the **maximum** envelope. Development Applications are to demonstrate that the gross floor area occupies not **more** than 70% of the maximum building envelope in the case of residential floors and 80% in the case of commercial/retail floors above the ground floor.

The building envelope plan for this block shows seven storey building envelope along Anzac Pde, and envelopes ranging from three to six storeys along Boyce Rd, Green St and Garden St.

BUILDING USE:

Along Anzac Parade

- two floors of retail/commercial with residential above

Along secondary streets

- one floor of commercial with residential above (home office type uses encouraged)

Any variation to the above should be accompanied by an assessment of the economic impact on existing commercial development in the town centre.

BUILDING DEPTH:

On Anzac Parade:

commercial/retail floors

- max 25m (max 23m glass line to glass line above the ground floor)

residential floors

- max 22m (max 18m glass line to glass line)

On Boyce Rd, Green St and Garden St:

commercial/retail floors

- max 18m (max 16m glass line to glass line)

residential floors

- max 18m (15m glass line to glass line)

On Green Street - additional envelope if amalgamation occurs

- max 15m (12m glass line to glass line)

SETBACKS:

In addition to the setback requirements listed below, the requirements in Section 3.1.6 Building Separation also apply. If any inconsistency between the maximum building envelope and setbacks arises, the setback requirements (below) and the requirements in Section 3.1.6 override the maximum building envelope.

Front setback

Along Anzac Parade	0m
Along Boyce Road	min 3m
Along Green Street	min 2m*

* Note: a greater front setback is required in Green Street to allow for wider footpaths suited to cafe uses.

Side setback

Along Anzac Parade	0m
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Rear setback

Along Anzac Parade	min 10m
Along Garden Street	min 6m

VEHICLE ACCESS

Lots with frontage to both Boyce Road and Green Street, are to provide vehicular access via Boyce Road only.

PART 3 **DEVELOPMENT CONTROLS**

3.2.7 Block 7

DEEP SOIL ZONE + OPEN SPACE:

Min 25% of total site area is to be provided as communal open space in residential developments.

For lots with frontage to Anzac Parade a min 1.5m wide deep soil tree planting strip along the rear boundary is to be provided.

OTHER CONTROLS:

Road widening: Lots on Green Street are to comply with Randwick City Council's Subdivision Code [Policy No 6.01.22] Clause C - *Subdivisions to lanes*.

PART 3 DEVELOPMENT CONTROLS

3.2.8 Block 8



Description

Block 8 is bound by Green Street to the north, Maroubra Road to the south, Garden Street to the east and Anzac Parade to the west. This block contains fairly new and tall strata buildings (seven to ten storeys), which are unlikely to change in the next 5-10 years. There are also lower buildings which range from one to four storeys along Maroubra Road and Green Street.

Objectives

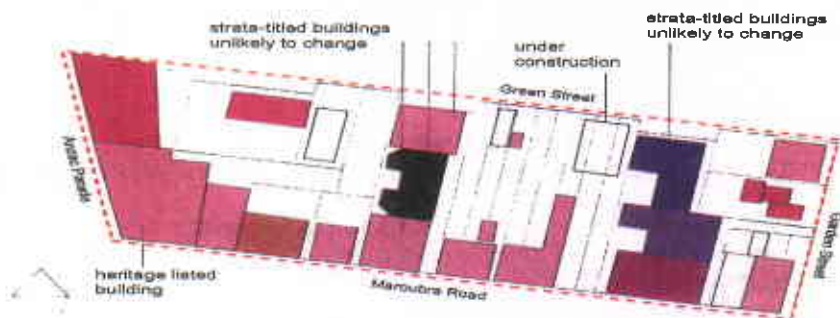
- Reinforce Anzac Parade as the main street
- Reinforce Maroubra Road as the cross street
- Reinforce the 'Junction' of Maroubra Road and Anzac Parade as the main focus of the Maroubra Junction Town Centre.
- To encourage a mix of commercial/retail uses in the retail core area.
- Provide a transition in scale from the town centre along Green Street and Garden Street to the lower scale residential buildings on the periphery.
- Maintain the amenity of the residential buildings by providing a green buffer between the busy commercial/retail activities on Anzac Parade and low scale residential uses on properties adjacent.
- Development of Green Street is to promote an intimate scale shopping and café laneway.
- Development sensitive in scale and character to Dudleys Corner (heritage building).



Images of existing buildings on block

PART 3 DEVELOPMENT CONTROLS

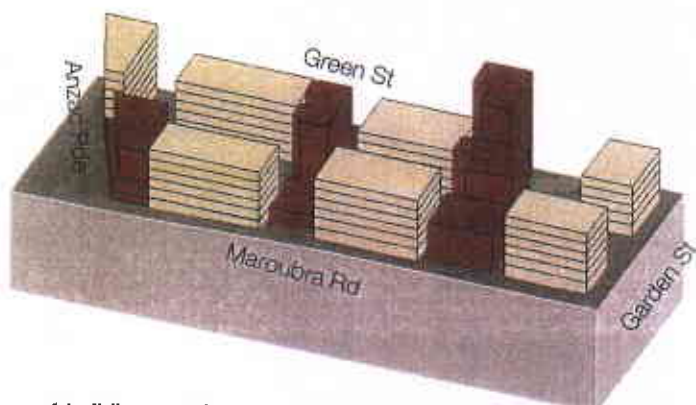
3.2.8 Block 8



Existing plan



Building envelope plan



3D view of building envelopes



Block 3.2.8

Key

- 1 storey
- 2 storeys
- 3 storeys
- 4 storeys
- 5 storeys
- 6 storeys
- 7 storeys
- 8 storeys
- 9 storeys and above
- town centre boundary
- proposed building envelope
- proposed building envelope if amalgamation occurs
- preferred development parcel
- deep soil zone
- open space
- strata-titled buildings unlikely to change/approved DA's in 3-D
- proposed buildings in 3-D
- buildings outside town centre boundary in 3-D

Controls

The Primary Development Controls in Section 3.1 and the Design Controls in Part 4 of this plan apply to all blocks.

BUILDING ENVELOPE PLAN

The building envelope plan shows the **maximum** envelope. Development Applications are to demonstrate that the gross floor area occupies not more than 70% of the maximum building envelope in the case of residential floors and 80% in the case of commercial/retail floors above the ground floor.

The building envelope plan for this block shows seven storey building envelopes along Anzac Parade, six along Maroubra Road, and ranging from six to five along Green and Garden Streets.

BUILDING USE:

Along Anzac Pde, Maroubra Rd - two floors of retail/commercial with residential above
Along Green St - one floor of commercial/retail with residential above.

Any variation to the above should be accompanied by an assessment of the economic impact on existing commercial development in the town centre.

BUILDING DEPTH:

Along Anzac Parade (excluding Dudleys Corner)
All floors

- maximum envelope depth is set by the 10 metre rear setback

Along Maroubra Road and Green St - middle sites

- max 22m (max 18m glass line to glass line)

Along Maroubra Road and Green St - end sites,
Garden Street and Anzac Parade

- max 18m (max 15m glass line to glass line)

SETBACKS:

In addition to the setback requirements listed below, the requirements in Section 3.1.6 Building Separation also apply. If any inconsistency between the maximum building envelope and setbacks arises, the setback requirements (below) and the requirements in Section 3.1.6 override the maximum building envelope.

Front setback

Along Anzac Pde, Maroubra Rd and Garden St 0m

Along Green Street min 2m

Side Setback

Green St and Maroubra Rd 1.5m from existing strata buildings
All others 0m

Rear setback

Lots fronting Anzac Pde min 10m

DEEP SOIL ZONE + OPEN SPACE:

Min 25% of total site area is to be provided as communal open space in residential developments.

For lots with frontage to Anzac Parade - min 1.5m wide deep soil tree planting strip along rear boundary

For lots with frontage to secondary streets - substantial tree planting in the middle of the lot is required

PART 3 DEVELOPMENT CONTROLS

3.2.8 Block 8

VEHICLE ACCESS

All lots fronting Anzac Parade are required to provide vehicle access via a minimum 6m wide rear right of carriageway.

OTHER CONTROLS:

Road widening: Lots on Green Street are to comply with Council's Subdivision Code [Policy No 6.01.22] Clause C - *Subdivisions to lanes*.

PART 3 DEVELOPMENT CONTROLS

3.2.9 Block 9



Description

Block 9 is bound by Maroubra Road to the north, Ferguson Street to the east and Robey Street to the west. Existing buildings on the block are one to two storeys high. The southern adjoining boundary of the block contains an electricity substation.

Objectives

- Reinforce Maroubra Road as the primary cross street.
- To encourage a mix of commercial/retail uses within the retail core area.
- Provide a transition in scale from the town centre along Ferguson Street and Robey Street to the lower scale residential buildings on the periphery.

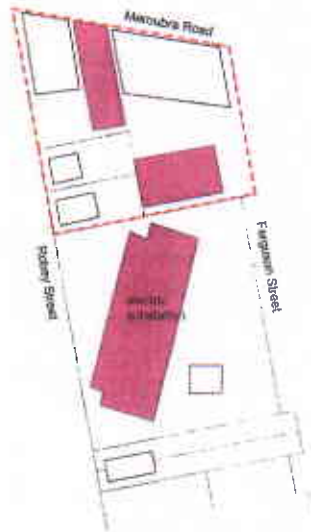


Images of existing buildings on block

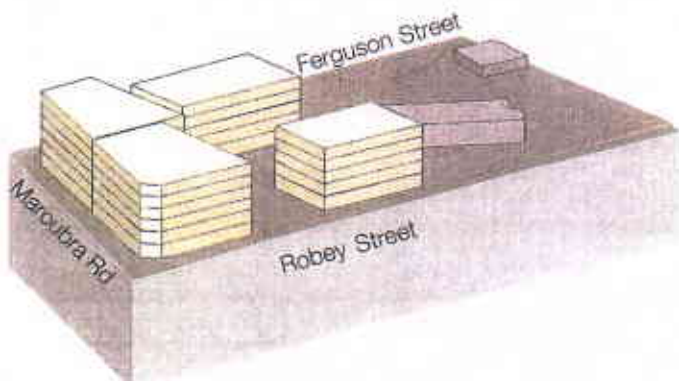
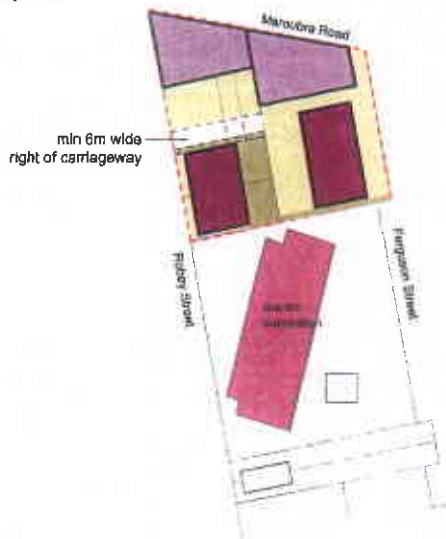
PART 3 DEVELOPMENT CONTROLS

3.2.9 Block 9

Existing plan



Building envelope plan



3D view of building envelopes



Block 3.2.9

Key

- 1 storey
- 2 storeys
- 3 storeys
- 4 storeys
- 5 storeys
- 6 storeys
- 7 storeys
- 8 storeys
- 9 storeys and above
- town centre boundary
- proposed building envelope
- proposed building envelope if amalgamation occurs
- preferred development parcel
- deep soil zone
- open space
- strata-titled buildings unlikely to change/approved DA's in 3-D
- proposed buildings in 3-D
- buildings outside town centre boundary in 3-D

Controls

The Primary Development Controls in Section 3.1 and the Design Controls in Part 4 of this plan apply to all blocks.

BUILDING ENVELOPE PLAN

The building envelope plan shows the **maximum** envelope. Development Applications are to demonstrate that the gross floor area occupies not more than 70% of the maximum building envelope in the case of residential floors and 80% in the case of commercial/retail floors above the ground floor.

The building envelope plan for this block shows six storey envelopes for lots on Maroubra Rd and five storey envelopes for all lots on Ferguson St and Robey St.

BUILDING USE:

Along Maroubra Road

- two floors of commercial with residential above

Along Robey Street and Ferguson Street

- one floor of commercial with residential above [home office uses encouraged]

Any variation to the above should be accompanied by an assessment of the economic impact on existing commercial development in the town centre.

BUILDING DEPTH:

Along Maroubra Road:

commercial/retail floors

- max 25m (max 23m glass line to glass line above ground floor)

residential floors

- max 22m (max 18m glass line to glass line)

Along Robey Street and Ferguson Street:

all floors

- max 18m (max 15m glass line to glass line)

SETBACKS:

In addition to the setback requirements listed below, the requirements in Section 3.1.6 Building Separation also apply. If any inconsistency between the maximum building envelope and setbacks arises, the setback requirements (below) and the requirements in Section 3.1.6 override the maximum building envelope.

Front setback

Along Maroubra Road
Along Robey and Ferguson Sts

0m
min 3m

Side setback

Along Maroubra Road
Along Robey and Ferguson Sts

0m
min 1.5m

Rear setback

Lots fronting Maroubra Road
Lots fronting Robey and Ferguson Sts

min 10m
min 6m

DEEP SOIL ZONE + OPEN SPACE:

Min 25% of total site area is to be provided as communal open space in residential developments.

For lots with frontage to Maroubra Road - min 1.5m wide deep soil tree planting strip along rear boundary.

PART 3 **DEVELOPMENT CONTROLS**

3.2.9 Block 9

VEHICLE ACCESS

Lots fronting Maroubra Road are required to provide vehicle access via a minimum 6m wide rear right of carriageway.

OTHER CONTROLS:

Road widening: Lots on Ferguson Street are to comply with Randwick City Council's Subdivision Code [Policy No 6.01.22] Clause C - *Subdivisions to lanes*.

PART 3 DEVELOPMENT CONTROLS

3.2.10 Block 10



Description

Block 10 is bound by Maroubra Road to the north, Anzac Parade to the east and Ferguson Street to the west. There are some existing strata-titled buildings, six to eight storeys high, along Anzac Parade which are unlikely to change in the next 10-15 years, and one to five storey buildings along Maroubra Road and Anzac Parade. There are two heritage buildings on this block: the Maroubra Hotel on Maroubra Road and 817 Anzac Parade, which must be considered when proposing any future development in their vicinity.

