The Hills Development Control Plan (DCP) 2012

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THE HILLS Sydney's Garden Shire



Part A
Introduction

A

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1. Introduction

1.1 NAME AND STATUS OF THE PLAN

This Development Control Plan has been prepared in accordance with Section 74C of the Environmental Planning and Assessment Act 1979 (EP&A Act) and Environmental Planning and Assessment Regulation 2000 (EP&A Regulation), and is to be referred to as 'The Hills Development Control Plan 2012'.

The provisions of this Development Control Plan are amongst the considerations that are relevant when Council determines any application for development of land within the Shire.

1.2 LAND TO WHICH THIS DEVELOPMENT CONTROL PLAN APPLIES

This Development Control Plan applies to all land within The Hills Shire.

Note: Separate Development Control Plans apply to the growth centres precincts known as 'North Kellyville' or 'The Hills Growth Centre' (i.e. Box Hill) under State Environmental Planning Policy (Sydney Region Growth Centres) 2006 (Growth Centres SEPP). These Development Control Plans are known as the 'North Kellyville Development Control Plan' and the 'Box Hill and Box Hill Industrial Precincts Development Control Plan'.

The provisions of the North Kellyville Development Control Plan and the Box Hill and Box Hill Industrial Precincts Development Control Plan apply to those precincts, unless specifically stated in those Development Control Plans that provisions of this Development Control Plan apply. Where there is an inconsistency between those Development Control Plans and this Development Control Plan in respect of land within those precincts, the provisions of the Development Control Plan applying to those precincts shall apply to the extent of the inconsistency.

1.3 PURPOSE OF THIS DEVELOPMENT CONTROL PLAN

The purpose of this Development Control Plan is to guide development outcomes within The Hills Shire. Relevant provisions within this Development Control Plan, along with other relevant planning legislation and policy, will be considered by Council in the assessment of development applications.

1.4 HOW TO USE THIS PLAN

This Development Control Plan consists of a written document and maps, and is divided into a number of Parts. Within each Part are a number of Sections.

Except as otherwise indicated, the provisions in each Part apply to all land identified in 'Land to which this Development Control Plan Applies' above.

Unless otherwise provided in the Glossary in this Part of the Development Control Plan, definitions for terms used in this Development Control Plan will be those definitions used in the EP&A Act, EP&A Regulation and The Hills Local Environmental Plan 2012.

A development may be required to meet development standards contained in different parts of the Development Control Plan. Examples are provided as follows:

Example 1:
A development application for a residential flat building will need to comply with provisions in the following Parts:

- *Introduction*
- *Residential Flat Buildings*
- *Parking*
- *Landscaping*

- *Waste Management Plan*

Example 2:
A development application for a veterinary hospital proposed on land zoned RU2 Rural Landscape will need to comply with provisions in:

- *Introduction*
- *Rural*
- *Parking*
- *Signage*
- *Landscaping*

1.5 OBJECTIVES, OUTCOMES, PERFORMANCE CRITERIA AND DEVELOPMENT CONTROLS

An applicant may request a variation to any development control, provided that the outcomes/objectives of the specific development control and the relevant Section/s of the Development Control Plan as a whole can still be achieved. The applicant must provide a written statement as part of their development application (for instance within the Statement of Environmental Effects) to support any request for a variation to the Development Control Plan.

2. Development Assessment Pathways

Most development requires a development application, except when it is identified as Exempt or Complying Development. Requirements for these types of development are set out under State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 (Codes SEPP), or within Schedules 2 and 3 of The Hills Local Environmental Plan 2012.

2.1 EXEMPT DEVELOPMENT

In general, Exempt Development is low impact, minor development, such as small-scale additions to existing homes, garden sheds, decks and awnings.

If a development meets all the pre-determined standards and criteria as set out in either the Codes SEPP or Schedule 2 of The Hills Local Environmental Plan 2012, no form of approval is required.

2.2 COMPLYING DEVELOPMENT

Complying Development is common or routine development that has predictable and minor environmental impacts. Examples of complying development include building a new house, renovating an existing house or undertaking alterations to commercial or industrial buildings, if the development meets all the pre-determined standards and criteria as set out in the legislation. Secondary dwellings or 'granny flats' can also be undertaken as complying development, however the relevant controls for these are under State Environmental Planning Policy (Affordable Rental Housing) 2009.

Complying Development approval comes in the form of a Complying Development Certificate (CDC) which can be issued by either Council or a private certifier.

2.3 LOCAL DEVELOPMENT

Where a development is permissible with consent and does not fit into the exempt or complying categories, a development application needs to be submitted and determined by Council. The design of the development is to be in accordance with the relevant provisions of this Development Control Plan. A variation from the development controls may be considered as detailed in Section 1.5 – Objectives, Performance Criteria and Development Controls.

3. Advertising & Notification Procedures

The purpose of this section is to establish a clear process for public participation in the development assessment process. The notification procedures outlined below aim to balance the public's right to participate in the development assessment process whilst minimising delays in the processing of low impact development applications.

3.1 MANDATORY ADVERTISING/NOTIFICATION

Planning legislation requires some developments to be advertised in a local newspaper and/or notified to adjoining property owners and relevant public authorities. These types of developments are generally larger scale and/or require approval from one or more public authorities.

Applications which require advertising/notification under legislation are identified below and, if applicable are required to pay an advertising fee at the time of lodgement in accordance with Council's Fees and Charges:

- Nominated Integrated Development
- Threatened Species Development
- Class 1 or Class 2 Aquaculture Development
- Designated Development
- State Significant Development

Note: See Section 6 – Glossary for definitions of these development types.

3.2 NOTIFICATION OF DEVELOPMENT APPLICATIONS

Written notification to owners of adjoining and adjacent properties will be undertaken for local development that is permissible with consent except for where identified in Section 3.4 Circumstances Where Notification is not Required.

Council may also notify additional landowners in the vicinity of a development site, if it is considered the application may have a greater impact. In determining whether to extend or limit the extent of notification the following factors may be considered:

- Siting and design
- Views
- Visual and acoustic privacy
- Access
- Overshadowing
- Public interest
- Topography
- Solar access
- Drainage
- Landfill
- Traffic generation

3.3 NOTIFICATION TIMEFRAMES

The notification period for local development is to be a minimum period of 14 days however may be reduced to 7 days in special circumstances. The period of time may also be extended depending on the circumstances of the case. Timeframes for Mandatory Advertised Development is specified in legislation however is generally 30 days, commencing on the day after which the notice of the application is first published in a newspaper. Any notification period shall not include the last week of December and the first week of January in any year.

3.4 CIRCUMSTANCES WHERE NOTIFICATION IS NOT REQUIRED

No notification of adjoining and adjacent properties is required for the following types of development applications, if the proposal complies with all applicable development controls (LEP, DCP & other relevant policies) and/or it is considered by Council that the development is unlikely to have a detrimental impact on those properties:

- New rural sheds ancillary to residential use
- New rural fencing
- New tennis courts ancillary to residential use
- Strata subdivisions
- Subdivisions to adjust property boundaries where no additional lots are created
- Where the development site does not adjoin a residential property

Where a development application is not notified by Council in accordance with the above provisions, adjoining and adjacent property owners will be sent a courtesy letter advising that an application has been received that is in accordance with the requirements of the development control plan. The letter will state Council will not be formally notifying or inviting submissions for the application which will be determined within the requirements of the *Environmental Planning and Assessment Act, 1979* no sooner than 14 days from the date of the letter.

3.5 CONCILIATION CONFERENCES

If more than 10 submissions are received relating to a development application during a formal notification period, Council will host a conciliation conference. All conferences are chaired by the Mayor or the Mayor's nominee.

4. Lodging a Development Application

Guidance on lodging development applications can be found within Council's Development Application Lodgement Guide and relevant Fact Sheets available from Council's Customer Service Centre or on Council's website (www.thehills.nsw.gov.au).

5. Ecologically Sustainable Development

Ecologically sustainable development is defined in The Hills Local Environmental Plan 2012 Dictionary. In order to fulfil Council's statutory responsibilities as required by Schedule 2 of the EP&A Regulation; the Local Government Act 1993, development is required to meet Council's ESD Objectives.

5.1 COUNCIL'S ESD OBJECTIVES

ESD 1 – To apply the precautionary principle where development is likely to cause short or long-term irreversible or serious threats to the environment.

ESD 2 – To allow for broad community involvement in respect to issues of concern throughout the development process.

ESD 3 – To ensure during the design, construction and operation of the development, that water is utilised efficiently and that water leaving the site is of a quality and quantity comparable to that which is received.

ESD 4 – To ensure that biodiversity and the integrity of ecological processes are not compromised by the development.

ESD 5 – To promote the following during the design, construction and operation of development:

- *the use of energy efficient materials and designs*
- *utilisation of renewable energy & materials; and*
- *energy efficient technology.*

ESD 6 – To follow the principles of the 'Waste Hierarchy' (reduce, reuse, recycle) in the use of materials and the design of waste recovery and disposal systems throughout the development process.

ESD 7 – To protect neighbourhood amenity and safety in the design and construction and operation of the development.

ESD 8 – To encourage the long-term economic viability and health of the community in the development process.

ESD 9 – To encourage the use of public transport, bicycles and pedestrian trips in the development and design process.

5.2 ACHIEVING THE ESD OBJECTIVES

In all aspects of the planning for, and development of, land, consideration must be given to achieving the ESD objectives listed.

As part of the Statement of Environmental Effects required to be submitted with all Development Applications a summary of the action taken in order to achieve these objectives must be included. Specific objectives and development controls are contained within this Development Control Plan which identify specific areas where ESD principles need to be carefully considered and provides controls detailing how these principles are to be achieved.

6. Glossary

The explanations included here are for purposes of clarification only and do not override the definitions in legislation.

Advertising area is:

- in the case of an advertising structure with one surface area which is used or is to be used for advertising – that surface area;
- in the case of an advertising structure with more than one surface area which is used for advertising – the largest of such surface areas; or
- in any other case – one third of the total surface area of the advertising structure that is to be used for advertising.

Annual Environmental Management Plan (extractive industries) is a report to indicate the overall performance and management of the operation. The Environmental Management Plan may use and/or reference as chapters the respective strategies/studies and other management plans required by for extractive industry development. As a guide, consideration should be given to addressing the following matters:

- Acquisition of all necessary licences and permits;
- On-site materials Management;
- Water Management;
- Acoustic Management;
- Air quality Management;
- Transport routes, access & movements;
- Rehabilitation Management, including consultation with community groups;
- Identifying risks and safeguards and the confidence level of contingency/emergency plans;
- Compliance with the conditions of consent;
- Compliance with the objectives of this Appendix;
- Advice & recommendations of all relevant state government agencies; and
- Recommendation to adjustments to operation procedures to improve the overall performance of the extractive industry.

The Environmental Management Plan may be required to be accompanied by a Statement of Compliance and a Survey Plan to clearly illustrate the status and performance of extraction and rehabilitation.

Annual Exceedance Probability (AEP) is the chance of a flood of a given or larger size occurring in any one year, usually expressed as a percentage. E.g. if a peak flood discharge has an AEP of 5%, it means that there is a 5% chance (that is one-in-20 chance) of this peak flood discharge or larger events occurring in any one year (see ARI).

Annual Rehabilitation Management Plan (extractive industries) is a report which may be required every 12 months after the endorsed date of development consent to demonstrate and ensure the effective implementation of the Rehabilitation Strategy.

Aquifer (extractive industries) is rock or sediment in a geological formation, group of formations or part of a formation which is capable of being permeated permanently and can thereby transmit water.

Australian Height Datum (AHD) is the common national plane of level corresponding approximately to mean sea level.

Average Recurrence Interval (ARI) is the long-term average number of years between the occurrence of a flood as big as (or larger than) the selected event.

Batter (extractive industries) is an artificial, uniform slope or its inclination expressed as one vertical unit to so many horizontal units.

Building setback is the minimum distance that a wall, window or outer-most part of the building is required to be from a property boundary. It is measured as the horizontal distance between the proposed wall, window or outer most part of the building and the boundary.

Bund Wall (extractive industries) is an uninterrupted wall of earth normally built to such a height and location which can contain an area of water, sediment, hazardous liquid or the like.

Class 1/Class 2/Class 3 Aquaculture Development is the level of environmental risk of an aquaculture development (aquaculture being the keeping or cultivating of fish or marine vegetation for a commercial purpose), with Class 1 being the lowest risk and Class 3 being the highest risk. Given the higher environmental higher risk Class 3 Aquaculture falls under the category of Designated Development. Refer to the EP&A Act and Regulation for further information.

Co-siting (telecommunications) is the siting of a number of telecommunication facilities, often owned by different carriers, in one location.

Cumulative impact (telecommunications) is the impact of radiation from various sources or over time.

Design floor level or ground level (flood controlled land) is the minimum finished floor level or ground level that applies to the development. If the development is concessional development, this level is determined based on what land use category would apply if it was not categorised as Concessional Development.

Designated development is development which may have significant environmental impacts and requires additional consideration of such impacts (for example mining developments or chemical industries).

Direct seeding (extractive industries) is a seeding technique which may be as simple as collecting viable seeds from a community of plants and then paced/thrown onto a prepared/desired site and includes Hydro mulching.

Dust suppression (extractive industries) is the means by which dust particles and/or granules from gravel, sand or loose road or land surface material is suppressed by water spraying or dampening devices and includes:

- the removal of such material from roads in the vicinity where it is considered to be hazardous to general road users
- dust suppression equipment fitted to processing machinery.

Effective warning time (flood controlled land) is the time available after receiving advice of an impending flood and before the floodwaters prevent appropriate flood response actions being undertaken. The effective warning time is typically used to raise furniture, evacuate people and transport their possessions to safety.

Electromagnetic radiation (EMR) is the radiation in the microwave and radiofrequency band of the electromagnetic spectrum.

Employment co-efficient (extractive industries) is the relationship between the number employed in extractive industry divided by its output/turnover and expressed in the number of jobs per million dollars of output.

Enclosed car parking (flood controlled land) is car parking which is potentially subject to rapid inundation, which consequently increases danger to human life and property damage (such as basement or bunded car parking areas). The following criteria apply for the purposes of determining what is enclosed car parking:

- Flooding of surrounding areas may raise water levels above the perimeter which encloses the car park (normally the entrance), resulting in rapid inundation of the car park to depths greater than 0.8m
- Drainage of accumulated water in the car park has an outflow discharge capacity significantly less than the potential inflow capacity.

Environmental Management Plan (extractive industries) is a report which indicates the overall performance and management of the extractive industry operation.

Extractive material (extractive industries) is sand, gravel, clay, turf, soil, rock, stone and any similar substance such as bush-rock.

Flora/Fauna Monitoring Program (extractive industries) should establish the efficacy of buffer zones to protect and enhance opportunities for the further development of native species during the life span of extraction operation. May be included within the annual Rehabilitation Management Plan.

Flood is a relatively high stream flow which overtops the natural or artificial banks in any part of a stream, river, estuary, lake or dam, and/or local overland flooding associated with major drainage as defined by the Floodplain Development Manual (FDM) before entering a watercourse, and/or coastal inundation resulting from super-elevated sea levels and/or waves overtopping coastline defences excluding tsunami.

Note: Consistent with the Floodplain Development Manual, this section of the DCP does not apply in the circumstances of local drainage inundation as defined in the Floodplain Development Manual and determined by Council. Local drainage problems can generally be minimised by the adoption of urban building controls requiring a minimum difference between finished floor and ground levels.

Flood awareness is an appreciation of the likely effects of flooding and knowledge of the relevant flood warning and evacuation procedures.

Flood control lot is as defined in the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

Flood controlled land is land to which a flood related development control applies.

Flood evacuation strategy is the proposed strategy for the evacuation of areas within effective warning time during periods of flood as specified within any policy of Council, any FRMP, the relevant State government disaster plan, by advices received from the State Emergency Services (SES) or as determined in the assessment of individual proposals.

Floodplain being synonymous with *flood liable* and *flood prone land* is the area of land which is subject to inundation by the probable maximum flood (PMF).

Floodplain Development Manual (FDM) is the document published by the New South Wales Government and entitled *"Floodplain Development Manual: the management of flood liable land"* dated April 2005.

Floodplain Risk Management Plan (FRMP) is a plan prepared for one or more floodplains in accordance with the requirements of the FDM or its predecessor.

Floodplain Risk Management Study (FRMS) is a study prepared for one or more floodplains in accordance with the requirements of the FDM or its predecessor.

Flood Planning Levels (FPLs) are the combinations of flood levels (derived from significant historical flood events or floods of specific ARIs or AEPs) and freeboards selected for floodplain risk management purposes, as determined by Council. Under the influences of climate change, flood levels and FPLs may change with time.

Floodway areas are those areas of the floodplain where a significant discharge of water occurs during floods. They are often aligned with naturally defined channels. Floodways are areas that, even if only partially blocked, would cause a significant redistribution of flood flow, or a significant increase in flood levels.

Flow-ons (extractive industries) are the non direct economic impact of an Extractive industry and includes those consumption and production induced Flow Ons.

Flowpath is the area affected by the concentrated flow of local overland flooding. This could be associated with stormwater discharges above ground due to an exceedance of the capacity of the piped drainage system, blockage of the piped drainage system or where no pipe drainage system exists.

Freeboard provides reasonable certainty that the risk exposure selected in deciding on a particular flood chosen as the basis for a FPL, is actually provided. It is a factor of safety typically used in relation to the setting of flood levels, levee crest levels, etc. (as specified at Section K5 of the FDM). Freeboard is included in flood planning levels (although in some circumstances, zero freeboard may be appropriate).

Groundwater (extractive industries) is all waters occurring below the land surface.

Groundwater Impact Assessment (extractive industries) is a report which:

- Identifies & classifies aquifer systems
- Identifies all ground water dependent land uses & environments within catchment areas
- Assesses vulnerability of ground water
- Identifies freeboard level (to AHD) above high groundwater level capable of protecting groundwater flow patterns & water quality
- Identifies potential sources of impacts including seepage from tailing dams
- Outlines procedures for monitoring ground water flow and quality.

The site specific Groundwater Impact Assessment Report should reference the findings and recommendations of the Maroota Groundwater Study - Stage 1: Scoping Study 1996 and any subsequent reports.

Habitable floor area (flood controlled land) is:

- In a **residential situation**: a living or working area, such as a lounge room, dining room, rumpus room, kitchen, bedroom or workroom

- in an **industrial or commercial situation** an area used for offices, retailing, storage, warehousing, factory uses or the like, or to store valuable possessions susceptible to flood damage in the event of a flood

Note: Separate considerations are specified for the car parking area of a development irrespective of the land use with which it is associated.

Hazard is a source of potential harm or a situation with a potential to cause loss.

Integrated development is development that requires development consent and at least one approval, permit, licence, authority, or consent from another government body under one or more pieces of legislation listed in section 91 of the EP&A Act.

Internal access road (extractive industries) is a carriageway specifically designed to accommodate the two (2) way movement of Haulage vehicles.

Landscape (extractive industries) is all the flora & fauna diversity (and topography), cultural significance (i.e. aesthetic, scientific, historic, social, or other special values), travel routes, and rural/residential land uses.

Landscape works (landscaping) is in relation to a development site include, but are not limited to: site preparation, earth works and grading; planting, mulching and maintenance; hard landscaping (such as decks, paved areas, water features, pergolas and retaining walls) and the installation of watering systems.

Local drainage is local stormwater systems including pits and pipes, which, when the capacity is exceeded, may lead to small scale overland flow including areas generally where depths are less than approximately 0.3m and are beyond the floodplains of original watercourses (which may now be piped, channelised or diverted). There is little risk to personal safety or property damage in these areas. This type of inundation is not referred to as 'flooding' and normal building controls are used to manage the inundation risks in these areas rather than the flood-related controls in this Plan.

Natural ground level (landscaping) is the existing ground level of a site before any improvements or other works are carried out.

Net Floor Area (NFA) is the total floor area of all buildings on a site. It does not include walls, the area of stairs, loading bays, access ways or car parking areas or any area occupied by machinery required for air conditioning, heating or power supply or lifts.

Nominated Integrated Development refers to certain types of integrated development that are subject to certain public exhibition requirements under the EP&A Act and Regulation. The EP&A Regulation defines nominated integrated development as follows:
Integrated Development (not being threatened species development or Class 1 aquaculture development) that requires an approval (within the meaning of section 90A of the EP&A Act) under other legislation including:

- a provision of the Heritage Act 1977 specified in section 91 (1) of the EP&A Act, or
- a provision of the Water Management Act 2000 specified in section 91 (1) of the EP&A Act, or
- a provision of the Protection of the Environment Operations Act 1997 specified in section 91 (1) of the EP&A Act.

Refer to the EP&A Act and Regulation for further information

On Site Detention (OSD) is a facility, designed to specifications nominated by Council and provided on an individual site to retard the flow of water off site so to minimise downstream flooding impacts. The requirement for an OSD system is not considered to be a "flood related development control" for the purposes of *SEPP (Exempt and Complying Development Codes) 2008*.

Outbuilding is a building which is ancillary to a principal residential building and includes sheds, garages, car ports and similar buildings.

Overburden (extractive industries) is the top layer of earth/rock that is to be removed to expose the extractive material.

Overland flowpath is an overland flowpath is surface runoff before it enters a waterway. A flowpath is usually initiated when rainfall runoff concentrates in low points, surface depressions and gullies, and ultimately overwhelms the capacity of a stormwater drainage system.

Precautionary principle (extractive industries) is instances where there are threats of serious or irreversible damage, a lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

Probable maximum flood (PMF) is the largest flood that could conceivably occur at a particular location, usually estimated from probable maximum precipitation.

Probable maximum precipitation (PMP) is the greatest depth of precipitation for a given duration meteorologically possible over a given size storm area at a particular location at a particular time of the year. PMP is the primary input to the estimation of the probable maximum flood.

Radio-communications facility is a base station or radio-communications link, satellite-based facility or radio-communications transmitter.

Recharge area (extractive industries) is a geographical area in which water infiltrates then percolates to reach an aquifer.

Refuge area (flood controlled land) is an onsite refuge or reliable access to ground that is located above the PMF that provides reasonable shelter for the likely occupants of development commensurate with the period of time that refuge is likely to be required in floods up to the PMF.

Rehabilitation Strategy (extractive industries) is a report which outlines:

- Site analysis used to determine conservation areas
- The implementation of the findings of Flora & Fauna monitoring program
- Means of maintaining vegetative buffer zones and rehabilitated areas
- Placement of rocks & landscape features
- Tree retention, protection and replenishment scheme
- Integration of the final landform with the landscape characteristics of the surrounding terrain
- Capacity of the final landform to achieve the objectives and performance criteria of this plan
- Details of backfilling works
- A Works Program defining a time period for the rehabilitation of each stage with the aim to restore vegetative covers at the earliest possible opportunity
- Those works that are to be carried out under the supervision of a nominated qualified person
- Reference to a Farm Management Plan for sites to be rehabilitated to agricultural land
- Compliance with all controls set out in the Rural DCP section on Extractive Industries
- Compliance with other established rehabilitation methods endorsed by relevant Public Authority including “best practice” publications.

Reliable access (flood controlled land) during a flood means the ability for people to safely evacuate an area subject to imminent flooding to a refuge area within effective warning time, having regard to the depth and velocity of flood waters, the suitability of the evacuation route, and without a need to travel through areas where water depths increase.

Residence not associated with extractive operations (extractive industries) is a dwelling-house whose occupants, whether owner/s or tenants have no direct involvement in the day-to-day operations of extractive industries.

Risk is the chance of something happening and its impact. It is measured in terms of consequences and probability (likelihood).

Sediment storage volume (extractive industries) is the holding capacity of a Sediment Control Dam.

Site Flood Emergency Response Plan (not being an SES Flood Plan) is a management plan that demonstrates the ability to safely evacuate persons and includes a strategy to move goods above the flood level within the effective warning time. This Plan must be consistent with any relevant flood evacuation strategy, flood plan or similar plan.

State Significant Development is development that is identified by the NSW Government as being either of State or Regional significance, and for which the Minister for Planning's approval is required. Refer to the EP&A Act and Regulation for further information.

Suitably Qualified Civil Engineer is a civil engineer who is a Corporate Member of the Institution of Engineers, Australia, or is eligible to become a Corporate Member of the Institution of Engineers, Australia, and has appropriate experience and competence in the relevant field.

Survey plan is a plan prepared by a registered surveyor which shows the information required for the assessment of an application in accordance with the provisions of this Plan.

Tailings (extractive industries) are waste products from mining and processing operations, commonly in the form of fine grained sediments.

Tailing dam (extractive industries) is structural containment and storage areas for tailings. Such structures are to be structurally stable, integrate with the scenic & landscape qualities of the surrounding environment and facilitate rehabilitation after capping.

Threatened Species Development is development on land that is, or is a part of, critical habitat or is likely to significantly affect threatened species, populations or ecological communities, or their habitats. Refer to the EP&A Act and Regulation for further information.

Visual sensitivity (extractive industries) is the degree of importance of a particular landscape component within a natural landscape setting and/or scene.

Water Management Strategy (extractive industries) is a report outlining a framework for the identification, classification and management of artificial and natural surface and sub-surface water cycles. This framework should incorporate details for all phases of development including:

- Site investigations used to identify and classify catchment origin, drainage patterns, water flow and water quality
- Source, quantity and quality of water required to provide a reliable supply of water to the operations
- Procedures for minimising importation of water
- Procedures for maximising re-use and recycle of collected waters particularly during extreme climatic condition
- Procedures capable of maintaining natural surface water flow and quality conditions along downstream boundary alignments
- Destination points for collected waters are retained within the extraction site
- The design, location and likely impact of any temporary diversion of drainage patterns within the extraction site
- Procedures for ensuring that contaminated waters are contained on-site during the 1% AEP
- Risks, safeguards and contingency plans for extreme climatic conditions or operational hazards including breach or contamination

- Procedures for monitoring groundwater flow, quality and recharge areas within catchments having regard to the recommendations of the Groundwater Impact Assessment Report.

Watertable (extractive industries) is the surface of the saturated zone in an unconfined aquifer.

Wet weather high groundwater level is a term used to represent the groundwater level at a time of the year when most of the rain in a region falls.

7. Important Dates & Document Specifications

- Adoption date: 12 March 2013
- Date in force: 26 March 2013

8. List of Amendments

This Development Control Plan has been amended as follows:

Part & Section	Description of Amendment	Address of Land (if applicable)	Adoption Date & Minute No.	In Force Date	File Reference
PBS2 - Residential Map Sheet 13 of 46	Controls to guide development outcomes on the site and removal of Restricted Development Area	64 Mackillop Drive, Baulkham Hills (Lot 2 DP 817696)	28/05/2013 (284)	11/06/2013	FP204
PDS10 - Baulkham Hills Town Centre	Controls to guide development within the Windsor Road Precinct of the Baulkham Hills Town Centre	404-416 Windsor Road, 2-6 Rembrandt Drive, 1-7 Meryll Avenue and 2 Meryll Avenue, Baulkham Hills (Lot 1 DP 564845, Lot 6 DP654751, Lots 101 – 104 DP 1000120, Lot 1 DP 164096)	27/11/2012 (634)	02/08/2013	3/2012/PLP
PDS6 - Rouse Hill Regional Centre	Amendments to residential controls	Rouse Hill Regional Centre - Residential Precincts	10/12/2013 (730)	07/01/2014	FP28
PDS15 - Crane Road Precinct	Amendments to various controls to reflect revised development outcomes for the site	299-309 Old Northern Road, Castle Hill (Lot 23 DP 785110, Lot 1 DP 701677, Lot A DP 151502, Lot 18 DP 821398 and Lot 19 DP 821398) and adjoining road reserve	10/09/2013 (528)	21/02/2014	9/2013/PLP
PDS7 - Balmoral Road Release Area	Controls to guide development outcomes at the site	2, 2A, 2B and 12 Memorial Avenue, Kellyville (Lots 7 and 8 DP 1128575, part of Lot 214 DP 1123224 and Lot 2 DP 1131540 and Lot 2 DP 1087781)	24/09/2013 (548)	07/03/2014	7/2013/PLP

Part & Section	Description of Amendment	Address of Land (if applicable)	Adoption Date & Minute No.	In Force Date	File Reference
PCS6 - Flood Controlled Land (new) PA - Introduction PBS1 - Rural PBS2 - Residential PBS3 - Dual Occupancy PBS4 - Multi Dwelling Housing PBS5 - Residential Flat Buildings PBS6 - Business PBS7 - Industrial PCS5 - Telecommunications Facilities PDS1 - 27-33 North Rocks Road PDS2 - Pennant Street Target Site PDS3 - 257 Windsor Rd Baulkham Hills PDS5 - Kellyville/Rouse Hill PDS7 - Balmoral Road PDS8 - Norwest Residential PDS9 - Windsor Rd Northmead Target Site PDS10 - Baulkham Hills Town Centre PDS12 - Carlingford Precinct PDS13 - 354-368 Old Northern Rd Castle Hill PDS14 - Target Site Corner Windsor Rd and Seven Hills Rd PDS15 - Crane Rd Precinct	New flood controls, definitions for flood-related terms, DA requirements for flood control lots and removal of duplication of controls from various sections of the DCP	N/A	11/03/2014 (112)	25/03/2014	FP214

Part & Section	Description of Amendment	Address of Land (if applicable)	Adoption Date & Minute No.	In Force Date	File Reference
PBS7 - Industrial PCS1 - Parking	Site specific controls for development within the Edwards Road Precinct	278 to 290-312 Annangrove Road, Rouse Hill (Lot 2 DP 879450, Lot 2 DP 1032790, Lot 10 DP 563695, Lot 2 DP 838278, Lot 3 DP 222080, Lot 26 DP 834050 & Lot 12 DP 835727), 20 & 31 Edwards Road, Rouse Hill (Lot 2 DP 222080 & Lot 2 DP 225401), Lot 1 Edwards Road, Rouse Hill (Lot 1 DP 133473) and 314 to 332-334 Annangrove Road, Rouse Hill (Lots 27-30 DP 834050, Lots 32-34 DP 834050, Lots 12 & 13 DP 833069 and SP 78246)	08/10/2013 (591)	04/07/2014	11/2013/PLP
PBS6 - Business	Controls to guide development outcomes at the site	488-494 Old Northern Road, Dural (Lot 2 DP 839151)	13/05/2014 (219)	11/07/2014	1/2013/PLP
PBS5 - Residential Flat Buildings PDS6 - Rouse Hill Regional Centre PDS8 - Norwest Residential Precinct PDS12 -Carlingford Precinct PDS14 - Target Site Corner Windsor Road and Seven Hills Road, Baulkham Hills	New apartment mix and size controls for residential flat buildings and deletion of redundant controls within various sections of the DCP	N/A	09/09/2014 (537)	23/09/2014	FP196
PDS16 - 301 Samantha Riley Drive, Kellyville (new)	Controls to guide development outcomes at the site	301 Samantha Riley Drive, Kellyville (Lots 101 & 103, DP 1122070)	29/04/2014	03/10/2014	2/2012/PLP/A
PDS9 - Target Site 23-25 North Rocks Road, North Rocks	Amendments to facilitate the amalgamation of 23 and 25 North Rocks Road and associated changes to building height and landscaping	23-25 North Rocks Road, North Rocks (Lot 3 DP 1158967 & Lot 100 DP 1128357)	23/09/2014 (566)	07/10/2014	FP72
PBS6 - Business	New controls to manage the development and operation of landscape material supplies and/or garden centre uses	1-15 Millcroft Way, RMB 104, 104A And 105 Windsor Road, 1-3, 5 And 7 Wilkins Avenue, Beaumont Hills	12/08/2014 (453)	10/10/2014	4/2014/PLP

Part & Section	Description of Amendment	Address of Land (if applicable)	Adoption Date & Minute No.	In Force Date	File Reference
PDS1 - 27-33 North Rocks Road, North Rocks	Controls to facilitate high density residential development at the site	27-33 North Rocks Road, North Rocks (Lot 2 DP 1158967, Lot 101 DP 617754, Lot 2 DP 721567, Lot 3 DP 22931, Lot 1 DP 127003 & Lot 2 DP 22931)	28/10/2014 (645)	11/11/2014	5/2012/PLP
All Sections	Various amendments relating to footpaths, verge widths and street tree species for residential development, private tree management provisions, waste management for multi-unit and mixed use developments and other minor typographic/ formatting amendments	N/A	25/11/2014 (712)	09/12/2014	FP171
PDS17 - Box Hill North	Controls to guide development of the Box Hill North Precinct	Box Hill North Precinct	10/02/2015 (39)	03/03/2015	1/2014/PLP
PBS7 - Industrial	Controls to guide development outcomes at the site	912-914 Old Northern Road, Glenorie	12/05/2015 (218)	28/07/2015	2/2015/PLP
PCS1 - Parking	Revised parking controls	Castle Hill Main Street	28/07/2015 (369)	11/08/2015	FP173
PCS6 - Business	Insertion of site specific controls	11-13 Solent Circuit, Baulkham Hills	09/12/2014 (753)	01/12/2015	17/2013/PLP
PDS5 - Kellyville/Rouse Hill Release Area	Amend cycleway route and remove open space notation	5 Jackson Place, Kellyville	09/06/2015 (282)	08/04/2016	9/2015/PLP
PDS7 - Balmoral Road Release Area	Controls to guide development outcomes at the site	Lot 101 DP 1176747 and Lots 32 and 33 DP 247442, known as RMB 47 Spurway Drive, Baulkham Hills, 30 Fairway Drive, Kellyville and Lot 33 DP 247442	28/07/2015 (367)	29/04/2016	10/2013/PLP
PA - Introduction	Revised requirements for advertising and notification of development applications and administrative/formatting amendments	N/A	26/04/2016 (193)	24/05/2016	FP179

Part & Section	Description of Amendment	Address of Land (if applicable)	Adoption Date & Minute No.	In Force Date	File Reference
Part B Section 1 - Rural	Reduced and simplified controls including additional flexibility for rural sheds, secondary dwellings and rural cluster subdivision	N/A	26/04/2016 (193)	24/05/2016	FP179

The Hills Development Control Plan (DCP) 2012

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THE HILLS Sydney's Garden Shire



Part B Section 1
Rural

B1

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INTRODUCTION

LAND TO WHICH THIS SECTION OF THE PLAN APPLIES

This section applies to the land within the following zones or any additional land where rural or agricultural land uses are permissible:

RU6 – Transition
RU1 – Primary Production
SP3 – Tourist
E2 – Environmental Conservation
RU2 – Rural Landscape
RU3 – Forestry
W2 – Recreational Waterways

Part 2: Extractive Industries also applies to those lands identified in Sydney Regional Environmental Plan No 9—Extractive Industry (No 2—1995), refer figure Part 2, Figure 7.