Objective

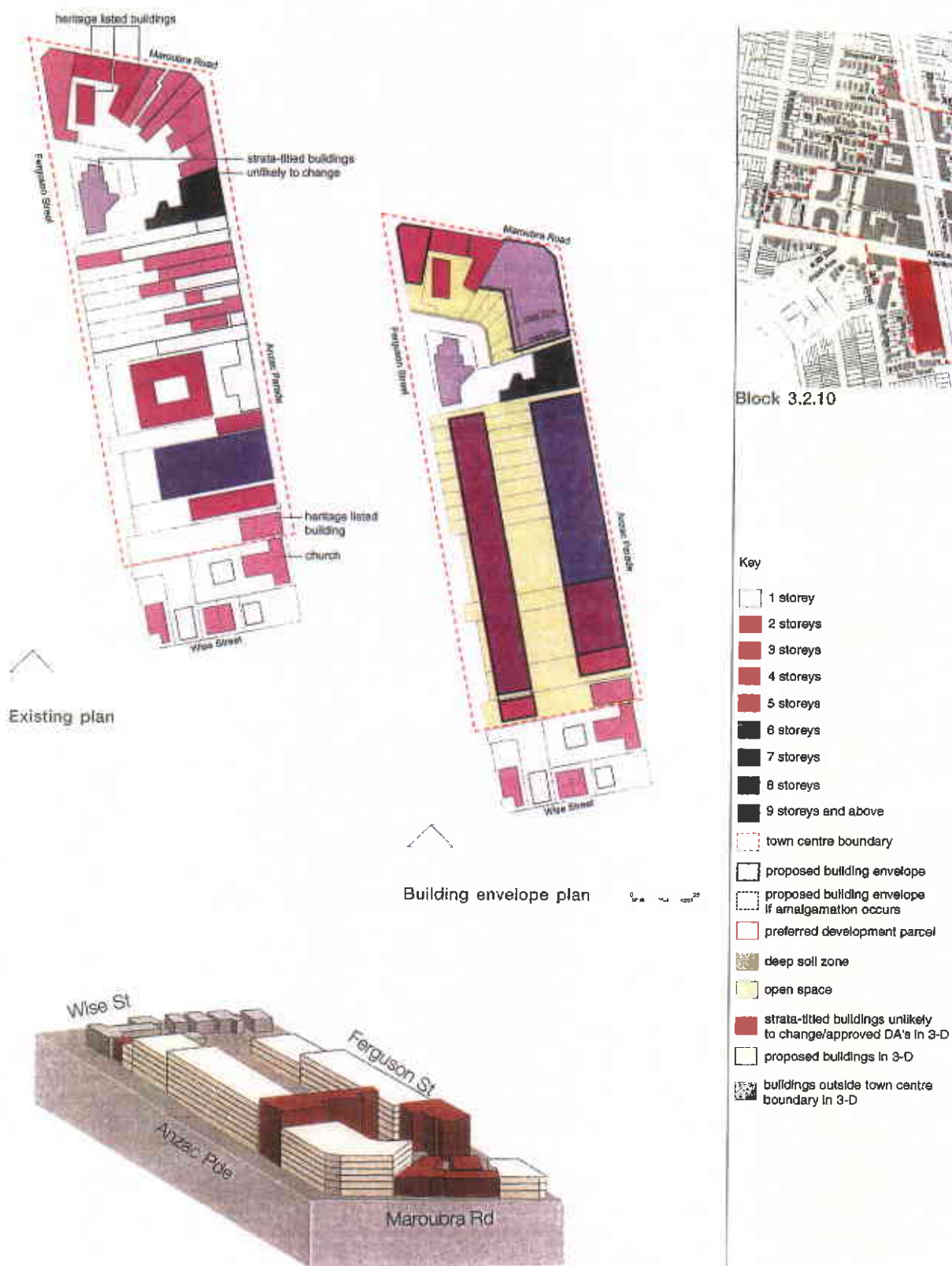
- Reinforce Anzac Parade as the main street.
- Reinforce Maroubra Road as the primary cross street.
- Reinforce the 'Junction' of Maroubra Road and Anzac Parade as the main focus of the Maroubra Junction Town Centre.
- To encourage a mix of commercial/retail uses within the retail core area.
- Provide a transition in scale from the town centre along Ferguson Street to the lower scale residential buildings on the periphery.
- Development sensitive in scale and character to the heritage buildings on this block.



Images of existing buildings on block

PART 3 DEVELOPMENT CONTROLS

3.2.10 Block 10



3D view of building envelopes

Controls

The Primary Development Controls in Section 3.1 and the Design Controls in Part 4 of this plan apply to all blocks.

BUILDING ENVELOPE PLAN

The building envelope plan shows the **maximum** envelope. Development Applications are to demonstrate that the gross floor area occupies not more than 70% of the maximum building envelope in the case of residential floors and 80% in the case of commercial/retail floors above the ground floor.

The building envelope plan for this block shows envelopes on Anzac Parade of five to seven storeys, stepping down to three storeys adjacent to heritage buildings, envelopes of three to five storeys along Ferguson St, and six storeys on corner of Maroubra Rd and Anzac Parade.

BUILDING USE:

Along Anzac Parade and Maroubra Road on lots adjacent to heritage building:

- two floors of retail/commercial with residential above

Along Anzac Parade south of strata-titled building (767-771 Anzac Parade):

- one floor of retail/commercial with residential above

Along Ferguson Street:

- one floor of commercial with residential above (home office uses encouraged)

Any variation to the above should be accompanied by an assessment of the economic impact on existing commercial development in the town centre.

BUILDING DEPTH:

Corner of Anzac Parade and Maroubra Road:
commercial/retail floors

- max 25m (max 23m glass line to glass line above ground floor)

residential floors

- max 22m (max 18m glass line to glass line)

Along Anzac Parade (remainder):

commercial/retail floors

- max 22m (max 20m glass line to glass line)

residential floors

- max 22m (max 18m glass line to glass line)

Along Ferguson Street:

all floors

- max 15m (max 12m glass line to glass line)

SETBACKS:

In addition to the setback requirements listed below, the requirements in Section 3.1.6 Building Separation also apply. If any inconsistency between the maximum building envelope and setbacks arises, the setback requirements (below) and the requirements in Section 3.1.6 override the maximum building envelope.

Front setback

Along Anzac Pde, Maroubra Rd	0m
Along Ferguson St	min 3m

PART 3 DEVELOPMENT CONTROLS

3.2.10 Block 10

Side setback

- Anzac Pde, Maroubra Rd 0m;
min 3m from existing strata-title buildings and from
heritage building (817 Anzac Pde) at southern end of
the block
- Along Ferguson St 0m;
min 3m from existing strata-title buildings
min 1.5m from boundary of 817 Anzac Parade if
amalgamation does not occur with adjacent property and
0m if it does.
min 1.5m from the boundary of lots fronting Wise Street.

DEEP SOIL ZONE + OPEN SPACE:

Min 25% of total site area is to be provided as communal open space in residential developments.

For lots with frontage to Maroubra Road

- min 1.5m wide tree planting strip at rear boundary

OTHER CONTROLS:

Road widening: Lots on Ferguson Street are to comply with Randwick City Council's Subdivision Code [Policy No 6.01.22] Clause C - *Subdivisions to lanes*.

PART 3 **DEVELOPMENT CONTROLS**

3.2.11 Block 11



Description

Block 11 is bound by Maroubra Road to the north, Garden Lane to the south, Garden Street to the east and Anzac Parade to the west. Existing building heights range from one to three storeys.

Objectives

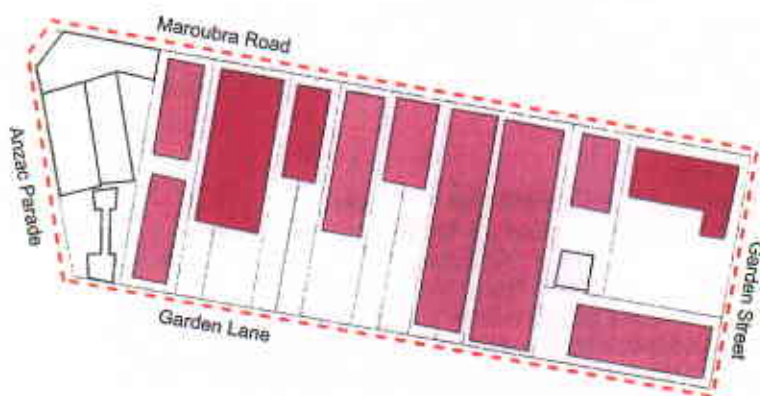
- Reinforce Anzac Parade as the main street
- Reinforce Maroubra Road as the primary cross street
- Reinforce the 'Junction' of Maroubra Road and Anzac Parade as the main focus of the Maroubra Junction Town Centre.
- To encourage a mix of commercial/retail uses within the retail core.
- Provide a transition in scale from the town centre along Garden Street and Garden Lane to the lower scale residential buildings on the periphery.



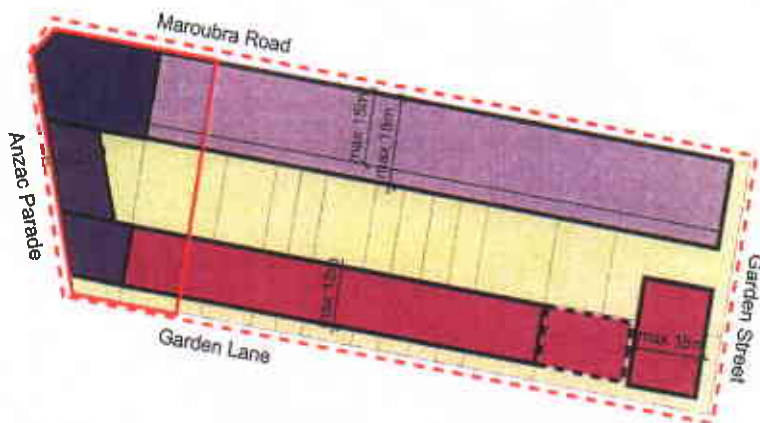
Images of existing buildings on block

PART 3 DEVELOPMENT CONTROLS

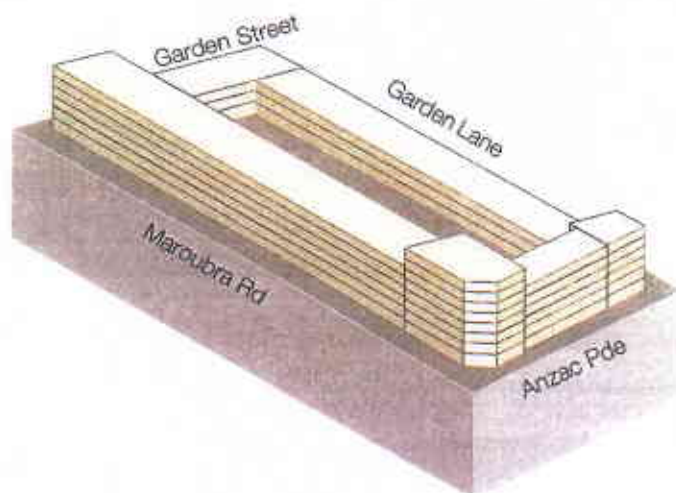
3.2.11 Block 11



Existing plan



Building envelope plan



3D view of building envelopes



Block 3.2.11

Key

- 1 storey
- 2 storeys
- 3 storeys
- 4 storeys
- 5 storeys
- 6 storeys
- 7 storeys
- 8 storeys
- 9 storeys and above
- town centre boundary
- proposed building envelope
- proposed building envelope if amalgamation occurs
- preferred development parcel
- deep soil zone
- open space
- strata-titled buildings unlikely to change/approved DA's in 3-D
- proposed buildings in 3-D
- buildings outside town centre boundary in 3-D

Controls

The Primary Development Controls in Section 3.1 and the Design Controls in Part 4 of this plan apply to all blocks.

BUILDING ENVELOPE PLAN

The building envelope plan shows the **maximum** envelope. Development Applications are to demonstrate that the gross floor area occupies not more than 70% of the maximum building envelope in the case of residential floors and 80% in the case of commercial/retail floors above the ground floor.

The building envelope plan for this block shows seven storeys on Anzac Parade, six on Maroubra Road and three storeys on Garden St and Garden Lane. The corner of Anzac Parade and Maroubra Road has an eight storey envelope to reinforce the importance of the 'Junction'.

BUILDING USE:

Along Anzac Parade

- two floors of retail/commercial with residential above

Along Maroubra Road

- two floors of retail/commercial with residential above

Along Garden Street and Garden Lane

- one floor of retail/commercial with residential above (home office uses encouraged)

Any variation to the above should be accompanied by an assessment of the economic impact on existing commercial development in the town centre.

BUILDING DEPTH:

Along Anzac Parade and Garden Lane:

commercial/retail floors

- max 12m (max 10m glass line to glass line above ground floor)

residential floors

- max 12m (max 9m glass line to glass line)

Along Maroubra Road:

commercial/retail floors

- max 18m (max 16m glass line to glass line)

residential floors

- max 15m (max 12m glass line to glass line)

Along Garden Street:

retail/commercial floors

- max 15m (max 13m glass line to glass line)

residential floors

- max 15m (max 12m glass line to glass line)

SETBACKS:

In addition to the setback requirements listed below, the requirements in Section 3.1.6 Building Separation also apply. If any inconsistency between the maximum building envelope and setbacks arises, the setback requirements (below) and the requirements in Section 3.1.6 override the maximum building envelope.
[see over page for specific setback requirements]

PART 3 DEVELOPMENT CONTROLS

3.2.11 Block 11

Front setback

Along Anzac Pde and Maroubra Rd	0m
Along Garden St and Garden Lane	min 3m

Side setback

All	0m
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DEEP SOIL ZONE + OPEN SPACE:

Min 25% of total site area is to be provided as communal open space in residential developments.

PART 3 **DEVELOPMENT CONTROLS**

3.2.12 Block 12



Description

Block 12 is bound by Garden Lane to the north, Haig Street to the south, Byng Lane to the east and Anzac Parade to the west. The block contains one to three storey buildings. It has a strata-titled building on the corner of Byng Lane and Haig Street, which is unlikely to change in the next 5-10 years.

Objectives

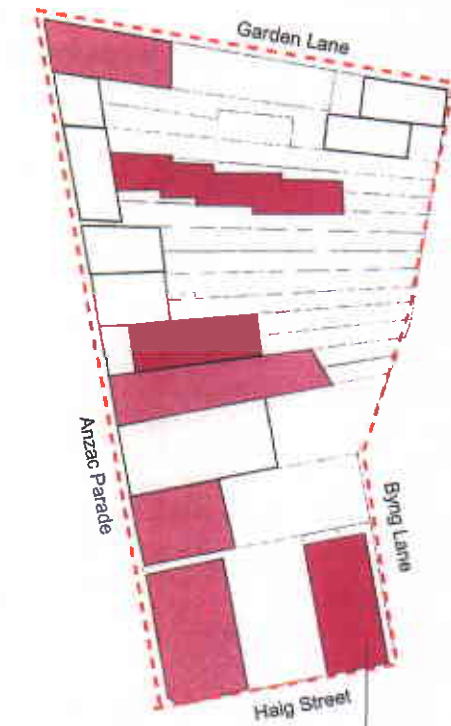
- Reinforce Anzac Parade as the main street
- Provide a transition in scale from the town centre along Garden Lane and Byng Lane to the lower scale residential buildings on the periphery.



Images of existing buildings on block

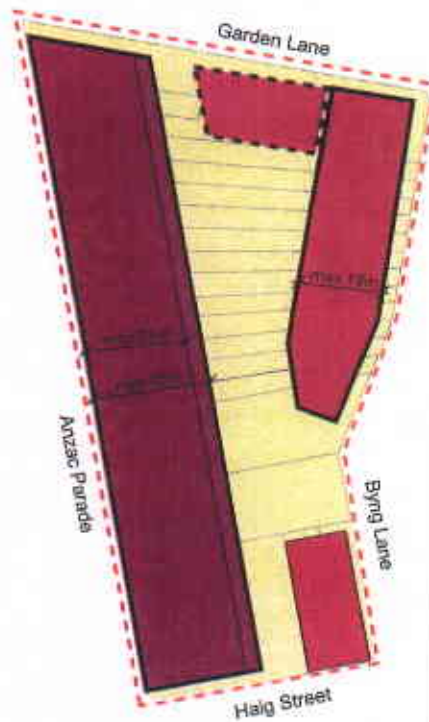
PART 3 DEVELOPMENT CONTROLS

3.2.12 Block 12

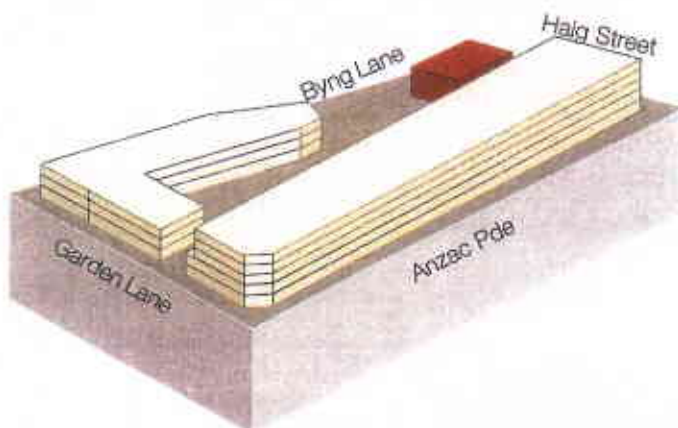


Existing plan

strata-titled building unlikely to change



Building envelope plan



3D view of building envelopes



Block 3.2.12

Key

- 1 storey
- 2 storeys
- 3 storeys
- 4 storeys
- 5 storeys
- 6 storeys
- 7 storeys
- 8 storeys
- 9 storeys and above
- town centre boundary
- proposed building envelope
- proposed building envelope if amalgamation occurs
- preferred development parcel
- deep soil zone
- open space
- strata-titled buildings unlikely to change/approved DA's in 3-D
- proposed buildings in 3-D
- buildings outside town centre boundary in 3-D

Controls

The Primary Development Controls in Section 3.1 and the Design Controls in Part 4 of this plan apply to all blocks.

BUILDING ENVELOPE PLAN

The building envelope plan shows the **maximum** envelope. Development Applications are to demonstrate that the gross floor area occupies not more than 70% of the maximum building envelope in the case of residential floors and 80% in the case of commercial/retail floors above the ground floor.

The building envelope plan for this block shows five storeys along Anzac Parade and three storeys on Garden and Byng Lanes.

BUILDING USE:

Along Anzac Parade

- one floor of commercial/retail with residential above

Along Haig Street, Garden Lane and Byng Lane

- one floor of commercial (home office uses encouraged) with residential above

Any variation to the above should be accompanied by an assessment of the economic impact on existing commercial development in the town centre.

BUILDING DEPTH:

Along Anzac Parade:

commercial/retail floors

- max 25m (max 23m glass line to glass line above the ground floor)

residential floors

- max 22m (max 18m glass line to glass line)

Along Garden Lane and Byng Lane:

retail/commercial floors

- max 18m (max 16m glass line to glass line)

residential floors

- max 18m (max 15m glass line to glass line)

SETBACKS:

In addition to the setback requirements listed below, the requirements in Section 3.1.6 Building Separation also apply. If any inconsistency between the maximum building envelope and setbacks arises, the setback requirements (below) and the requirements in Section 3.1.6 override the maximum building envelope.

Front setback

Anzac Parade	0m
Haig St, Garden and Byng Lanes	min 3m

Side setback

Along Anzac Parade	0m
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DEEP SOIL ZONE + OPEN SPACE:

Min 25% of total site area is to be provided as communal open space in residential developments.

PART 4 DESIGN CONTROLS

4.0 Using the Design Controls

INTRODUCTION

This part of the DCP outlines objectives and performance criteria that guide the design of buildings. These performance criteria are an additional layer of controls to those outlined in the 'Block-by-Block Controls' in Part 3 of this document.

All development applications must satisfy the performance criteria outlined in this section.

OBJECTIVES

These outline the design intention/intentions. Diagrams have been included to illustrate the design objectives. Compliance with the objectives must be demonstrated as part of a development application.

PERFORMANCE CRITERIA

The performance criteria demonstrate ways in which the objectives may be achieved, and these may not all be applicable to every site.

These criteria directly relate to the controls outlined in Part 3 [Block-by-Block Controls] of this document. All development applications will be reviewed against the performance criteria outlined in this part of the DCP.

PART 4 DESIGN CONTROLS

4.1 Site Design

4.1.1 DEEP SOIL ZONES

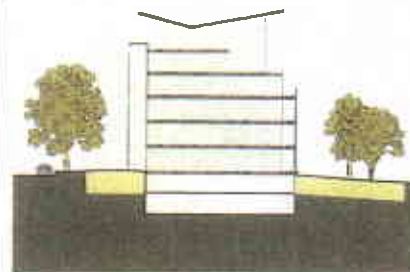
Deep soil zones are areas of natural ground with relatively natural soil profiles retained within a development. Deep soil zones are areas of the site that are not to be built upon, and are not to have underground carparking located underneath. Deep soil zones have important environmental benefits, which include promoting healthy growth of large canopy trees, protecting existing mature trees and allowing infiltration of rain water to the water table and thereby reducing stormwater runoff.

Objectives

- To improve the amenity of developments through the retention and planting of trees that are or will grow to a large or medium size.
- To assist with management of the water table.
- To assist with management of water quality.

Performance Criteria

- i. As a minimum, deep soil zones are to be provided wherever indicated in Part 3 Block-by-Block Controls, and are to be considered for all development.
- ii. Deep soil zones should accommodate existing mature trees, as well as allowing for the planting of trees/shrubs that will grow to be mature trees.
- iii. Deep soil zones are to have a pervious surface.
- iv. Deep soil zones are not to be built upon or have underground carparking areas underneath.



Car parking should be located under the building footprint to promote deep soil zones in the middle of the block.



A picket and pillar fence defines the street boundary, clearly demarcating 'public' and 'private' space.



Materials and planting are combined in a good ratio of solid to void, to enhance visual amenity of the street, whilst ensuring privacy and security to the residents.

4.1.2 FENCES + WALLS

Fences and walls include all built vertical landscaping elements that define boundaries between spaces or a change in level. The design of fences and walls has an impact on the real and perceived safety and security of residents as well as on the amenity of the public domain and the identity of the development. Fences will primarily be along side boundaries or areas of private open space.

Objectives

- To define the edges between public and private land.
- To define the boundaries between areas within the development having different functions or owners.
- To provide privacy and security.
- To contribute positively to the public domain.

Performance Criteria

- i. Private and public domain are to be clearly defined by fences and walls which provide privacy and security whilst not eliminating views, outlook, light and air.
- ii. Fences are to contribute to the amenity, beauty and useability of private and communal open spaces by incorporating design elements such as benches/seats, planter boxes, pergolas and trellises, barbeques, water features etc.
- iii. The amenity of the public domain is to be retained and enhanced by:
 - avoiding the use of continuous blank walls at street level
 - using planting to soften the edges of any raised terraces to the street, such as over sub-basement car parking, and reduce their apparent scale.
- iv. Fences are to be a maximum height of 1.2 metres. Variations may be permitted dependant upon the context, siting, safety, privacy and design of the building.
- v. Fences and retaining walls are to be detailed on the plans and elevations accompanying the development application.
- vi. Where a masterplan is required, fencing details are to be shown on the masterplan for the site.

PART 4 DESIGN CONTROLS

4.1 Site Design

4.1.3 LANDSCAPE DESIGN

Landscaping has the potential to contribute to the character and visual quality of the town centre. It is fundamental to the design of residential flat development. Well designed buildings and landscaped areas work together, resulting in greater aesthetic quality and amenity for occupants and the adjoining public domain. Open space should not be generated by 'left-over' spaces resulting from building siting and location.

Landscape design builds on the existing site's natural and cultural features to contribute to a development's amenity. Landscape design should maximise useability, privacy and social opportunity, equitable access and respect for neighbours' amenity.

Objectives

- To enhance the amenity, views and outlook within developments.
- To preserve and enhance native wildlife populations and habitat through appropriate planting of local native vegetation.
- To improve the microclimate and solar performance within the development.
- To create interest, variety and focal points.
- To improve stormwater quality and reduce the quantity of stormwater runoff.
- To improve urban air quality.

Performance Criteria

- i. All applications are to include a **landscaping plan** prepared by a qualified landscape architect.
- ii. Ensure that landscape design:
 - is in scale with the development and relates to building form
 - relates to the street planting and the streetscape
 - facilitates stormwater infiltration through the use of permeable surfaces
 - can be easily maintained
- iii. Developments are to contribute to streetscape and public domain through landscaping which visually softens the bulk of large developments.
- iv. Ensure amenity of private and communal open spaces by:
 - providing shade from the sun and shelter from wind (via trees, landscaping, structures etc)
 - providing accessible routes through the space and between buildings
- v. Use landscape design to improve the energy and solar efficiency of apartments and the microclimate of open spaces by:
 - locating trees for shading low-angle sun on the eastern and western sides of buildings
 - using trees appropriately so as not to cast a shadow over solar collectors at any time of the year
 - using deciduous trees for shading of windows and open space areas in summer and allowing solar access in winter
 - locating evergreen trees well **away** from buildings to allow winter sun access
 - using varying heights of trees/shrubs to shade walls and windows where necessary
 - locating pergolas on balconies and courtyards to create shaded areas in summer
- vi. Landscape design is to minimise water consumption by:
 - including local native plants with low water demand
 - plants suited to the Eastern Suburbs coastal environment
 - using plants with low fertiliser requirements
- vii. Mulching and multi-storey planting is encouraged.



The site's topography has been used to create a series of smaller more intimate spaces using retaining walls and planter beds, which step down across the site.



Water features provide relief in urban environments.

Refer to Section 4.1.5 for more detail on Planting on Structures.

Refer to Randwick Council's *Local Native Plants for Sydney's Eastern Suburbs* brochure, and Council's *Street Tree Master Plan* for guidelines on suitable species.

PART 4 DESIGN CONTROLS

4.1 Site Design



A central courtyard with mature trees, lawn and a swimming pool provides a pleasant microclimate from surrounding apartments in a dense environment.



A minimum of 25% of the site area in residential developments is to be provided as communal open space for residents.



Courtyard gardens provide private open space for residents within a larger common landscaped space.

4.1.4 OPEN SPACE

Open space is breathing space for residential flat development. It may be **public** (accessible and useable by the general public), **communal** (shared by all residents of a development) or **private** (associated with a single dwelling and for the exclusive use of the occupants). The primary function of open space is to provide amenity through:

- landscape design
- daylight access
- visual privacy
- opportunities for recreation and social activities
- water cycle management

Objectives

- To provide an area on site that enables soft landscaping and deep soil planting.
- To ensure that communal open space is consolidated and designed to be useable and attractive.
- To provide a pleasant outlook.
- To provide residents with passive and active recreational opportunities.

Performance Criteria

(a) COMMUNAL OPEN SPACE

- 25% of the total site area is to be communal open space.**
- Communal open space is to:
 - be located so that it forms a focus of the development and provides a landscape buffer between buildings
 - provide a pleasant outlook
 - be located so that solar access is maximised
 - be consolidated into useable areas
 - demonstrate that its size and dimensions allow for variety of uses, including active and passive recreation.
- Communal open space may be provided on a podium or roof(s).
- Communal open space design, is to provide shelter from wind.
- Communal open space is to provide environmental benefits including habitat for native fauna, native vegetation and mature trees, and rainwater percolation.
- Ventilation duct outlets from basement car parks are to be carefully located.
- External areas for clothes drying, screened from the public domain, are to be provided. These should be located so they receive sunlight.

(b) PRIVATE OPEN SPACE

- All dwellings are to have access to a private, useable, functional area of open space directly accessible from the main living area.
- Private open space of apartments at ground level, or similar space on a structure, (such as on a podium over a car park), is to have a minimum area of 25m², and a minimum dimension in one direction of 4 metres.