AIM

The aim of this section is to ensure that rural development is compatible with the capability of land, has regard to the natural environment, scenic qualities and rural character and contributes to the social and economic wellbeing of the rural area.

WHAT IS RURAL CHARACTER?

The rural part of the Shire is the land beyond the urban edge and its character can vary from setting to setting and means different things to people depending on a range of things such as background, age or where they live that relates to the appearance, economic and social structure of rural communities.

Beyond the more populated areas it provides an important backdrop to the urban areas and rural villages. In general it is a relatively undeveloped place, with a natural look that could be described as unplanned and non-uniform. In terms of its physical characteristics it is agricultural activities, large land parcels, low scale dwellings, farm sheds and natural scenic beauty.

Within the Shire rural character is made up of activities such as 'lifestyle' housing, market gardens, cropping orchards, sand mining, horses, animal grazing, houses and outbuildings, vegetation, rolling hills, creeks, gullies, wetlands, rural enterprises and tourism.

Being so close to the urban fringe, the Shire has seen somewhat of a shift away from rural agricultural to more rural lifestyle in some areas where people enjoy the qualities of the area that make it rural with open spaces and countryside and a close community within the rural villages.

STATEMENT OF OUTCOMES AND DEVELOPMENT CONTROLS

Development in the rural areas is generally guided by Statements of Outcomes and Development Controls. In some specific circumstances potential variations to a development control due to such matters as slope or existing building location, are identified to allow flexibility in the application of the control where the variation sought would meet the outcome to be achieved. Other variations may be considered as part of a merit assessment and would be evaluated against the Statement of Outcome for that control.

In addition to those policies, guidelines and documents specified in the *Introduction*, this Rural Part of the DCP is to be read in conjunction with other relevant Parts relating to:

- *Dual Occupancy*
- *Business*
- *Landscaping*
- *Heritage*
- *Flood Controlled Land*
- *Signage*

PART 1: GENERAL DEVELOPMENT

1. Site Planning

A. General Controls applying to rural subdivision

STATEMENT OF OUTCOMES

- New lots are usable parcels that avoid multiple access points, maintain the scenic and rural character of the Shire and have regard to environmentally sensitive areas.
- New lots have dimensions that maintain the scenic and rural character of the Shire.
- New lots have sufficient area for the erection of a dwelling and associated structures, free of topographic constraints or restrictions.
- New public roads cater to rural traffic movements and allow for dual carriageways
- Waste water and effluent areas are appropriately sized and located to have minimal impact on the environment.

DEVELOPMENT CONTROLS

Minimum Lot Width (For lots fronting a public road)	60m at the building line
Building Platforms	Minimum size 15m by 20m Must not be sited on slopes greater than 20% or on prominent ridgelines
New Public Road Construction Width	20m
Minimum area for wastewater and effluent disposal areas	1,000m^2
Wastewater and effluent disposal areas	Refer to Section 2 - New Development for requirements

VARIATIONS

a) Battle-axe lots may be considered on merit based on site constraints. Minimum access widths are set out below:

Number of lots to be accessed	Minimum access widths
One lot	6.0 metre wide access handle with the construction of a 3.0 metre wide all-weather pavement
2 to 4 lots	6.0 metre wide access handle with the construction of a 3.0 metre wide all-weather pavement and suitable passing bays
Greater than 4 lots	Public road required

Note: Refer Council's Subdivision Design Guidelines for specification detail.

B. Additional Controls: Subdivision in Maraylya, Box Hill and Nelson

STATEMENT OF OUTCOMES

- Subdivision outcomes in Maraylya, Box Hill and Nelson reflect orderly development outcomes that utilise existing roads, have regard to site constraints and minimise development impacts on environmentally sensitive areas and important vegetation corridors such as those strategically identified in the Constrained Land Layer.

DEVELOPMENT CONTROLS

Constrained Land Layer	Development areas must be clear of the Constrained Land Layer shown in Figure 1
Front setback for land adjacent to Boundary Road (within Maraylya, Box Hill and Nelson Precinct)	50m
New Public Roads	New public roads should be located in accordance with those in Figure 1

Notes:

a) The Constrained Land Layer is comprised of:

- Land with a slope of 20% or more
- Watercourses
- High conservation corridors
- Riparian corridors for creek categories 2 and above (Strahler method of ordering watercourses)
- The 1 in 100 year flood extent from the Hawkesbury River

b) To help guide future changes an indicative layout plan for Maraylya, Box Hill and Nelson Precinct based on 2 hectare subdivision potential and the future road pattern is also shown in Figure 1. It is a general illustration of what might be achieved only and does not in any way guarantee Council approval of a Development Application based on this layout.

c) The Box Hill North Precinct was zoned for urban development on 20 February 2015. Site specific development controls for this area are contained in Part D Section 17 of the Development Control Plan.

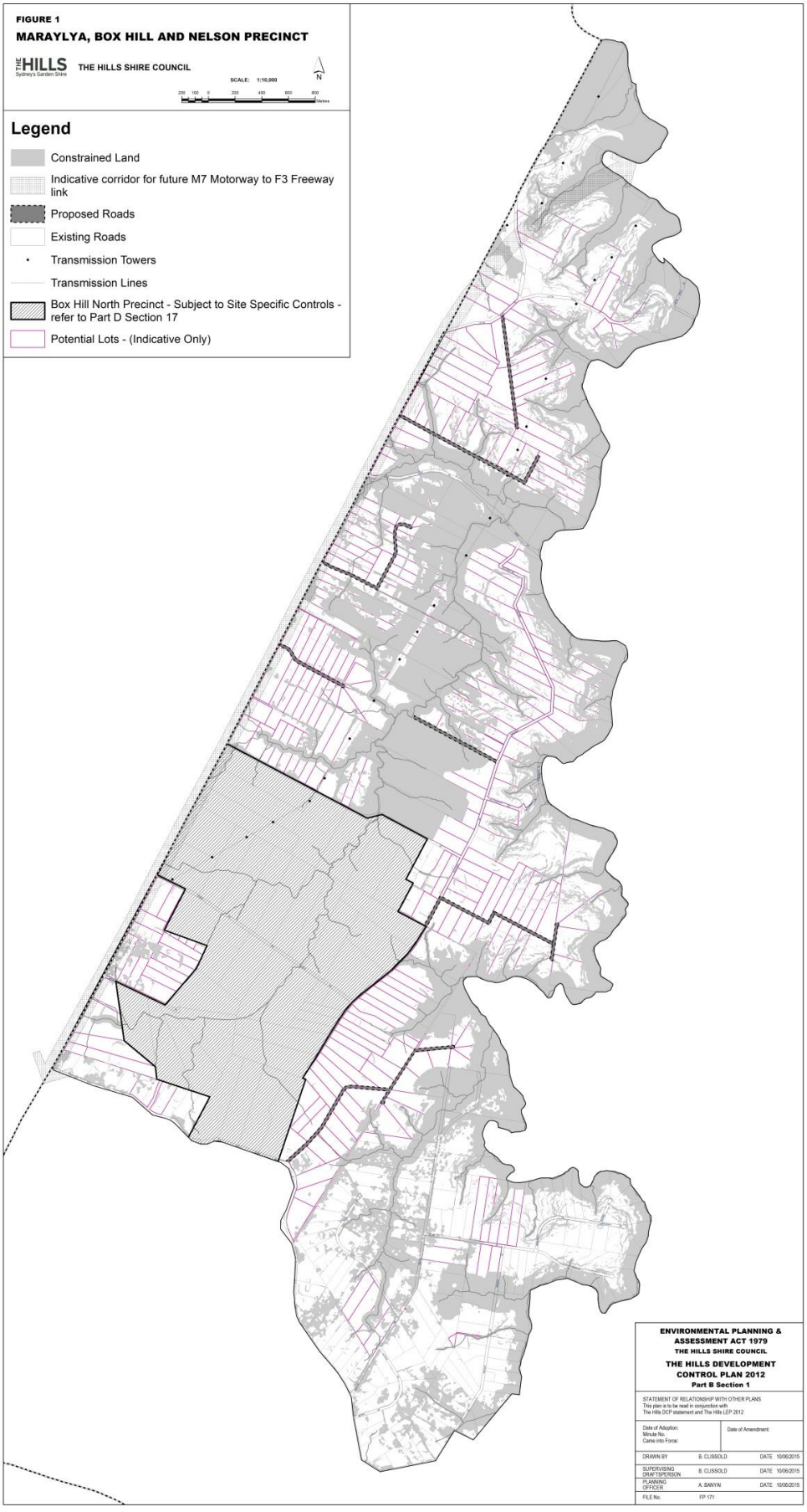


Figure 1: Maraylya, Nelson and Box Hill Precinct

Additional Controls: Rural Cluster Subdivision

STATEMENT OF OUTCOMES

- Rural cluster subdivision maintains the scenic and rural character of the Shire and minimises environmental impacts and bushfire hazards.
- Access to and within the site (including access to the association property) is safe and convenient for all users and maintains the open rural feel of the area.
- Rural cluster subdivision ensures existing environmental and biodiversity values are maintained or improved through effective ongoing management.

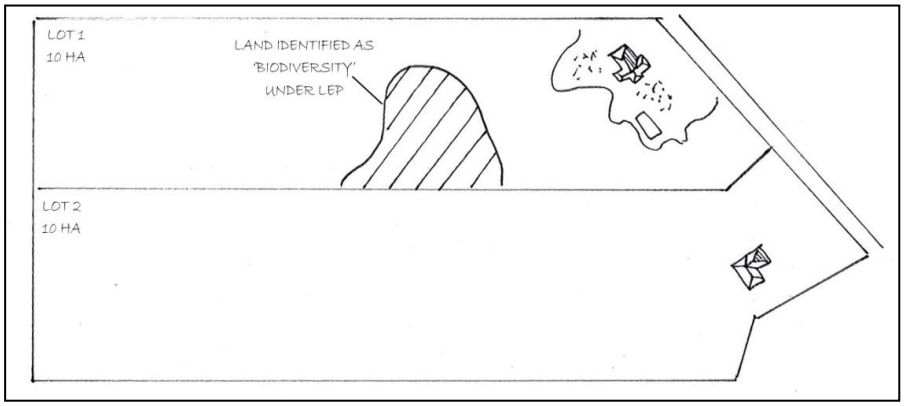
DEVELOPMENT CONTROLS

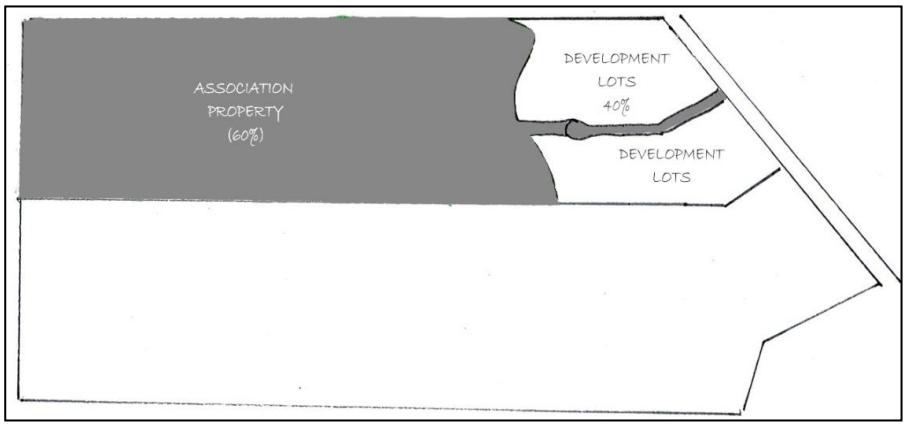
Site Layout	Lots must be clustered and grouped (Refer Figure 2) A minimum of 3 development lots (excluding the association property) are to be provided Lot location and arrangement must consider both ecological constraints and bushfire risk
Site Access	Vehicular access must be via a common driveway with secondary access to individual dwellings (Refer Figure 2)
Association Property	Minimum 60% of site area All lots must have direct access to the association property (Refer Figure 2)
Vegetation Management Plan	A Vegetation Management Plan shall demonstrate the subdivision will ensure the protection of the landscape, biodiversity and rural setting of the land Environmental management measures must demonstrate: • The same or greater biodiversity values on the site will be retained after subdivision • Natural creek lines are protected from increased nutrient loads and weed infestation, and • High biodiversity features including threatened ecological communities, populations, species and their habitats are maintained

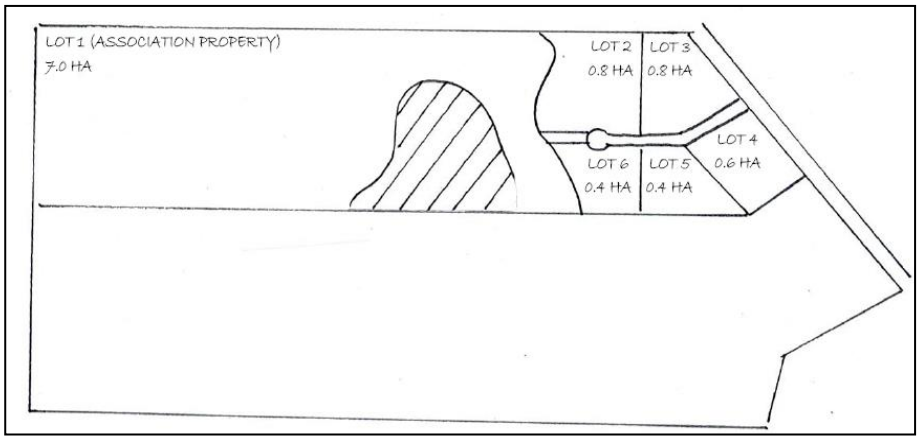
Note: Refer Council's Vegetation Management Plan Guidelines for detailed guidelines on content and requirements.

VARIATIONS

a) Site Access: Separate access to individual dwellings from an existing public road may be considered where a single common driveway is not achievable due to site constraints or where necessary to facilitate emergency access for emergency services.







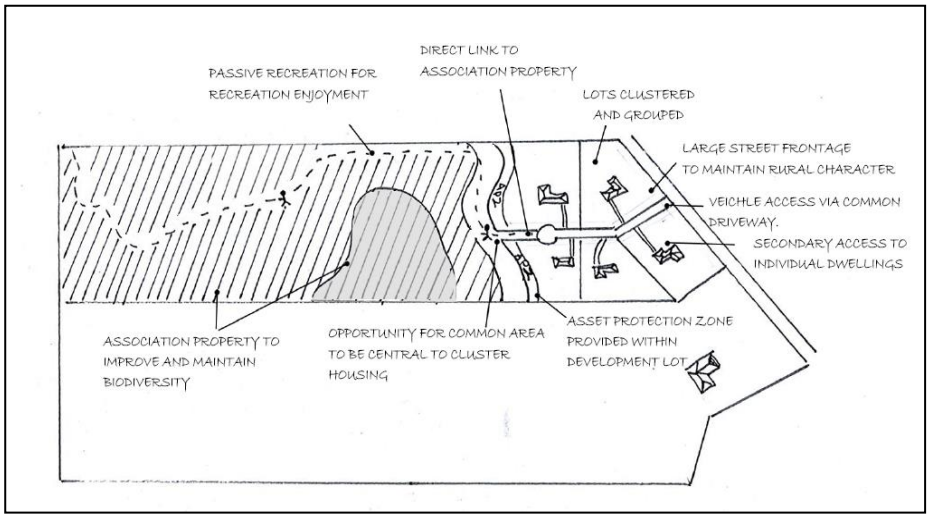


Figure 2: Rural Cluster Subdivision – Key principles

2. New Development

STATEMENT OF OUTCOMES

- The scale, siting and visual appearance of new development maintains the open rural feel of the landscape and preserves scenic and environmental qualities of the area.
- The location of new rural/ residential development is to have regard to the potential impacts arising from existing adjacent rural business activities.

DEVELOPMENT CONTROLS

Maximum Site Coverage* (refer note)	
Lots greater than 10 hectares in size	25% of the land area; or 5,000m^2, whichever is the lesser
Lots between 2 and 10 hectares in size	15% of the site area; or 2,500m^2, whichever is the lesser
Lots less than 2 hectares in size	50% of the site area; or 2,500m^2, whichever is the lesser
Minimum Setbacks	
Lots fronting a classified road	30m
Lots fronting any other road	10m
Side and rear setbacks	5m
Side setback for a residential dwelling adjacent to a lot where intensive plant agriculture, intensive livestock agriculture, rural industry, plant nursery or other approved rural activity	40m
Roadside stalls and boundary fencing	Nil
Development adjacent to the Hawkesbury River	30m
Front setback for land adjacent to Boundary Road (within Maraylya, Box Hill and Nelson Precinct)	50m
General Controls	
Front fences	1.8m maximum height Must be of open style and not be of solid masonry or solid panel construction
Cut and fill	• Cut shall not exceed 1m and fill shall not exceed 600mm. • Filling of land is to only be in conjunction with an approved land use or legitimate rural activity such as horse riding. • Fill shall be limited to the use of Virgin Excavated Material as defined under the Protection of the Environment Operations Act 1997
Stormwater Management	Stormwater management arrangements are to demonstrate there are no impacts to adjoining lots, watercourses or existing native bushland
Salinity (refer note)	Development proposed in areas where there is a known salinity hazard must incorporate appropriate management responses
Wastewater and effluent disposal areas	Proposals must demonstrate sufficient area is available for any proposed on-site sewerage management and effluent disposal areas. Proposals must ensure compliance with Council's applicable Local Approvals

	Policy. Wastewater and effluent disposal areas must be located on land that meets the following locational criteria: 40m from a dam or intermittent watercourse 100m from a permanent water course 6m from a structure, property boundary or native vegetation Not on slope greater than 15% Soil depth greater than 300mm

Notes:

a) Site coverage includes areas containing dwellings, outbuildings, ancillary items (such as pools, manoeuvring areas, garages and the like).

b) Some areas within Box Hill, Nelson and Rouse Hill are affected by salinity. Applicants in these areas should contact Council's Environmental Health Team to determine if a site is identified as having a known salinity hazard.

VARIATIONS

a) Variations to site coverage may be permitted where light weight structures are proposed as part of a rural enterprise development.

3. Dwellings

STATEMENT OF OUTCOMES

- Dwellings, including attached dual occupancies and secondary dwellings should fit within the rural setting of the rural landscape while providing for a residential lifestyle.
- Driveways have sufficient width to accommodate safe access to and from properties.
- Residential developments have a high standard of aesthetic quality and amenity for both occupants and surrounding residents.

DEVELOPMENT CONTROLS

Front elevations	Must not be greater than 50% of the street frontage if the lot is sited on a public road.
Minimum width access driveways	4m
Water supply	Sites that do not have access to reticulated water must provide a minimum water supply of 80,000 litres for domestic purposes.
Secondary Dwellings and Attached Dual Occupancies	
Construction Materials	Secondary dwellings or attached dual occupancies shall be constructed of the same material of the existing dwelling. Existing dwellings may be renovated to match the proposed external materials of the new dwelling
Structures not permitted	The use of temporary buildings and moveable structures as secondary dwellings is not acceptable. This includes but are not limited to the following: • Demountable buildings • Portable modular buildings • Portable modular cabins and sheds • Caravans • Shipping containers
Additional controls	Refer to Dual Occupancy Section of the DCP

4. Rural Sheds

STATEMENT OF OUTCOMES

- Rural sheds do not detract from the scenic and environmental qualities of the rural area and maintain the amenity of surrounding residents.

DEVELOPMENT CONTROLS

Size* (refer notes)		
Maximum gross floor area	Zone	
	RU1 and RU2	RU6
	500m^2	300m^2
General Controls		
Landscaping	Where a shed is setback less than 10m from an adjoining side or rear property boundary landscape screening with a width of 2m must be provided.	

Notes:

a) The maximum accumulative building footprint of all sheds on an individual allotment shall not exceed the maximum allowable floor area.

b) Where there is an inconsistency between the size of a shed and overall site coverage of development on a site, the site coverage control shall override.

5. Tennis Courts

STATEMENT OF OUTCOMES

- Tennis courts do not impact on the amenity of surrounding development.

DEVELOPMENT CONTROLS

Landscaping screening to boundaries	Dense landscaping must be incorporated into side and rear setbacks to screen the court from the view of adjoining properties
Fencing	Must be green or black mesh
Lighting	Shall not emit light spill outside the property boundary

6. Agriculture & Rural Industries

STATEMENT OF OUTCOMES

- Agriculture, aquaculture and rural industries are sensitive to adjoining land uses and minimise noise, odour and visual impacts.

DEVELOPMENT CONTROLS

Acoustic/noise impacts	Proposals must demonstrate they will not give rise to offensive noise as defined in the Protection of the Environment Operations Act and complies with the NSW Industrial Noise Policy
Intensive Livestock Agriculture and Aquaculture & Rural Industries	
Odour impacts	Proposals must demonstrate that appropriate measures will be undertaken to reduce the impacts of odours on adjoining properties
Intensive Plant Agriculture and Rural Industries	

Landscape screening to boundaries	Dense landscape screening with must be incorporated into all boundary setbacks to effectively screen the development from adjoining property boundaries

7. Landscape Material Supplies, Garden Centres & Plant Nurseries

STATEMENT OF OUTCOMES

- Rural business premises such as landscaping material supplies or garden centres/plant nurseries do not impact on the amenity of surrounding development.
- Rural businesses have a high aesthetic quality and maintain the scenic value of the rural landscape.

DEVELOPMENT CONTROLS

Landscaping screening to boundaries	Dense landscape screening must be incorporated into side and rear setbacks to effectively screen the development from adjoining property boundaries
Acoustic	Where a proposal is likely to have noise impacts to surrounding properties measures must be taken to reduce impacts
Odour and dust control	Proposals must demonstrate that appropriate measures will be undertaken to reduce the impacts of odours and dust on adjoining properties
Bulk storage bins	Shall not be located in any setback area

8. Tourist Facilities, Restaurants & Cafes

STATEMENT OF OUTCOMES

- Tourist facilities, restaurants, cafes and reception establishments minimise impacts on the rural streetscape and adjoining land uses.
- Tourist facilities are directly accessible from a public road.

DEVELOPMENT CONTROLS

Car parking areas in front setback	Car parking may be forward of the building setback when a minimum 5m width landscaping buffer is provided to the front boundary of the site
Additional controls	Refer to Business Section of the DCP
Tourist Facilities	
Access	Must have direct access to a public road

9. Water Storage Facilities (Dams, Weirs, Reservoirs)

STATEMENT OF OUTCOMES

- Water storage facilities do not have an adverse impact on the environment or residential amenity.

DEVELOPMENT CONTROLS

Location relative to effluent	Shall not be located within 40m of an effluent disposal

disposal areas	area

Note: Some development may have additional requirements under the Water Management Act 2000 and the Dams Safety Act 1978.

10. Development adjoining or in the visual catchment of the Hawkesbury River

STATEMENT OF OUTCOMES

- Nearby development does not detract from the scenic qualities of the Hawkesbury River.

DEVELOPMENT CONTROLS

Location of buildings	Buildings on land adjoining the river or within the visual catchment of the river shall be located so that the ridgeline is below the top of the escarpment or setback 20m from the top of the escarpment as shown in Figure 3

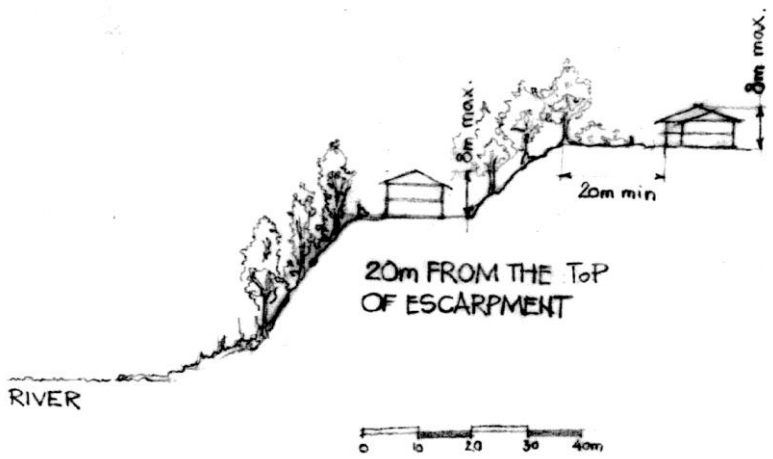


Figure 3: Location of buildings in relation to the top of the escarpment

11. Restricted Development Areas (Kenthurst)

STATEMENT OF OUTCOMES

- Areas of particular environmental significance in Kenthurst locality are protected from development.

DEVELOPMENT CONTROLS

Restricted Development Area	Refer Figure 4

Note: Development, other than bushfire hazard reduction, is prohibited in restricted development areas. In these areas, development includes:

- the erection of a fence on the land
- the removal of soil or rock from the land
- the deposit of soil, rock and any other matter on the land
- the destruction or removal of any tree or other vegetation on the land.



Figure 4: Restricted Development Areas (Kenthurst)

12. Land at 2 Schwebel Lane, Glenorie

The site specific outcomes and controls apply where development is for the purpose of a concrete batching plant/landscape supplies and associated uses.

STATEMENT OF OUTCOMES

- To ensure the aesthetic character, streetscape and residential amenity of Glenorie Village is maintained.
- To make provisions for substantial landscaping to maintain and enhance the aesthetic qualities of the site and provide a visual barrier between the site, public roads, adjoining land uses and Glenorie Village
- To ensure safe vehicular access to the site
- To minimise the level of noise transmitted to adjoining land uses.

DEVELOPMENT CONTROLS

Setbacks and Landscaping	Setbacks are to be in accordance with Figure 5 Where indicated on Figure 5 setbacks are to be landscaped at sufficient densities so that an effective visual barrier is achieved
Materials	External building materials must not utilise metal-siding systems, masonry block work and textured or highly patterned brickwork
Access	All vehicular access to the site is to be from Schwebel Lane and be as far as practicable from the intersection of Old Northern Road and Schwebel Lane
Noise Transmission	The equivalent continuous energy average (LAeq) emanating from the site measured over a 15-minute period shall not exceed the background noise level by more than 5dB. This is to be assessed at the most affected point on or within the residential boundary and any other noise sensitive receivers such as schools in the vicinity of the subject site. Where the background noise level plus 5dB exceeds 45dB(A), then the LAeq emanating from the site shall not exceed the acceptable noise levels specified in the Noise Guide for Local Government or the NSW Industrial Noise Policy. A landscaped earth mound or other noise attenuation device shall be constructed within the setback adjacent to the southern property boundary as shown Figure 5. Noise attenuation must be achieved without compromising the landscape objective of this plan.

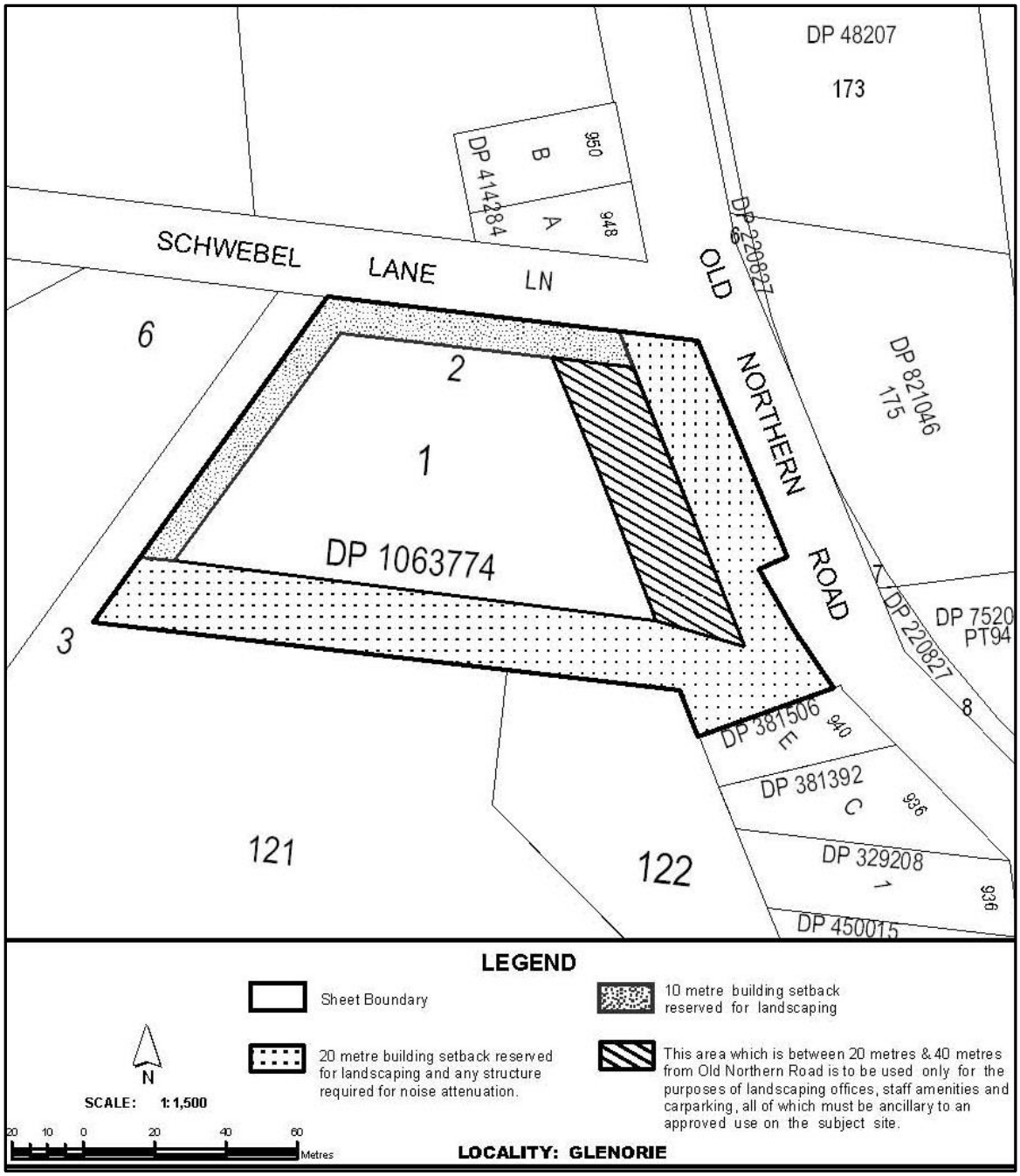


Figure 5: 2 Schwebel Lane, Glenorie

PART 2: EXTRACTIVE INDUSTRIES

1. Site Planning

STATEMENT OF OUTCOMES

- Extractive industries and related activities maintain an effective buffer to protect landscape quality, the habitats of threatened species, populations and ecological communities of the shire.
- Extractive industries maintain and enhance the rural-residential streetscape, existing character and amenity of rural-residential activities.