Refer to Sections 4.3.1 and 4.4.3 for more details on **visual privacy** and **balcony design**.

PART 4 DESIGN CONTROLS

4.1 Site Design

4.1.5 PLANTING ON STRUCTURES

Landscaping on top of basement car parks, on podiums and on roofs can make a significant contribution to the amenity of the building, and particularly for the dwellings that overlook these spaces as they soften expanses of hard surfaces. The plants in these areas are grown in containment with artificial soils, drainage and irrigation, however good design of planting areas can result in healthy plant growth.

Objectives

- To contribute to the quality and amenity of communal open space on roof tops, podiums and internal courtyards.
- To encourage the establishment and healthy growth of trees in the town centre.
- To provide screening between private, communal and public spaces.

Performance Criteria

- Plant growth is to be optimised by:
 - providing soil depth, volume and area appropriate to the size of the plants selected
 - providing appropriate soil conditions and irrigation methods
 - providing appropriate drainage.
- Planters are to be suitable for plant selection and achievement of maximum mature plant growth
- Planters are to accommodate the largest volume of soil possible [minimum soil depths will vary depending on the size of the plant - refer to iv. below]
- Minimum soil depths are to be increased in accordance with:
 - the mix of plants in a planter for example where trees are planted in association with shrubs, groundcovers and grass
 - the level of landscape management, including frequency of irrigation, anchorage requirements of large and medium trees, soil type and quality.
- Minimum soil depths are to be provided as follows:

Plant Size	Minimum Soil Requirements
<i>Large trees</i> (16 metre canopy diameter at maturity)	volume 150 cubic metres depth 1.3 metres area 10 x 10m area (or equivalent)
<i>Medium trees</i> (8 metre canopy diameter at maturity)	volume 35 cubic metres depth 1 metre
<i>Shrubs</i>	depth 500-600mm
<i>Ground cover</i>	depth 300-450mm
<i>Turf</i>	depth 100-300mm

Note: Any subsurface drainage systems are in addition to the minimum depths above.



Shade trees and planters enclose a small courtyard and provide intimacy within a larger communal open space.



Sculptural planters provide adequate depth for small trees and visually enhance the design of adjacent spaces.



Dudley's Corner at Maroubra Junction.



Art deco walk-up on 817 Anzac Pde.



Maroubra Junction Hotel.

4.1.6 HERITAGE

Heritage buildings, spaces, streets and items link people with their past, and contribute to the identity of an area. These are to be retained and reinforced, as far as possible. Heritage items may have scientific, aesthetic, historic or social/cultural significance or a combination of these. There are 3 heritage items within the town centre: Dudley's Corner, Maroubra Junction Hotel and 817 Anzac Parade.

The scale and proportion of development in the vicinity of heritage items should consider the context and heritage significance of relevant heritage items.

Objective

- To retain and enhance heritage buildings and items, older items and places of significant character in the local area.

Performance Criteria

- i. A **heritage impact assessment** is to be provided where a property is a heritage item, or is within a heritage conservation area.
- ii. Developments within proximity of heritage items are to be appropriate in scale, proportion and materials to these items and their context.
- iii. Developments near heritage items are to reflect and relate to, but not replicate or reproduce the heritage item.

PART 4 DESIGN CONTROLS

4.2 Site Access

4.2.1 PARKING

Accommodating parking on site, has a significant impact on the site layout, landscape design, deep soil zones and stormwater management.

Parking provision should also be considered in relation to the local context. The location of public transport facilities, services and recreational facilities within walking or cycling distance may reduce the need for parking spaces.

Objectives

- To minimise car dependency for commuting and recreational transport use and to promote alternative means of transport-public transport, bicycling, and walking.
- To provide adequate car parking for the building's users and visitors.
- To integrate the location and design of car parking with the design of the site and the building.

Performance Criteria

- i. Car parking provision is to be in accordance with **Council's Parking DCP**.
 - ii. Parking is to be accommodated underground where possible.
 - iii. Basement and sub-basement car parking areas are not to be located on the primary street frontage as indicated in the section diagram (below right).
 - iv. Basement and sub-basement car parking areas are to have natural ventilation where possible.
 - v. Ventilation grilles or screening devices of car park openings are to be integrated into the overall façade and landscape design of the development.
 - vi. Safe and secure access is to be provided for building users, including direct access to residential apartments.
 - vii. A logical and efficient structural grid is to be provided. There may be a larger floor area for basement car parking than for upper floors above ground.
 - viii. Where above ground enclosed parking cannot be avoided, the car park (including vehicle entries) must be integrated into the overall façade design of the building. The car park must not be located on the street frontage.
 - ix. Sub-basement carparking is to be not more than 1.2m above existing ground level.
 - x. Podiums above basement or sub basement car parks are to be landscaped as private or communal open space.
- ix. The impact of on-grade car parking is to be minimised by:
- locating parking on the side or rear of the lot away from street frontage;
 - screening cars from view of streets and buildings;
 - allowing for safe and direct access to building entry points;
 - incorporating car parking into the landscape design of the site (considerations include: vegetation between parking bays to ameliorate views, selection of paving material and screening from communal and private open space areas).



Where on-grade car parking is necessary, its impact can be reduced by quality paving and landscaping between smaller groups of car spaces.



Locating above-ground car parking to the rear of the site behind commercial and retail uses, is a good way of screening it from the main road.

Refer to Council's Parking DCP for the number of parking spaces required.



A safe pedestrian pathway mediates between private building entries and on-grade car parking.

4.2.2 PEDESTRIAN ACCESS

Design for pedestrians focuses on delivering high quality, safe and pleasant walking environments. It is person-centred rather than vehicle-centred. Pedestrian access should also provide a barrier-free environment where all people who live in and visit the development can enjoy the public domain, and can access apartments and communal use areas.

Objectives

- To promote development which is well connected to the street and contributes to the accessibility of the public domain.
- To ensure that residents, including users of strollers and wheelchairs and people with bicycles, are able to reach and enter their apartment and use communal areas via minimum grade ramps, paths, accessways or lifts.

Performance Criteria

- i. High quality safe and accessible routes are to be provided to public and semi-public areas of the building and the site, including shopfronts, major entries, lobbies, communal open spaces, site facilities, parking areas, public streets and internal roads.
- ii. Equity is to be promoted by:
 - ensuring that the main building entrance for apartments is accessible for all from the street and from car parking areas
 - Integrating ramps into the overall building and landscape design.
- iii. Ground floor apartments are to be designed to be accessible from the street, where possible.
- iv. The number of accessible and adaptable apartments in a building is to be maximised.
- v. Pedestrian accessways and vehicle accessways are to be separate and clearly distinguishable.
- vi. The provision of public through-site pedestrian accessways is to be considered in large development sites.
- vii. Pedestrian access from the street and car parking area to the apartment entrance, are to be clearly identified on the DA plans.
- viii. The accessibility standard set out in Australian Standard AS 1428 (parts 1 and 2), is to be followed as a minimum.
- ix. Barrier-free access is to be provided to and within at least 1 in 15 dwellings in all development.

PART 4 DESIGN CONTROLS

4.2 Site Access

4.2.3 VEHICLE ACCESS

Vehicle access is the ability for cars, maintenance and service vehicles to access a development. The location, type and design of vehicle access points to a development will have significant impacts on the streetscape, the site layout and the building façade design. It is important that vehicle access is integrated with site planning from the earliest stages to balance any potential conflicts with streetscape requirements and traffic patterns and to minimise potential conflicts with pedestrians.

Objectives

- To integrate adequate car parking and servicing access without compromising street character, landscape or pedestrian amenity and safety.
- To encourage the active use of street frontages.

Performance Criteria

- i. In accordance with RTA requirements, vehicular access is not permitted from Anzac Parade or Maroubra Road for new developments. Vehicular access to sites fronting these roads is to be provided from secondary streets or via 6m (minimum) wide rights-of-carriageways running parallel to their rear boundaries, where identified on the block-by-block diagrams.
- ii. Basement carpark access must comply with the requirements of Section 4.7.3 Total Watercycle Management.
- iii. Potential pedestrian/vehicle conflict is to be minimised by:
 - limiting the width and number of vehicle access points (whilst complying with the relevant Australian Standards);
 - ensuring clear sight lines at pedestrian and vehicle crossings;
 - utilising traffic calming devices;
 - separating and clearly distinguishing between pedestrian and vehicular accessways.
- iv. Adequate separation distances are required between vehicular entries and street intersections.
- v. Active street frontages are to be optimised by consolidating vehicle access within sites under single body corporate ownership.
- vi. The appearance of car parking and service vehicle entries are to be improved by:
 - screening and locating garbage collection, loading and servicing areas away from the street;
 - recessing car park entries from the main façade line;
 - avoiding black holes in the façade by providing security doors to car park entries;
 - where doors are not provided, ensuring that the visible interior of the car park is incorporated into the façade design and material selection and that building services pipes and ducts are concealed;
 - continuing the façade material into the car park entry recess for the extent visible from the street.
- vii. The width of driveways is to comply with the relevant Australian Standards.



A safe pedestrian pathway mediates between private building entries and on-grade car parking.



This elevation treats the car park entry as part of the whole elevation. It narrows the width of the entry and defines an opening in proportion to the other façade elements.



This small site on a steep terrain, has split the entry and exit driveways to maintain a consistent scale of façade openings.



The facade of this building distinguishes the residential entry from the commercial shop fronts with a vertical element.

4.3.1 BUILDING ENTRY

Entrances define the threshold between the public street and private areas within the building. They may lead into a common entry or directly into the private space of an apartment from the street. Building entries provide a public presence and should contribute to the identity of a residential development. Using multiple entries (a main entry plus individual entries to ground floor apartments) helps to create a human scale along the street.

Objectives

- To create entrances which are clearly identifiable and provide a desirable residential identity for the development.
- To orient the visitor.
- To contribute positively to the streetscape and building façade design.

Performance Criteria

- i. Building entries are to be:
 - oriented to, and clearly visible from the street;
 - convenient for pedestrians; and
 - a clearly identifiable element of the building in the street.
- ii. Building entries must be designed to provide equal access to all people.
- iii. Safe and secure access is to be provided by:
 - avoiding ambiguous spaces in entry areas;
 - providing a clear line of sight between one circulation space and the next;
 - providing sheltered, well lit and highly visible spaces for building entry and for the collection of mail.
- iv. Separate entries from the street are to be provided for:
 - pedestrians and cars;
 - different uses (for example, for residential and commercial users in a mixed-use development);
 - ground floor apartments.
- viii. Entries, lifts and their associated circulation space are to be of an adequate size to allow movement of furniture between public and private spaces.

This diagram illustrates a contrast between undesirable practice (top) and better design practice (bottom) for entry and lobby design.

PART 4 DESIGN CONTROLS

4.3 Site Amenity

4.3.2 VISUAL PRIVACY

Visual privacy protects residents' ability to carry out functions within rooms and private open spaces without compromising views, outlook, ventilation and solar access or the functioning of these spaces. Visual privacy is influenced by topography, site configuration, the scale of the proposed development, apartment layout and the relationship to adjoining development.

Privacy is influenced by factors such as:

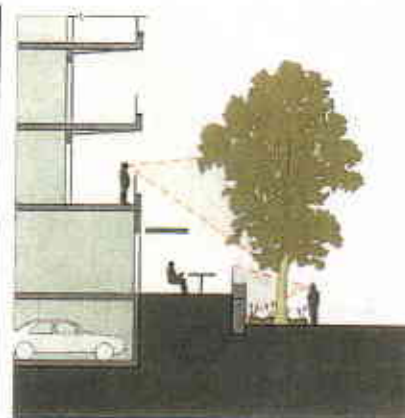
- the nature of activities in areas;
- the times and frequency of use of the spaces;
- occupants' ability to control overlooking with screening devices.

Objectives

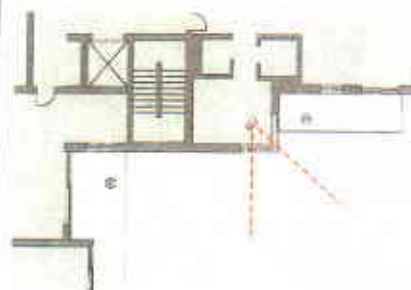
- To provide reasonable levels of visual privacy externally and internally, during the day and at night.
- To maximise outlook and views from principal rooms and private open spaces without compromising visual privacy.

Performance Criteria

- New development is to be located and oriented to maximise visual privacy between buildings on site and adjacent buildings by providing adequate:
 - building separation (refer to Section 3.1.6 Building Separation); and
 - rear and site setbacks (Part 3).
- Building layouts are to be designed such that direct overlooking of rooms and private open spaces is minimised in apartments by:
 - separating communal open space, common areas and access routes from windows of rooms, particularly habitable rooms;
 - changing the level between ground floor apartments (including their associated private open space), and the public domain or communal open space.
- Building and site design are to increase privacy without compromising access to light and air through:
 - offsetting windows of apartments in new development to windows in adjacent development;
 - recessing balconies and/or providing vertical fins between adjacent balconies;
 - using solid or semi-solid balustrades to balconies;
 - using louvres or screen panels to windows and/or balconies;
 - providing appropriate fencing;
 - providing landscape screening;
 - incorporating planter boxes into walls or balustrades to increase the visual separation between areas;
 - utilising pergolas or shading devices to limit overlooking of lower apartments or private open space.



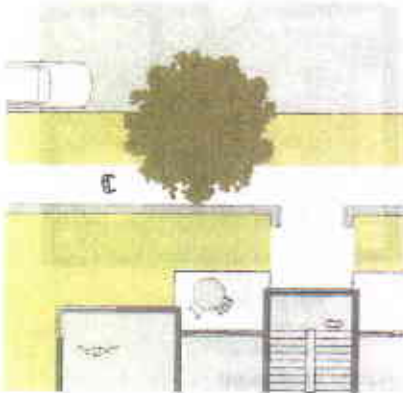
A change in level, retaining walls, and vegetation, define a boundary between private open space and communal open space.



Locating circulation cores at the internal corners of buildings can improve separation and privacy between apartments.



Building elements provide privacy between spaces, pergolas limit overlooking, solid walls and sliding screens limit horizontal views.



Windows, balconies and front doors address the street, provide surveillance and make both the street and the apartment building more secure during the day and at night.



Landscape lighting, common stairwell lighting and projected internal lighting increases safety within the common areas in the development.



Projecting bay windows increases surveillance along the street.

A Crime Risk Assessment is to be provided for all residential developments of 20 or more new dwellings.

Refer to DIPNR's *Crime Prevention and the Assessment of Development Applications* guidelines.

4.3.3 SAFETY + SECURITY

The built environment has an impact on perceptions of safety and security, as well as on the actual opportunities for crime. Development should provide safe ground level entry and exit at all times of day and night, enable casual surveillance, clearly define public and private ownership, and control access to the building.

Objectives

- To ensure that residential flat developments are safe and secure for residents and visitors.
- To contribute to the safety of the public domain.

Performance Criteria

- i. The development boundary should clearly define public and private space through one or more of the following:
 - a level change at the site and/or building threshold;
 - signs;
 - entry awnings;
 - fences, walls and gates;
 - change of material in paving between the street and the development.
- ii. Casual surveillance opportunities should be provided by:
 - orienting living areas with views over public or communal open spaces;
 - providing clear lines of sight between building entrances, foyers and the street;
 - using bay windows and balconies, which protrude beyond the building line and enable a wider angle of vision to the street;
 - using corner windows, which provide oblique views of the street;
 - providing casual views of common internal areas, such as lobbies and foyers, hallways, recreation areas and car parks.
- iv. Opportunities for concealment are to be minimised by:
 - avoiding blind or dark alcoves near lifts and stairwells, at the entrance and within indoor car parks, along corridors and walkways;
 - providing well-lit routes throughout the development;
 - providing appropriate levels of illumination for all common areas;
 - providing graded illumination to car parks and illuminating entrances higher than the minimum acceptable standard.
- v. Access to the development is to be controlled by:
 - making apartments inaccessible from the balconies, roofs and windows of neighbouring buildings;
 - separating the residential car parking component from any other building use;
 - providing direct access from car parks to apartment lobbies for residents;
 - providing separate access for residents in mixed use buildings;
 - controlling car park access from public and common areas.
- vi. A formal **crime risk assessment**, consistent with the Department of Infrastructure, Planning and Natural Resources' (DIPNR) *Crime Prevention and the Assessment of Development Applications* guidelines, is to be carried out for all residential developments of 20 or more new dwellings.

PART 4 DESIGN CONTROLS

4.4 Building Configuration

4.4.1 APARTMENT LAYOUT

The internal layout of an apartment establishes the uses of rooms, circulation between rooms, and the degrees of privacy for each room. In addition, the layout directly influences the quality of residential amenity, such as access to daylight and natural ventilation, and the assurance of acoustic and visual privacy. The apartment layout also includes private open space.

Objectives

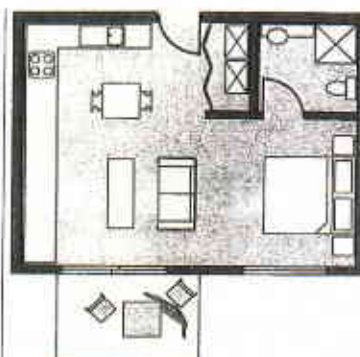
- To ensure that apartment layouts are efficient and provide high standards of residential amenity.
- To maximise the environmental performance of apartments.

Performance Criteria

- The following minimum sizes (internal area) of apartments are to be complied with:

- studio apartment	40m ²
- 1 bedroom apartment	50m ²
- 2 bedroom apartment	80m ²
- 3 bedroom apartment	125m ²

 - For each additional bedroom above 3 bedrooms, an additional 20m² is required.
- Single-aspect apartments are to have a maximum depth of 8 metres.
- The back of a kitchen should be no more than eight metres from a window.
- The width of cross-over or cross-through apartments over 15 metres deep is to be 4 metres or greater to avoid deep narrow apartment layouts.
- Apartment layouts must be designed to:
 - provide appropriate room size for their use;
 - accommodate a variety of furniture arrangements;
 - provide for a range of activities and privacy levels between different spaces within the apartment;
 - incorporate flexible room sizes and proportions or open plans;
 - provide adequate window locations and sizes appropriate for their use;
 - ensure circulation by stairs, corridors and through rooms is planned as efficiently as possible thereby increasing the amount of floor space in rooms.
- Apartment layouts are to be designed to respond to the natural environment and optimise site opportunities by:
 - locating the primary private open space (eg. balcony, terrace, courtyard or garden) adjacent to the main living area;
 - orienting main living spaces toward the primary outlook and aspect and away from neighbouring noise sources or windows;
 - locating habitable rooms, and where possible kitchens and bathrooms, on the external face of the buildings thereby maximising the number of rooms with windows;
 - maximising opportunities to facilitate natural ventilation and to maximise natural daylight, for example by providing:
 - corner apartments
 - cross-over or cross-through apartments
 - split-level or maisonette apartments
 - shallow, single-aspect apartments.



Studio apartment



One-bedroom cross-through apartment

PART 4 DESIGN CONTROLS

4.4 Building Configuration

Examples of different apartment configurations

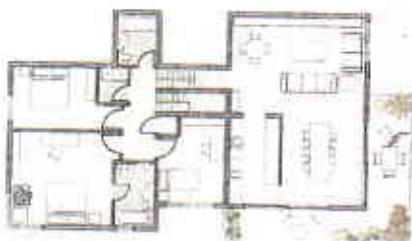
Note: Apartment configuration is to be designed in response to the attributes of the site identified in the site analysis diagram (such as orientation, winds, relationship to adjoining development).



Two bedroom cross over apartment



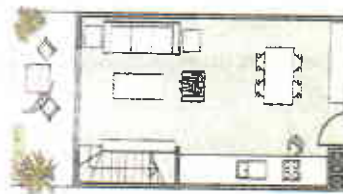
Two bedroom corner apartment with study



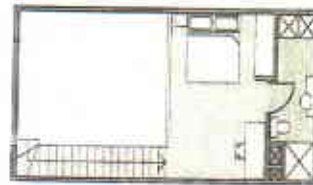
Three bedroom apartment



One bedroom single aspect apartment



One bedroom maisonette/loft apartment



Two bedroom cross through apartment



Two bedroom corner apartment

PART 4 DESIGN CONTROLS

4.4 Building Configuration

4.4.2 APARTMENT MIX

A mix of apartment types provides housing choice and supports equitable housing access. By accommodating a range of household types, a mix of apartments can ensure apartment buildings support the needs of society now and in the future. This is particularly important because apartment buildings form a significant and often permanent part of the urban environment.

Objectives

- To provide a diversity of apartments types, which cater for different household requirements now and in the future.
- To maintain equitable access to new housing by cultural and socio-economic groups.

Performance Criteria

- i. A mix of studio, one, two, and three or more bedroom apartments is to be provided.
- ii. The number of accessible and adaptable apartments is to be optimised to cater for a wider range of occupants.
- iii. The possibility of flexible apartment configurations is to be investigated, which supports change in the future.

PART 4 DESIGN CONTROLS

4.4 Building Configuration



Balconies allow for privacy while at the same time giving a view and surveillance over the street they face.



Ensure that balconies have enough depth to accommodate a table and chairs.



The detailed design of these partially solid balustrades, sun shades and privacy screens contribute to the overall facade composition of the building.

4.4.3 BALCONIES

Balconies are outdoor rooms, which enhance the amenity and lifestyle choices of apartment residents. They provide private open space, extend the living spaces of the apartment and capitalise on the temperate climate. Balconies are also important architectural elements, contributing to the form and articulation of apartment buildings.

Objectives

- To provide all apartments with private open space.
- To ensure balconies are functional, responsive to the environment, and promote outdoor living for apartment residents.
- To ensure that balconies are integrated into the overall architectural form and detail of residential flat buildings.
- To contribute to the safety and liveliness of the street by allowing for casual overlooking and address.

Performance Criteria

- i. Each apartment is to have at least one primary balcony.
- ii. Primary balconies are to have a minimum depth of 2.5 metres.
- iii. The minimum area of primary balconies is to be as follows:

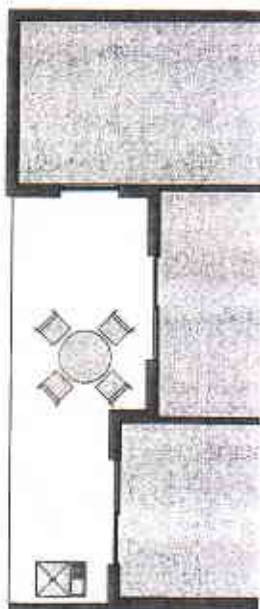
apartment type	min area of primary balcony
studio and 1 bedroom	6m ²
2 and 3 bedrooms	10m ²
4 or more bedrooms	15m ²

- iv. Primary balconies are to be:
 - located adjacent to the main living areas (such as living room, dining room, kitchen) to extend the living space; and
 - sufficiently large and well proportioned to be functional and promote indoor/outdoor living (a dining table and two to four chairs should fit on the majority of balconies in any development. Consideration should be given to supplying a tap and gas point).
- v. Additional amenity and choice is to be provided in the following situations, via secondary balconies (including Juliet balconies or operable walls with balustrades):
 - in larger apartments
 - adjacent to bedrooms.
- vi. Balconies are to be detailed and designed in response to the local climate and site context. This may be achieved by:
 - locating balconies facing predominantly north, east or west to provide solar access;
 - utilising sun screens, pergolas, shutters and operable walls to control sunlight and wind;
 - providing balconies with moveable screens, Juliet balconies or sliding doors with a balustrade in locations where noise or high winds prohibit other solutions (such as on busy roads or in tower buildings);
 - the use of cantilevered, partially cantilevered and/or recessed balconies in response to daylight, wind, acoustic privacy and visual privacy;
 - ensuring that balconies do not prevent sunlight entering apartments adjacent or below.

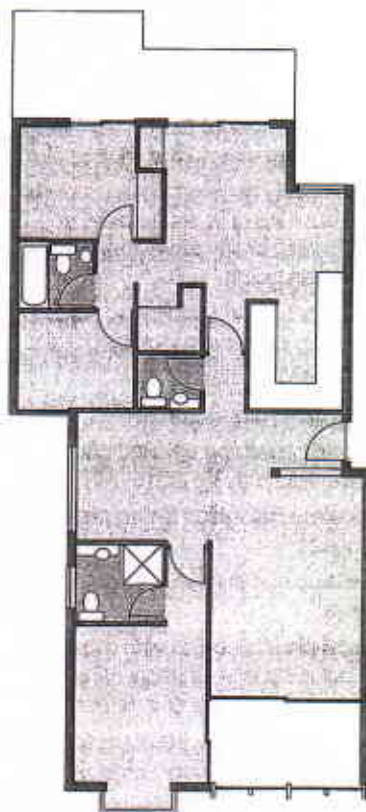
PART 4 DESIGN CONTROLS

4.4 Building Configuration

- vii. Balustrades are to be designed to allow views and casual surveillance of the street while providing for safety and visual privacy. Design considerations may include: detailing balustrades using a proportion of solid to transparent materials to address privacy, sight lines from the street, public domain or adjacent development (*note: full glass balustrades do not provide privacy for the balcony or apartment interior, especially at night and are to be avoided*).



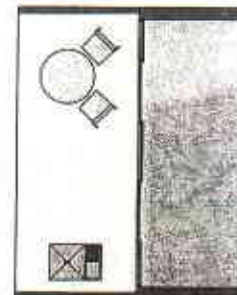
Balconies with access from multiple rooms improve the amenity of an apartment.



This 3-bed apartment has 2 balconies which cater to the varying needs of a family.



A 2.5 m deep balcony (primary balcony) can comfortably accommodate a table and four chairs.



A 2m deep balcony (secondary balcony) can comfortably accommodate a table and two chairs.



Operable walls may be more appropriate in some contexts where there is limited space available, for example.

PART 4 DESIGN CONTROLS

4.4 Building Configuration



Variation in height of different floors adds to the articulation/visual quality of the building.



The double height in this apartment spatially unifies the two floor levels, creating a pleasant well-lit living area.

4.4.4 CEILING HEIGHTS

Ceiling heights are measured from finished floor to finished ceiling level. Well designed and appropriately defined ceilings ensure quality residential amenity and create spatial interest.

Objectives

- To increase the sense of space in apartments and provide well proportioned rooms.
- To promote the penetration of daylight into the depths of the apartment.
- To contribute to flexibility of use.
- To achieve quality interior spaces while considering the external building form requirements.

Guidelines

- All development must comply with the following minimum floor to ceiling levels:

floor	minimum ceiling height
ground floor	3.6m
first floor	3.3m *
all floors above first floor	2.7m

* to allow flexibility for this floor to be commercial/retail or residential

- Ceilings are to:

- enable better proportioned rooms (for example, smaller rooms often feel larger and more spacious when ceilings are higher);
- maximise heights in habitable rooms by stacking wet areas from floor to floor (ensuring that services and their bulkheads are located above bathroom and storage areas rather than habitable spaces);
- reduce reliance on air conditioning by promoting the use of ceiling fans for cooling and heating distribution.

- Better access to natural light is to be facilitated by using ceiling heights which:

- promote the use of taller windows, highlight windows and fan lights (this is particularly important for apartments with limited light access, such as ground floor units and apartments with deep floor plans);
- enhance the effectiveness of light shelves in providing daylight into deep interiors.

- Ceiling heights are to be designed to promote building flexibility over time for a range of other uses, including retail or commercial, where appropriate.

- Double height spaces with mezzanines are to be counted as two storeys.

PART 4 DESIGN CONTROLS

4.4 Building Configuration

4.4.5 CORNER BUILDINGS

Buildings on the corner of two streets/roads are identified as 'corner buildings'. Corner buildings are highly visible because of their location, with address and visibility from two streets.

Objective

- To ensure that corner buildings, are well designed and respond to the different characteristics of the streets they address.