DEVELOPMENT CONTROLS

Adjoining property boundary	Minimum setback of 10m
Public road	Minimum setback of 30m
National Park, State Forest or Crown Lands boundary	Minimum setback of 40m
Any site or relic of heritage, archaeological, geological or cultural significance	Minimum setback of 40m
Top bank of a watercourse	Minimum setback of 40m, or otherwise to the requirements of the Office of Water
Public or Community facility	Minimum setback of 100m
Residence not associated with extraction	Minimum setback of 100m
Electricity transmission lines	In accordance with the requirements of the controlling electricity authority / transmission corporation

Note: The above setbacks may vary depending upon the nature and location of extractive industries.

2. Transport

STATEMENT OF OUTCOMES

- Maintain and upgrade the safety and efficiency of the existing road network, and achieve safe, coordinated and controlled transport links for extractive industries.
- The safety and amenity of existing rural and residential activities is maintained and protected.

DEVELOPMENT CONTROLS

Access to public roads	Access points to public roads are to be controlled and limited to maintain the safety and efficiency of the public road network.
Internal access carriageways - width	Minimum of 12m wide in accordance with established road construction standards as Illustrated in Figure 6 (Typical Cross Section of Internal Haul Roads)
Internal access carriageways - setbacks	Minimum 10m setback from adjoining property boundary Minimum 50m setback from environmentally sensitive areas including habitats of threatened species. Minimum 100m setback from residences not associated with extraction

Note:

Alternative designs of internal access/Intersection points will consider:

- Specific needs of the operation and site characteristics;
- Austroads: Guide to Traffic Engineering Practice;
- RMS: Road Design Guides;
- RMS: Guide to Traffic Generating Developments;
- Or other designs agreed to by the Roads and Maritime Services (RMS)

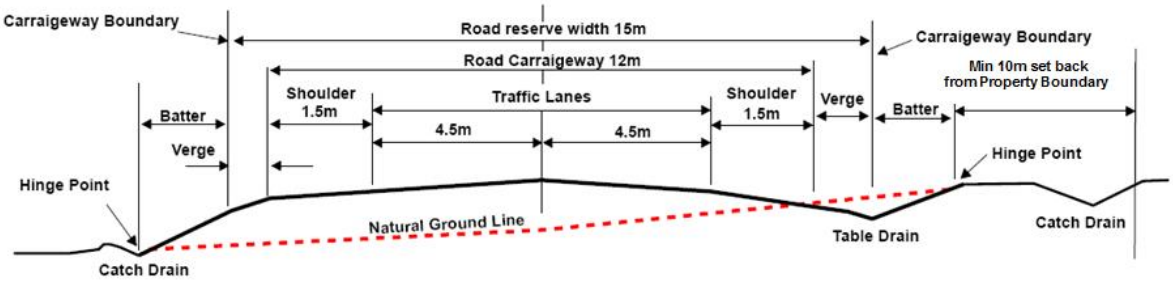


Figure 6: Typical Cross Section of Internal Haul Roads

3. Water Resources

STATEMENT OF OUTCOMES

- Ground water resources and supplies are conserved to protect groundwater dependent riparian ecosystems and natural habitats.
- The quality, quantity and location of water supplies and downstream drainage patterns are maintained and protected, and water usage is conserved sustainably.

DEVELOPMENT CONTROLS

Drainage Outlets	Employ operational practices capable of maintaining and monitoring drainage outlets at downstream boundaries together with pre-existing groundwater flow and quality conditions
Water flow patterns & water quality	Determine the likely impact upon groundwater and nominate an effective freeboard above wet weather high ground water level capable of conserving water flow patterns and water quality on each extraction site
Extraction	Not to occur within 2 metres of the wet weather high groundwater level or otherwise to the requirements of the Office of Environment and Heritage

4. Visual Amenity & Scenic Quality

STATEMENT OF OUTCOMES

- The natural, scenic and landscape quality of the area is conserved and the rural character is retained.
- The aesthetic, visual, cultural, scientific, historic, social and other special values of the landscape are conserved.

DEVELOPMENT CONTROLS

Rehabilitation of Extraction Sites	Extraction sites are to be rehabilitated to a final landform capable of integrating with the physical elements and

	land use patterns of the local landscape
Protection of Landforms	The proposal should demonstrate that areas of high visual sensitivity such as outstanding, distinctive or diverse landforms or land cover features will be preserved and protected
Machinery and Equipment	To be stored in buildings and structures of non-reflective materials and of a height, bulk and scale proportional to the surrounding landscape
Perimeter Screen Planting	Extraction sites must provide perimeter screen planting of a sufficient height to screen views of the site from surrounding public and private places

5. Flora & Fauna Buffer Zones

STATEMENT OF OUTCOMES

- Sufficient separation is provided to threatened species and critical ecological communities, and the scenic and environmental quality of the Shire is retained.

DEVELOPMENT CONTROLS

Extractive Industry Buffer Zones	• To be a minimum of 50m from important habitats of threatened species, populations, ecological communities and/or; • No less than the site specific requirements of the National Parks & Wildlife Services. The buffer zone should not be disturbed except for ongoing management or rehabilitation purposes

6. Heritage & Archaeological Resources

STATEMENT OF OUTCOMES

- Archaeological resources, geological features and areas and items of heritage value are identified, protected and conserved.

DEVELOPMENT CONTROLS

Buffer Areas	Site planning for extractive operations should provide buffer areas to conserve: • Potential Habitation Sites or sites with potential Archaeological Deposits • Archaeological sites protected under the National Parks & Wildlife Act, 1974 and as listed in the Register of Aboriginal Sites • Distinct geological features
Heritage items	Conserve and protect local, regional and state listed heritage items.

Note: Reference should also be made to the Office of Environment and Heritage Aboriginal Sites Register and Council's Aboriginal Sites Predictive Study

7. Soil Conservation

STATEMENT OF OUTCOMES

- Wind, water & soil erosion of disturbed and rehabilitated areas are minimised by maintaining effective sediment and erosion control measures for the protection of environmentally sensitive areas and downstream properties.

DEVELOPMENT CONTROLS

Clearing and extraction	Limit the extent of cleared areas at any one time by ensuring that soil surface conditions on extraction sites are protected & maintained by natural or manufactured material or mulch or by any other acceptable soil stabilisation technique
Drainage control	Developments must ensure that drainage control measures are provided for upstream catchments from runoff that may by pass the extraction site. They should also ensure infiltration into and control runoff from the subject site. Ensure the long term stability of natural channels downstream of the site by maintaining pre-existing rates, volumes and quality of channel flow. Protection measures may include controlled entry and exit points from sub-catchments
Sediment Control	Sediment control design should include details of the proposed dewatering method for the settling volume, spillway configuration, energy dissipation and the design life of the structure
Wind Breaks	Ensure that wind breaks including trees, shrubs and bund walls are of a height, length, orientation, location & permeability capable of reducing wind velocity across extraction areas
Drainage Control Measures	Ensure that drainage control measures such as diversion

	channels or holding structures including graded banks, drains or dams are designed for a peak discharge of a 1 in 20 Annual Exceedance Probability (AEP) storm event with a minimum one metre flood freeboard margin. Ensure that sediment control dams are located downstream of wet screening plants and between tailing dams and downstream boundaries. These structures should have a sediment trapping capacity at least half the volume of the largest tailing dam. Ensure that all batters of dams and detention basins have a preferred gradient of 4H (Horizontal):1V (Vertical), which should be stabilized by vegetation or other appropriate measure. Sediment loss should be controlled by the installation of upstream diversion channels, catch drains and sediment traps along the downstream toe of the embankment. These should be maintained until vegetation cover is achieved
Tailing (Sludge) Pond Measures	
Tailing (Sludge) Pond Design	Design should have regard to: • Site investigations including soil profiles, water table level, & in-situ materials • Site suitability, including topography, geotechnical and meteorological conditions of the locality • Physical, mineral & chemical properties of tailings; • Stability of embankments including heights, slope, natural strength, materials & degree of compaction foundations • Potential seepage into groundwater including high pressure groundwater levels resulting from high water table levels within the embankment

8. Acoustic Management

STATEMENT OF OUTCOMES

- The acoustic quality and environment of residents, Public & community facilities and other receivers in the Shire is maintained and protected.
- The potential for offensive noise emission is limited.

DEVELOPMENT CONTROLS

Acoustic Buffer	Provide an effective acoustic buffer to residences and public places not associated with their operations
Noise Control	Implement effective noise control measures where noise emissions exceed maximum average background noise level
Acoustic Shielding	Proponents are encouraged to implement the extraction “cell” technique as a means of facilitating acoustic shielding around worked extraction sites
Minimise Road Traffic Noise	Ensure that road traffic noise is minimised to reduce potential impacts upon the acoustic environment of residents and community facilities within the locality Proponents should indicate the special transport needs of the activity, which are most likely to generate noise

	outside normal operating hours
Hours of Operation	Ensure that the hours of operation of extraction and the transportation of materials are limited to 7.00am to 6.00pm Monday to Friday inclusive, and 7.00am to 4.00pm Saturday. Variations to these hours may be justified having regard to the nature and location of a particular project
Acoustic Barriers	Signs and barriers should be installed and maintained at the point of access to ensure compliance. The barriers should be kept locked except during authorised hours of operation

Note: Noise levels must be assessed in accordance with the NSW Industrial Noise Policy and any other EPA requirements.

9. Air Quality Management

STATEMENT OF OUTCOMES

- To preserve the air quality and protect the health and amenity of residents, visitors and industry employees.

DEVELOPMENT CONTROLS

Dust Air Pollution	Implement effective measures capable of controlling air pollution caused by dust, particularly during dry and windy weather conditions. Ensure that dust suppression equipment is fitted to all processing equipment. Employ wind activated water sprinkler systems to ensure extraction sites minimise dust generation particularly during high periods of wind and when sites are unattended. Ensure that stockpiles of material are effectively stabilised and maintained so as to prevent any dust nuisance
Covering of Loads (Trucks)	Prior to leaving extraction sites all laden trucks are to have their payloads fully covered by suitable material to prevent spillage from the trucks onto roads and adjoining properties
Access Roads	Ensure that access roads are sealed at the entrance to extraction sites and remaining unsealed portions of access roads are watered on a regular basis as a means of dust suppression

10. Rehabilitation

STATEMENT OF OUTCOMES

- Extraction sites are fully rehabilitated in an orderly, progressive and controlled manner and the environment of threatened species is protected.
- The natural attributes of surrounding catchments are conserved and the scenic, heritage and environmental quality of the Shire is protected and enhanced.
- Rehabilitation achieves a final landform that is capable of supporting agricultural production or other post-extraction use that is compatible with the rural/residential character of the region.

DEVELOPMENT CONTROLS

Rehabilitation - Design and Materials	Extraction sites are to be rehabilitated to a usable and stable final landform. The rehabilitation of extraction sites is to integrate with the shape, form, contour, vegetation, soil composition, drainage and land use characteristics of the surrounding terrain. The final use of land for agricultural purposes will only be considered where it can be demonstrated that the original land use was agricultural or where the adjoining land use is for agriculture. Otherwise, all sites are to be rehabilitated to bushland. Extraction areas should be progressively rehabilitated to integrate with the shape, form, contour, colour, land use, drainage characteristics, landscape quality and diversity of the pre-existing surrounding terrain, under the direction of a qualified person. Rehabilitation should commence prior to proceeding onto the next extraction area. Stockpiles of clean topsoil & overburden should be appropriately formed and shaped to ensure the viability of the soil and seed source of the site/area for later re-spreading or backfilling. Extracted areas should be backfilled only with earth and rock materials sourced as a result of extraction. No solid waste or putrescible materials are to be disposed of within the site without the prior approval of Council and other State Government agencies
Rehabilitation – Planting and Maintenance	Rehabilitation should incorporate, where appropriate, endemic native plants, grass covers and species. Disturbed areas should be appropriately maintained until rehabilitation is well established. Permanent ground cover should be established on areas disturbed for more than 30 days and is to be maintained by regular watering and additional applications of seed and fertiliser. Proponents should regularly maintain rehabilitated areas having regard to the following criteria:

	• Replanting exposed areas & replacing dead plants within six months • Repairing erosion problems • Pest and weed control • Fertiliser applications where appropriate • Regular watering • Application of lime or gypsum to control pH and improve soil structure, where appropriate
Rehabilitation Bond	Proponents will be required to pay a Rehabilitation Bond of a minimum $3.00 per square metre. The amount and phasing of the bond payment may vary depending upon the approved works program referred to in the Rehabilitation Strategy

11. Community Engagement

STATEMENT OF OUTCOMES

- Community participation and employment associated with Extractive Industries is encouraged, facilitated and promoted.

DEVELOPMENT CONTROLS

Community Engagement	Proposals should provide opportunities to involve the local community where possible, for example via employment and the engagement of local community groups

12. Setbacks from Maroota Public School

STATEMENT OF OUTCOMES

- To protect and maintain the safety and amenity of the Maroota Public School and residences not associated with extraction.

DEVELOPMENT CONTROLS

Extractive Activities - Setbacks	Extractive Industries are to be set back at least 250m from Maroota Public School

13. Section 94 Contributions

STATEMENT OF OUTCOMES

- To attain sufficient funds necessary to maintain and upgrade the regional and local road networks.

DEVELOPMENT CONTROLS

Developer Contributions	As a result of road damage caused by heavy vehicles extractive industry operators shall contribute to the maintenance of the regional and local road network. Proponents may be required to make developer contributions under Section 94 of the Environmental

	Planning & Assessment Act 1979 and in accordance with Council's Contribution Plan No.6 – Extractive Industries and shall be imposed as a condition of consent. The current Section 94 levy is based upon a per tonne rate, payable for material transported from extraction sites. As a condition of consent proponents may be required to submit to Council monthly certified statements of material won from each extraction site all within fourteen days after the end of each proceeding month. Monies currently collected from developer contributions will be placed in a trust account and transferred to the Roads and Traffic Authority for the maintenance, restoration and rehabilitation of the Old Northern and Wiseman's Ferry Roads and other associated works in accordance with road improvement programs as agreed between Council and the Roads and Maritime Services

14. Environmental Management Systems

STATEMENT OF OUTCOMES

- Extractive Industries consistently perform to good environmental management practices and ensure the ecological sustainability of extractive industry sites.
- Internationally and nationally recognised environmental management systems are implemented.

DEVELOPMENT CONTROLS

Environmental Management	All aspects of the operation are to employ and maintain good environmental management practices. This may involve the establishment a Management Committee including at least two permanent residents not associated with the extractive operation. This management committee may provide input into the proponent company's environmental management system and details of which may be recorded in the annual Environmental Management Plan

15. Information Required for an Extractive Industries Development Application

Council requires a high standard of application, which will enable it to conduct a proper and informed environmental impact assessment of the social, economic and environmental consequences of extractive industries.

To facilitate the timely consideration of your application, Council has designed this preferred format, content & structure for all Extractive Industry development applications.

EXECUTIVE SUMMARY

- The study site and locality;
- Background on the Proposal;
- Objectives of the Proposal;
- Justification for the Proposal;

- Management of the Proposal;
- Statutory requirements;
- The structure of the application; and
- Executive Summary: The General findings & Recommendations.

SITE ANALYSIS

- Location and ownership details including zoning & surrounding land uses;
- Topography, slopes, geology and meteorology;
- Visual and Landscape aspects;
- Soils and soil erosion;
- Hydrology, including surface & groundwater resources;
- Air quality;
- Background Noise levels;
- Flora and Fauna;
- Archaeology & Heritage; and
- Transport including accessibility.

DESCRIPTION OF THE DEVELOPMENT

- Previous and surrounding land uses;
- Local & Regional context;
- Operating objectives & procedures;
- Extraction program plan for the life of operation;
- Extraction quantity/rate and life span;
- Hours of operation;
- Equipment and on-site facilities;
- Internal & external transport arrangements;
- Power supplies and services;
- Energy consumption;
- Employment and the Multiplier effects;
- Site Management, occupational health & safety;
- Rehabilitation staging and phasing;
- Post-extraction landforms and uses; and
- Risks, safeguards & contingencies.

THE PLANNING CONTEXT

- Address the procedures for Integrated Development in Section 90 of the Environmental Planning & Assessment Act, 1979;
- Address Schedule 2 'Environmental Impact Statements' and Schedule 3 'Designated Development' of the Environmental Planning & Assessment Regulation, 2000
- SREP No.9 (2 -1995) – Extractive Industries (only Maroota)
- SREP No.20 – Hawkesbury Nepean River;
- Related Acts including Protection of the Environment Operations Act 1997; and
- Consultation with public authorities & the community.

ENVIRONMENTAL IMPACT AND MITIGATION DURING CLEARING WORKS

- Phasing/staging in relation to extraction program;
- Construction materials and equipment;
- Drainage works;
- Temporary structures and works;
- Soil conservation & management procedures;
- Location and containment of major work areas;
- Hours of operation;
- Noise generation during works;
- Transport arrangements;
- Dust suppression measures;
- Number of employees;
- Expected time frame;

- Safety issues; and
- Contingency arrangements.

ENVIRONMENTAL IMPACT AND MITIGATION DURING EXTRACTION

- Extraction program plans (extent and depth);
- Extraction materials and equipment;
- Soil conservation & management procedures;
- Hydrology including drainage works, ground – water protection & management strategies;
- Sediment and erosion control plan including tailing dam designs;
- Temporary structures and works;
- Location & containment of major work areas;
- Hours of operation;
- Noise generation during works;
- Transport arrangements;
- Air quality management, including dust suppression;
- Waste minimisation measures;
- Protection methods for environmentally sensitive areas, including flora, fauna and heritage;
- Number of employees;
- Expected time frame for each extraction phase/stage;
- Site management issues; and
- Risks, safeguards & contingency arrangements.
- Identify areas of archaeological sensitivity and/or sites with Potential Archaeological Deposits;
- Assess the scientific, educational, landscape and cultural value of aboriginal sites including possible mythological or cultural sites with no physical elements; and
- Detail how all facets of the operation will employ and maintain good environmental management practices.

ENVIRONMENTAL IMPACT AND MITIGATION DURING REHABILITATION

- Rehabilitation strategy;
- Rehabilitation materials and equipment;
- Soil conservation & management procedures;
- Hydrology including drainage work and water management strategies;
- Sediment and erosion control plan including capping of tailing dams;
- Temporary structures and works;
- Location and containment of major work areas;
- Hours of operation;
- Noise generation during works;
- Transport arrangements;
- Air quality management, including dust;
- Protection methods for environmentally sensitive areas, including flora, fauna and heritage;
- Number of employees;
- Time frame for each rehabilitation phase/stage;
- Site management issues;
- Risks, safeguard & contingency arrangements;
- Participation with community & public authorities;
- Final landform including water management; and
- Post extraction land use capabilities.

ECONOMIC APPRAISALS

- Estimates of material quality and quantity;
- Scope of the assessment
- Economic appraisal technique used;
- Project costs and benefits;

- Community costs and benefits including the no go option;
- Externalities including environmental effects and costs;
- Identify the number, degree, and extent of economic linkages between extractive industry and businesses within the Shire by way of an Economic Appraisal Report and;
- Conclusions.

SOCIAL IMPACT ASSESSMENT

- Scoping;
- Profiling;
- Formulating options/alternatives;
- Projecting & predicting effects;
- Impact management;
- Monitoring and mitigating;
- Evaluation
- Identify, mitigate and manage/monitor social impacts resulting from extractive industries by way of a Social Impact Assessment and Social Impact Management Plan and;
- Conclusion.

CUMULATIVE IMPACT

- Extraction activities within the locality;
- Social impacts and mitigating measures/management;
- Environmental impacts including groundwater, flora, fauna, noise and air quality;
- Transport routes including road damage and access arrangements;
- Community facilities and services;
- Hazard analysis including identified, discounted and emergency hazard management; and
- Relationships with other non-extraction land uses within the locality.

ENVIRONMENTAL MANAGEMENT SYSTEMS

- Water Management Plan;
- Noise Monitoring Plan;
- Sediment & Erosion Control Plan;
- Extraction Program Plan;
- Flora/fauna Monitoring Program;
- Rehabilitation Management plan;
- Waste Management Plan;
- Environmental Management Plan;

ECOLOGICALLY SUSTAINABLE DEVELOPMENT

- Identify principles and objectives of the National Strategy for Ecologically Sustainable Development (ESD) 1992 relating to the project;
- The framework in which council, public authorities and the community can participate in the preparation, monitoring of performance and rehabilitation of the project;
- Implementation of the precautionary principle including an evaluation of measures undertaken to avoid serious or irreversible damage to the environment;
    - Means of ensuring inter-generational equity;
    - Means of conserving biological diversity & ecological integrity within the locality;
    - Recognition of the global dimension of impacts, including greenhouse gas emissions;
    - Recognition of economic appraisal and social impact assessments;
    - Efficient mining procedures including occupational health & safety;
    - Achieving social equity and satisfaction;
    - Water resource management;
    - Waste management/ minimisation strategy;
    - Risks, safeguards & contingency arrangement; and
    - Other effective monitoring and review programs.

REVIEW OF ALTERNATIVES

- Alternative sources of material;
- Alternative transport routes;
- Alternative sources of employment; and
- Alternative land uses including “no go” option.

RECOMMENDATIONS

- Need for the development in local and regional context;
- Alternatives to the development;
- The preferred option;
- Summary impact assessment of the preferred option; and
- Conclusions.

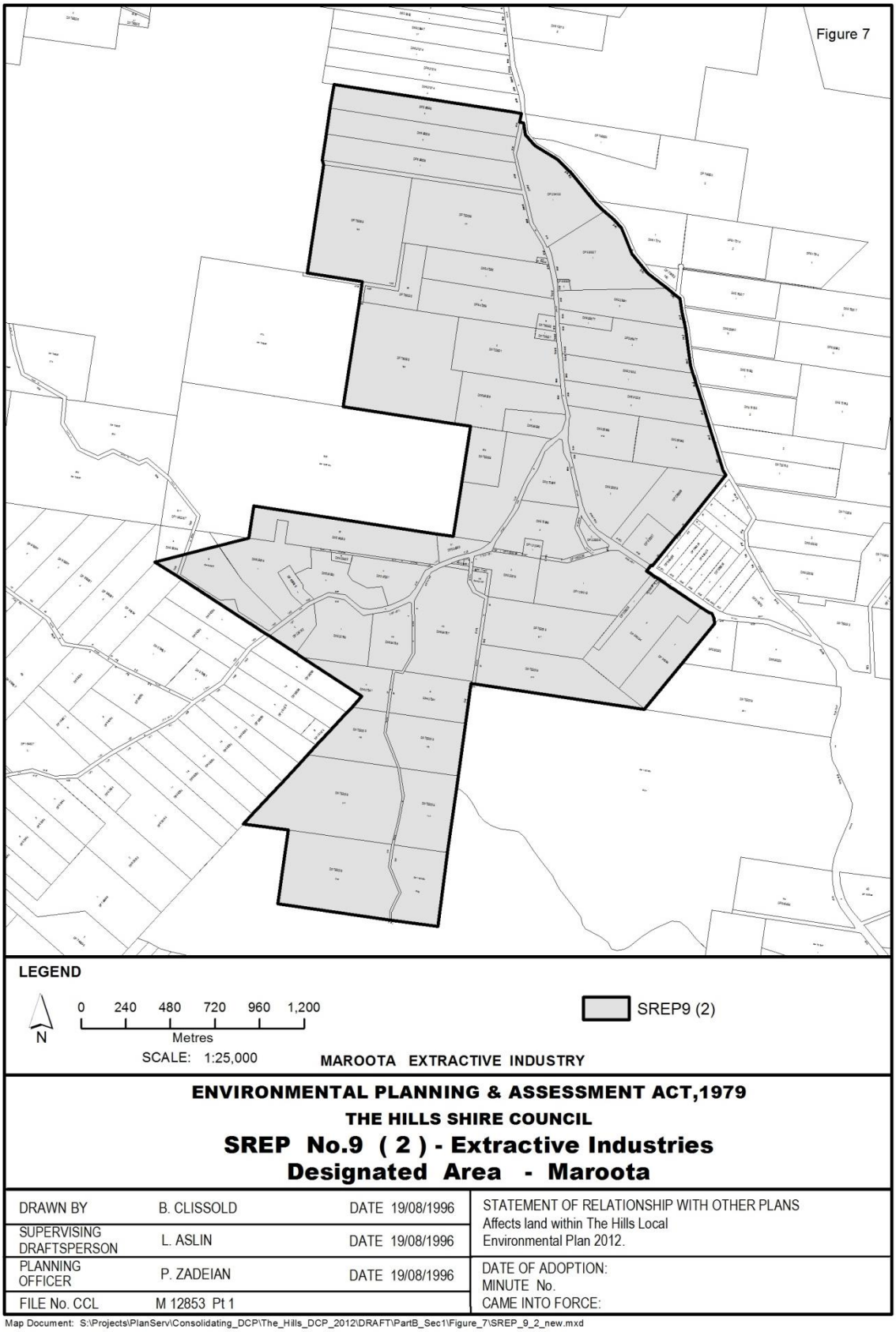


Figure 7: Sydney Regional Environmental Plan No 9—Extractive Industry (No 2—1995) Designated Area

The Hills Development Control Plan (DCP) 2012

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THE HILLS Sydney's Garden Shire



Part B Section 2
Residential

B2

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1. INTRODUCTION

This Section of the DCP must be read in conjunction with Part A - Introduction.

1.1. LAND TO WHICH THIS SECTION OF THE PLAN APPLIES

This Section of the DCP applies to all Residential zoned land and also applies to all land where residential accommodation land uses is permissible. Further specific controls for multi dwelling housing and residential flat buildings as defined in The Hills Local Environmental Plan 2012 are included in separate Sections of this DCP.

1.2. AIMS AND OBJECTIVES OF THIS SECTION

The aim of this Section of the DCP is to identify Council's objectives for residential development in the Shire and identify controls to ensure the objectives are achieved.

Council's overarching objectives for residential development are:

OBJECTIVES

(i) Encourage a high standard of aesthetically pleasing and functional residential developments that sympathetically relate to adjoining and nearby developments to create consistent streetscape and character.

(ii) Ensure that development will not detrimentally affect the environment of any adjoining lands and ensure that satisfactory measures are incorporated to ameliorate any impacts arising from the proposed development.

(iii) Encourage innovative and imaginative design with particular emphasis on the integration of buildings and landscaped areas that add to the character of the neighbourhood.

(iv) Provide high levels of amenity for future residents of any residential development.

(v) Implement the principles of Ecologically Sustainable Development.

(vi) To facilitate the implementation of the aims and objectives of residential development as set out in the Hills Shire LEP.

Additional objectives covering a range of specific issues, related to residential development in the Shire, are identified in section 2 below. These specific objectives are all related to the six objectives identified above.

2. OBJECTIVES AND DEVELOPMENT CONTROLS

Objectives, performance criteria and development controls for residential development are set out in the following sections.

A checklist including many of the development controls is provided as a summary in Appendix A of this Section of the DCP.

In addition to those policies, guidelines and documents specified in Section 1.4 of Part A – Introduction, this Residential Section is to be read in conjunction with other relevant Sections including:

- Part C Section 1 – Parking
- Part C Section 3 – Landscaping
- Part C Section 4 – Heritage
- Part C Section 6 – Flood Controlled Land

2.1. DEVELOPMENT CONTROL MAP SHEETS

The form of residential development is controlled by this Section of the DCP and specific locality maps. These DCP map sheets (Part B Section 2 - Residential, Sheets 1 to 46) provide additional detail as to local subdivision patterns, road layouts and development controls.

A Map showing which Residential DCP Sheets apply is provided in Appendix B – Residential DCP Map Sheet Guide of this Section of the DCP.

This DCP Section contains site specific objectives and controls for land adjoining Heritage Park, Gilroy College Target Site, Hunterford Estate in Oatlands, a residential precinct located at the corner of Old Windsor Road and Seven Hills Road, Baulkham Hills and land at 64 Mackillop Drive, Baulkham Hills (Refer to Appendix C – Precinct Plan Maps and Site Specific Controls in this Section of the DCP). Appendix C – Precinct Plan Maps and Site Specific Controls indicates the boundaries of precincts to which these site specific controls apply. These site-specific controls prevail over Shire Wide Controls.

2.2. SITE SPECIFIC DEVELOPMENT CONTROLS

In addition to this Section of the DCP, Council has adopted a number of site specific development controls to address issues specific to certain areas.

Note. In the event of any inconsistency between this Section of the DCP and site specific DCP Sections, the site specific DCP Section shall prevail only to the extent of the inconsistency.

Part D Section 5 - Kellyville/Rouse Hill is a site specific Section of this DCP. The purpose of this Section of the Plan is to provide for the control of residential development within the Rouse Hill Development Area.

Part D Section 7 – Balmoral Road Release Area is a site specific Section of this DCP. The purpose of this Section of the Plan is to provide for additional controls of residential development within the Balmoral Road Release Area.

2.3. RESTRICTED DEVELOPMENT AREAS

OBJECTIVES

(i) To protect sensitive land from development in order to retain natural drainage channels, vegetation and topographic features in accordance with Council's ESD Objective 6.

(ii) To reduce the risk to development arising from geotechnical constraints.

DEVELOPMENT CONTROLS

(a) Development is to be limited at specified environmentally sensitive locations as identified on the locality maps for this Section of the DCP (Part B Section 2).

(b) Additional site specific controls apply to land adjoining Heritage Park (See Appendix C – Precinct Plan Maps and Site Specific Controls).

SUBMISSION REQUIREMENTS

- Restricted Development Areas must be accurately plotted on the Site Plan; and
- Any development proposed within the Restricted Development Area must be clearly identified.

2.4. SITE ANALYSIS

OBJECTIVES

(i) To encourage a comprehensive approach to site planning, design and assessment of residential development.

(ii) To facilitate assessment of how future dwellings relate to their immediate surroundings and each other.

(iii) To facilitate development of a design that minimises the negative impacts on the amenity of adjoining residential development in accordance with Council's ESD objective 7.

(iv) To ensure development is compatible with land capability.

(v) To minimise adverse impacts on the environment in accordance with Council's ESD objectives 3 and 4.

DEVELOPMENT CONTROLS

(a) Development should be designed to respect site constraints such as topography, drainage, soil, landscapes, flora, fauna and bushfire hazard.

(b) Disturbance to existing natural vegetation and landforms, watercourses, wetlands and overland flow paths should be minimised.

(c) Development on land adjoining bushland reserves should incorporate measures (such as setbacks and buffers) to prevent any impact on the reserves.

(d) Development should be sited on the area of land presenting the least topographic constraints.

(e) Development should be sited away from steep slopes (particularly those containing natural vegetation) so that, where possible, these features can be kept in a natural state.

(f) Development should be designed to be consistent with the character of the streetscape.

SUBMISSION REQUIREMENT

- Site Analysis.

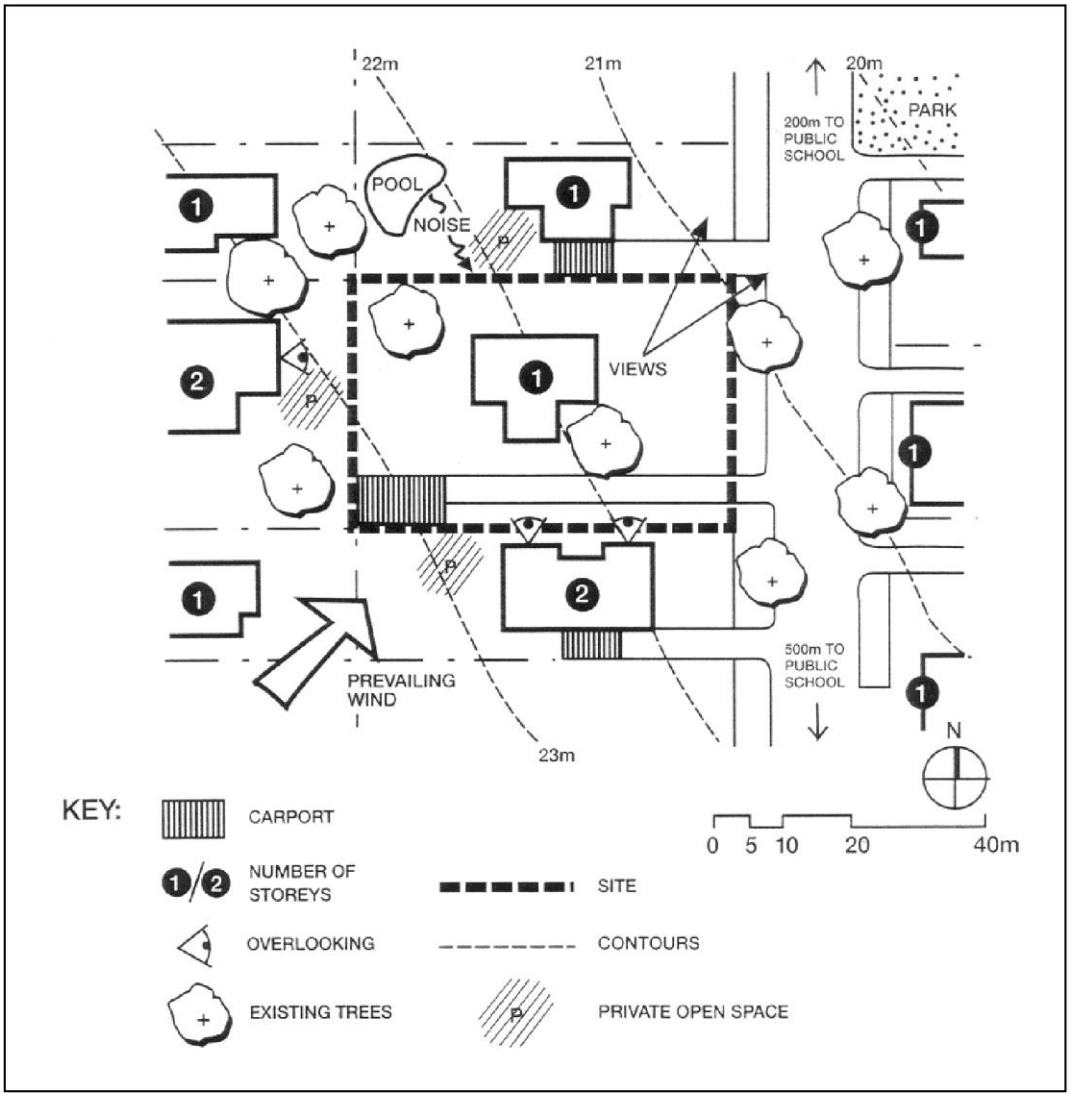


Figure 1: Site Analysis Plan

2.5. STREETSCAPE AND CHARACTER

Note. Streetscape is created by many visible features in a street including lot size, kerbs, fencing, setbacks, spatial separation, bulk and scale, access arrangements, street tree planting, native vegetation and private gardens, colours and materials, as well as the architecture of individual residences and buildings.

The relationship of these elements creates character which contributes to the 'look and feel' of a street, a sense of place and identity. Understanding the character of an area is critical in ensuring development contributes, enhances, and integrates with the existing character that makes an area desirable.

OBJECTIVES

(i) To ensure that the appearance of new development is of a high visual quality, enhances the streetscape and complements surrounding development.

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

(iii) To ensure that the appearance of housing is of a high visual quality, enhances the streetscape and complements good quality surrounding development.

(iv) To encourage streetscape variation whilst maintaining a high level of amenity for the development.

(v) To ensure new development respects and enhances the green and garden character of The Hills Shire.

(vi) To achieve development that respects and makes a positive contribution to the character and "sense of place" of Castle Hill.

(vii) To enhance the visual attractiveness, safety and security and personal comfort of streets and public and semi public spaces.

DEVELOPMENT CONTROLS

(a) The proposed development must:

- contribute to an attractive residential environment with clear character and identity;
- address the street and boundaries to the site with a building form compatible with adjoining development in terms of street elevation and presentation; and
- retain, complement and sensitively harmonise with any heritage item or conservation area in the vicinity that are identified in Council's Local Environmental Plan.

(b) The proposed development should maintain neighbourhood amenity and appropriate residential character by:

- providing building setbacks that progressively increase as wall heights increase to reduce bulk and overshadowing;
- using building form and siting that relates to the land form;
- adopting building heights at the street frontage that do not dominate the streetscape;
- retaining where possible and providing landscaping in the front and rear yards in particular tall planting in scale with the building proposed; and
- considering where buildings are located on neighbouring properties.

(c) Additional site specific controls apply to Hunterford Estate, Oatlands and Gilroy College (Appendix C).

SUBMISSION REQUIREMENTS

- Documentation to demonstrate how the objectives and development controls are met.
- Architectural Plans.
- Elevation Plans.
- Streetscape perspective of proposed development.
- Schedule of External Materials.

2.6. BUSH FIRE HAZARD MANAGEMENT

OBJECTIVES

(i) To reduce the risk to life and property in areas of bushfire risk.

(ii) In determining Development Applications, Council will have regard to any likely bushfire hazard.

DEVELOPMENT CONTROL

(a) Council has adopted the NSW Rural Fire Service Guidelines entitled "Planning for Bushfire Protection 2006". Development subject to bushfire risk will be required to address the requirements in these guidelines.

2.7. GEOTECHNICAL SITE STABILITY

Note. This section applies to development on land identified with Landslide Risk under The Hills Local Environmental Plan 2012.

OBJECTIVES

(i) To ensure proposed development does not result in movement or slip.

(ii) To ensure soil movement or land slip does not adversely affect proposed development.

DEVELOPMENT CONTROLS

(a) Areas possibly subject to movement or slip are identified by The Hills LEP 2012 Landslide Risk Maps or identified by Council to be considered subject to movement or slip.

(b) Prior to the determination of any subdivision or Development Application, a geotechnical appraisal prepared by an Engineer qualified as a corporate Member of the Institution of Engineers of Australia or similar recognised industry body (and who is experienced in the fields of landslides, soil and rock mechanics, slope stabilisation and residential developments) must be submitted by the applicant and may, as determined by Council, be subject to assessment by an independent expert review panel at the expense of the applicant.

(c) The geotechnical appraisal must certify that the design of all the structures the subject of the application is suitable to withstand the effects of high plasticity clays subject to shrink/swell

movements and possible creep movement of near surface soils.

(d) The geotechnical appraisal must satisfy Council that an acceptable level of risk is achieved with respect to the possibility of movement or slip adversely affecting the proposed subdivision or development or being caused by the proposed subdivision or development.

(e) An 'acceptable risk level' is defined in accordance with the AGS Guidelines for Landslide Susceptibility, Hazard and Risk Zoning for Land Use Planning (AGS 2007a) as the loss of life for the person most at risk (from the landslide) as 1 in a million per annum and for property loss the risk is to be 'low' as identified in Appendix C of the Practice Note Guidelines for Landslide Risk Management 2007 (AGS 2007c). The application must demonstrate that any proposed remedial works will satisfy these requirements.

(f) For land zoned E3 Environmental Management, refer to Development Controls in section 2.14.2 in this Section of the DCP.

SUBMISSION REQUIREMENTS

- Any part of the site shown as being subject to Geotechnical constraints on the site specific maps for this Section of the DCP or identified by Council to be considered subject to movement or slip must be identified on the site plan.
- A Geotechnical Assessment will be required for works proposed within these areas.

2.8. BUSHLAND AND BIODIVERSITY

OBJECTIVE

(i) To conserve and protect the biodiversity of the Shire including habitats of threatened flora and fauna species and communities in accordance with Council's ESD objective 1 and 4.

DEVELOPMENT CONTROLS

(a) Significant flora and fauna species, communities and ecological communities should be preserved.

(b) Development should be designed to retain existing bushland and fauna habitats, including identifiable corridors and linkages.

SUBMISSION REQUIREMENTS

- Applications should include a Fauna and Flora Assessment in accordance with Section 5A of the Environmental Planning & Assessment Act 1979 if there is likely to be a significant effect on threatened species, populations or ecological communities, or their habitats.
- Applicants may be required to submit a Species Impact Statement (SIS) for development likely to significantly affect threatened species, populations and ecological communities. Reference should be made to the requirements of the Environmental Planning & Assessment Act 1979, and the Threatened Species Conservation Act 1995.

2.9. EROSION AND SEDIMENT CONTROL

OBJECTIVES

(i) Minimise land degradation, water pollution and damage to infrastructure from accumulated sediment in accordance with Council's ESD objective 3.

(ii) To ensure development controls are identified for all stages of development and to ensure a consistent approach to erosion and sediment control.

DEVELOPMENT CONTROLS

(a) Use best management practices available to avoid or mitigate land degradation associated with development.

(b) Applications for residential development including subdivision are to be accompanied by an Erosion and Sediment Control Plan (ESCP) which will describe the measures to be taken at development sites to minimise land disturbance and erosion and control sediment pollution of waterways. ESCPs are to clearly identify the erosion and sediment control measures to be used.

(c) Erosion and Sediment Control Plans shall be prepared in accordance with "Managing Urban Stormwater – Soils and Construction", produced by the NSW Department of Housing.

(d) The erosion and sediment control measure proposed may need to change during the development process. The erosion sediment control plan should address all phases of the development process.

(e) Erosion and sediment controls must be in place before work commences and be retained and revised to reflect changes in site conditions, until the development is finalised and the site stabilised.

SUBMISSION REQUIREMENTS

- Erosion and Sediment Control Plans.

2.10. HERITAGE

OBJECTIVES

(i) To ensure that development is undertaken in a manner that is sympathetic to, and does not detract from, the heritage significance of heritage items and conservation areas, and their settings.

DEVELOPMENT CONTROLS

(a) Views to and from significant items of natural or cultural heritage should not be impeded by development.

(b) If the development is within the Rouse Hill Development Area, SREP No. 19 will also apply.

(c) All developments must address and comply with the provisions of Part C Section 4 – Heritage.

2.11. SIGNAGE

OBJECTIVES

(i) To permit an approved use to adequately identify their premises while maintaining the residential character of the area.

(ii) To ensure that advertising signs are appropriate to the size and scale of the activity conducted on the property.

DEVELOPMENT CONTROLS

(a) All signage proposed must be designed in accordance with Part C Section 2 – Signage.

(b) Advertising signs must not detract from any residential area. The size, shape, materials and location of signage must complement the visual character of the surrounding area.

SUBMISSION REQUIREMENTS

- Signage Plan.

2.12. STORMWATER MANAGEMENT

OBJECTIVES

(i) To provide for the disposal of stormwater from the site in efficient and environmentally sensible ways in accordance with Council's ESD objective 3.

(ii) To control stormwater and to ensure that developments do not increase downstream drainage flows or adversely impact adjoining or downstream properties.

(iii) To ensure the integrity of watercourses is protected and enhanced in accordance with Council's ESD objective 4.

(iv) To provide for on-site detention of stormwater.

(v) To encourage the reuse of stormwater.

DEVELOPMENT CONTROLS

(a) Water Sensitive Urban Design (WSUD) measures should be employed in the management of the site's/development's stormwater in terms of water retention, reuse and cleansing.

(b) In all development, consideration should be given to utilising one of the following water sensitive urban design measures:-

M1 Low Impact Building Design

M2 Low Impact Landscape Design

A detailed description of the actions required to implement each of these measures is included in Appendix B – Water Sensitive Urban Design of The Hills Shire Development Control Plan.

Where only BASIX exemption is relied on, rain water tanks to reuse rainwater must be installed for each new dwelling outside the Kellyville Rouse Hill Release Area. The requirements for their installation and use are included in Appendix B – Water Sensitive Urban Design under the heading:

M3 Rainwater Utilisation – toilet, irrigation

(c) Rainwater tanks are not required in the Kellyville - Rouse Hill Release Area because a recycled water system has been installed in this area. However owners may choose to install a rainwater tank if they consider it appropriate for their property.

(d) Drainage systems are to be designed and constructed in accordance with the design guidelines set out in "Australian Rainfall and

Runoff 1987" published by the Institution of Engineers, Australia.

(e) On-site detention systems (OSD) when required, are to be designed in accordance with (a) above and the specific requirements of (as relevant) the Upper Parramatta River Catchment Trust On-site Detention Handbook.

(f) Concentrated stormwater flows must be connected to Council's drainage system. In some cases this may require the creation of drainage easements over downstream properties. In this circumstance, a letter of consent from the owner(s) of the downstream properties is to be submitted with the Development Application. On rural properties overflow from rainwater tanks must be dispersed on site to ensure concentrated flows do not impact on adjoining properties or cause erosion.

(g) Reference should be made to the Restrictions As To User on the title of the land to which the development is proposed in relation to requirements for on-site detention.

(h) Discharge points are to be controlled and treated to prevent soil erosion, and may require energy dissipating devices on steeper topography, to Council's requirements.

(i) All development in rural areas must be in accordance with Appendix C – On Site Sewage Systems in Part B Section 1 – Rural.

SUBMISSION REQUIREMENTS

- Preliminary Engineering Drainage Plans indicating the proposed drainage infrastructure.
- If required, easements are to be created over downstream properties prior to the release of the linen plan for the subdivision, or prior to the release of a Building or Occupation Certificate whichever is earliest.
- On-site Detention (OSD) Plans if required.

2.13. SUBDIVISION

The objectives and development controls are primarily related to applications involving subdivision. The controls relating to the erection of a dwelling must still be considered at subdivision stage to ensure all lots created can accommodate a suitable dwelling in accordance with this Section of the DCP.

2.13.1 RESIDENTIAL LOT WIDTH AND DEPTH

OBJECTIVES

(i) To provide allotments of a size conducive to residential living, having regard to any development constraints or environmental qualities of that land; and

(ii) To ensure allotments have sufficient area to provide adequate access, open space, a sufficient building platform and attractive presentation to the street.

DEVELOPMENT CONTROLS

(a) The minimum frontage for a lot on a classified road where a dwelling is permissible shall be 27m.

(b) The minimum frontage for other road frontages for a lot where a dwelling is permissible is 18m. Except for land zoned E4 Environmental Living where the minimum frontage is 23m.

(c) The minimum depth of lots where a dwelling is permissible is 27m. Except for land zoned E4 Environmental Living where the minimum depth is 50m.

(d) For an irregular shaped allotment the average width shall not be less than the minimum frontage controls (a) to (c).

(e) Map Sheet 40 of this Section of the DCP identifies land where development shall provide for the connection of surface stormwater on the land the subject of the development to a piped stormwater drainage system.

(f) For battle-axe shaped allotments and allotments served by a right-of-way where allotments have no road frontage, the minimum area excluding the access corridor shall not be less than the minimum lot size identified in The Hills Local Environmental Plan 2012.

(g) The minimum width for the battleaxe handle on battleaxe shaped allotments is:

Number of lots to be accessed	Minimum Width
One allotment	4 metres
Two or more allotments	6 metres

(h) The minimum area of a residential lot should be free of any restricted development area. Refer to Map Sheets 1-42.

SUBMISSION REQUIREMENTS

- Site Plan and/or Subdivision Plans.
- Site Analysis.

2.13.2 BUILDING PLATFORM AND VIEWS

OBJECTIVES

(i) To ensure allotments have a suitable area for the erection of a dwelling and associated structures free of constraints or restrictions.

(ii) To ensure that the appearance of housing is of a high visual quality and enhances the streetscape and the urban environment.

(iii) To allow flexibility in the siting of new buildings and ensure the bulk and scale of new development protects reasonable neighbour amenity and maintain appropriate residential character.

(iv) To maximise views available from the site in the design of new residential development in the Hunterford Estate, Oatlands.

DEVELOPMENT CONTROLS

(a) The site must be capable of providing a building platform of at least 20 metres by 15 metres. The platform shall be sited in an accessible and practical location and on relatively flat terrain with stable soil and geology.

(b) Practical and suitable access shall be provided from a public road to the building platform.

(c) The building platform is to be applied independently of the minimum building setbacks.

(d) Pitched roofs are the preferred choice of roof form for the development, particularly for dwellings adjoining the existing residential area.

(e) Dwellings should be orientated to maximise solar access and enjoy views.

(f) Additional site specific objectives and controls to development on land adjoining Heritage Park, Hunterford Estate in Oatlands and Residential Development, Corner Old Windsor Road and Seven Hills Road, Baulkham Hills (Refer to Appendix C – Precinct Plan Maps and Site Specific Controls).

SUBMISSION REQUIREMENTS

- The subdivision plans must clearly indicate where the building platforms can be located on each lot and the proposed access paths to the platforms free of any restrictions.

2.13.3 PEDESTRIAN ACCESS, SAFETY AND SECURITY

OBJECTIVE

(i) To ensure the needs of residents and visitors are considered with particular regard to access requirements, safety and security in accordance with Council's ESD Objective 7.

DEVELOPMENT CONTROLS

(a) Residential developments are to provide safe and convenient access for prams, wheelchairs and people with disabilities from the public road to all areas of the development.

(b) Movement areas should be designed to provide convenient, obvious and safe pedestrian and bicycle links from the site to public transport services and local facilities.

(c) Footpaths, landscaped areas and driveway designs are to provide opportunities for surveillance and allow safe movement of residents and visitors.

(d) The design of residential developments is to demonstrate consideration of resident safety and security.

(e) Signage is to be clear and easy to understand.

(f) Consideration should be given to Council's Safer by Design Guidelines, particularly in regards to natural surveillance, sightlines and lighting.

2.13.4 DEVELOPER CONTRIBUTIONS

Applicants should consult with Council's Section 94 Contributions Plan and Council's Officers to determine the required amount of Section 94 Contributions payable.

2.13.5 WASTE COLLECTION

OBJECTIVE

(i) To ensure safe and efficient collection of waste and recyclables by Council or its contractor.

DEVELOPMENT CONTROLS

(a) Roads must be designed to provide adequate manoeuvring space to allow Council's (or its contractor's) waste collection vehicles to enter and exit in a forward direction to collect waste and recyclables with no need for reversing.

2.14. DWELLINGS

The controls below apply to developments for dwellings.

2.14.1. BUILDING SETBACKS

OBJECTIVES

(i) To provide setbacks that complements the streetscape and protects the privacy and sunlight to adjacent dwellings in accordance with ESD Objective 7.

(ii) To ensure that new development is sensitive to the landscape setting, site constraints and established character of the street and locality.

(iii) To ensure that the appearance of new development is of a high visual quality and enhances the streetscape.

DEVELOPMENT CONTROLS

(a) The minimum road frontage setback for any classified road is 10 metres.

(b) The minimum road frontage setback requirement for any non classified roads is as follows:

Primary Road Frontage Setback 10m

The areas where the primary road setback is not 10 metres are shown on Maps 1-4. The setbacks for these areas are outlined in the table below.

Areas where Primary Road Frontage Setback is less than 10m	Map No	Primary Setback
West Pennant Hills Valley	1	7.5
Bingara Crescent/ Crestwood	2	7.5
Kings Road	3	7.5
Bella Vista Residential	4	6m
Kellyville/Rouse Hill Development Area	n/a	*

*Refer to Part D Section 5 – Kellyville / Rouse Hill Release Area, Part D Section 6 Rouse Hill Regional Centre and Part D Section 7 – Balmoral Road Release Area.

(c) Where the predominant setback pattern of the existing streetscape reflects setbacks which exceed the required minimum, the greater setback suggested by the character created by the three (3) adjoining dwellings either side of the proposed dwelling will apply .

(d) Development on corner allotments, with no frontages to classified roads shall have regard to the streetscape of both street frontages and may provide a setback of not less than 6 metres for the primary frontage and 4 metres to a secondary road frontage.

(e) All garages must be setback in accordance with the setbacks described in a), b) and c) above, or 5.5 metres, whichever is the greater. This is required to ensure vehicles parked on the driveway in front of the garage do not encroach into the road reservation.

(f) The maximum width of a dwelling must be:

Width of allotment at the building line	Percentage of width at the building line
Less than or equal to 18m	80%
Greater than 18m	75%

(g) The minimum side boundary setback requirement is:

Height of building	Distance of wall to boundary line	Distance of eave to boundary line
1 or 2 storeys	900mm	675mm
3 storey	1500mm	1175mm

(h) The minimum rear boundary setback requirement is:

Height of building	Setback
1 storey element of dwelling'	4 metres
2-3 storey elements of dwelling'	6 metres

(i) For battleaxe allotments dwellings shall be setback a minimum distance to three sides only of the lot of 4m for the single storey element and 6m for the 2 and 3 storey elements.

(j) Except where the lot has two road frontages and the dwelling is to back onto an arterial or sub-arterial road. In this case the required rear wall setback to the road frontage is:

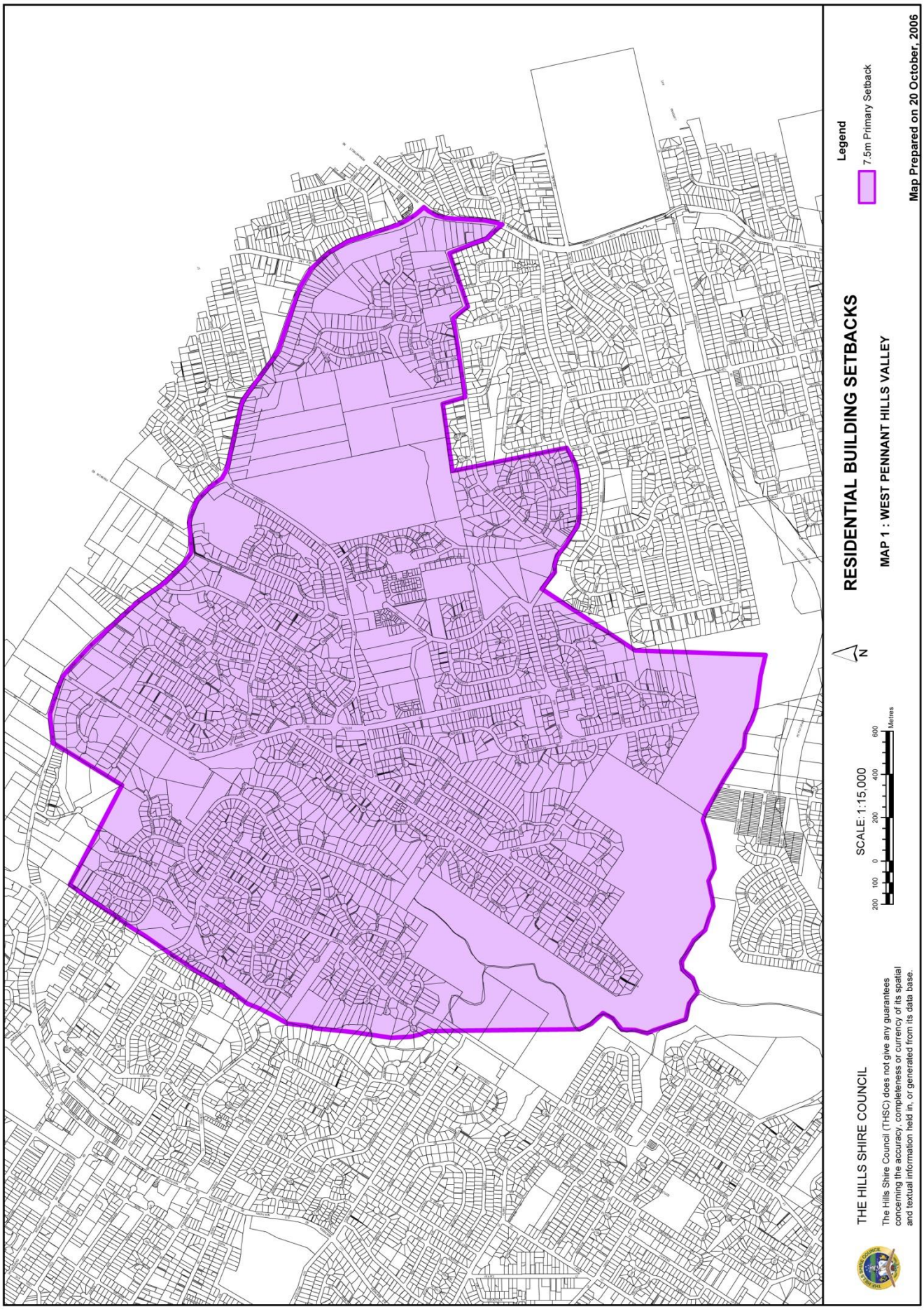
Height of building	Rear wall setback to a classified road
1 storey	6 metres
2-3 storey	8 metres

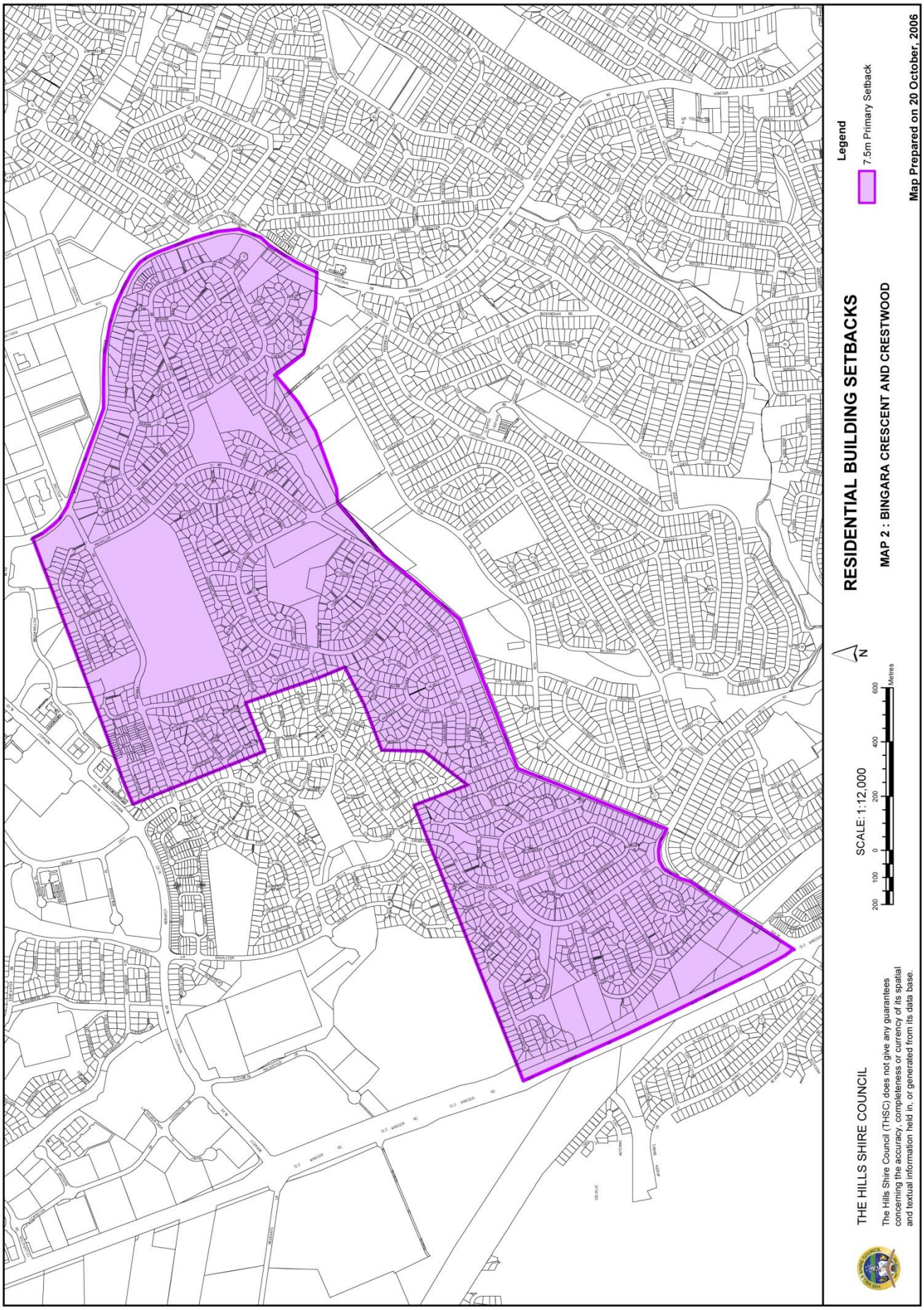
(k) Consideration should be given to Council's Safer by Design Guidelines, particularly in regards to natural surveillance, sightlines and lighting.

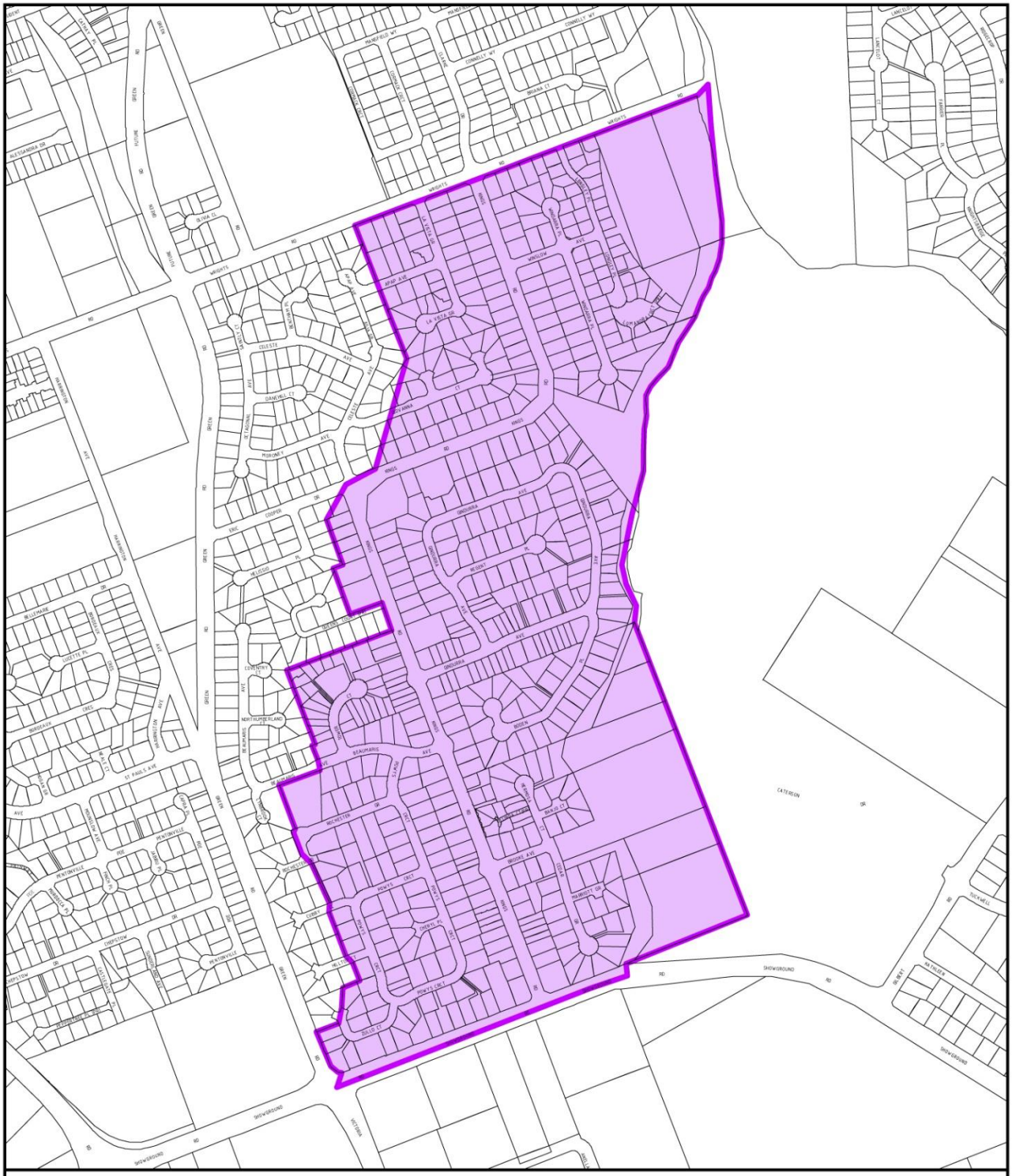
(l) Site specific controls apply to Hunterford Estate in Oatlands, Land Adjoining Heritage Park, Gilroy College Site and Residential Development Old Windsor Road and Seven Hills Road, Baulkham Hills (Refer to Appendix C – Precinct Plan Maps and Site Specific Controls).