Performance Criteria

- i. Buildings are to align and reflect the corner conditions. This is to:
 - accentuate the topography;
 - clarify the street hierarchy; and
 - reinforce the spatial relationships.
- ii. Corner buildings are to reflect the architecture, hierarchy and characteristics of the streets they address.



This corner building, owing to its alignment to both streets, helps pedestrians to align/place themselves relative to the two roads it addresses.



Corner buildings, if well-treated, help in reinforcing important junctions.

PART 4 DESIGN CONTROLS

4.4 Building Configuration



Locating a bedroom with an ensuite on the ground floor of this 2-storey apartment facilitates a variety of uses:

1. Small business
2. Third bedroom
3. Shared housing for independent adults
4. Housing for an elderly parent

4.4.6 FLEXIBILITY

Flexible apartment design ensures that buildings can accommodate a wider range of inhabitants and their changing lifestyle needs, such as:

- changes in household structure (single, couple, family, extended family)
- home/office arrangements;
- changing mobility and access needs, including those of the elderly or young children in prams; and
- future changes in use such as a change from residential floors to commercial office space.

Objectives

- To encourage housing designs which meet a broad range of needs.
- To promote buildings, which can be adapted to accommodate whole or partial changes of use over time.
- To encourage adaptive re-use.
- To save the embodied energy expended in building demolition.

Performance Criteria

- i. Building configurations are to utilise multiple entries and circulation cores, especially in larger buildings over 15 metres in length.
- ii. Buildings are to be designed to accommodate future change in building use or configuration by incorporating:
 - slim building cross sections (suitable for both residential and commercial uses);
 - a mix of apartment types;
 - separate entries for the ground floor level and the upper levels;
 - aligning structural walls, columns and services cores throughout the building;
 - knock-out panels between apartments to allow two adjacent apartments to be amalgamated; and
 - minimising internal structural walls.
- iii. Apartment layouts are to be designed to accommodate flexibility in room use through:
 - adequate room sizes or open-plan apartments, which provide a variety of furniture layout opportunities;
 - dual master-bedroom apartments, which can support two independent adults living together or a live/work situation;
 - incorporate flexible room sizes.
- iv. A minimum of 10% of all ground floor apartments are to comply with AS4299-1995 *Adaptable House Class A*.
- v. A minimum of 10% of all ground floor apartments are to comply with AS4299-1995 *Adaptable House Class C*.
- vi. All commercial/retail components of mixed use buildings are to comply with Australian Standards AS1428-2001.

PART 4 DESIGN CONTROLS

4.4 Building Configuration

4.4.7 GROUND FLOOR APARTMENTS

Ground floor apartments offer the potential for direct access from the street and private open space areas. They provide opportunities for the apartment building and its landscaping to create a pedestrian scale at street level. Ground floor apartments that address the street with individual entries increase pedestrian activity and street surveillance. Ground floor apartments also support housing choice by providing access for elderly and/or disabled people, and are suitable for families with small children. Ground floor apartments extend the lifestyle choices available in apartment buildings by facilitating activities, such as gardening, play and pet ownership.

Objectives

- To contribute to the desired streetscape of an area and to create active safe streets.
- To increase the housing and lifestyle choices available in apartment buildings.

Performance Criteria

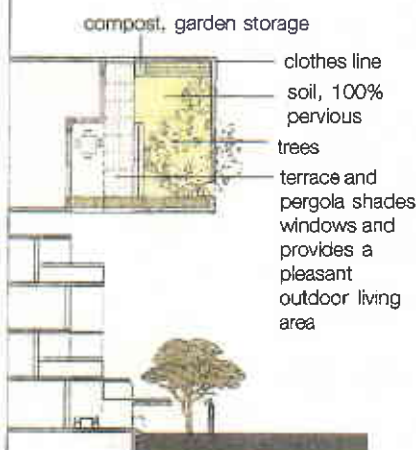
- Housing choice is to be promoted by:
 - maximising the number of accessible apartments on the ground floor;
 - designing ground floor apartments so they can accommodate a change of use, such as a corner shop or home office accessible from the street.
- Where no front setback is required, privacy and safety of ground floor units is to be ensured by:
 - stepping up the ground floor from the level of the footpath (to a maximum of 1.2 metres);
 - designing balustrades and window sill heights to minimise sight lines into apartments;
 - ensuring safety bars or screens are integrated into the overall building design and detailing.
- Solar access to ground floor units is to be increased by:
 - providing higher ceilings and taller windows; and
 - use of deciduous trees and shrubs which allow solar access in winter and shade in summer.
- Ground floor apartments are to have direct access to private open space, preferably a terrace or garden, which should contribute to the character of the street while maintaining adequate privacy for apartment occupants.



The use of multiple lift/stair cores creates more entries along the street and helps articulate a long building facade.



Street level picket fencing with planting provides screening to car park ventilation louvres.



Well-landscaped private courtyards extend the liveable space of the apartment and provide a variety of paved and soft landscaped areas.

4.4.8 HOME OFFICES

A home office is a small work place forming part of a dwelling, with no traffic or parking implications, and no interference with the amenity of the neighbourhood.

Objectives

- To promote economic growth and diversity within the town centre.
- To promote transport initiatives by reducing travel time and cost, creating a cleaner environment.
- To promote an active and safe neighbourhood, and casual surveillance of the street.
- To improve personal and property security.
- To promote a diverse workforce in terms of age and mobility.

Performance Criteria

- i. Home offices are to have no traffic or parking implications on the neighbourhood/ street.
- ii. Home offices are to minimise conflict with domestic activities.
- iii. Home offices are to have the flexibility of being able to convert to become part of the residence.
- iv. Home offices are to have a clearly identifiable area, ideally designed to be able to be closed-off from the rest of the dwelling for purposes of safety, security and privacy.
- v. The work activity is not to interfere with the amenity of the neighbourhood by reason of emission of noise, vibration, odour, fumes, smoke, vapour, steam, soot, ash, dust, waste, water, waste products, grit, oil, or otherwise.
- vi. Home offices are to have:
 - adequate storage areas,
 - a mailbox suitable for business mail
 - any special utility services needed (eg separate power metering)
- vii. Home offices are not to display any goods in a window.
- viii. Home offices are not to exhibit any notice, advertisement or sign, other than a notice, sign or advertisement exhibited on the dwelling house or dwelling to indicate the name and occupation only of the resident.

PART 4 DESIGN CONTROLS

4.4 Building Configuration

4.4.9 INTERNAL CIRCULATION

Lobbies, stairs, lifts and corridors make up the common circulation spaces within a building. Important design considerations include safety, amenity and choice of materials for durability and low maintenance.

Objectives

- To create safe and pleasant spaces for the circulation of people and their personal possessions.
- To facilitate quality apartment layouts, such as dual aspect apartments.
- To contribute positively to the form and articulation of the building façade and its relationship to the urban environment.
- To encourage interaction and recognition between residents to contribute to a sense of community and improve perceptions of safety.

Performance Criteria

- i. Optimise safety and security by grouping apartments to a maximum of ten (10) around a common lobby. Council may consider a variation in the maximum number of apartments per floor where the Applicant can demonstrate that a high level of amenity of the common lobby, corridors and apartments is achieved (for example through light wells).
- ii. Where apartments are arranged off a double-loaded corridor, the number of units accessible from a single core/corridor is to be limited to eight.
- iii. Amenity and safety in circulation spaces is to be increased by:
 - providing generous corridor widths and ceiling heights, particularly in lobbies, outside lifts and apartment entry doors;
 - providing appropriate levels of lighting, including the use of natural daylight, where possible;
 - minimising corridor lengths to give short, clear sight lines;
 - avoiding tight corners;
 - providing adequate ventilation.
- iv. Building layouts are to utilise multiple cores to:
 - increase the number of entries along a street;
 - increase the number of vertical circulation points;
 - give more articulation to the facade;
 - limit the number of units off a circulation core on a single level.
- v. Longer corridors are to be articulated by:
 - changing the direction or width of a corridor;
 - utilising a series of foyer areas;
 - providing windows along or at the end of a corridor.
- vi. Durable, low maintenance materials are to be used in common circulation areas. Details of proposed materials are to be provided on DA plans and in the Statement of Environmental Effects.



Conventional practice locates single aspect units along a double loaded corridor.



Better practice uses multiple cores to support more dual aspect apartments with better daylight access and cross-ventilation.

PART 4 DESIGN CONTROLS

4.4 Building Configuration

4.4.10 STORAGE

Providing adequate and useable storage space is particularly important in residential developments where dwelling size and configuration is constrained. Storage is calculated on an individual apartment basis, proportional to the size of the apartment.

Objectives

- To provide adequate storage for everyday household items within easy access of the apartment.
- To provide storage for sporting, leisure, fitness and hobby equipment.

Performance Criteria

- i. Storage is to be located conveniently for apartments.
- ii. At least 50% of the required storage within each apartment is to be accessible from either the hall or living area. Storage within apartments is best provided as cupboards accessible from entries and hallways and/or from under internal stairs.
- iii. Dedicated storage rooms may be provided on each floor within the development, which can be leased by residents as required.
- iv. Storage can be provided in dedicated and/or leasable storage in internal or basement car parks. Where this is provided, it must be contained in fire-safe compartments and must comply with fire regulations.
- v. Storage is to be provided to accommodate larger items such as surfing and skiing equipment, bicycles, etc.
- vi. Storage which is provided separate from the apartments is to be safe and secure for individual use.
- vi. Where basement storage is provided, it must not compromise natural ventilation in car parks.
- viii. Additional storage may be provided in smaller apartments in the form of built-in cupboards to promote a more efficient use of small spaces. Details are to be shown on DA plans.
- ix. In addition to kitchen cupboards and bedroom wardrobes, accessible storage facilities are to be provided at the following rates as a minimum requirement:

apartment size	accessible storage
studio apartments	6m ³
one-bedroom apartments	8m ³
two-bedroom apartments	10m ³
three plus bedroom apartments	12m ³

The above minimum storage areas shall be excluded from apartment size calculations.

- x. Storage spaces are to have a minimum height of 1.5m.

PART 4 DESIGN CONTROLS

4.5 Building Amenity

4.5.1 ACOUSTIC PRIVACY

Acoustic privacy is a measure of sound insulation between apartments and between external and internal spaces. Acoustic privacy is important for the amenity of apartments in multi unit housing and mixed use developments. Designing for acoustic privacy relates to the location and separation of buildings and the arrangement of apartments and internal spaces within apartments.

Objective

- To ensure a high level of amenity by protecting the privacy of occupants of residential flat buildings, both within the apartments and in private open spaces.

Performance Criteria

- All residential buildings are to be constructed so as to achieve the following internal acoustic amenity criteria, when tested in accordance with Australian Standard AS2107: 2000;
 - In naturally ventilated residential units; the repeatable maximum $L_{Aeq}(1hour)$ should not exceed:
 - 35 dB(A) between 10.00 pm and 7.00 am in sleeping areas when the windows are closed;
 - 45 dB(A) in sleeping areas when windows are open (24 hours);
 - 45 dB(A) in living areas (24 hours) when the windows are closed, and
 - 55 dB(A) in living areas (24 hours) when the windows are open
 - Where natural ventilation cannot be achieved, in residential units provided with mechanical ventilation, air conditioning or other complying means of ventilation (in accordance with the ventilation requirements of the Building Code Of Australia), when doors and windows are shut, the repeatable maximum $L_{Aeq}(1hour)$ should not exceed:
 - 38 dB(A) between 10.00 pm and 7.00 am in sleeping areas;
 - 46 dB(A) in living areas (24 hours);
 - 45 dB(A) in sleeping areas between 7.00 am and 10.00 pm
- A **noise and vibration assessment report**, prepared by an appropriately qualified professional, is to be submitted with development applications, addressing appropriate measures to minimise potential noise and vibration impacts for any proposed development. This assessment is to:
 - be prepared having regard to the NSW Environmental Protection Authorities Industrial Noise Policy, Chapter 174 of the NSW Environmental Protection Authorities Noise Control Manual and relevant Australian Standards;
 - incorporate external noise sources (such as traffic, plant & equipment) and internal noise sources (such as mechanical ventilation);
 - specify if the findings and recommendations can be achieved and detail the measures needed to achieve the required acoustic environment.
- The site and building layout are to maximise acoustic privacy by providing adequate building separation within the development and from neighbouring buildings. All development should comply with Section 3.1.6 Building Separation.



This apartment layout locates living spaces away from noise sources such as the lift and stairs. Quiet bedrooms are also located separate from main living areas.

Submit a Noise and Vibration assessment. Refer to the RTA's Environmental Noise Management Manual.

PART 4 DESIGN CONTROLS

4.5 Building Amenity

- iv. Developments are to be designed to minimise noise transition between apartments by:
 - locating busy, noisy areas next to each other and quieter areas next to other quiet areas, for example, living rooms next to living rooms, bedrooms with bedrooms;
 - locating bedrooms away from busy roads and other noise sources;
 - using storage or circulation zones within the apartment to buffer noise from adjacent apartments, mechanical services or corridors and lobby areas – minimising the amount of party (shared) walls with other apartments.
- v. Noise transmission is to be reduced from common corridors or outside the building by providing seals at entry doors.
- vi. Conflicts between noise, outlook and views are to be resolved using design measures such as double glazing and operable screening.
- vii. Comply with BCA requirements for acoustic control of airborne noise and impact of noise between apartments.

PART 4 DESIGN CONTROLS

4.5 Building Amenity

4.5.2 DAYLIGHT ACCESS

Daylight access refers to natural light as well as direct sunlight. It changes with the time of day, season, and weather conditions. Within an apartment, access to natural light reduces reliance on artificial light, improving energy efficiency and residential amenity.

Objectives

- To ensure that daylight access is provided to all habitable rooms and encouraged in all other areas of residential flat development.
- To provide adequate ambient lighting and minimise the need for artificial lighting during daylight hours.
- To provide residents with the ability to adjust the quantity of daylight to suit their needs.

Guidelines

- i. The building configuration is to optimise northern aspect to new residential apartments where possible.
- ii. Communal open spaces are to receive sunlight between March and September and appropriate shading is to be provided in summer.
- iii. Habitable rooms and private open spaces are to be designed to maximise daylight access, particularly in winter.
- iv. Living rooms and private open spaces for **at least** 70 percent of apartments in a development are to receive a minimum of three hours direct sunlight between 9 am and 3 pm in mid-winter, unless existing overshadowing prevents this.
- v. Skylights, clerestory windows and fanlights are to be used to supplement daylight access.
- vi. Where daylight access is limited (eg due to orientation or adjoining development), two-storey and mezzanine apartments are encouraged to facilitate daylight access to living rooms and private open spaces.
- vii. The depth of single aspect apartments is to be limited to 8 metres.
- viii. Living areas are to be located on the northern side, and service areas located on the southern and western sides of the development, as much as possible.
- ix. Single storey-single aspect apartments are to have a northerly or north-easterly aspect.
- x. The number of south-facing apartments is to be kept to a minimum. Single aspect apartments are not to be oriented to Anzac Parade or Maroubra Road.
- xi. Buildings are to be designed for shading and glare control, particularly in summer, by:
 - using shading devices, such as eaves, awnings, colonnades, balconies, pergolas, external louvres and planting, particularly for north and western facing windows;
 - using high performance glass (note: the use of reflective glass is not permitted).
- xii. Lightwells should not be used as a primary source of daylight to habitable rooms.
- xiii. Submit **shadow diagrams** in elevation and plan form prepared by a suitably qualified professional with each DA. Refer to Council's DA guide for details.

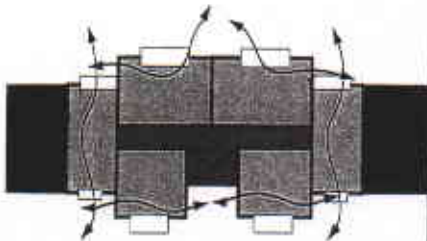


A combination of louvres provides shading for different times of the day.

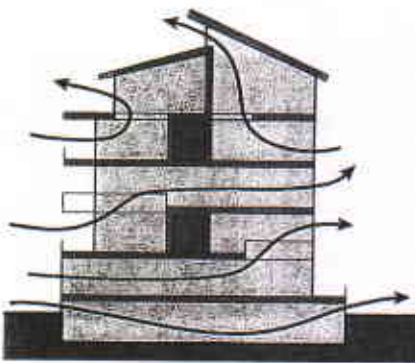


Sun shading is an integral component of the building form and facade design.

Submit **shadow diagrams** in elevation and plan form prepared by a suitably qualified professional with each DA. Refer to Council's DA guide for details.

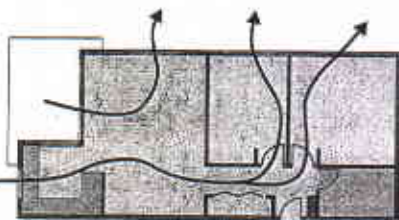


Corner apartments and dual aspect achieve effective natural ventilation.

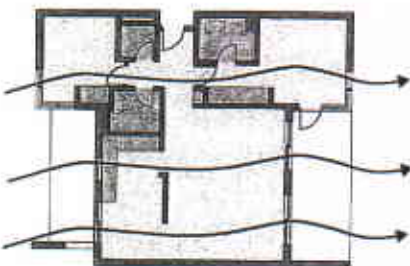


Good cross-ventilation can be achieved with the following:

1. Cross-over apartments
2. Maisonette apartments
3. Semi-basement car parks



Corner apartments draw cross ventilation through windows having different orientations. The above layout works well in upper floor apartments.



This layout allows for air flow directly from one side of the apartment to the other.

4.5.3 NATURAL VENTILATION

Natural ventilation is the circulation of sufficient volumes of fresh air through an apartment to create a comfortable indoor environment. Designing for natural ventilation exercises sustainable practice by responding to the local climate and by reducing or eliminating the need for mechanical ventilation. The building envelopes in Part 3 of this DCP have been designed to encourage effective natural ventilation. Building orientation, apartment layout and external building facades are key elements in achieving optimal natural ventilation.

Objectives

- To ensure that apartments are designed to provide all habitable rooms with direct access to fresh air and to assist in promoting thermal comfort for occupants.
- To provide natural ventilation in non-habitable rooms, where possible.
- To reduce energy consumption by minimising the use of mechanical ventilation, particularly air conditioning.

Performance Criteria

- i. Ensure that all apartments are single loaded or dual aspect, to allow the direct flow of air from one side of the apartment to the other.
- ii. Development is to utilise natural breezes by:
 - determining prevailing breezes and orienting buildings to maximise use, where possible;
 - locating vegetation to direct breezes and cool air as it flows across the site; and
 - selecting planting or trees that do not inhibit airflow.
- iii. Building layout is to maximise the potential for natural ventilation through:
 - dual aspect apartments (eg cross through apartments and corner apartments), which allow cross ventilation;
 - apartment design which draws cool air in at lower levels and allow warm air to escape at higher levels (eg maisonette apartments and two-storey apartments).
- iv. The internal layout of apartments is to be designed to promote natural ventilation by:
 - minimising interruptions (such as corners and walls) to air flow through an apartment;
 - grouping rooms with similar usage together, for example, keeping living spaces together and sleeping spaces together (allowing the apartment to be compartmentalised for efficient summer cooling or winter heating).
- v. Doors and operable windows are to maximise natural ventilation by:
 - locating small windows on the windward side and larger windows on the leeward side of the building (utilising air pressure to draw air through the apartment);
 - using higher level casement or sash windows, clerestory windows or operable fanlight windows (including above internal doors) to facilitate convective currents. This is particularly important in apartments with only one aspect; and
 - selecting windows which can be reconfigured to funnel breezes into the apartment, such as vertical louvred and casement windows.
- vi. Innovative technologies to naturally ventilate internal building areas or rooms such as bathrooms, laundries and underground car parks (eg using stack-effect ventilation or solar chimneys), are to be explored.
- vii. Council may consider some double-loaded apartments only if specific site conditions create design difficulties and the applicant can provide appropriate verification/evidence (from suitably qualified professional) that innovative technologies will be employed to achieve natural ventilation.

PART 4 DESIGN CONTROLS

4.6 Building Form

4.6.1 AWNINGS AND SIGNS

Awnings increase the amenity of public footpaths and protect pedestrians from sun and rain. They encourage pedestrian activity along streets and are an important part of the streetscape and building facade.

Signs are an important consideration in the design of buildings located in mixed-use areas. Signs should be compatible with the desired streetscape character, building scale and proportions, without obscuring or dominating important views. Signs should be considered at the design stage of the building and not as an after thought.

Objectives

- To provide shelter for public streets.
- To ensure signs are in keeping with desired streetscape character and with development scale, detail and overall design.

Performance Criteria

Awnings

- i. Awnings are to:
 - complement the height, depth and form of the desired character or existing pattern of awnings, and
 - provide sufficient protection from sun and rain.
- ii. New awnings are to follow the general alignment of existing awnings in the street and there must be a minimum clearance of 3.5m between the footpath and the underside of the awning.
- iii. Awnings must have a minimum setback of 600mm from the kerb.
- iv. Continuous awnings are to be provided in busy pedestrian areas.
- v. Awnings are to be located over building entries and should help identify the entry point.
- iv. Pedestrian safety is to be enhanced by providing under-awning lighting.

Signs

- i. Signs are to be integrated with the design of the development by responding to scale, proportions and architectural detailing.
- ii. Location and space for future signs is to be detailed on DA plans and elevations.
- iii. Signs are to provide clear direction for residents and visitors.
- iv. Signs on blinds are not permitted.
- v. All signs are to comply with *State Environmental Planning Policy No 64 (SEPP 64)* - Advertising and Signage and Council's Outdoor Advertising DCP



Well-designed awnings create interest in the streetscape & give pedestrians protection from the weather.



Signage contributes to the building's image from a distance.



Signage gives identity to the building entry and provides legibility for visitors.



Rectilinear elements, clearly defined volumes and a change of materials creates visual interest on this building facade.



The use of varying alignments on the facade and sunscreens has articulated the taller mass of this building.



This facade is more traditional and uses a variety of repeated forms, and a restrained material palette.

4.6.2 FACADES AND ARTICULATION

Facades are the public face of buildings. Their architectural quality contributes to the character and design of the public domain.

The composition and detailing of the building façade has an impact on its apparent scale as well as its appearance. The proportions of the façade, the placement and size of windows, the articulation and detailing of external walls, and materials used are all important considerations.

Objectives

- To promote high architectural quality in buildings.
- To ensure that new developments define and enhance the public domain and desired street character.
- To ensure that building elements are integrated into the overall building form and façade design.

Performance Criteria

- i. A satisfactory relationship between the building form and the façade, including building elements, is to be established.
- ii. Facades are to have an appropriate scale and proportion, which respond to building use and desired character by:
 - defining a base, middle and top related to the overall proportion of the building;
 - emphasising the vertical elements;
 - using cornices, a change in materials or building setback to articulate the facade;
 - expressing the variation in floor to floor height, particularly at the lower levels;
 - articulating building entries with awnings, porticos, recesses, blade walls and projecting bays;
 - use of balcony types which respond to the street context, building orientation and residential amenity and to add visual depth to the facade;
 - using a variety of window types to differentiate building uses;
 - incorporating architectural features which give human scale to the design of the building at street level (such as porches, awnings, colonnades, pergolas and fences).
- iii. Important corners are to be expressed by giving visual prominence to parts of the façade (eg a change in building articulation, material or colour, roof expression or increased height).
- iv. Building services such as drainage pipes are to be coordinated and integrated, with the overall façade and balcony design.
- v. Security grilles/screens, ventilation louvres and car park entry doors are to be coordinated with the overall façade design.
- vi. Grilles and transparent security shutters are to have a minimum of 70% transparency. Solid shutters, screens or grilles are not permitted.

PART 4 DESIGN CONTROLS

4.6 Building Form

4.6.3 ROOF DESIGN

The roof is an important architectural element for the overall composition of a building. The roof of a building may be visible from adjacent taller buildings, as well as in silhouette against the sky. Roof design should consider the context of surrounding development and should add interest to the building.

Objectives

- To provide quality roof designs, which contribute to the overall design and performance of mixed use and residential flat buildings.
- To integrate the design of the roof into the overall facade and composition of the building.

Performance Criteria

- i. Roof design is to be related to the desired built form. Design solutions include articulating the roof, or breaking down its massing on large buildings, to minimise the apparent bulk or to relate to a context of smaller building forms.
- ii. The roof design, including any parapet, is to relate to the size and scale of the building, the building elevations and 3D building form.
- iii. Roofs, particularly on large buildings, are to be articulated to minimise apparent bulk.
- iv. Roof design is to respond to the orientation of the site, for example, by using eaves and skillion roofs to respond to sun access.
- v. Roof design is to relate to the scale of the proposed development. 'Domestic' roof forms may not be appropriate on larger buildings.
- vi. Service elements (such as lift over-runs, service plants, telecommunications infrastructure, satellite dishes, and vent stacks) **are** to be incorporated into roof design to minimise visual impact.
- vii. Where roofs are used for open space, structures to provide shade and shelter from wind are to be incorporated into the design.
- viii. The use of the roof for sustainable functions is to be facilitated by:
 - allowing rainwater tanks for water conservation
 - orienting surfaces so they are suitable for photovoltaic panels/cells
 - allowing for future innovative design solutions, such as water features or green roofs.



The feature roof line of this building gives it a strong identity.



This modern version of the attic contributes to a dynamic and vibrant roofscape at night time.

Refer also to Section 4.1.5
Planting on Structures



This illustration shows how a plan can be organised into separable heating and cooling zones.

4.7.1 ENERGY EFFICIENCY

The ability of buildings to optimise thermal performance, thermal comfort and daylight will contribute to the energy efficiency of buildings, provide increased amenity to occupants and reduce greenhouse emissions and, with them, the cost of supplying energy.

Objectives

- To reduce the need for mechanical heating and cooling.
- To reduce reliance on fossil fuels.
- To minimise greenhouse gas emissions.
- To promote renewable energy initiatives.

Performance Criteria

- i. The following energy ratings apply:
 - **new commercial premises** more than 1000 sq m must achieve a minimum 4 star Australian Building Greenhouse Rating (ABGR) for the Base Building and undertake a commitment agreement*.
 - **new residential developments** (less than 3 storeys) are to achieve a minimum NatHERS rating of 3.5 stars for all units, and 3 or more storeys are to achieve a minimum NatHERS rating of 4 stars for all units.

New mixed use developments will require ABGR documentation for the commercial component and a NatHERS certificate for the residential component.

- ii. A **Total Energy Strategy** (compiled by a suitably qualified person) must be submitted to address energy efficiency aspects that are not covered by the NatHERS rating system. This may include but is not limited to renewable energy initiatives and the energy efficiency of areas such as car parks. Details are to be provided at DA stage.

Any non-compliance with the ratings nominated is to be justified within the Energy Strategy and accompanied by an assessment of the energy performance of the building, and a statement outlining how the objectives of the ratings have been met.

- iii. Passive solar design techniques are to be incorporated into building design to optimise heat storage in winter and heat transfer in summer by:
 - insulation that complies with the relevant Australian Standards
 - maximising thermal mass in floor and walls in northern rooms of dwelling/building

Details are to be provided at DA stage.

- iv. The control of space heating and cooling is to be improved by:
 - designing apartments so that entries open into lobbies or vestibules and are isolated from living areas by doorways
 - allowing for adjustable awnings and blinds to be attached to the outside of windows to keep the heat out in summer
 - providing gas bayonets to living areas, where gas is available
 - providing reversible ceiling fans for improving air movement in summer and for distributing heated air in winter.
 - designing heating/cooling systems to target only those spaces which require heating or cooling, not the whole apartment.
- v. Where mechanical heating or cooling devices are required, they must be rated in terms of energy efficiency.

* More information is available from the Sustainable Energy Development Authority (SEDA) or the ABGR website www.abgr.com.au

PART 4 DESIGN CONTROLS

4.7 ESD

vi. Photovoltaic panels are to be designed for by:

- designing the roof so that photovoltaic panels can be mounted parallel to the roof plane; and
- locating trees where they will not shade photovoltaic installations.