SUBMISSION REQUIREMENT

- Building setback dimensions are to be shown on development application plans.


RESIDENTIAL BUILDING SETBACKS
MAP 1 : WEST PENNANT HILLS VALLEY
Legend
7.5m Primary Setback
Map Prepared on 20 October, 2006
N
SCALE: 1:15,000
200 100 0 200 400 600
Metres
THE HILLS SHIRE COUNCIL
The Hills Shire Council (THSC) does not give any guarantees concerning the accuracy, completeness or currency of its spatial and textual information held in, or generated from its data base.


RESIDENTIAL BUILDING SETBACKS
MAP 2 : BINGARA CRESCENT AND CRESTWOOD
Legend
7.5m Primary Setback
Map Prepared on 20 October, 2006
N
SCALE: 1:12,000
200 100 0 200 400 600 Metres
THE HILLS SHIRE COUNCIL
The Hills Shire Council (THSC) does not give any guarantees concerning the accuracy, completeness or currency of its spatial and textual information held in, or generated from its data base.



RESIDENTIAL BUILDING SETBACKS

MAP 3 - KINGS ROAD

Legend

7.5m Primary Setback

THE HILLS SHIRE COUNCIL

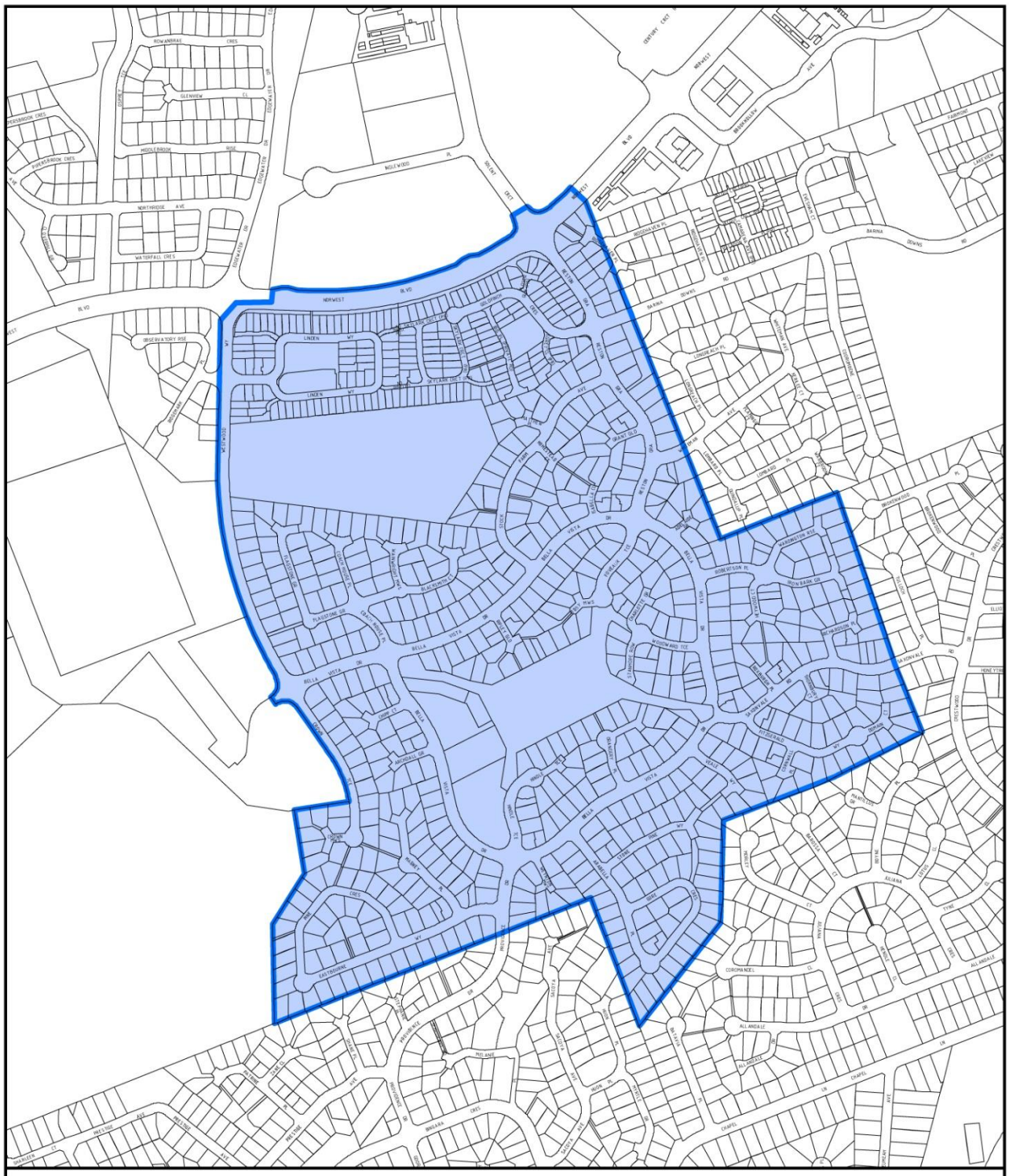
The Hills Shire Council (THSC) does not give any guarantees concerning the accuracy, completeness or currency of its spatial and textual information held in, or generated from its data base.

N

SCALE: 1:8,000

0 50 100 200 300 Metres

Map Prepared on 20 October, 2006



RESIDENTIAL BUILDING SETBACKS

MAP 4 - BELLA VISTA RESIDENTIAL

Legend

6.0m Primary Setback

THE HILLS SHIRE COUNCIL

The Hills Shire Council (THSC) does not give any guarantees concerning the accuracy, completeness or currency of its spatial and textual information held in, or generated from its data base.

N

SCALE: 1:8,000

0 50 100 200 300 Metres

Map Prepared on 20 October, 2006

2.14.2. SITE COVERAGE

OBJECTIVES

(i) To maximise the provision of open space.

(ii) To avoid the creation of drainage and runoff problems, through minimising the amount of impervious area in accordance with Council's ESD Objective 3.

(iii) To minimise bulk and scale of development.

(iv) To facilitate spatial separation between buildings.

(v) To provide for adequate landscaped area.

(vi) Maintain the character of existing areas by retaining vegetation.

DEVELOPMENT CONTROLS

(a) The maximum site coverage permitted in residential zones is 60% with the exception of land zoned E4 Environmental Living and land identified in the Map Sheets by pink shading, where the maximum site coverage is 30%.

Note. For the purpose of this plan the calculation of the site coverage will be subject to the following criteria:

- any impervious area including, but not limited to, buildings, driveways, patios, pools, tennis courts, decks, recreation facilities and the like will be included within the calculation of site coverage; and
- The total land area of the lot will be used in the calculation of site coverage. The total land area excludes restricted development areas or land required for public purposes.

(b) Of the maximum permitted site coverage, the dwelling building footprint is to be no more than 45%, with the exception of land shaded pink on Map Sheets 1-42.

(c) Additional site specific controls apply to land adjoining Heritage Park (Refer to Appendix C – Precinct Plan Maps and Site Specific Controls).

Zone E3 Environmental Management

(d) Erection of a dwelling on land zoned E3 Environmental Management (shown in Map Sheet 40) shall be:

- a replacement for an existing dwelling, and
- it will have a floor area not exceeding 125% of the floor area of the existing dwelling, and
- it will be a light and flexible structure capable of tolerating soil movement, and
- it shall not involve the excavation or filling of land to a depth or height of more than 300mm from the existing surface level.

(e) For additions or alterations to an existing dwelling-on land zoned E3 Environmental Management (shown in Map Sheet 40):

- the area of the existing dwelling will not be increased by more than 25%, and
- the additions or alterations will be light and flexible and capable of tolerating soil movement.

SUBMISSION REQUIREMENTS

- A schedule showing the site coverage and landscape area should be submitted with the application or included on the Site Plan.

2.14.3. BUILDING HEIGHT

Refer to Clause 4.3 *Height of buildings* of The Hills Local Environmental Plan 2012.

2.14.4. PRIVATE OPEN SPACE

OBJECTIVES

(i) To provide for a private outdoor living space, as an extension of the dwelling, for the enjoyment of residents.

(ii) To provide outdoor living spaces which receive a reasonable quantity of sunshine during all months of the year.

DEVELOPMENT CONTROLS

(a) Private open space (behind the front building line) is to be 20% of the lot area or 80m^2 whichever is the greater and can be contained within the landscaped area of the site.

(b) The private open space area must be able to contain a rectangle measuring 6 metres by 4 metres.

(c) The private open space area is to be:

- continuous to, and accessible from, the primary living areas of the dwelling;
- located and oriented to ensure it is not directly overlooked from adjoining lots or buildings; and
- located on relatively flat land to ensure it is useable as open space.

(d) At least 50% of the required minimum open space area is to receive direct sunlight between 10.00am and 3.00pm during mid-winter. Appropriate shadow diagrams are to be provided at development application stage to demonstrate compliance with this standard.

SUBMISSION REQUIREMENTS

- The location and dimensions of the private open space must be shown on the Site Plan.

2.14.5. LANDSCAPING AND OPEN SPACE

OBJECTIVES

(i) To enhance the quality of the built environment by providing a high standard of landscaping.

(ii) To ensure that landscaping may be efficiently maintained.

(iii) To promote a pleasant and safe living environment.

(iv) To limit tree removal to maintain the character of the area.

(v) To design a high quality landscape setting for urban housing development.

(vi) To fully integrate the landscape design in communal, private and public areas as a necessary element in any well designed residential project.

(vii) To preserve and enhance existing landscape features.

(viii) To encourage existing vegetation to be included wherever possible into site landscaping.

(ix) To provide adequate open space areas for the enjoyment and use by residents.

(x) To enhance the quality of the built environment by providing opportunities for landscaping.

(xi) To provide an open space area within the development for the recreation of residents and children's play.

DEVELOPMENT CONTROLS

(a) All setback and car parking areas are to be landscaped and maintained in accordance with the provisions of Part C Section 3 – Landscaping.

(b) The minimum required landscaped or naturally vegetated area for residential development as a percentage of the total site area is 40%. Except for land zoned E4 Environmental Living where the minimum is 70%.

(c) Consideration should be given to Council's Safer by Design Guidelines, particularly in regards to natural surveillance, sightlines and lighting.

Note. Landscaped area does not include any paved or built upon area such as driveways, tennis courts, patios/decks, outbuildings or pools.

(d) Site specific controls apply to Hunterford Estate, Oatlands, Gilroy College and residential development at the Corner of Old Windsor Road and Seven Hills Road, Baulkham Hills (Refer to Appendix C – Precinct Plan Maps and Site Specific Controls).

SUBMISSION REQUIREMENTS

- A Landscape Plan including details of site coverage and Landscape area.
- Tree management Details.
- Site Plan.

2.14.6. DWELLING DESIGN AND CONSTRUCTION

OBJECTIVES

(i) To ensure that dwellings are designed with regard to site conditions and constraints such as drainage easements.

(ii) To ensure that dwelling design and siting have regard to the existing streetscape and character of the area, and the amenity of adjoining development.

(iii) To protect existing trees on the site.

(iv) To ensure that the appearance of housing is of a high visual quality and enhances the streetscape and the urban environment.

(v) To allow flexibility in the siting of new buildings and ensure the bulk and scale of new development protects reasonable neighbour amenity and maintain appropriate residential character.

DEVELOPMENT CONTROLS

(a) Removal of existing trees should be minimised in any building proposal. Refer to Clause 5.9 *Preservation of trees or vegetation* of The Hills Local Environmental Plan 2012 and Part C Section 3 – Landscaping for requirements.

(b) Any part of the structure must comply with the building line setbacks applying to the land.

(c) Stairs, single storey verandahs, single storey entry features, and single storey porticos may encroach up to 1.2 metres of the building setback for 30% of width of the dwelling provided the design, materials, colours and construction be consistent with the dwelling.

(d) Dwellings must be designed so that walls facing public spaces contain window or door openings to a habitable room.

(e) Council discourages design that results in carports and garages facing a public place as prominent elements of the streetscape. Garages should be no more than 6.5m in width and should not extend across more than 50% of the width of the property (measured at the required building line setback). Garages must be designed to be:-

- visually subservient;
- integrated into the overall dwelling design; and
- constructed of similar materials and finishes to the dwelling.

(f) Two of the criteria listed below should be utilised to minimise the impact of garages:

- Garage doors are divided by a vertical masonry pillar or similar;
- Upper floor element projected forward of the garage to cast a shadow and take prominence;
- Colours and textures to ensure the garage doors do not dominate the street elevation;
- Verandah or pergola provided across the face of the garage;
- Utilisation of vertical elements to mitigate the horizontal elements of the garage;
- Garage entrance to be oriented away from the primary street frontage; and
- Staggered garages whereby one garage is setback from the adjoining garage (triple garages will not be supported unless one garage is setback from the adjoining two garages).

(g) In cases where triple garages are proposed the suitability of the proposal will be considered on the basis of the impact on the streetscape utilising the criteria listed above as guidelines.

(h) Site specific controls apply to land adjoining Heritage Park facing Old Castle Hill Road. Hunterford Estate in Oatlands and Gilroy College Target Site (Refer to Appendix C – Precinct Plan Maps and Site Specific Controls).

SUBMISSION REQUIREMENTS

- Documentation to demonstrate how the objectives and development controls are met.
- Development Applications submitted for new dwellings shall indicate the site levels and finished floor levels related to a datum (AHD preferred) at the invert of the gutter.

2.14.7. CUT AND FILL

OBJECTIVE

(i) To ensure that dwellings are designed with regard to site conditions and minimise the impact on landform.

DEVELOPMENT CONTROLS

(a) Building siting and design should consider the topography of the site and if cut and fill is necessary it must be balanced to ensure no fill leaves the site.

(b) Where plans show an excess of 600mm of filling and, provided that the filling does not exceed 1.5 metres, a condition of approval will be imposed requiring a concealed dropped edge beam to contain the fill in excess of 600mm. Should the plans show an excess of filling above 1.5 metres, the applicant will be requested to amend the design to reduce the filling required.

(c) Excavation in excess of 1 metre may be permitted, subject to there being no adverse effect on the adjoining owners and the submission of structural engineers details of retaining walls with the Development Application, or alternatively, a separate Development Application is to be submitted.

SUBMISSION REQUIREMENTS

- Details of the exact amount and extent of excavation and filling on the site.

2.14.8. BUILDING MATERIALS

OBJECTIVES

(i) To promote integrated, visually harmonious and attractive buildings in residential and rural areas.

(ii) To encourage the use of renewable, energy efficient materials that are durable and cost effective in accordance with Council's ESD objective 5.

(iii) To reduce waste generation and wastage of resources in accordance with Council's ESD objective 6.

(iv) To encourage consideration of the long-term impact of the production and use of materials used in construction of the development.

DEVELOPMENT CONTROLS

(a) All building construction must comply with the Environmental Planning and Assessment Act 1979, Local Government Act 1993, and Building Code of Australia.

(b) The choice of materials and external finishes are to be compatible with surrounding developments and landscape features in terms of colours, textures and quality.

(c) The following factors must be considered when selecting materials:
- suitability for the purpose;
- durability;
- long term appearance;
- local environmental impacts;
- broader and longer term environmental impacts; and
- the quantity of material required.

(d) Avoid oversupply and waste of materials by careful assessment of quantities needed.

(e) Avoid materials that are likely to contribute to poor internal air quality such as those generating formaldehyde or those that may create a breathing hazard in the case of fire (eg polyurethane).

(f) Select materials that will minimise the long-term environmental impact over the whole life of the development.

(g) Preference should be given to materials derived from renewable sources or those that are sustainable and generate a lower environmental cost, recycled material or materials with low embodied energy, better lifecycle costs and durability.

(h) Choice of materials should be based on consideration of both their environmental and economic costs.

(i) Consideration should be given to Council's Safer by Design Guidelines, particularly in regards to the use of anti – graffiti surfaces.

SUBMISSION REQUIREMENTS

- Schedule of External Materials including schedule of colours.

2.14.9. PRIVACY – VISUAL AND ACOUSTIC

OBJECTIVES

(i) To site and design buildings to ensure visual privacy between dwellings and principal areas of private open space in accordance with Council's ESD objective 7.

(ii) To avoid overlooking of living spaces in dwellings and private open spaces.

(iii) To contain noise within dwellings and communal areas without unreasonable transmission to adjoining dwellings.

(iv) To promote changes in levels through terracing and height variations to reduce overlooking.

(v) To ensure window locations and design reduce overlooking.

DEVELOPMENT CONTROLS

(a) Buildings are to be designed to ensure maximum protection of privacy; in particular the privacy of primary living areas must be protected. Where appropriate consideration should be given to:
- using windows that are narrow, translucent or obscured or, in the case of bathrooms, have window sills a minimum of 1.5 metres above the upper storey floor level;

- ensuring that windows that face directly to the windows, balconies or yards of adjoining dwellings are appropriately screened; and
- screening of opposing windows, balconies and yards with appropriate landscaping.

(b) First floor balconies will not be permitted where they overlook living areas of adjacent dwellings.

(c) Windows should be placed to minimise direct viewing between dwellings.

(d) Dwellings are to be designed to limit the potential for noise transmission to the living and sleeping areas of adjacent existing and future developments.

(e) Careful consideration should be given to the location of air-conditioning systems, swimming pools and the like to minimise the impact on the amenity of adjoining properties.

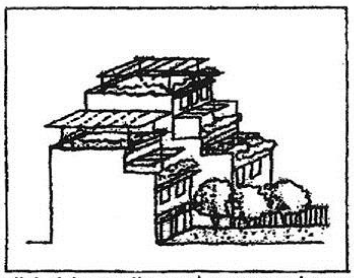
(f) Private open space areas and driveways are to be designed to minimise noise impacts.

(g) Dwellings that adjoin classified roads are to be designed to ensure acceptable internal noise levels, based on Environmental Protection Authority – Environmental Criteria for Road Traffic Noise and Australian Standard 3671 – Road Traffic Noise Intrusion – Building Siting and Construction.

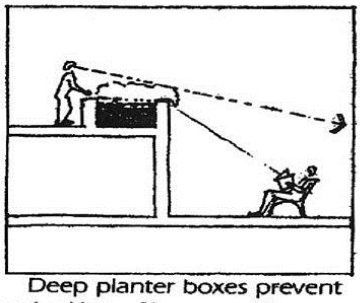
(h) Site specific controls apply to Hunterford Estate in Oatlands and Gilroy College Target Site (Refer to Appendix C– Precinct Plan Maps and Site Specific Controls).

SUBMISSION REQUIREMENTS

- Statement of Environmental Effects must address design measures considered and ultimately selected to ensure the visual and acoustic privacy of future residents and residents of adjoining sites.



Solid side walls and screens improve privacy of adjoining balconies



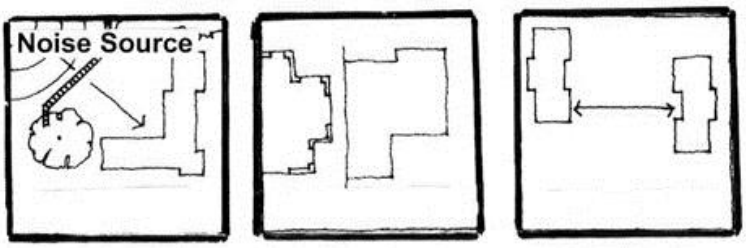
Deep planter boxes prevent overlooking of lower outdoor areas.

- Statement from a qualified acoustic consultant certifying that the design and construction of the building meets the Environmental Protection Authority – Environmental Criteria for Road Traffic Noise and Australian Standard 3671 – Road Traffic Noise Intrusion – Building Siting and Construction.

Privacy for Single Dwelling Residents and Neighbours

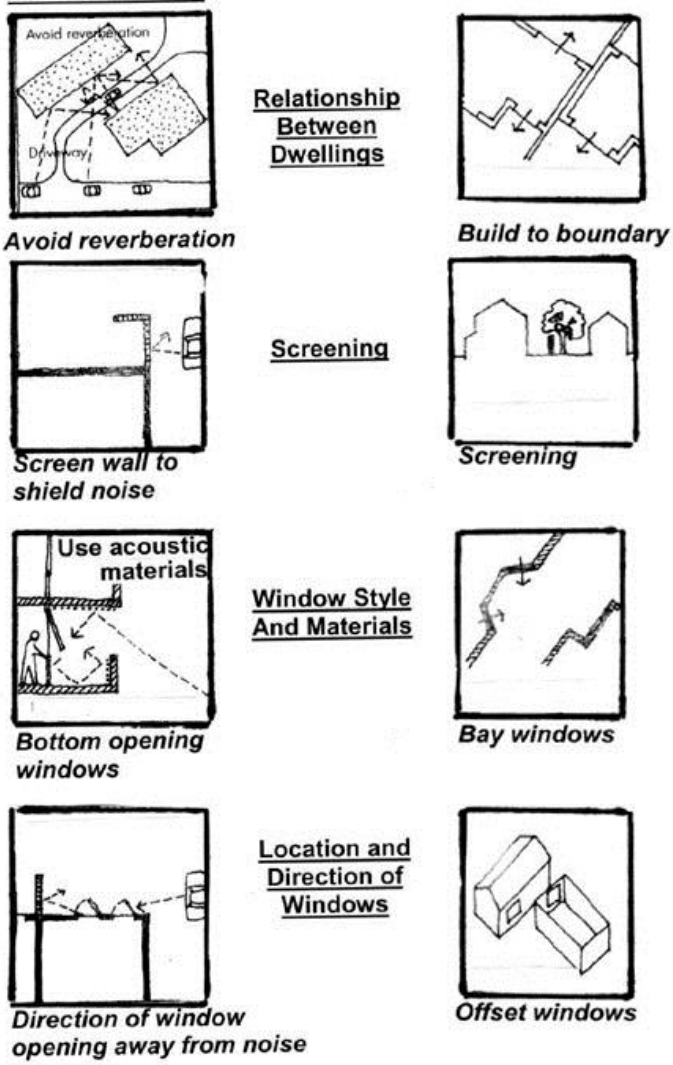
Site Planning and Layout

Privacy for Neighbours



Separate and Screen | Building to Boundary | Privacy by Separation

Design Techniques



Source: Australia's Guide to Good Design – Residential

2.14.10. SOLAR ACCESS

OBJECTIVES

(i) To maximise solar access to internal living spaces within buildings and open space areas in winter.

(ii) To ensure no adverse overshadowing of adjoining allotments/developments including the principal area of open space.

(iii) To orient the development in a way that best allows for appropriate solar access and shading, to ensure energy efficient outcomes in accordance with Council's ESD objective 5.

(iv) To minimise the need for artificial lighting in dwellings during the day, to ensure energy efficient outcomes in accordance with Council's ESD objective 5.

(v) To orientate dwellings so that the living areas face north.

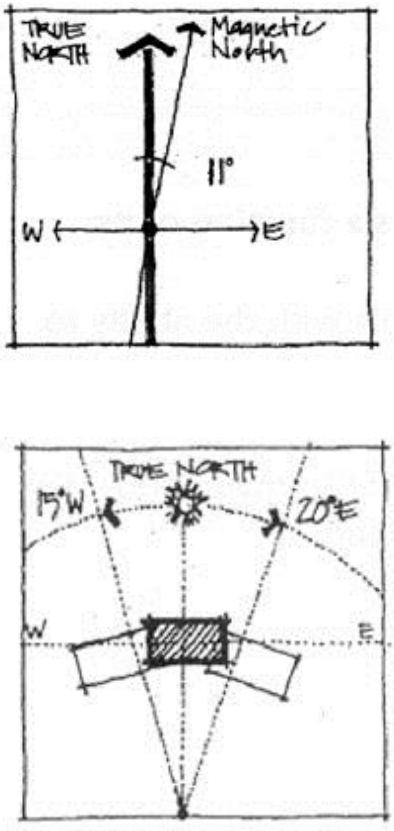
DEVELOPMENT CONTROLS

(a) Dwellings should be sited to allow adequate provision for access of direct sunlight to private open space within the subject land and on adjacent properties. At least 50% of the required private open space within the subject property and that on adjoining properties is to receive direct sunlight for a minimum of 4 hours between 9am and 3pm on 21 June.

(b) Living areas of dwellings shall be orientated to the north wherever possible.

(c) Maximise the amount of direct sunlight available to clothes drying areas.

(d) Orient buildings so that each dwelling obtains direct sunlight where possible. Ideally, orientate the long axis of the development up to 30 degrees east and 20 degrees west of true north. This is illustrated in the following diagrams:



Source: BDP Environment Design Guide

(e) Where winter solar access is not optimum consider the use of double-glazing or high performance glass.

(f) Windows should have suitable shading or other solar control to avoid summer overheating.

(g) Consider the use of horizontal shading devices (for north facing windows) including eaves, verandahs, pergolas, awnings and external horizontal blinds to allow low winter sun whilst providing shade from high summer sun.

(h) West facing windows can cause excess heat in summer. If suitable, minimise the size of east and west facing windows, or consider external vertical shading devices such as vertical blinds, blade walls and thick vegetation.

(i) Shading elements are to be integrated into the overall elevation design.

(j) Site specific controls apply to Hunterford Estate in Oatlands and Gilroy College Target Site (Refer to Appendix C– Precinct Plan Maps and Site Specific Controls).

SUBMISSION REQUIREMENT

- Shadow Diagram.

2.14.11. VENTILATION

OBJECTIVES

(i) To maximise ventilation flows in dwellings.

(ii) To minimise the filtering of cold or warm air through gaps in the construction of dwellings in accordance with Council's ESD objective 5.

DEVELOPMENT CONTROLS

(a) Consider ventilation in early design stages.

(b) Consider prevailing breezes in relation to building orientation, window design and internal circulation.

(c) Place windows to allow for cross ventilation.

(d) Consider the installation of fans, roof vents, louvered windows and high-level windows for rooms or spaces where cooling rather than heating is the priority.

(e) Windows should be lockable in a partly open position.

(f) Provide security screen doors at dwelling entries.

(g) Minimise air gaps by incorporating door and window seals.

2.14.12. LIGHTING

OBJECTIVE

(i) To maximise the use of natural lighting and to minimise the energy consumption of developments in accordance with Council's ESD objective 5.

DEVELOPMENT CONTROLS

(a) The design should maximise the use of natural lighting through window placement and skylights.

(b) Incorporate dimmers, motion detectors, automatic turn-off switches where appropriate.

(c) Provide separate switches for special purpose lights.

2.14.13. ON-SITE SEWAGE MANAGEMENT

Residences in unsewered residential zones such as Wisemans Ferry, Glenorie, Kenthurst and Lower Portland will need to address on-site sewage management requirements in Appendix C of Part B Section 1 - Rural.

2.14.14. CAR PARKING AND VEHICULAR ACCESS

OBJECTIVES

(i) To ensure dwellings have adequate areas of ingress and egress from the local road system and satisfactory on-site access in accordance with Council's ESD Objective 7.

(ii) To provide sufficient and convenient parking for residents and visitors to the site.

(iii) To ensure that adequate carparking is provided on-site so as to prevent inconvenience to residents and congestion in nearby streets in accordance with Council's ESD Objective 7.

DEVELOPMENT CONTROLS

(a) Car parking is to be provided in accordance with Part C Section 1 - Parking.

(b) The location and design of driveways and parking areas should enable the opportunity for landscape screening.

(c) Provision is to be made for convenient and safe access to car parking facilities.

(d) At least one car parking space must be provided behind the front building line. Single garages must have minimum internal dimensions of 5.5m by 3.0m. Double garages must have minimum internal dimensions of 5.5m by 5.0m.

(e) Site specific controls apply to land adjoining Heritage Park, at the corner of Old Windsor Road and Seven Hills Road, Baulkham Hills (Refer to Appendix C– Precinct Plan Maps and Site Specific Controls).

SUBMISSION REQUIREMENTS

- Plans showing proposed vehicular access and circulation and calculations, specifically relating to vehicular movement, turning circles, parking spaces, and driveway widths. The Australian Standard 2890.1 – Off Street Car Parking templates must be overlaid on the appropriate plans.

2.14.15. ACCESS AND SURVEILLANCE

OBJECTIVE

(i) To ensure the needs of residents and visitors are considered with particular regard to access

requirements, safety and security in accordance with Council's ESD Objective 7.

DEVELOPMENT CONTROLS

(a) Site planning and dwelling design is to allow general observation of the street, the site and the approaches to the dwelling entry from the inside of each dwelling.

(b) Access to dwellings is to be direct and without unnecessary barriers. For example, use ramps instead of stairs/steps, consider the height and length of handrails and eliminate changes in level between ground surfaces.

(c) Stairs and ramps are to have reasonable gradients and non slip even surfaces. Refer to Australian Standard 1428.1 - 2001 Design for Access and Mobility and supplementary AS 1428.2 - 1992.

2.15. FENCING

Fencing may be exempt development under the State Environmental Planning Policy (Exempt and Complying Development Codes 2008). Where land is excluded from this State Environmental Planning Policy, the following applies.

Note: Additional controls relating to fencing on flood controlled land is detailed in Part C Section 6 – Flood Controlled Land of this DCP.

OBJECTIVES

(i) To ensure that fencing is of a high visual quality, compliments the character of the area and is compatible with the proposed development.

DEVELOPMENT CONTROLS

(a) Any boundary fencing shall be subject to the requirements of the Dividing Fences Act 1991.

(b) Front fencing is to be consistent with the height, scale, and style of existing fencing in the street. Where there are no existing front fences, front fences are not supported.

(c) Consideration should be given to Council's Safer by Design Guidelines, particularly in regards to natural surveillance, sightlines and anti-graffiti surfaces.

(d) Where front fencing over 1.2 metres in height is proposed, this shall be of open style.

(e) Any fencing in the front setback over 1.2m in height shall be setback from the front boundary a minimum of 500mm to allow opportunities for landscaping to soften the impact of the fence.

(f) Consideration will be given to fencing on secondary road frontage setbacks, subject to there being no adverse affect on the immediate area and on traffic visibility and be of a design to incorporate features such as landscaping bays or a variation/combination of materials.

(g) Side and rear boundary fencing should be a maximum of 1.8 metres in height.

(h) Site specific fencing controls apply to land adjoining Heritage Park and at the corner of Old Windsor Road and Seven Hills Road, Baulkham Hills (Refer to Appendix C– Precinct Plan Maps and Site Specific Controls).

SUBMISSION REQUIREMENT

- Details of all fencing proposed for the site.

2.16. WASTE MANAGEMENT

2.16.1. STORAGE AND FACILITIES

OBJECTIVES

(i) To minimise the overall environmental impacts of waste.

(ii) To maximise, through appropriate design, the opportunities to deal with domestic waste according to the Waste Hierarchy as given in Council's ESD objective 6.

(iii) To provide, in accordance with Council's ESD Objective 6, domestic waste management systems that allow for ease of use by occupants and ease of service by collection contractors.

(iv) To provide waste storage areas that are integrated with the design of the development.

(v) To ensure minimum visual impact of the waste storage facilities.

(vi) To assist in achieving Federal and State Government waste minimisation targets.

DEVELOPMENT CONTROLS

(a) Waste collection and separation facilities must be provided for each dwelling. Each dwelling should have a waste storage cupboard in the kitchen

capable of holding at least a single days waste, and be sufficient to enable separation of recyclable material.

(b) Adequate storage for waste materials must be provided on site.

(c) All waste storage areas must be screened from view from any adjoining property or public place.

(d) Waste storage areas must be kept clean, tidy and free from offensive odours at all times.

(e) Bin storage space is to be:

- incorporated into the landscape design of each dwelling; and
- adequate for one 240 litre garbage bin and one 240 litre recycling bin per dwelling.

(f) Location of the bin storage space:

- is to be convenient to the occupant(s) of the dwelling; and
- must allow the bins to be wheeled to the street kerb over flat or ramped surfaces with a maximum grade of 7% and not over steps, landscape edging or gutters or through the dwelling.

2.16.2. WASTE MANAGEMENT PLANNING

OBJECTIVES

(i) To promote improved project management and to reduce the demand for waste disposal during demolition and construction in accordance with Council's ESD Objective 6.

(ii) To maximise, re-use and recycle building/construction materials in accordance with Council's ESD Objective 6.

(iii) To encourage building designs and construction techniques that will minimise waste generation in accordance with Council's ESD Objective 6.

(iv) Minimise waste generation to landfill via the waste hierarchy in accordance with Councils ESD objective 6.

(v) To assist in achieving Federal and State Government waste minimisation targets.

A. DEMOLITION

DEVELOPMENT CONTROLS

(a) Site operations should provide for planned work staging, at source separation, re-use and recycling of materials and ensure appropriate storage and collection of waste.

(b) Traditional comprehensive demolition should be replaced by a process of selective deconstruction and re-use of materials. Careful planning is also required for the correct removal and disposal of hazardous materials such as Asbestos.

(c) Project management must seek firstly to re-use and then secondly to recycle solid waste materials either on or off site. Waste disposal to landfill must be minimised to those materials that are not re-useable or recyclable.

(d) When separated, materials are to be kept uncontaminated to guarantee the highest possible re-use value.

(e) Details of waste sorting areas and vehicular access are to be provided on plan drawings.

B. CONSTRUCTION

DEVELOPMENT CONTROLS

(a) Avoid over-supply and waste of materials by careful assessment of quantities needed.

(b) The use of prefabricated components may reduce waste.

(c) Re-use of materials and use of recycled material is desirable where possible.

(d) Site operations should provide for planned work staging, at source separation, re-use and recycling of materials and ensure appropriate storage and collection of waste.

(e) All asbestos, hazardous and/or intractable wastes are to be disposed of in accordance with Workcover Authority and EPA requirements.

SUBMISSION REQUIREMENTS

- Waste Management Plan (WMP). Appendix A of The Hills DCP 2011 contains a template that can assist in the preparation of a WMP.

2.17. SERVICES

OBJECTIVE

(i) To ensure adequate provision is made for services for each dwelling including garbage, sewer, water, drainage, electricity and telecommunications.

DEVELOPMENT CONTROLS

(a) Unless it is satisfied that adequate provision has been made for the supply of water and disposal of sewage, Council may not grant consent to the development.

(b) All water, gas, power and communication services are to be located underground.

2.18. SWIMMING POOLS

OBJECTIVES

(i) To ensure swimming pools are located so that they are not visually prominent from the street.

(ii) To ensure that the amenity of adjoining owners is considered when siting and designing swimming pools.

DEVELOPMENT CONTROLS

(a) Swimming pools are not to be located within the front or secondary boundary setback.

(b) Swimming pools are required to have a minimum setback of 1m from the waterline to side and rear boundaries.

(c) Swimming pool filters are to be placed at a location away from dwellings on adjoining properties and enclosed in soundproof structures.

3. INFORMATION REQUIRED FOR A DEVELOPMENT APPLICATION

3.1DWELLINGS AND ADDITIONS / ALTERATIONS TO AN EXISTING DWELLING

The following plans and details are required for new dwellings or alterations/additions to existing dwellings:-

COMPLETED APPLICATION FORM

You must have the written consent of all current owners.

SITE ANALYSIS

SITE PLANS

ARCHITECTURAL PLANS

- Floor Plan (Existing and Proposed)
- Elevations
- Schedule of External Materials

LANDSCAPE PLAN

STATEMENT OF ENVIRONMENTAL EFFECTS (SEE)

BASIX CERTIFICATE

WASTE MANAGEMENT PLAN

Refer to section 2.16 and Appendix A of The Hills DCP 2011.

SEDIMENT EROSION CONTROL PLAN

Refer section 2.9 of this Section of the DCP.

Note. Refer to Part A – Introduction section 4.0 for general lodgement requirements and detailed requirements to be included in each of the above documentation.

3.2 SUBDIVISION APPLICATIONS / SMALL LOT HOUSING UNDER CLAUSE 4.1B

COMPLETED APPLICATION FORM

You must have the written consent of all current owners.

SITE ANALYSIS

PROPOSED LAYOUT PLANS (10 Copies)

These plans should:

- Be produced in ink and be not less than A4 and no greater than A1 in size;
- Be of suitable scale (1:500 or 1:000 wherever possible). In cases where there is more than 1 sheet an overall plan at 1:4000 should be submitted to illustrate the overall layout;
- Include existing boundaries and lot or portion numbers in broken lines/lettering;
- Show proposed boundary lines;
- Show proposed dimensions and areas;
- Show proposed lots consecutively numbered and include any easements and restricted development areas;
- Show widths of all existing roads;
- Show footpath and pavement widths of all proposed roads, proposed road widening and corner splays;
- Show all proposed roads consecutively numbered;
- Show the position of all intersecting adjoining property boundaries, existing roads or property boundaries of land on the opposite side of all existing roads adjoining the site;

- All vegetation and trees on the subject property (separate plan);
- Contours in one metre intervals at Australian Height Datum;
- Show all existing buildings, watercourses, drains, dams, swamps, easements, right- of-ways, structures or permanent improvements; and
- Show all services.

Community Title Subdivision

In addition to the plans required above, a Draft Management Statement and Development Contract must be provided.

Strata Title Subdivision

For Strata Title Subdivision the plans required must:

- Be produced in ink and be not less than A4 and no greater than A1 in size;
- Be of suitable scale (1:500 or 1:000 wherever possible). In cases where there is more than 1 sheet an overall plan at 1:4000 should be submitted to illustrate the overall layout;
- Show proposed boundary lines;
- Show proposed dimensions and areas; and
- Show proposed lots consecutively numbered and include any easements and restricted development areas.

Additional Reports/Plans

The following reports may be required depending on the nature of the site and application. Advice will be provided at pre-lodgement stage as to which of the following are required with the application:

- Flora and Fauna Report
- Soil Analysis Report
- Heritage Report
- Bushfire Report
- Tree Management Details
- Flood Study
- Landscape Plan
- Streetscape Plan
- Solar and Siting Plan

Note. Refer to Part A – Introduction section 4.0 for general lodgement requirements and detailed requirements to be included in each of the above documentation.

4. REFERENCES

Australian Council of Business Design Professionals, (2000) BDP Environment Design Guide

Baulkham Hills Shire Council, 2002 Making Access For All.

Donovan I, Cameron C, and Coombes P (1999). Water Sensitive Urban Development: Model Planning Provisions. Lake Macquarie City Council, Speers Point, on behalf of the Lower Hunter and Central Coast Environmental Management Strategy.

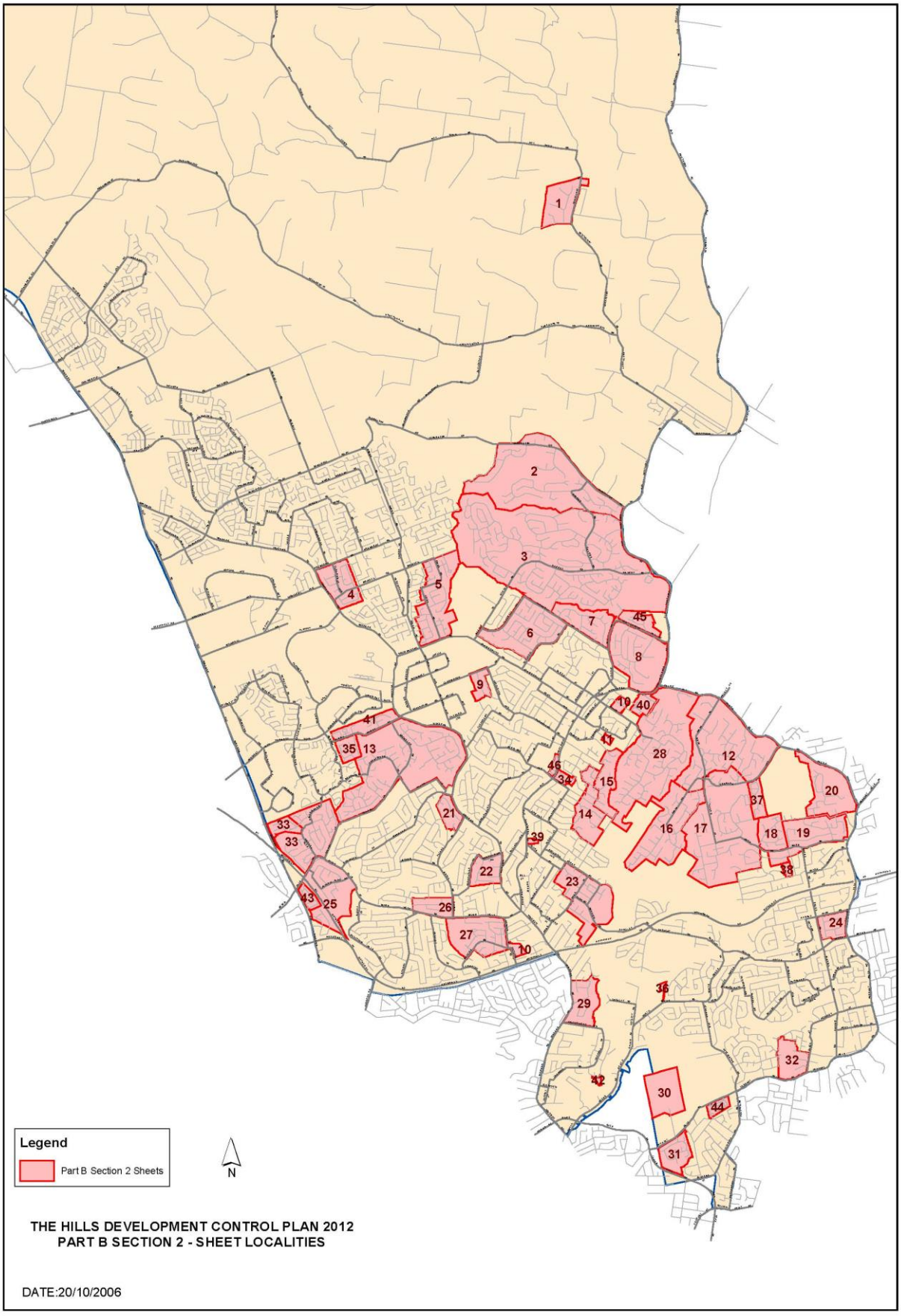
Faculty of the Constructed Environment, RMIT University et al, Australia's Guide to Good Design – Residential, Prepared on behalf of the National Office for Local Government.

APPENDIX A - DEVELOPMENT CONTROLS CALCULATION SHEET

Issue		Development control	Proposed development	Complies
1.	Development Control Map Sheets	Refer to Site Specific DCP Map sheets		
2.	Site Specific Development Control Plans			
3.	Restricted Development Areas	Refer to Site Specific DCP Map Sheets and section 2.3.		
4.	Site Analysis	Refer to section 2.4		
5.	Streetscape and Character	Refer to section 2.5		
6.	Bush Fire Hazard Management	Refer to section 2.6		
7.	Geotechnical Site Stability	Refer to section 2.7		
8.	Bushland and Biodiversity	Refer to section 2.8		
9.	Erosion and Sediment Control	Refer to section 2.9		
10.	Heritage	Refer to Part C Section 4 – Heritage		
11.	Signage	Refer to Part C Section 2 - Signage		
12.	Stormwater Management	Refer to section 2.12 and Appendix B of The Hills DCP 2012		
13.	Minimum Lot Size	Refer to section 2.13.2		
14	Building Platform	20 metres x 15 metres		
15.	Access and Safety	Refer to section 2.13.4		
16.	Developer Contributions	Refer to Council's Developer Contributions Plans regarding applicable plan and amount payable.		
17.	Setbacks: ➢ primary setback ➢ width of dwelling ➢ In front of garages ➢ Corner allotments (secondary setback) for second road frontages ➢ Battle axe allotments	Refer to section 2.14.1		
18.	Site Coverage:	Refer to section 2.14.2		
19	Building Height	Refer to section 2.14.3		
20.	Open Space: ➢ Landscaped area for Residential ➢ Private Open Space	Refer to section 2.14.5		

Issue		Development control	Proposed development	Complies
21.	Landscaping	Refer to Part C Section 3 - Landscaping		
22.	Dwelling Design and Construction	Refer to section 2.14.6		
23.	Cut and Fill	Refer to section 2.14.7		
24.	Building Materials	Refer to section 2.14.8		
25.	Privacy	Refer to section 2.14.9		
26.	Solar Access	Refer to section 2.14.10		
27.	Ventilation	Refer to section 2.14.11		
28.	Insulation and Thermal Mass	Refer to section 2.14		
29.	Energy Efficiency Hot water system	Refer to section 2.14		
30.	On-site Sewage Management:	Refer to Appendix C of Part B Section 1 – Rural.		
31.	Car parking ➢ Single Garage ➢ Double Garage	At least one car parking space provided behind the building line. ➢ Min internal dimension 5.5 metres x 3 metres ➢ Min internal dimension 5.5 metres x 5 metres		
32.	Surveillance			
33.	Fencing	Maximum height of 1.8 metres		
33.	Waste Management	Refer to section 2.16		
34.	Services	Refer to section 2.17		
35.	Swimming Pools	➢ Not in front of secondary boundary setback ➢ Minimum one metre setback from side and rear boundaries Refer to section 2.18.		

APPENDIX B - RESIDENTIAL DCP MAP SHEET GUIDE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Part B Section 2 Sheets
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THE HILLS DEVELOPMENT CONTROL PLAN 2012
PART B SECTION 2 - SHEET LOCALITIES
DATE:20/10/2006

APPENDIX C - PRECINCT PLAN MAPS AND SITE SPECIFIC CONTROLS

C.1. CORNER OLD WINDSOR ROAD AND SEVEN HILLS ROAD, BAULKHAM HILLS

C.1.1 LAND TO WHICH THIS SECTION OF THE PLAN APPLIES



Legend

Part B Section 2 Map Sheet 43 of 46

SCALE: 1:4,000

50 25 0 50 100 150
Metres

N

LAND TO WHICH THIS SECTION OF THE PLAN APPLIES
- **CORNER OF OLD WINDSOR ROAD & SEVEN HILLS ROAD BAULKHAM HILLS**

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 43 of 46

	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012	
FILE No. FP 171	Date of Adoption: Minute No. Came into Force:	

Map Document: S:\Projects\Plan Sec\Consolidating_DCP\The_Hills_DCP_2012\Draft\Part B_Sec2\Sheet_43\Part B_Sec2_Sht43.mxd

C.1.2. BUILDING PLATFORM AND VIEWS

OBJECTIVES

(i) Dwellings should be designed and/or positioned on site to maximise views.

(ii) Views of the estate from public places such as the proposed freeway, open space and surrounding roads should be taken into consideration during design stage.

DEVELOPMENT CONTROL

(a) Dwellings shall be designed to maximise existing views to the east and south.

C.1.3 BUILDING SETBACKS

OBJECTIVES

(i) To create an attractive, interesting and pleasant streetscape through the siting of buildings and landscaping.

(ii) To provide privacy for residents and neighbours, to minimise overshadowing and to protect the visual quality of existing open space areas.

DEVELOPMENT CONTROLS

(a) Front Setbacks: In cases where stacked car parking is required in front of garages, the minimum setback shall be 5.5 metres to the garage.

(b) Floor Level: Where a building setback to a public road or public place is less than 4 metres, the floor level in any habitable room of the building shall be at least 600mm higher than the finished level of the public road or public place.

(c) Side Setbacks: Side setbacks for dwellings should be 1.0 metre.

(d) Single storey side or rear walls without windows or any other opening may be built on the boundary providing that there is no unreasonable adverse impact on the privacy or solar access of adjoining properties.

(e) Rear Setbacks for dwellings adjacent to major roadways should be at least 5 metres.

C.1.4 CAR PARKING AND VEHICULAR ACCESS

OBJECTIVES

(i) To provide convenient and safe parking for residents, visitors and service vehicles.

(ii) To encourage access design to form part of the overall landscape design.

(iii) To ensure vehicular and pedestrian safety.

(iv) To allow the free flow of traffic in streets of the estate.

DEVELOPMENT CONTROLS

(a) Two on-site car parking spaces per dwelling should be provided.

(b) One space shall be a garage, located within stipulated building setbacks.

(c) The second car parking space may be provided as stack parking between the garage and the property boundary, provided the garage is setback at least 5.5 metres from the property boundary.

C.1.5 FENCING

DEVELOPMENT CONTROLS

(a) Fencing materials must be chosen to soften and enhance the built form of the estate and have regard to the need for noise attenuation measures. Excessive straight runs of fencing should be avoided where possible.

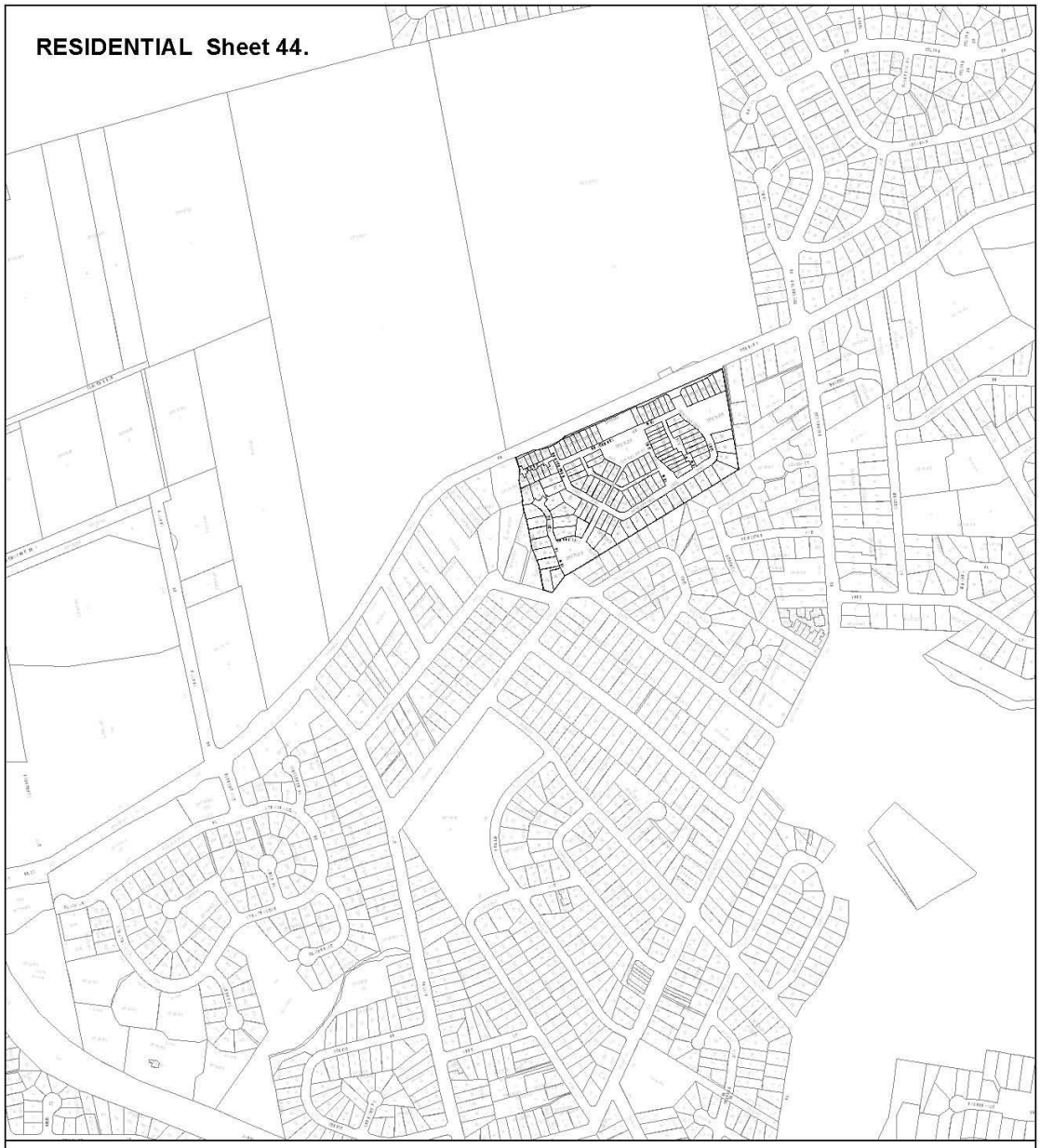
(b) Any courtyard or private open space area may be required to be enclosed by at least a 1.8 metre high fence to maximise privacy.

(c) Fencing should meet the requirements of residents for security, aural and visual privacy and landscaping.

(d) Fencing shall be located along all perimeter boundaries of the site with screen landscaping to enhance the appearance of the estate.

C.2. HUNTERFORD ESTATE, OATLANDS

C.2.1 LAND TO WHICH THIS SECTION OF THE PLAN APPLIES



Legend

Sheet Boundary

SCALE: 1:6,000

50 25 0 50 100 150 200
Metres

N

LAND TO WHICH THIS SECTION OF THE PLAN APPLIES
- HUNTERFORD ESTATE, OATLANDS

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979
THE HILLS SHIRE COUNCIL
THE HILLS DEVELOPMENT CONTROL PLAN 2012
Part B Section 2 Map Sheet 44 of 46

	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012	
FILE No. FP 171	Date of Adoption: Minute No.: Came into Force:	

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C.2.2. STREETSCAPE AND CHARACTER

DEVELOPMENT CONTROLS

(a) The design of buildings should reflect and complement the streetscape and avoid monotonous or symmetrical design.

(b) Development should contribute to an attractive residential environment with clear character and identity.

(c) Variation in the location and height of buildings along streets through varied building setbacks and heights.

(d) Other quantitative controls relating to streetscape are those established by this plan relating to landscaping, height and building setbacks.

C.2.3 BUILDING PLATFORM AND VIEWS

DEVELOPMENT CONTROLS

(a) The site layout should take into account the views available from the southeast corner of the site.

(b) Dwelling orientation should take advantage of views.

(c) Building form and design should where possible allow for view sharing.

C.2.4 BUILDING SETBACKS

DEVELOPMENT CONTROLS

Front

(a) The minimum front setback shall be 7.5 metres from the adjusted boundary following excision of the land required by the RMS, for all buildings fronting Pennant Hills Road, providing noise attenuation measures are put in place to reduce traffic noise in accordance with EPA Standards for the future inhabitants of the development. A 3 metre setback shall be provided for all other roads in the development. If a stacked car parking space is required to meet the car parking requirements the setback to the garage is to a minimum of 5.5 metres.

Side and Rear Setbacks

(a) The minimum setback shall be 4.5 metres to the boundary of an existing adjoining property for one storey developments, and 6 metres to the boundary of an adjoining property for two storey developments, except for that part of the site that adjoins properties Lot 9-13 in DP 229301 Regency Court where the minimum setback shall be 8.5 metres. Zero setbacks are permissible as part of the small lot housing development (Refer to Clause 4.1B of The Hills LEP 2012).

(b) Residential flat buildings should have a minimum side setback of 3 metres and should have due regard for overlooking and overshadowing of adjacent dwellings within the integrated scheme. The side setback will be increased to reduce any impact of overlooking and overshadowing on adjacent dwellings within the small lot housing scheme (Refer to Clause 4.1B of The Hills LEP 2012).

(c) Where front verandahs/patios are provided, they may project forward of the building line to within 2 metres of the front property boundary.

(d) With respect to roads and adjoining properties, up to 25% variation in setback may be considered where there will be no detrimental impact on the streetscape and there is no significant overlooking or overshadowing of adjoining properties.

C.2.5 LANDSCAPING AND OPEN SPACE

DEVELOPMENT CONTROLS

(a) Trees and other plantings should be used to achieve an improved level of privacy between units while allowing casual surveillance for safety.

(b) High quality landscape design which includes significant tree planting, well defined entrances, play areas and kerbside planting are considered important elements for the creation of a good urban setting for urban housing, and should be encouraged.

(c) Landscaping design should incorporate species indigenous to the area and those which will not cause damage to adjacent buildings or driveways.

(d) Fencing in or adjacent to communal open space areas is to be minimised. Where provided, such fencing is to be of a height, design and

construction which reflects the landscape character of the site.

Reference should be made to the relevant category of development listed below.

1. For all dwellings (except residential flat buildings) with a site density of 40 dwellings per ha or less.

(a) The minimum private open space area required is 20% of the site area, with a minimum dimension of 3 metres.

(b) The private open space should have a maximum gradient of 1 in 10 metres.

(c) Screening (minimum 1.8 metres) should be provided where necessary to ensure privacy to users of the open space.

2. For all dwellings (except residential flat buildings) with a site density more than 40 dwellings per ha

(a) Dwellings should be provided with a total minimum area of 35m^2 (minimum 20% of the site area for site densities greater than 60 dwellings per ha), with a minimum dimension of 2.5 metres.

(b) The private open space should have a maximum gradient of 1 in 10 metres.

(c) One part of the private open space should comprise an area of 16m^2, with a minimum dimension of 4 metres and which is directly accessible from a living area of the dwelling.

(d) Screening (minimum 1.8 metres) should be provided where necessary to ensure privacy to users of the open space.

C.2.6 DWELLING DESIGN AND CONSTRUCTION

DEVELOPMENT CONTROLS

(a) Pitched roofs are the preferred choice of roof form for the development, particularly for dwellings adjoining the existing residential area.

(b) Dwellings should be orientated to maximise solar access and enjoy views.

C.2.7 PRIVACY

DEVELOPMENT CONTROLS

(a) Outlooks from windows of habitable rooms, balconies, terraces and the like should be obscured or screened where a direct view is available into the principal area of private open space of an existing dwelling.

(b) If screening is used, the view of the area overlooked must be restricted within 9 metres and beyond a 45° angle from the plane of the wall containing the opening, measured from a height of 1.7 metres above floor level.

(c) No screening is required where windows are in non-habitable rooms. Windows in bathrooms, toilets, laundries and storage rooms which have a direct view into adjoining properties should have either translucent glazing or sill heights of at least 1.7 metres.

(d) Building designs which mirror the reverse on adjoining lots, so that windows are directly opposite each other, should be avoided.

(e) Any dwellings located close to Pennant Hills Road or affected by traffic noise from Pennant Hills Road are to comply with the criteria for road and traffic noise contained in the publication “Environmental Criteria for Road Traffic Noise”, prepared by the Environmental Protection Agency dated May 1999.

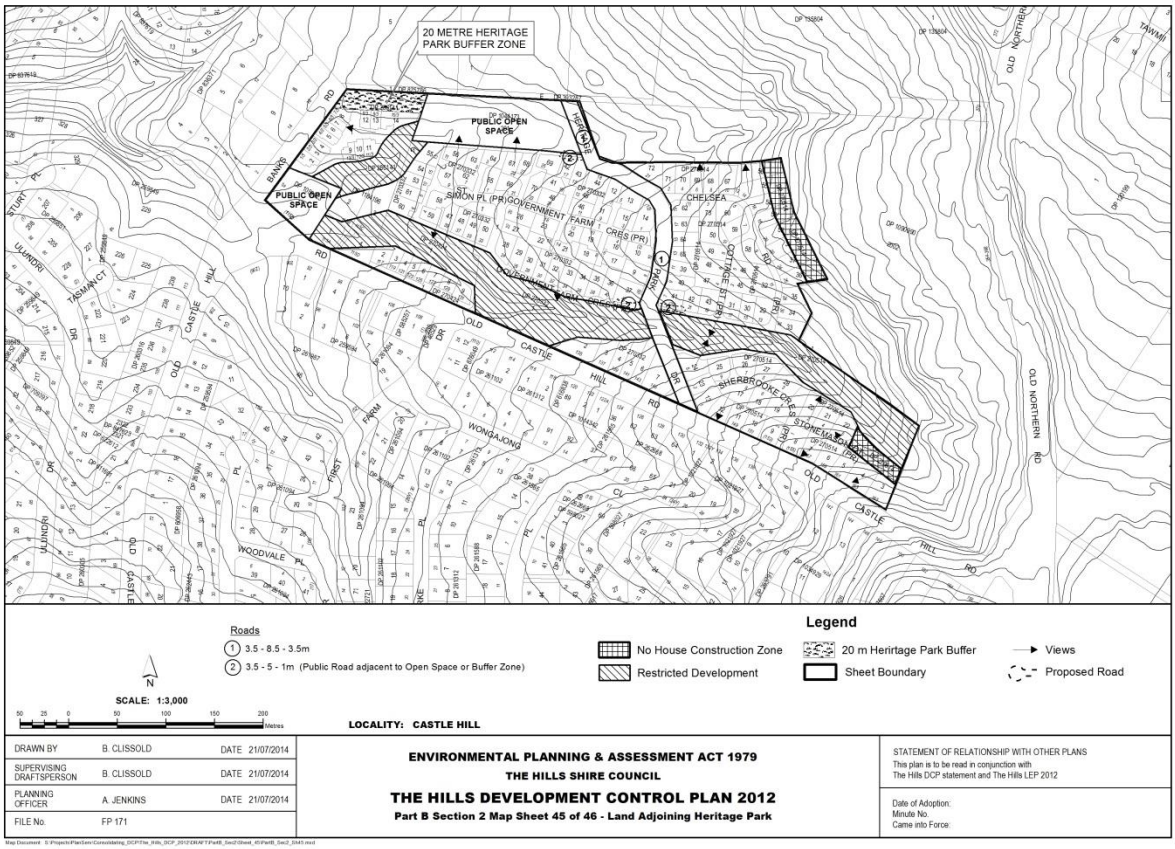
(f) Achievement of LA10 (20 minute) noise level or less than 50d BA in habitable rooms with windows and doors “normally” open (i.e. at least 50 % of the flow area of the room), and less than 50d BA with the windows closed.

(g) An acceptable acoustic environment can be achieved within noise sensitive rooms and also at outdoor recreation space by means of correct building orientation and height, appropriate internal layout and increase in the mass of the external facade.

(h) Wherever possible, bedrooms of one dwelling should not share walls with living rooms or garages of adjacent dwellings.

C.3. LAND ADJOINING HERITAGE PARK

C.3.1 LAND TO WHICH THIS SECTION OF THE PLAN APPLIES



C.3.2. RESTRICTED DEVELOPMENT AREAS

OBJECTIVES

(i) To ensure the road design and the siting and orientation of buildings allows for adequate surveillance of the Restricted Development Areas and public or common open space land.

(ii) To encourage, via building design, direct views to the Restricted Development Areas, and open space areas from primary living areas and private open space area.

DEVELOPMENT CONTROLS

(a) Driveways or private access roads shall be located adjacent to the boundaries of the open space or restricted development areas to ensure natural surveillance and ease of access.

(b) To promote the surveillance of RDA and open space areas the only fencing permitted along the RDA or open space boundaries will be transparent chain mesh or pool type fencing, or the like, to a maximum height of 1.5 metres.

(c) Individual dwellings should be sited and designed to ensure direct views are available from private living areas to the restricted development areas, open space areas and road ways.

C.3.3 BUILDING PLATFORM AND VIEWS

OBJECTIVES

(i) To maintain the views of residents into open space and restricted development areas.

(ii) To ensure development of the subject land has minimal impact on the views of residents and visitors within the locality.

DEVELOPMENT CONTROLS

(a) Landscaping and building design and siting should have regard for the topography to ensure the impact on the views from:

- existing residences;
- viewing platforms along Old Northern Road identified in the Heritage and Visual analysis prepared by Mayne – Wilson & Associates, March 1999; and
- the Heritage Park site towards the subject land is minimised by ensuring the built form does not dominate the views.