Details are to be shown on DA plans.

v. A minimum 3.5 star SEDA Greenhouse Score water heater is to be provided in each new apartment. The table below indicates which types of systems will achieve this requirement.

Water heater type	Greenhouse Score
Solar-gas boost*	Storage 5
Gas	Instantaneous 4
Gas-Storage	High Efficiency 4
Electric-Storage	Heat Pump 4
Gas-Storage	Low Efficiency 4
Solar-Electric boost*	Continuous 4
Solar-Electric boost*	Off Peak 2 4
Electric	Instantaneous 2
Electric	Continuous 1
Electric-Storage	Storage 1
	(Off peak 1, Off peak 2)

* greater than 50% solar contribution

vi. Hot water systems should be installed as close as practical to the main draw off point as possible. Insulate pipes and keep systems sheltered to minimise heat loss from the system.

vii. Reliance on artificial lighting is to be reduced by:

- providing a mix of lighting fixtures, including dimmable lighting, to provide for a range of activities in different rooms
- using separate switches for special purpose lighting
- using high efficiency lighting, such as compact fluorescent, for common areas
- using motion detectors for common areas, lighting doorways and entrances, outdoor security lighting and car parks.
- investigate the use of voltage control units so that suitable lights (fluorescents) can operate in economy mode.

viii. The efficiency of household appliances is to be maximised by:

- providing areas for clothes to be dried through natural ventilation.
- installing high efficiency clothes dryers and dishwashers.

ix. Clothes dryers must have a minimum Appliance Greenhouse Score of 3.5. The table below matches the Label Energy Star Rating to the Greenhouse Score.

Label Energy Rating Star	SEDA Greenhouse Score
4.5	6.0
4.0	5.5
3.5	5.0
3.0	4.5
2.5	4.0
2.0	3.5 <i>minimum</i>

x. Where pools and spas are proposed, they are to have solar heating.

4.7.2 MAINTENANCE

Detailed design and material selection support long-term maintenance of buildings. On-going maintenance ensures the longevity of quality architectural and landscape design, sustains and increases the value of property and minimises the life-cycle cost of a development to owners.

Objective

- To ensure long life and ease of maintenance for the development.

Performance Criteria

- i. Windows are to be designed to enable their cleaning from inside the building, where possible.
- ii. Manually operated systems, such as blinds, sunshades, pergolas and curtains are to be selected in preference to mechanical systems.
- iii. Building maintenance systems are to be incorporated and integrated into the design of the building form, roof and façade.
- iv. Durable materials, which are easily cleaned and are graffiti resistant, are to be selected.
- v. Appropriate landscape elements and vegetation are to be selected and appropriate irrigation systems are to be provided.
- vi. For developments with communal open space, a garden, maintenance and storage area are to be provided, which is efficient and convenient to use and is connected to water and drainage. Details are to be shown on DA plans.

PART 4 DESIGN CONTROLS

4.7 ESD

4.7.3 TOTAL WATER CYCLE MANAGEMENT

Water is a precious resource. Total water cycle management seeks to minimise impacts on the water cycle by reducing stormwater discharge, protecting stormwater quality, and facilitating water reuse. Building design can contribute to environmental sustainability by integrating measures for improved water efficiency.

Objectives

- To encourage the use of rainwater tanks in accordance with Randwick Council's Rainwater Tank Policy.
- To reduce consumption of potable water and encourage water reuse on site.
- To improve stormwater quality and reduce the quantity leaving the site.
- To minimise the discharge of sediment and other pollutants during and post construction.

Performance Criteria

(a) GENERAL

- i. New developments are to include a **Water Cycle Management Strategy**, prepared by a suitably qualified engineer, which includes (but is not limited to) estimated water usage of the proposed development, a water management strategy for the site, and demonstrates how the strategy addresses the estimated water usage, and the Performance Criteria outlined in the following subsections (b-d).

(b) WATER CONSERVATION

- i. All development is to be in accordance with Randwick Council's Rainwater Tank Policy, State Environmental Planning Policy 4 (SEPP 4), Sydney Water and NSW Health requirements, and relevant Australian Standards.
- ii. AAA rated appliances and fixtures are to be used to minimise water use.
- iii. Rainwater is to be collected, stored and reused on site for uses such as toilet flushing, washing machines (cold water only), garden watering, rooftop gardens, car washing, and any external water features.

(c) FLOOD MITIGATION

It is recommended that applicants contact Council prior to submitting any form of development application to determine whether flooding may be an issue and whether a flood study may be required.

- i. Flood studies will be required prior to development in areas subject to possible stormwater inundation/flooding. As a minimum this shall include areas located within entrapped low points.
- ii. New developments in areas subject to possible stormwater inundation/flooding will need to be designed in a manner to prevent stormwater damage to people and/or property. Subject to flood investigations this may include, but is not limited to:
 - raising all habitable and storage areas a minimum of 300mm above the 1 in 100 year flood level determined for the site (or suitably waterproofing the development to the same level).
 - designing the internal driveway (and all other access points into the basement) with a high point at least 150mm above the 1 in 100 year flood level (higher in some areas).

Contact Council prior to submitting any development application to determine whether a flood study is required. Refer to the NSW Government's Floodplain Management Manual 2001 where applicable.

(d) STORMWATER MANAGEMENT

- i. The volume impact of stormwater on infrastructure is to be reduced by:
 - minimising impervious areas by using pervious or open pavement materials;
 - provision of on-site detention facilities to temporarily store stormwater on-site;
 - retaining runoff from roofs and balconies in water features as part of landscape design or for reuse for toilet flushing, car washing and garden watering;
 - landscape design incorporating local native vegetation (details to be provided in the landscape plan at DA stage);
 - minimising the use of piped drainage systems by adopting vegetated flowpaths (grass swales), infiltration or biofiltration trenches and subsoil collection systems in saline areas;
 - water pollution control ponds or constructed wetlands on larger developments. Details are to be provided at DA stage.
- ii. Developments are to optimise the area of deep soil within the site (area of deep soil is to be provided in the landscape plan at DA stage).
- iii. Structural stormwater treatment measures are to be used, including at minimum:
 - litter or gross pollutant traps to capture leaves, sediment and litter; and
 - onsite detention storage.
- iv. Stormwater quality is to be protected by providing for:
 - sediment filters, traps or basins for hard surfaces;
 - treatment of stormwater collected in sediment traps on soils containing dispersive clays;
 - all storm water quality treatment devices are to be designed for a minimum 3 month average recurrence interval (ARI) magnitude storm.
- v. The need for expensive sediment trapping techniques is to be minimised by controlling erosion through:
 - landscape design incorporating appropriate vegetation;
 - stable (non-eroding) flowpaths conveying water at non-erosive velocities.
- vi. Approval from the Department of Infrastructure, Planning and Natural Resources (DIPNR) may be required for development applications involving use or extraction of groundwater and will be considered as Integrated Development. Refer to the submission requirements for Integrated Development.

Approval from the Department of Infrastructure, Planning and Natural Resources (DIPNR) may be required for development applications involving the use or extraction of groundwater.

PART 4 DESIGN CONTROLS

4.7 ESD

4.7.4 WASTE MANAGEMENT

The minimisation and management of waste from buildings can contribute to the visual and physical amenity of the building as well as limiting potentially harmful impacts on the environment. Minimising waste is relevant to all stages of the building's life cycle, from construction to demolition. It also includes the way in which waste is stored and collected.

Objectives

- To avoid the generation of waste through design, material selection and building practices.
- To plan for the types, amount and disposal of waste to be generated during demolition, excavation and construction of the development.
- To encourage waste minimisation, including source separation, reuse and recycling.
- To ensure efficient storage and collection of waste and quality design of facilities.

Performance Criteria

- i. Submit a **Waste Management Plan** (at DA lodgement) that conforms with *Randwick City Council's Waste Management Plan - Part A* with each development application. Generally the Waste Management Plan should conform with the guidelines published in the document *Better Practice Guide for Waste Management in Multi-Unit Dwellings*, Resource NSW, Feb 2002.
- ii. Existing built elements are to be incorporated into new work, wherever possible, and detailed in the Waste Management Plan.
- iii. Demolished materials are to be recycled and reused, where possible, and detailed in the Waste Management Plan.
- iv. Building materials that can be reused and recycled at the end of their life, are to be specified.
- v. Waste management processes are to be integrated into all stages of the project, including the design stage, and addressed in the Statement of Environmental Effects.
- vi. Storage areas for rubbish bins are to be located away from the front of the development and are to be appropriately screened. Details are to be shown on DA plans.
- vii. Every dwelling is to be provided with a waste cupboard or temporary storage area of sufficient size to hold a single day's waste and to enable source separation.
- viii. On-site composting is to be incorporated, where possible, and detailed in the DA plans.

Submit a Waste Management Plan.

Refer to Council's *Waste Management Plan - Part A* and *Better Practice Guide for Waste Management in Multi-Unit Dwellings*.

4.7.5 ENVIRONMENTAL EDUCATION

Environmental education has a fundamental role in taking steps towards sustainability. The ability to make informed choices and ways of dealing with environmental problems will help us towards sustainable living.

Objectives

- To educate residents on the sustainability features of the development.
- To encourage the use and maintenance of water efficient and energy efficient design features of the development over time.

Performance Criteria

- i. Environmental education toolkits and resource packages are to be provided for all residents detailing the design features and maintenance requirements for the sustainability features of the development, such as (but not limited to):
 - rainwater tanks;
 - water conservation devices;
 - solar powered devices;
 - energy conservation devices;
 - composting.
- ii. Where practical, maintenance instructions are also to be attached to the particular feature, such as a rainwater tank.
- iii. The environmental education package may be complemented with information from Randwick City Council (such as the *Local Native Plants for Sydney's Eastern Suburbs* brochure) and other organisations (such as the Sustainable Energy Development Authority).
- iv. A draft environmental education package is to be submitted with the Development Application.

Acoustic privacy	a measure of sound insulation between dwellings and between external and internal spaces
Accessible housing	housing that is designed and built to accommodate the needs of occupants with mobility impairment (Australian Standard 1428: Design for Access & Mobility Series)
Adaptable housing	housing that is designed and built to accommodate future changes to suit occupants with mobility impairment or life cycle needs (Australian Standard 4299: Adaptable Housing)
Affordable Housing	housing for low to moderate income households. Affordable housing is usually required to be financially viable based on a ratio of housing costs to income.
Amenity	the 'liveability' or quality of a place which makes it pleasant and agreeable to be in for individuals and the community. Amenity is important in both the public and private domain and includes the enjoyment of sunlight, views, privacy and quiet.
Articulation	three dimensional modelling at the periphery of the building, including any changes in facade alignment, balconies, bay windows and sun shading devices
AS 1428	Australian Standard 1428: Design for Access and Mobility Series
AS 4299	Australian Standard 4299: Adaptable Housing
BCA	Building Code of Australia
Building Envelope	the area within which a building can be built, usually represented in plan and section.
Build to Line	a front setback expressed as a required distance from the street edge of the building envelope. In urban areas the build to line often corresponds to a zero front setback, to establish a consistent streetscape.
Building Line	the line formed by the main external face of the building, excluding any balcony or bay window projections
Building Height	is calculated as the distance measured vertically from the ground level taken from each point on the boundary of the site to the underside of the topmost floor
Core	vertical circulation (eg lift, stairs)
Cornice	decorative horizontal moulding at the top of a building which 'crowns' or finishes the external facade
Cross over apartments	apartments with two opposite aspects and with a change in level between one side of the building and the other
Cross through apartments	apartments on one level with two opposite aspects
Deck	an external platform, usually elevated, located alongside and accessible from an interior space and often made of timber
Depth or width	measured from inside face of wall to inside face of wall or from inside face of glass to inside face of glass
Double loaded corridor	corridor with apartments off both sides, generally associated with single aspect apartments
Dual aspect apartment	apartments which have at least two major external walls facing in different directions, including corner, cross over and cross through apartments

GLOSSARY

Façade	the external face of a building
Glass line	inside face of windows on the external walls of a building
Ground level	means the level of the site that existed at the appointed day
Habitable room	any room or area used for normal domestic activities, including living, dining, family, lounge, bedrooms, study, kitchen, sun room and play room
Indigenous plants or animals	a plant or animal species occurring at a place within its historically known natural range and forming part of the natural biological diversity of a place
Internal Courtyard	communal space at ground level or above a structure (eg. podium), formed by the building and enclosed
Juliet balcony	small projecting balcony, generally ornamental or only large enough for one person standing
Lightwell	a shaft for air or light, enclosed on all sides or which has the potential to be enclosed by future adjoining development, and either open to the sky or glazed
Maisonette apartment	a two-storey apartment, where the storeys are vertically stacked
Mezzanine	the second storey of an apartment, fully or partially open to a void (double height) space shared by both storeys
Non-habitable room	spaces of a specialised nature not occupied frequently or for extended periods, including bathrooms, toilets, pantries, walk-in wardrobes, corridors, lobbies, photographic dark rooms and clothes drying rooms
On-grade	on ground level (not on a building structure)
Open plan	apartment layouts where spaces are not divided into discrete rooms, but are open and connected to allow flexibility of use (typically living, dining, kitchen and study areas)
Operable screening device	sliding, folding or retractable elements on a building designed to provide shade, privacy, and protection from natural elements
Operable walls	internal walls which can be moved, for example by sliding, folding, or pivoting, to allow for different room configurations
Parapet	a horizontal low wall or barrier at the edge of a balcony or roof. Often taken to refer to the decorative element which establishes the street wall height of heritage buildings (see Cornice)
Perimeter block development	where buildings are generally aligned to the street, enclosing or partially enclosing an area in the middle of the block
Potable water	water which conforms to Australian Standards for drinking quality
Private Courtyard	private open space which may be on a structure (eg. podium, parking deck) or at ground level
SEPP	State Environmental Planning Policy
Silhouette	a building outline viewed against the sky

GLOSSARY

Stack ventilation / solar chimney	air convection resulting from hot air being pushed up and out by colder denser air which is drawn in at a lower level
Storey	means habitable floors, excluding underground parking
Terrace (outdoor area)	an unroofed and usually paved area connected to an apartment and accessible from at least one room. May be on-grade or on a structure (podium)
Underground	below ground level or less than 1.2 metres above ground level

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