(b) Building siting and design, including the size, shape and position of windows should, where possible, provide for living areas to face the open space or restricted development areas and significant views.

(c) For development on land adjoining Heritage Park, siting and design of buildings, in particular any development adjacent to the southern boundary of the Heritage Park site, should consider the objectives of the Bushfire Hazard Management Practices outlined in the Castle Hill Heritage Park – Plan of Management.

C.3.4 SITE COVERAGE

OBJECTIVES

(i) To protect the visual amenity of existing and future residents of the locality.

(ii) To provide open space this enhances the buildings.

(iii) To provide adequate areas within which landscaping can be provided to ensure views of the subject area, particularly from vantage points within Heritage Park, are not dominated by built structures.

(iv) To minimise the extent of impervious area to assist in the management of stormwater.

DEVELOPMENT CONTROL

(a) A maximum 30% site coverage will be permitted for dwellings. Except where small lot housing pursuant to Clause 4.1B of The Hills Local Environmental Plan 2012 is proposed, the maximum site coverage is 60%.

C.3.5 BUILDING SETBACKS

The following building setback controls apply to small lot housing (Refer to Clause 4.1B of The Hills LEP) in the precinct known as Land adjoining Heritage Park.

OBJECTIVES

(i) To create an attractive, interesting and pleasant streetscape through the siting of buildings and provision of landscaping.

(ii) To provide privacy for existing and future residents to minimise overshadowing and to protect the visual quality of open space areas.

(iii) To maintain an adequate buffer between dwellings and nearby environmentally sensitive areas.

DEVELOPMENT CONTROLS

(a) The minimum building setback from Old Castle Hill Road is 6 metres.

(b) The minimum building setback from any open space boundary or restricted development area boundary is 6 metres.

(c) With respect to building setbacks from internal driveways and/ or private access roads the development on the subject land will be required to demonstrate:

- building setbacks that progressively increase as wall heights increase to reduce bulk and overshadowing;
- that an adequate area is provided between the garage of any dwelling and the driveway or private access road adjacent to it to enable a motor vehicle to be parked without impeding the use of the driveway or private access road. In this regard a setback of 5.5 metres is suggested.

(d) To ensure privacy and solar access, buildings facing each other across internal driveways or private access roads shall not be erected less than:

- 6 metres apart in the case of single storey buildings; and 9 metres apart in the case where 1 or more of the buildings is 2 storeys.

C.3.6 DWELLING DESIGN AND CONSTRUCTION

OBJECTIVE

(i) To ensure that the appearance of new development is of high visual quality, enhances the streetscape and complements surrounding development.

DEVELOPMENT CONTROLS

(a) Dwellings must be designed so that walls facing Old Castle Hill Road contain windows from habitable rooms to over look the street.

(b) Where a carport or garage is to face the street, it is to be no more than 6 metres in width nor extend across more than 50% of the property frontage, whichever is lesser. The design, materials and colours must be consistent with the dwelling.

C.3.7 CAR PARKING AND VEHICULAR ACCESS

OBJECTIVES

(i) To provide sufficient and convenient parking for residents and visitors so as to maintain the amenity of adjoining properties and the efficiency of the road network.

(ii) To ensure residential developments have adequate areas of ingress and egress from the local road system and satisfactory on-site access.

(iii) To ensure that non-vehicular access has been integrated into the road and open space areas.

DEVELOPMENT CONTROLS

(a) Site access is to be located and designed in accordance with the criteria contained within the Roads and Maritime Services Guide to Traffic Generating Developments and Part C Section 1 - Parking.

(b) A primary access road to the Heritage Park and suggested locations for access roads are shown on the map

(c) A minimum of two undercover car parking spaces are required for each dwelling.

(d) Adequate footpath space must be provided throughout the site, free of any obstructions and vehicular movements.

Road surfaces must not be constructed of a material that prohibits the use of bicycles.

(e) A total of 2 visitor spaces must be provided for each 5 dwellings within an integrated housing development.

(f) Visitor car parking spaces shall be dispersed throughout the site and not be concentrated in one part of the site.

(g) Visitor spaces are to be made accessible at all times and are not to be located behind security gates.

(h) Parking space and vehicle manoeuvring areas shall be designed in accordance with Part C Section 1 – Parking.

(i) Any car parking area shall be landscaped in accordance with Part C Section 3 – Landscaping.

C.3.8 FENCING

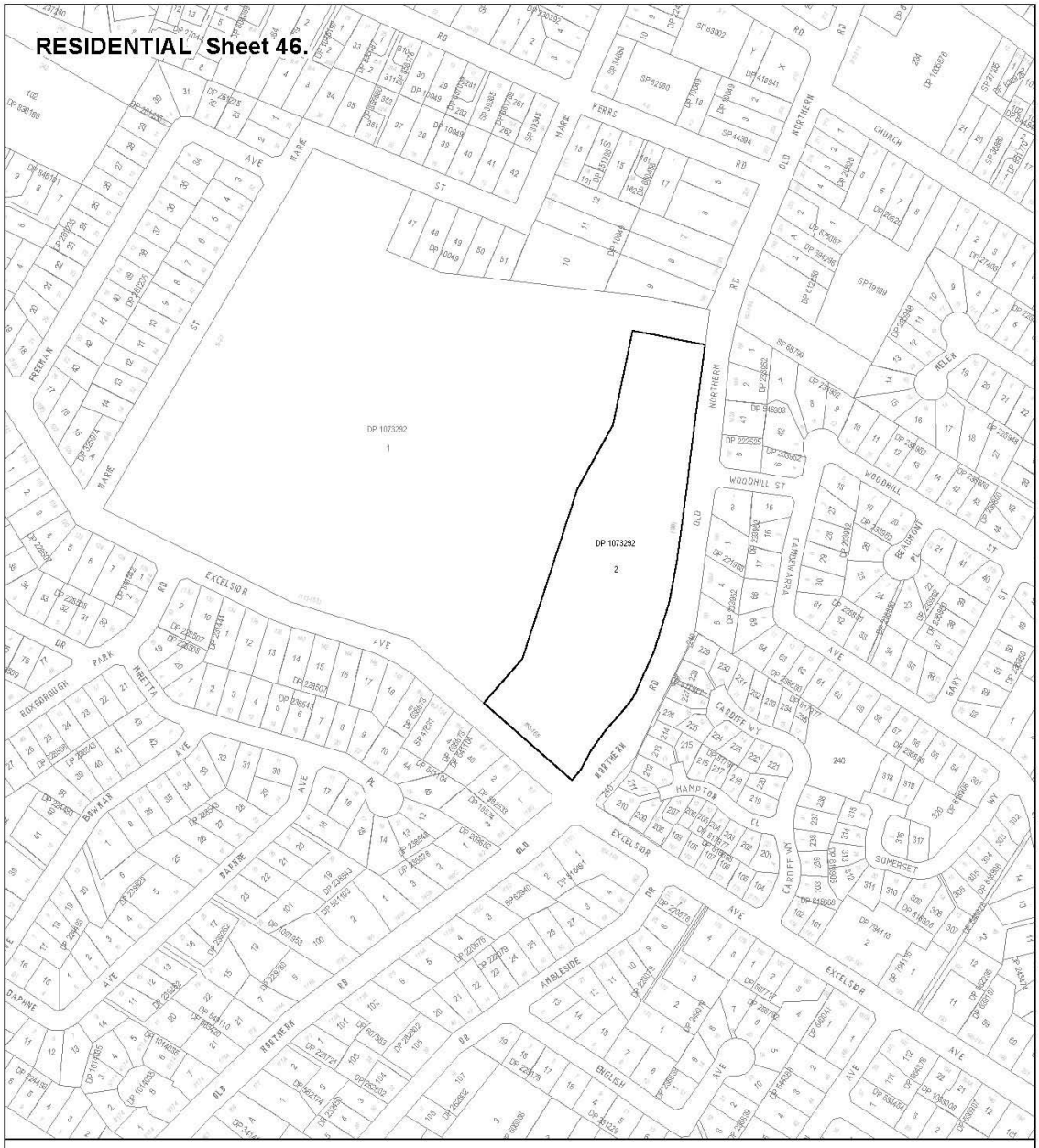
DEVELOPMENT CONTROLS

(a) Fences along Old Castle Hill Road greater than 1 metre in height shall be of similar design and colour to that used in the dwelling and be set back by 750mm to allow for landscaping opportunities between the fence and the footpath.

(b) Fencing, landscaping and building structures shall not impact on the visibility and movement of pedestrian and vehicular traffic.

C.4. GILROY COLLEGE TARGET SITE

C.4.1 LAND TO WHICH THIS SECTION OF THE PLAN APPLIES



LAND TO WHICH THIS SECTION OF THE PLAN APPLIES
- GILROY COLLEGE (Former Target Site), CASTLE HILL

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979
THE HILLS SHIRE COUNCIL
THE HILLS DEVELOPMENT CONTROL PLAN 2012
Part B Section 2 Map Sheet 46 of 46

	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012	
FILE No. FP 171	Date of Adoption: Minute No. Came into Force:	

Map Document: S:\Projects\Plan Set\Consolidating_DCP\The_Hills_DCP_2012\Draft\Part B_Sec02\Sheet_46\Part B_Sec02_S46.mxd

C.4.2. STREETSCAPE AND CHARACTER

DEVELOPMENT CONTROLS

(a) Building materials, colours, textures and styles should adopt design clues, and exhibit a strong relationship, with the predominant style, character, materials, colours and textures of residential buildings within the immediate vicinity of the proposed development.

(b) Compatibility of style and character of the proposed development with that of the predominant style and character of surrounding residential buildings should be demonstrated within the Development Application.

Roof Form

(c) Roofs are to be pitched at a slope which allow their habitable use and which is compatible with the pitch of roofs present on surrounding structures.

(d) Habitable use of roof space is encouraged in all residential development. Roof space is not counted as an additional storey for the purpose of this Section of the DCP.

(e) Eaves overhang should be considered in order to provide weather protection to walls.

(f) Roof form features such as hips, gables, chimneys etc are encouraged in order to give greater visual interest and break up the bulk and mass of the roofscape.

(g) There should be a defined palette of roof colours and material to be utilised throughout the target site area.

(h) Roofs should be of a colour and material which is compatible with other buildings in the locality, and the surrounding urban context.

Massing and Fenestration

(i) The massing of buildings on the site should serve to garment larger building forms into more human scaled components, in both vertical and horizontal planes. Development of the site will need to demonstrate the manner in which the following criteria have been addressed:

- Building facades are to exhibit a clear expression of “base”, “middle” and “top” components.
- Building facades are to be articulated and fragmented. They are to utilise building form, the play of light and shade, solid and void, and a variety of materials and elements in order to achieve visual interest and supportive relationship with the scale of pedestrians experiencing the urban environment both inside and outside the site.
- The horizontal bulk of buildings are to be downplayed through the use of strong vertical elements, particularly in cases where long walls will address the street.
- Windows are to be vertical in proportion in order to reduce the apparent bulk of buildings.

Building Appearance

(j) The appearance of housing across the site should be coordinated such that there is a reasonable level of individual variety, within the context of achieving a compatible relationship between all buildings. There should be a mix of building forms.

(k) All new buildings must consider and respond supportively to buildings located in adjacent positions, as well as across the street. Consistency between ridge, eave and opening heights are important in this respect.

Colours and Materials

(l) Building material and colours selected and utilised on the site are to be coordinated throughout the site and are to be compatible with the heritage structures currently, or formerly, located on the site, and adjoining building. Generally, building of masonry and/or render construction with light colours of a neutral tone are preferred.

External Walls

(m) External brick walls must not exceed more than 12 metres in length or breadth unless a return, recessed balcony or some other method is adopted to articulate the wall.

(n) Common walls between units should be of cavity or masonry construction of at least 0.23 metre thickness and shall be taken from ground floor to roofline.

(o) All side balconies should be recessed or otherwise designed to prevent the appearance of “attachment” to the side walls.

General Controls

(p) All public spaces, building entries, car parks and internal access ways should be well lit at night and easy to navigate.

(q) Building design should ensure that opportunities for casual surveillance are maximised and no opportunities provided for personal concealment.

(r) Front fences or walls should be integrated with the streetscape and compliment building design.

(s) Internal access ways should be designed to minimise the visual impact of parking and driveway areas.

(t) Walls, blank facades, car ports and garages should not dominate the streetscape.

(u) A formal entry should be provided to each dwelling or group of dwellings and should directly address and be visible from the street or internal site access way.

(v) Lighting and directional signage should be provided to all pedestrian paths, car parking areas, building entries and public spaces.

(w) Front fences or walls that do not enclose the principal private open space area of a dwelling should be no higher than 1.2 metres. This may be increased to 1.8 metres provided the design of the fence or wall incorporates opening or other design elements that maintain at least 40% transparency through the fence or wall.

(x) All fencing or walls facing Old Northern Road or Excelsior Avenue should be constructed of masonry with similar colours and textures of, and shall be compatible with, the design and colours of the building.

(y) Garage doors or carports facing the street or internal access way should have a maximum width of 6.0 metres per dwelling or a maximum of 50% of the length of the building wall, whichever is the greater.

Street Tree Planting

Refer to Part C Section 3 – Landscaping.

Lighting

(z) Lighting should be provided to improve the level of safety within all streets. Light pole and luminaries shall be of a style, colour and form compatible with the context of the site and the style, colour and form of other urban elements.

(aa) Light poles should be compatible with the pedestrian scale by virtue of their height and relationship to street dimensions.

(bb) Light poles should be evenly spaced and contribute to establishing a regular pattern and rhythm in the street. Spacing of light poles is to be coordinated with the spacing of street trees.

(cc) A strategy for lighting public spaces should be developed in conjunction with Council and will address the full range of issues including light type, appearance and spacing, as well as achievement of the relevant standards for acceptable ambient lux levels in public streets and spaces.

Services

(dd) All services are to be located below ground, both within streets and between streets and individual dwellings.

(ee) All principal services are to be provided in accordance with the requirement of the responsible authority.

Front Boundary Fencing

(ff) The choice of fencing is to enhance an image/perception of quality and provide appropriate levels of privacy. Front fences are also to provide a suitable transition between the public domain and semi-public areas located within individual allotments.

(gg) High front fences which are not transparent are not encouraged. The following standards will apply:

- The option of no front fence is encouraged;
- Front fences must not exceed 1.2 metres from ground level (excluding piers);
- Front fences must be highly transparent; and
- Side and rear fencing should be no higher than 1.8 metres. They should provide an adequate level of privacy to private open spaces and should be consistent with building design and where visible from the street.

Street Numbers

(hh) All street numbers must be clearly visible from the principal street frontage.

Telecommunications Facilities

(ii) Telecommunications facilities are to be located such that they do not detract from the aesthetic appeal of the neighbourhood or adversely impact on the visual amenity of neighbours.

Antennae

(jj) Antennas are not to be located on the front façade of any building and must not extend above the uppermost ridge line of a building.

(kk) A maximum of one antenna is permitted per building.

Cabling

(ll) All cabling, for the purposes of pay TV etc, must be located below ground.

Satellite Dishes

(mm) A maximum of one satellite dish is permitted per building. Satellite dishes are to be located below the ridgeline (or parapet) of the roof. No satellite dish is to be located on the front façade of a building, or be visible from a public street.

C.4.3 BUILDING SETBACKS

OBJECTIVES

(i) To maintain and improve the character and streetscape qualities of Excelsior Avenue by reinforcing existing street setbacks within proposed new development.

(ii) To provide setbacks that compliment the setting which allow flexibility in siting of buildings and allow for landscaping and open space around new building.

(iii) Provide privacy for future residents and neighbours.

(iv) Minimise overshadowing, and protect visual quality of proposed open space areas and the public realms of Old Northern Road and Excelsior Avenue.

DEVELOPMENT CONTROLS

(a) Setbacks shall provide sufficient area for landscaping to compliment building form.

(b) Side and rear setbacks are to be proportioned to the slope of the site, having regard to the height and relationship of the building on adjoining properties.

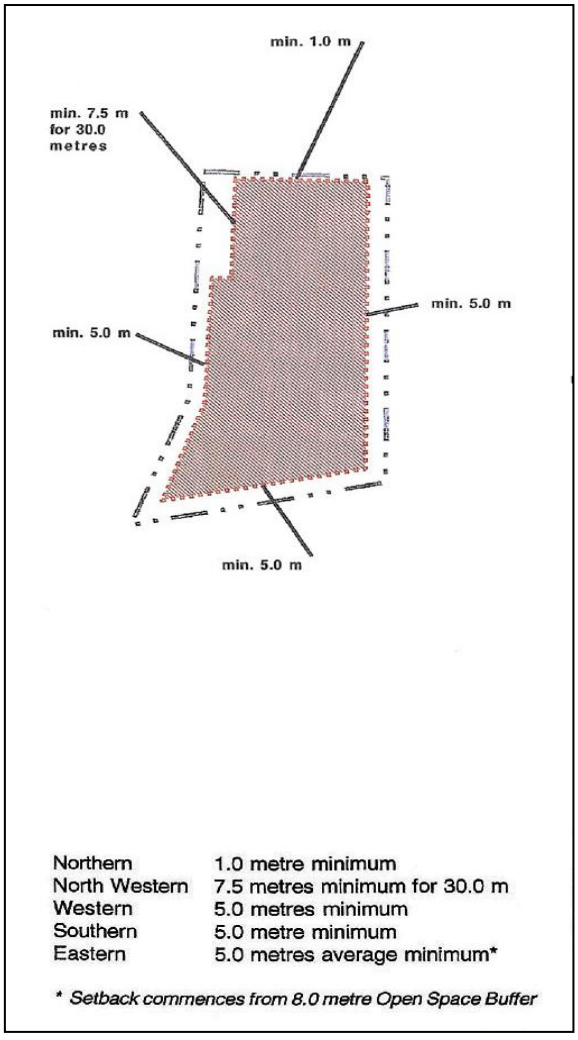
(c) The setbacks of proposed buildings are to minimise any adverse impacts such as overshadowing and privacy on to adjacent and adjoining properties.

(d) Building setbacks shall be articulated in plan and section to introduce visual interest and reduce monotonous building walls.

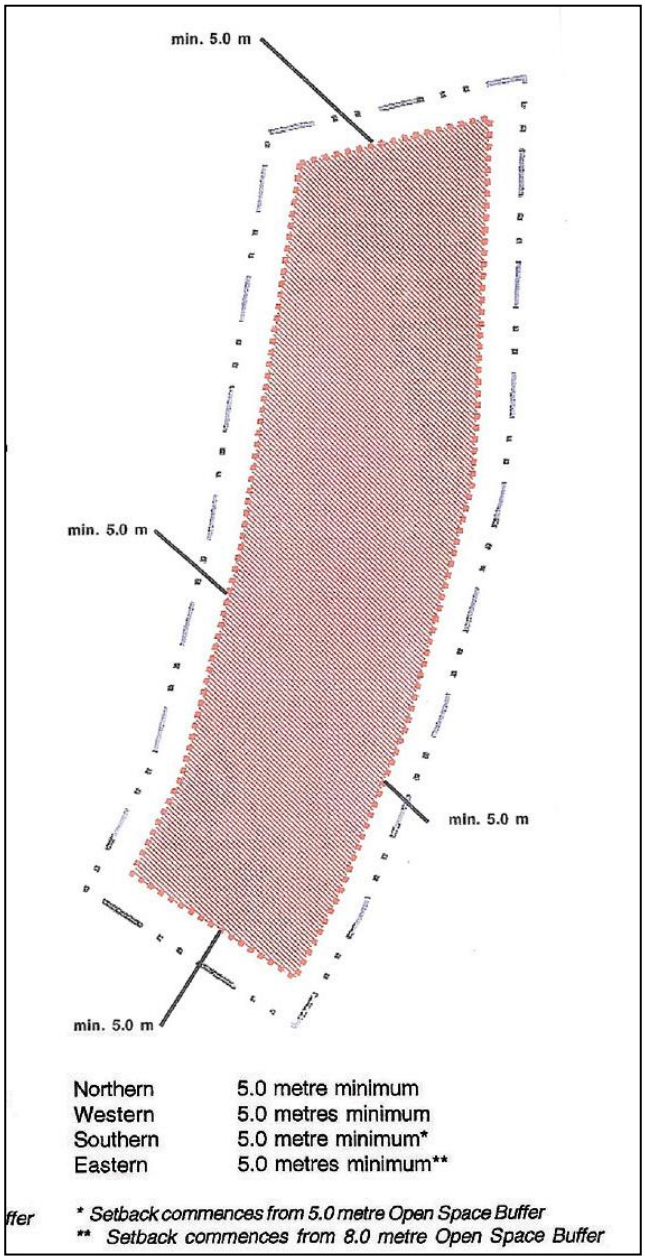
(e) Zero side boundary setbacks may be permissible where it can be demonstrated that there is no adverse impact upon the residential amenity of adjoining development.

(f) Development shall be setback a minimum of 5 metres from the open space/landscape buffer adjoining the Old Northern Road and Excelsior Avenue.

(g) The minimum building setback shall be in accordance with the Figures below.



North Precinct Buildable Area and Setbacks



South Precinct Buildable Area and Setbacks

C.4.4 LANDSCAPE AND OPEN SPACE

OBJECTIVES

(i) To provide open space for recreation and for use by the future occupants of the new buildings.

(ii) To enhance the quality of the built environment by providing opportunities for landscaping.

(iii) To fully integrate the landscape design as part of the overall development of the site.

(iv) To integrate the landscape design with the design of the future residential development.

(v) To protect and enhance the green gardenesque of the Shire.

(vi) To assist in developing a common landscape theme for the estate.

(vii) To protect existing landscape features.

(viii) To provide open space this enhances the buildings and streetscape.

(ix) To enhance the quality of the built environment by providing for landscaping.

(x) To provide for privacy and shade.

(xi) To retain the majority of existing significant mature vegetation in any development.

(xii) To ensure that each dwelling is provided with useable private open space to meet reasonable requirements for outdoor activities, privacy, access and landscaping.

(xiii) To enhance the quality of the built environment by providing for landscaping.

DEVELOPMENT CONTROLS

(a) Private and common open space shall meet user requirements for privacy and access.

(b) Each dwelling shall provide an area of useable private open space, or private courtyard area, which has direct private access from the dwelling.

(c) Areas(s) of communal open space shall be provided for the recreational needs of the future residents.

(d) The location of all open space areas shall have regard to such requirements as solar access, outlook, privacy and the location of adjoining dwellings.

(e) Each dwelling shall be provided with one contiguous area of private open space equal to 50% of the floor area of the dwelling.

(f) Private open space areas should be contiguous to the dwelling for which it is provided and have minimum useable area of 5 metres by 5 metres.

(g) The principal private open space area of a dwelling shall be enclosed with a wall or fence with an effective height of 1.8 metres from finished ground level.

(h) Notwithstanding Control (c) above any fencing addressing/facing a common area or public space shall maintain 50% transparency and constitute only 75% of the dwelling's private open space frontage to the common area or public space.

(i) Fencing enclosing private open space facing a common area or public space shall be constructed in masonry similar to the type and colour to be used in the building.

(j) The private open space area is to be:

- contiguous to, and accessible from, the primary living areas of the dwelling.
- Located and oriented to ensure it is not directly overlooked from adjoining lots or buildings.
- Located on relatively flat land to ensure it is useable as open space.

(k) Common open spaces are to include equipment such as seating, shade structures, barbecues and children's play equipment for passive recreational use. Consideration should also be given to the provision of swimming pool, common room and hard stand outdoor play area as part of the overall stand outdoor play area as part of the overall development of the site.

(l) Common open spaces are to be centrally located, usable, highly visible, highly accessible and well lit at night.

(m) *For the North Precinct, communal open space* areas comprising a child play area or recreation activities area shall be provided on the site behind the building line for developments of more than 5 dwellings comprising a minimum $10m^2$ of space per dwelling. The open space area shall have minimum dimensions of 12 metres x 12 metres.

(n) For the South Precinct, one communal open space shall be provided within the precinct that has a minimum area of $50m^2$ and ~~a~~ minimum dimensions of 15 metres x 20 metres.

(o) Additional, smaller communal open space areas shall be provided through the precinct in the form of pedestrian pathways, seating, landscaping and other communal facilities.

(p) Landscaping is to be appropriately scaled and located relative to both the building bulk, incorporating existing vegetation where possible.

(q) A landscape buffer shall be provided along the Old Northern Road and Excelsior Avenue frontages

(r) Tall branching street trees shall be provided in all proposed new roads at a separation of one tree every 10 metres.

(s) Existing vegetation is to be retained where practicable and shall incorporate steps to protect the root zone during construction in accordance with the recommendation of a qualified arborist.

(t) If a fence or wall is proposed to be constructed between any development and Old Northern Road or Excelsior Avenue it will be necessary to ensure that construction remains outside the canopy line of the largest trees and avoid damage to young saplings.

(u) Medium strip planting should be provided at any new proposed intersection of the site entry with Excelsior Avenue to avoid light spill into existing dwellings in Excelsior Avenue generated by headlights. The median planting selected shall have regard to safety requirements and maintain sight distance requirements at maturity.

(v) A small "village green"/pocket park with a minimum width of 30.0 metres shall be provided and located in accordance with Figure 15. The open space shall incorporate a pedestrian pathway linking Old Northern Road with the western edge of the site. Existing mature trees within the space should be retained and supplemented with similar species.

(w) Landscaping should avoid the use of very large trees (eg Forest Red Gum, Blackbutt) in confined spaces between houses and internal roads. The overuse of Acadia (wattles) should also be avoided.

(x) Areas less than 1.0 metre in width should be paved.

(y) A minimum of 20% of the landscaped areas should permit deep planting.

(z) No more than 50% of the landscaped area shall be hard paved (impervious) surface.

(aa) Landscape species shall comprise native species common to the area.

(bb) Trees shall be tall branching and ground covers and shrubs shall have maximum height of 0.6 meters to maintain clear pedestrian, resident and vehicle sightlines

C.4.5 DWELLING DESIGN AND CONSTRUCTION

OBJECTIVES

(i) To provide accessibility across common property and to provide convenient conditions for the use of strollers and similar.

(ii) To provide a small amount of dwelling unit suitable for use by disabled people.

DEVELOPMENT CONTROLS

(a) All buildings should be connected to the footpath network.

(b) Application for development approval should be accompanied by an "Access Plan" that demonstrates the compliance of the proposed development with Australian Standard 1428 Part 1.

(c) At least 1, or 5 percent, of the units in a development of 20 or more dwellings must be either;

- an accessible unit to Australian Standard 1428 Part 2, suitable for occupation by a wheelchair user; or
- meeting Class B adaptability under Australian Standard 4299.

(d) Each unit so provided above should have an accessible car parking bay complying with Australian Standard 2890 for people with a disability, and be accessible to a pick-up and drop-off point.

C.4.6 PRIVACY – VISUAL AND ACOUSTIC

OBJECTIVES

(i) To limit views into adjoining private open spaces and living rooms.

(ii) To protect residents from external noise.

(iii) To contain noise between dwellings without unreasonable transmission to adjoining dwellings.

DEVELOPMENT CONTROLS

(a) Private open space and habitable rooms of proposed and adjacent existing dwellings should be reasonably protected from overlooking by attending to, but not being limited to:

- Building layout.
- Location, size and design of windows & balconies.
- Screening devices.
- Landscaping.

(b) Private open space areas and habitable rooms should be reasonably protected from uncomfortable levels of external noise by attention to, but not being limited to:

- Use of noise resistant wall, ceiling, floor and roofing materials.
- Site planning.
- Location of habitable rooms away from the noise source.
- Use of double glazing.
- Use of fencing, porches and walls as noise buffers.

(c) Windows of living rooms with direct outlook to any living room window of any proposed, or and/or existing adjoining dwelling living rooms within 9 metres should:

- Be offset a minimum of 1 metre from the edge of one window to the edge of the other; or have a minimum height of the sill or fixed obscure glass at 1.6 metres.
- Be screened by permanently fixed structures made of durable materials.

(d) Habitable rooms of dwellings adjoining Old Northern Road should be designed and located to limit internal noise levels to a maximum of 45dB(a) in accordance with Australian Standard 3671 – Road Traffic.

(e) Dividing Walls and floors between dwellings shall be constructed to limit noise transmission to 45 STC (Sound Transmission Class) in accordance with Part F (5) of the Building Code of Australia.

C.4.7 SOLAR ACCESS

DEVELOPMENT CONTROLS

(a) Buildings should be designed to enable primary habitable rooms and private open space areas to enjoy at least three hours of sunlight to 50% of the areas between 9:00 am and 3.00 pm on the 21 June.

(b) Sunlight to at least 50% of the principal area of ground level private open space of adjoining properties should not be reduced to less than three hours between 9.00am and 3.00pm on 21 June.

(c) Deciduous species should be planted to improve solar access where appropriate.

(d) In order to maximise solar access, living areas of buildings should where possible, be located on the north side of the dwelling, with north facing

walls orientated between 20° west and 30° east of true north.

(e) Sunlight is to be available to the majority of living room spaces and private and communal open space areas of the proposed dwellings, and any existing adjoining dwellings, having regard but not limited to:

- Building siting;
- Living area orientation;
- Location of windows;
- Tree species;
- Pergolas;
- Eaves;
- Fencing;
- Roof pitch and
- Building height.

(f) All dwellings are to be designed and located so that at least 50% of each courtyard and private open space receives a minimum 3 hours of direct sunlight between 9.00 am and 3.00 pm on 21 June (Winter Solstice).

(g) All dwellings should be designed to maximise natural cross ventilation through, and appropriate solar access to, all living areas through:

- orientation of living areas to the north with access to the winter sun and summer shade.
- the shading of large windows located on the northern side from the higher summer sun, through the provision of roof eaves, verandahs, balconies, hoods and/or external screen. Conversely these design elements should permit exposure of living areas to the lower winter sun.

(h) Landscape design should assist in microclimate management through the location and selection of deciduous trees to permit winter sunlight access to living areas and summer shade to north facing exposed dwelling walls and windows.

C.5. 64 MACKILLOP DRIVE, BAULKHAM HILLS

C.5.1 LAND TO WHICH THIS SECTION OF THE PLAN APPLIES

This chapter of the Development Control Plan establishes site specific objectives and controls to guide future development on Lot 2 DP 817696, No.64 Mackillop Drive, Baulkham Hills (see Figure 2).



Figure 2: SUBJECT SITE

This chapter must be read in conjunction with Part A – Introduction of this DCP and other relevant Sections, including:

- Part B Section 2 – Residential
- Part B Section 4 – Multi Dwelling Housing
- Part B Section 5 – Residential Flat Buildings
- Part C Section 1 – Parking
- Part C Section 3 – Landscaping
- Part C Section 4 – Heritage

In the event of any inconsistency between this Section of the DCP and any other Sections of the DCPs, the provisions of this Section shall prevail only to the extent of the inconsistency.

C.5.2 SITE ANALYSIS

The subject site is bounded by Mackillop Drive to the east and Barina Downs Road to the north. The site has an area of 181,500m^2.

Located to the east of the site is the former farmhouse which is identified as a heritage item of local significance under the Baulkham Hills Local Environmental Plan 2005. Located on the western portion of the site is the Conference/Retreat Centre, associated facilities and the former priest's house. The remainder of the site is vacant.

Residential properties adjoin the southern and western boundaries of the subject site. Surrounding development is mostly detached dwellings to the north with some multi dwelling housing development. Residential flat building development has been approved on vacant land to the north.

The topography of the site is characterised by moderate to steeper slopes with a central ridgeline that is oriented along an east-west direction. Slopes on the northern side of the ridgeline range from 5% to 14% and range from 10% to 25% on the southern side. The sloping land presents challenges for future dwelling design and construction.

The dominant central ridgeline allows panoramic views on both the northern and southern aspect. Views from the northern aspect of the central ridge are local views over the Norwest Business Park and distant views to the mountains to the west. Views from the south side of the ridge are primarily over the established residential areas.

Five distinct drainage catchments are present on the site due to spur lines that extend from the eastern and western edges of the ridge. The largest catchment which drains to the south generates flood risk management issues at the confluence of three overland flow paths.

The majority of native vegetation has been cleared from the site for grazing of livestock, but areas along the access road and around the heritage listed building have been landscaped with exotic plants. Small remnants of vegetation occur on the western edge of the site and are listed on National Parks and Wildlife Service (2002) maps as Sydney Turpentine Ironbark Forest. This is listed as a Critically Endangered Ecological Community under the Environment Protection and Biodiversity Conservation (EPBC) Act 1999 and as an Endangered Ecological Community under the Threatened Species (TSC) Act. Councils mapping identifies the remnant vegetation as Cumberland Plain Woodland which is also listed as a Critically Endangered Ecological Community under the schedules of both the EPBC and TSC Acts. A flora and fauna survey and assessment undertaken in November 2011 has identified that the site is within a geographical transition zone between these two endangered ecological communities.

The key features of the site are shown in Figure 3.

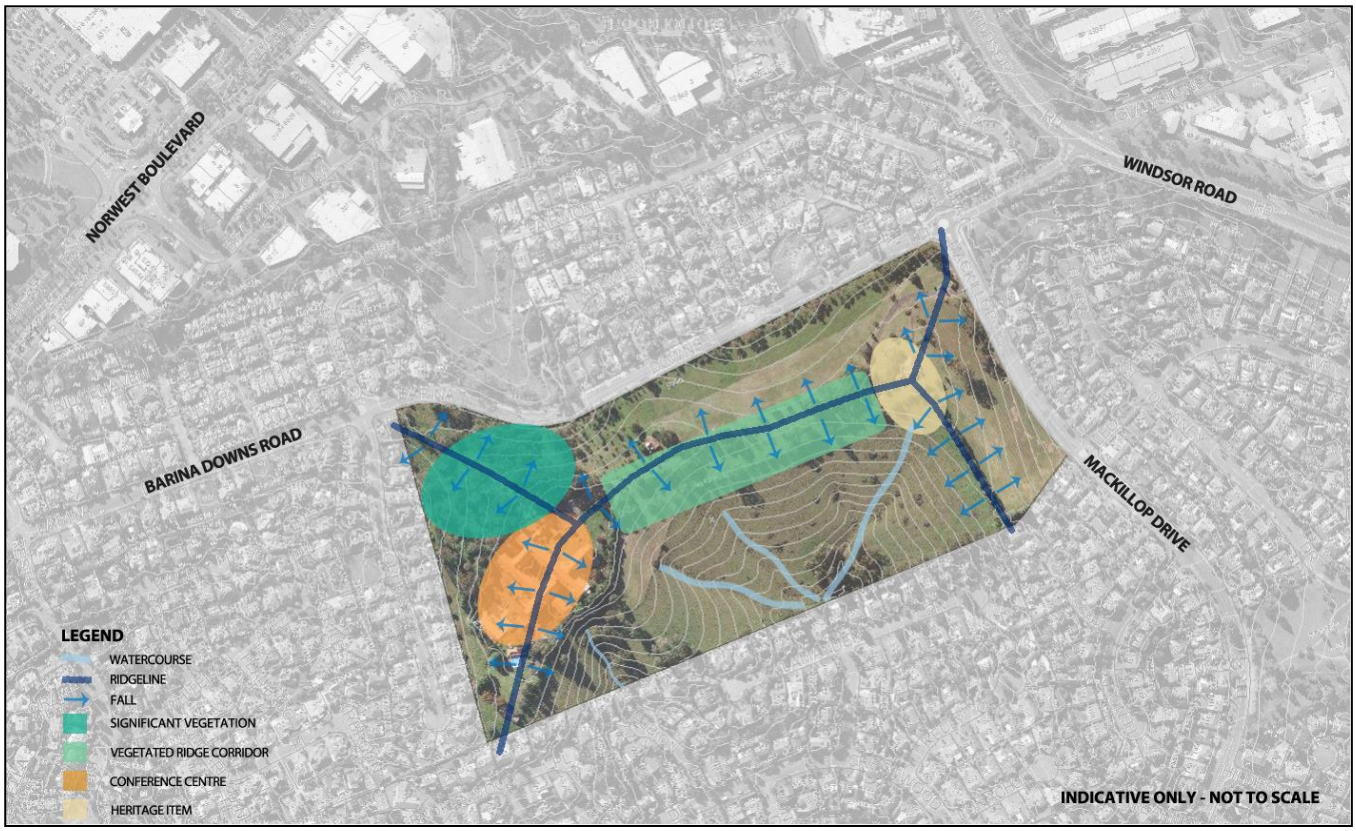


Figure 3 SITE ANALYSIS

C.5.3 SITE SPECIFIC OBJECTIVES AND DEVELOPMENT CONTROLS

The objectives and development controls for this site are set out in the following sections.

C.5.3.1 SITE PLANNING

OBJECTIVES

(i) To achieve coherent site planning and development that relates to the natural topography of the site and contributes to the character of the area.

(ii) To protect, contribute and enhance the existing residential character and amenity.

(iii) To ensure acceptable levels of amenity and minimise negative impacts of traffic movements on the surrounding locality.

DEVELOPMENT CONTROLS

(a) Residential flat buildings, attached dwellings and dwelling houses are to be provided in the locations identified in Figure 4.

(b) Access to the site is to be provided in the locations identified in Figure 4.

(c) Prominent views identified in Figure 4 are to be retained. Streets are to be located to enable additional view corridors into No.64 Mackillop Drive, Baulkham Hills and to the heritage item.

(d) The central ridgeline between the single dwelling housing and small lot housing areas is to be retained as common open space.

C.5.3.2 HERITAGE

The existing building is an interwar Californian bungalow built around circa 1928. It is described in The Hills Shire Council Inventory Sheet No.92 as *"A fine example of a bungalow in original condition".*

An important aspect of maintaining and enabling the interpretation of the heritage significance of a building is the land around it that establishes its context, commonly known as curtilage. Curtilage can include (but is not limited to) significant features of a site such as outbuildings and driveways and also vegetation, for example, the original garden or an avenue of trees.

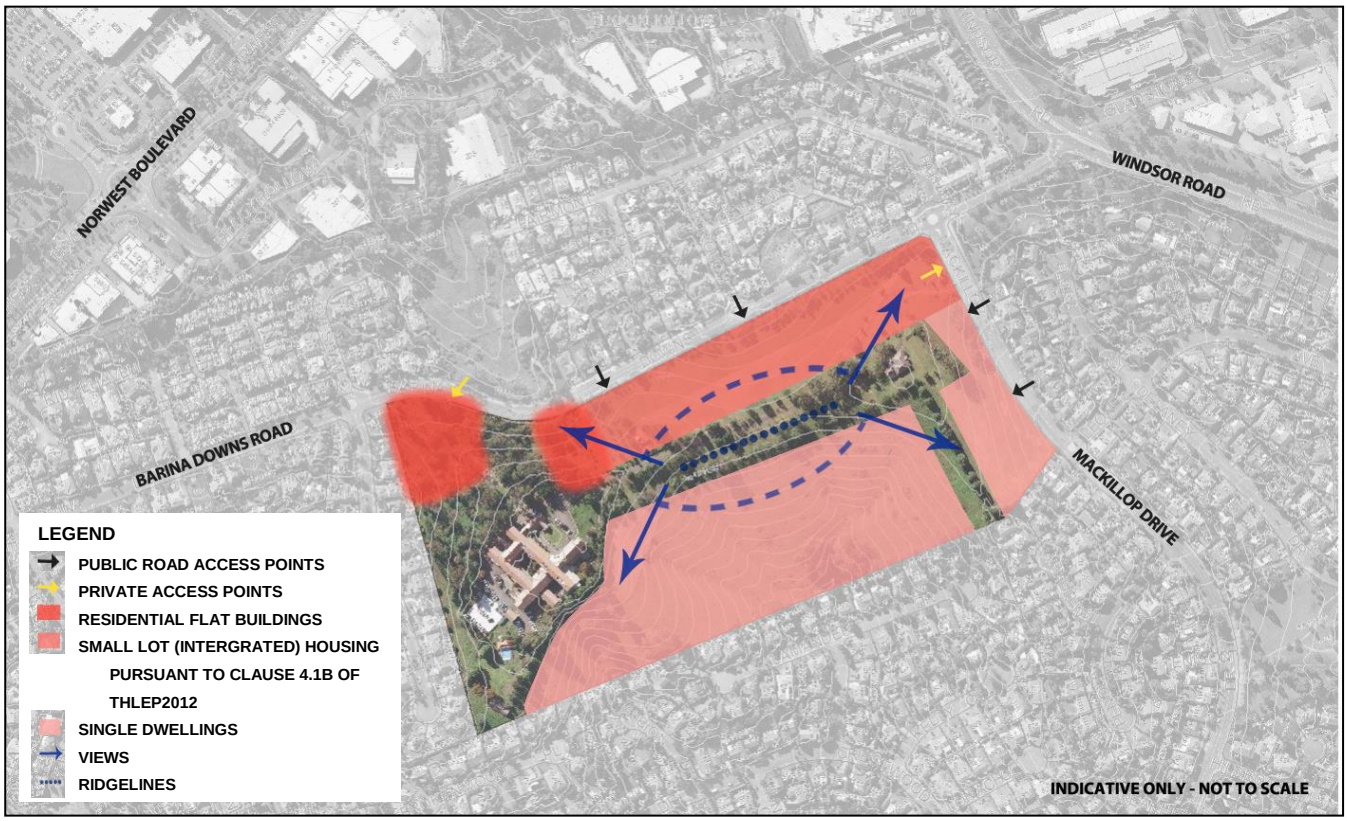


Figure 4: SITE PLANNING

OBJECTIVES

(i) To ensure that the subdivision of land on which a heritage building is located does not isolate the heritage building from its setting or context or adversely affect its amenity or privacy.

(ii) To ensure that new dwellings erected on land upon which the heritage building is located are sympathetic to the character of the heritage building and its setting.

(iii) To ensure that the development of land in the vicinity of a heritage site is undertaken in a manner that complements the heritage significance of the site.

(iv) To ensure that development of the site respects the curtilage established by the original garden associated with the heritage item.

DEVELOPMENT CONTROLS

(a) The heritage curtilage is to be consistent with the area shown edged yellow in Figure 5.

(b) Brush box trees located parallel to Mackillop Drive and within the immediate curtilage in Figure 5 shall be retained.

(c) The rural qualities of the bitumen avenue with swale drainage lines are to be retained. There shall be no concrete edging.

(d) Civil works for stormwater drainage dish drains to be kept away from root zones of trees in the access avenue.

(e) A Conservation Management Plan must be produced and submitted to Council to ensure that the existing heritage building is managed appropriately for its heritage values.

(f) A landscape plan shall be prepared by a landscape architect experienced in dealing with heritage gardens and is to include at a minimum the following:

- The retention of original and or significant landscaping (including plants with direct links or association with the heritage item); and
- Details of how new plantings retain significant views to and from the heritage item.

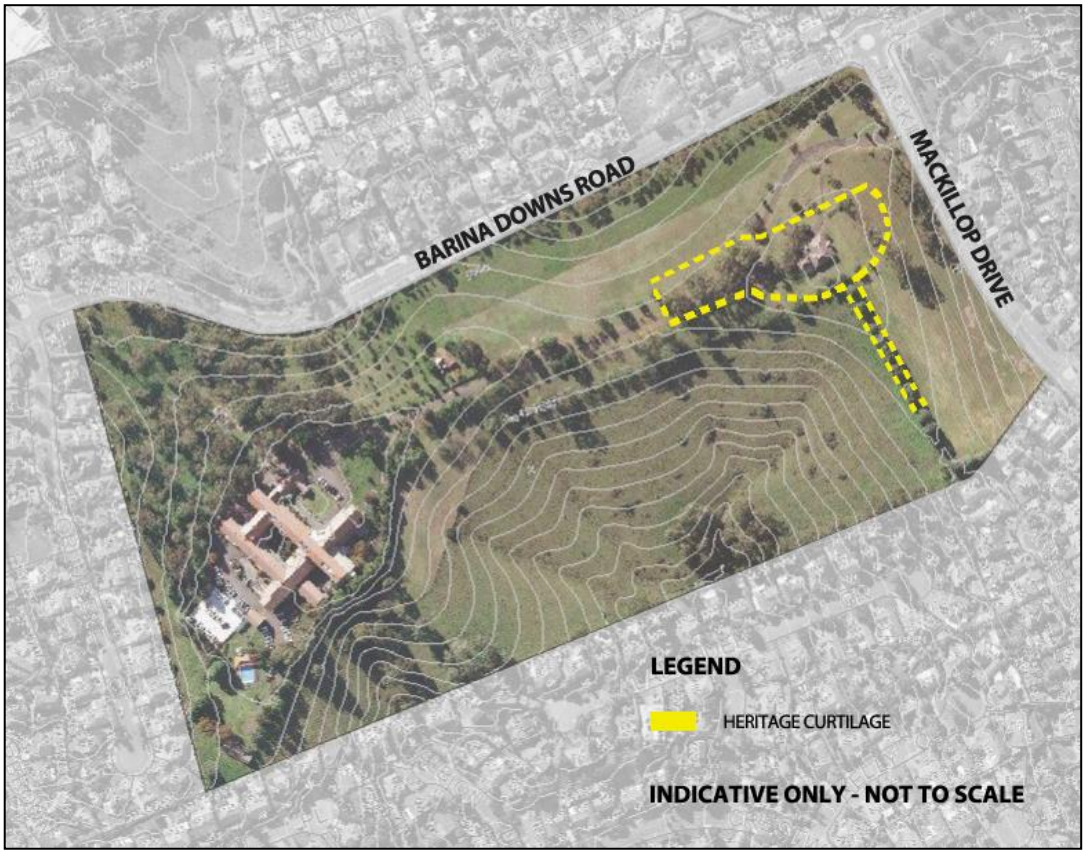


Figure 5: REQUIRED HERITAGE CURTILAGE

C.5.3.3 SURFACE WATER RUNOFF

OBJECTIVES

(i) Assist in the management of stormwater to minimise flooding and reduce the effects of stormwater pollution on receiving waterways.

(ii) Ensure that development is not subjected to undue flood risk, nor exacerbate the potential for flood damage or hazard to existing development and to the public domain.

DEVELOPMENT CONTROLS

(a) Water sensitive urban design infrastructure will not be accepted as part of any public road or open space dedication.

(b) The development proposal must demonstrate how the drainage system for the development site is designed to address any site specific conditions, and how it connects into the downstream drainage system.

(c) The drainage system is to be designed in a manner that ensures that personal and property safety is not compromised.

(d) A Local Drainage Management Plan is required for development of the site.

(e) The Local Drainage Management Plan is to address:

- the hydrology of the locality and its relationship to the drainage system;
- any expected rise in ground water level due to development;
- the role of the principal landscape components on the site for water conservation and on-site detention;
- the scope for on-site stormwater detention and retention, including the collection of water for re-use;
- how any detrimental impacts on the existing natural hydrology and water quality is proposed to be minimised; and
- how pedestrian and property safety is to be ensured.

(f) Onsite Stormwater Detention (OSD) is required to be provided in accordance with Council's adopted policy except where modified in control (g) below.

(g) Runoff from the development site is constrained by downstream infrastructure/ easements, specifically those connecting the subject site to Salamander Grove and Albion Place. The Local Drainage Management Plan must include a hydrological and hydraulic analysis of the existing infrastructure downstream to determine the capacity of the existing piped stormwater system. Where runoff from the site in its post development condition exceeds the capacity of the downstream system, additional stormwater management practices will be required to be implemented on site. Alternatively, amplification of the existing downstream drainage network may be necessary.

Additionally, overland flowpaths must be created to safely contain and convey any gap flows generated by the capacity of the storm drainage system being exceeded, or caused by system blockage. The overland flowpaths must be capable of conveying the maximum discharge between the 100 year ARI catchment runoff and pipe system capacity, safely connecting to the closest existing overland flowpath (road reserve). This may require improvements to the surface of easements where relied upon by the proposed development.

(h) All hydrological and hydraulic modelling undertaken must be submitted to Council as part of a development application.

(i) The post development run-off from impermeable surfaces (such as roofs, driveways and paved areas) is to be managed by stormwater source measures that:

- contain frequent low-magnitude flows;
- maintain the natural balance between run-off and infiltration;
- remove some pollutants prior to discharge into receiving waters;
- prevent nuisance flows from affecting adjacent properties; and
- enable appropriate use of rainwater and stormwater.

(j) Where filtration and bio-retention devices are proposed, they are to be designed to capture and provide temporary storage for stormwater.

(k) Public stormwater easements within residential lots are not permitted. Instead, local drainage links/ pathways must be used to retain public infrastructure within public land. The minimum width of any local drainage link must be 5m.

(Refer to Council's Design Guidelines – Subdivisions & Developments)

(l) A stormwater quality assessment is to be submitted with the development application to demonstrate that the development will achieve the post-development pollutant load standards in accordance with the Water Sensitive Urban Design Technical Guidelines for Western Sydney (2004) or as amended.

(m) The stormwater quality assessment is to be prepared by a suitably qualified engineer with experience in water sensitive urban design and include:

- Modelling of pre-development and post-development pollutant loads with an industry standard water quality model;
- The design of water sensitive urban design measures used to achieve the required post-development pollutant loads; and
- Maintenance schedules of any proposed water sensitive urban design measure that requires maintenance and/or likely full replacement.

(n) Water sensitive urban design elements, consisting of, but not limited to:

- Bio-retention swales;
- Rain gardens;
- Vegetated swales;
- Vegetated buffers;
- Rainwater tanks; and
- Gross pollutant traps,

must be incorporated into the planning for, and appropriately located within any future subdivision of the land.

(o) An alternative water quality treatment measure, which differs from the prescribed development controls may be considered on merit only where the identified surface water runoff objectives are deemed to be satisfied.

C.5.3.4 ROADS

OBJECTIVES

(i) To provide an acceptable level of access, safety and convenience for all road users, whilst ensuring acceptable levels of amenity and protection from the impact of traffic.

(ii) To provide sufficient road reserves, carriageway and verge width to allow roads to perform their function within the road network.

(iii) Roads are to be designed and located in a manner which respects and responds to the environmental features and constraints of the site.

DEVELOPMENT CONTROLS

(a) Roads are to be designed to integrate into the local road network and provide for the efficient and safe movement of vehicles, bicycles and pedestrians throughout the development site.

(b) The location and design of roads should minimise the extent of cut and fill and cause the least disturbance and impact on native vegetation.

(c) All roads are to be designed in accordance with the standards established in the table below:

Street Types				
Type	**Max number of dwellings**	**Street reserve**	**Lane width**	**Footpath width and verge**
Access Place	30	14.5m	7.5m	2 X 3.5m verge (1.2m wide path provided in verge on one side)
Access Street	200	15.5m	8.5m	2 X 3.5m verge (1.2m wide path provided in verge on one side)

(d) A lesser verge width may be considered where the road is adjacent to common open space.

C.5.3.5 SINGLE DETACHED DWELLINGS

The provisions of Part C Section 3 – Residential will apply. However, the additional setback control as stated below will apply to ensure that new development is sensitive to the landscape setting, site constraints, existing amenity and established character of the street and locality.

A. SETBACKS

OBJECTIVES

(i) To provide setbacks that complement the streetscape and protect the privacy and sunlight to adjacent dwellings.

DEVELOPMENT CONTROLS

(a) Lots fronting Mackillop Drive shall have a primary setback of not less than 7.5 metres with corner allotments having a minimum secondary setback of 4 metres. All other lots shall have a primary setback of 6 metres and secondary setback of 2 metres for corner allotments.

(b) A minimum rear setback of 10 metres is to be provided on the southern boundary of the development site. This requirement does not apply to any residential lot having direct frontage to Mackillop Drive.

C.5.3.6 MULTI DWELLING HOUSING

The provisions of Part B Section 4 – Multi Dwelling Housing will apply.

C.5.3.7 RESIDENTIAL FLAT BUILDINGS

The provisions of Part B Section 5 – Residential Flat Buildings will apply. However, the additional controls as stated below will apply:

A. SETBACKS

OBJECTIVES

(i) To provide setbacks that complement the setting and contribute to the streetscape and character of the street.

(ii) To minimise any adverse impacts such as overshadowing and privacy on adjacent and adjoining properties.

DEVELOPMENT CONTROLS

a) The minimum front setback to Barina Downs Road for residential flat buildings is 10 metres.

b) The minimum setback to the western boundary where the proposal abuts a residential property is 10 metres.

c) The minimum rear setback is 6 metres where development abuts the conference centre.

B. DENSITY

OBJECTIVES

(i) To ensure that the apartment development is compatible with the surrounding development and the bushland landscape setting.

DEVELOPMENT CONTROLS

(a) The maximum population density is 140 persons. The density is based upon the following occupancy rates:

Dwelling Type	Occupancy Rate (Persons)
1 bedroom unit	1.3
2 bedroom unit	2.1
3 bedroom unit	2.7
4 bedroom unit	3.5

C.5.3.8 HOUSING AS PER CLAUSE 4.1B OF THE HILLS LOCAL ENVIRONMENTAL PLAN 2012 EXEMPTIONS MINIMUM LOT SIZES FOR CERTAIN DEVELOPMENTS

Housing pursuant under the provisions of clause 4.1B of the Hills LEP 2012 presents the opportunity to consider all aspects of building and site design together, to be combined effectively to create a functional and attractive residential environment. Typically this form of development is referred to as 'small lot housing'.

All small lot housing developments must be designed so as to ensure a compatible relationship between dwelling-houses on individual lots and dwellings on adjoining land.

Any person undertaking a small lot housing development is required to submit a combined Development Application to Council for the construction of the dwelling-houses and subdivision of the land.

Factors which should be considered in the layout of an small lot housing development include:

- slope and orientation of the land;
- energy-efficient design of subdivision and dwelling-houses;

- solar access to adjoining dwellings/dwelling-houses;
- adequate visual and acoustic privacy to each dwelling-house;
- relationship to adjoining dwellings/dwelling-houses;
- retention of special qualities or features such as trees and views;
- provision of adequate site drainage;
- provision for landscaping and private open space; and
- existing streetscape character.

A. SITE COVERAGE

OBJECTIVES

(i) To minimise bulk and scale of development and ensure that suitable land is available for landscaping, drainage and retention of vegetation.

DEVELOPMENT CONTROLS

(a) The maximum site coverage (including garage/carport, driveways, outbuildings, decks, patios, paved areas and pools) for each dwelling in a small lot housing development is 65%.

B. SETBACKS

OBJECTIVES

(i) To create an attractive, interesting and pleasant streetscape through the siting of buildings.

(ii) To provide visual separation of built forms, privacy and opportunities for landscaping.

(iii) To protect solar access to habitable rooms, protect and optimise useable open space around dwellings, and protect adjoining dwellings from excessive overlooking, overshadowing and general loss of amenity.

(iv) To provide sufficient space for vehicle parking, manoeuvrability and clear sight lines.

(v) Maintain and enhance established streetscape and character of the neighbourhood. This includes building setback, landscaping, fencing, lighting, pathways and street trees.

DEVELOPMENT CONTROLS

(a) Zero lot line housing shall occur only on the southern side boundary of east-west allotments and either side boundary but not both sides of north-south allotments.

(b) The length of the zero lot line wall is to be a maximum of 10 metres.

(c) No dwelling built on the zero lot line is to abut an adjoining dwelling also built on the zero lot line.

(d) No openings shall be located along the zero lot boundary wall. The boundary wall shall be constructed of maintenance free materials such as face brick or masonry. Walls located on the boundary must comply with the requirements of the Building Code of Australia in terms of fire separation.

(e) All boundary walls must extend at least 300mm above the roof line of the dwelling to ensure that roof drainage is contained within the site.

(f) A restriction as to user is created for a one metre wide maintenance easement over the adjoining property pursuant to Section 88B of the Conveyancing Act 1919.

(g) Building setbacks are to be in accordance with the table below:

Location/Frontage	Setback
Primary Street - Mackillop Drive - Barina Downs Road	 7.5m 6m
Secondary Street - MacKillop Drive - All other corner allotments	4m 2m
All other streets - internal	4.5m
All Garages	5.5m
Side boundary	zero lot line or 900mm
Rear boundary	6m

C. VEHICULAR ACCESS

OBJECTIVES

(i) To provide an acceptable level of vehicular access, safety and convenience for all users of the development.

(ii) To ensure that the internal roadway design can satisfactorily accommodate the expected traffic volumes of the development.

(iii) To provide a safe environment for both pedestrians and vehicles using the site and surrounding road network.

DEVELOPMENT CONTROLS

(a) All internal roadways are to be of a sufficient width as determined by a traffic report to adequately accommodate the volume of traffic generated by the development, and the provisions of service vehicles.

D. CAR PARKING

OBJECTIVES

(i) To ensure that garages do not dominate the streetscape.

(ii) To provide sufficient and convenient parking for residents.

(iii) To ensure that adequate car parking is provided on-site so as to prevent inconvenience to residents and congestion in nearby streets.

DEVELOPMENT CONTROLS

a) A minimum of one car parking space is to be provided per dwelling. This space is to be located within a garage.

b) Carports and garages facing a public place are to be no more than 6m in width~~.~~ nor extend across more than 50% of the property frontage, whichever is the lesser.

c) Carports and garages are to be designed to be:
- visually subservient;
- integrated into the overall dwelling design; and
- constructed of similar materials and finishes to the dwelling.

d) Where a double garage is proposed a minimum of two of the following design measures are to be employed:
- garage doors are divided by a vertical masonry pillar or similar;
- upper floor element projected forward of the garage to cast shadow and take prominence;
- colours and textures to ensure garage door subservience;
- utilisation of vertical elements to mitigate the horizontal emphasis of the garage;
- garage entrance to be orientated away from primary street frontage to face the side boundary; and
- staggered garages whereby one garage is setback from the adjoining garage.

E. FACADES

OBJECTIVES

(i) To provide visual interest to the streetscape through the incorporation of design features.

DEVELOPMENT CONTROLS

(a) For all dwellings the facade must be suitably articulated and incorporate two of the following design elements:
- Non-enclosed verandah for at least 40% of the dwelling width
- Entry feature or portico
- Balcony or window box treatment to first floor element
- Recesses or projection of prominent architectural elements to visually break up the facade and avoid blank wall appearance;
- Verandah, pergola or similar provided over garage doors

F. PRIVATE OPEN SPACE

OBJECTIVES

(i) To ensure the private open space is usable, functional and easily accessible for residents

(ii) To ensure private open space includes landscape and soft features

(iii) To ensure direct access and a relationship between indoor and outdoor living areas.

DEVELOPMENT CONTROLS

(a) Each dwelling must have a minimum private open space area of $24m^2$ capable of containing a dimension of 4m and must have direct and level access to the dwelling's living areas, such as a lounge room, a family room, a dining room, or a kitchen.

In the calculation of private open area:
- a minimum of 50% of the open space area must be grassed or soft landscaped area

located in the rear yard except where such private open space is an elevated deck over rear lot access.
- no area is less than 2.5 metres in width.
- outdoor clothes drying area are included as private open space.
- car spaces are not included in private open space calculations.

(b) Private open space is not permitted in the front setback.

(c) A garage or gate must provide access between the private open space and the driveway.

(d) At least half (50%) of the principal private open space area is to receive a minimum of 2 hours direct sunlight between 9am and 3pm during mid winter.

G. COMMON OPEN SPACE

OBJECTIVES

(i) To provide outdoor living space which is an extension of the dwelling for the enjoyment of its inhabitants.

(ii) To provide outdoor living space which is of useable dimensions and which is located to receive a reasonable quantity of sunlight.

(iii) To enhance the quality of the built environment by providing high quality landscaping.

(iv) To promote a pleasant and safe living environment.

(v) To provide functional open space within the development for the informal recreation of residents and children's play.

DEVELOPMENT CONTROLS

(a) The central ridgeline and curtilage of the heritage item is to be retained as common open space.

(b) The common open space areas is to be:
- easily accessible to all residents within the development;
- of a configuration, slope, and design so as to ensure it is easily maintained;
- located to ensure the area receives adequate sunlight during mid winter;
- of a sufficient size to satisfy the immediate open space demands of the proposed population and accommodate informal active recreational activities; and
- provided with passive surveillance.

(c) The common open space area is to include a child play area or recreation activities area.

(d) The common open space area must have a minimum dimension of 12m x 12m.

(e) For developments consisting of 15 or more dwellings the common open space area is to comprise an area equivalent to $10m^2$ per dwelling.

(f) Access for all residents to the common open space area is to be guaranteed via the titling system.

(g) The majority of the common open space area is to receive direct sunlight between 9am – 3pm during mid-winter.

H. LANDSCAPING

OBJECTIVES

(i) To enhance the setting of the heritage building and the environmental quality of the neighbourhood.

(ii) To conserve significant natural features of the site and incorporate them into landscape areas.

DEVELOPMENT CONTROLS

(a) The minimum required landscaped or naturally vegetated area for integrated housing as a percentage of the total site area is 35%.

(b) Existing trees should be preserved.

(c) Native species are to be used to maintain a strong natural theme for the neighbourhood due to their low maintenance characteristics, relative fast growth, aesthetic appeal and compatibility with the natural habitat.

(d) All landscaped areas are to have a minimum width of 2m.

I. SOLAR ACCESS

OBJECTIVES

(i) To maximise solar access to internal living and open space areas in winter.

(ii) To ensure no adverse overshadowing of adjoining allotments/developments.

(iii) To orient the development in a way that best allows for appropriate solar access and shading,

(iv) To minimise the need for artificial lighting in dwellings during the day.

(v) To orientate dwellings so that the living areas face north.

DEVELOPMENT CONTROLS

(a) All dwellings must be designed to ensure that the living areas are orientated towards north where possible and that all north facing living area windows receive at least 3 hours of direct sunlight between 9am and 3pm on 21 June.

(b) Garages, bathrooms and laundries should be located in areas with a west to southwest orientation, with windows (glazing) minimised in size and number as well as being protected with effective sun shades.

(c) Shadow diagrams shall be submitted showing the impact of a proposal on the adjacent residential buildings and their private open space. Such diagrams shall be based on a survey of the site and adjoining development. The shadow diagrams shall include all openings and windows of adjoining buildings and shall demonstrate likely shadow impact on the 21 June for 9am, 12pm and 3pm.

J. PRIVACY CONTROLS

OBJECTIVES

(i) To site and design buildings to ensure visual privacy between dwellings.

(ii) To avoid overlooking of living spaces in dwellings and private open spaces.

(iii) To contain noise within dwellings and communal areas without unreasonable transmission to adjoining dwellings.

DEVELOPMENT CONTROLS

a) Buildings are to be designed to ensure maximum protection of privacy; in particular the privacy of primary living areas must be protected. Where appropriate consideration should be given to:

- using windows that are narrow, translucent or obscured or have window sills a minimum of 1.5m above the upper storey floor level.
- ensuring that windows that face directly to the windows, balconies or yards of adjoining dwellings are appropriately screened.

b) First floor balconies will not be permitted where they overlook living areas of adjacent dwellings.

c) The placement of windows should be staggered to minimise direct viewing between dwellings.

d) Dwellings are to be designed to limit the potential for noise transmission to the living and sleeping areas of adjacent existing and future developments.

e) Careful consideration should be given to the location of air-conditioning systems, swimming pools and the like to minimise the impact on the amenity of adjoining properties.

f) Private open space areas and driveways are to be designed and located to minimise noise impacts.

K. ACCESS AND SURVEILLANCE

OBJECTIVES

(i) To ensure the needs of residents and visitors are considered with particular regard to access requirements, safety and security.

(ii) To promote incorporation of community safety aspects in the development design.

DEVELOPMENT CONTROLS

(a) Integrated housing developments are to provide safe and convenient access for prams, wheelchairs and people with disabilities from the public road to all areas of the development.

(b) The design of an integrated development is to demonstrate consideration of resident safety and security whereby pedestrian pathways and associated areas are not to be obscured, but rather provided with natural surveillance.

(c) The siting and design of dwellings shall ensure surveillance of all common areas.

(d) Access to dwellings is to be direct and without unnecessary barriers.

(e) Stairs and ramps are to have reasonable gradients and non slip even surfaces.

L. FENCING

OBJECTIVES

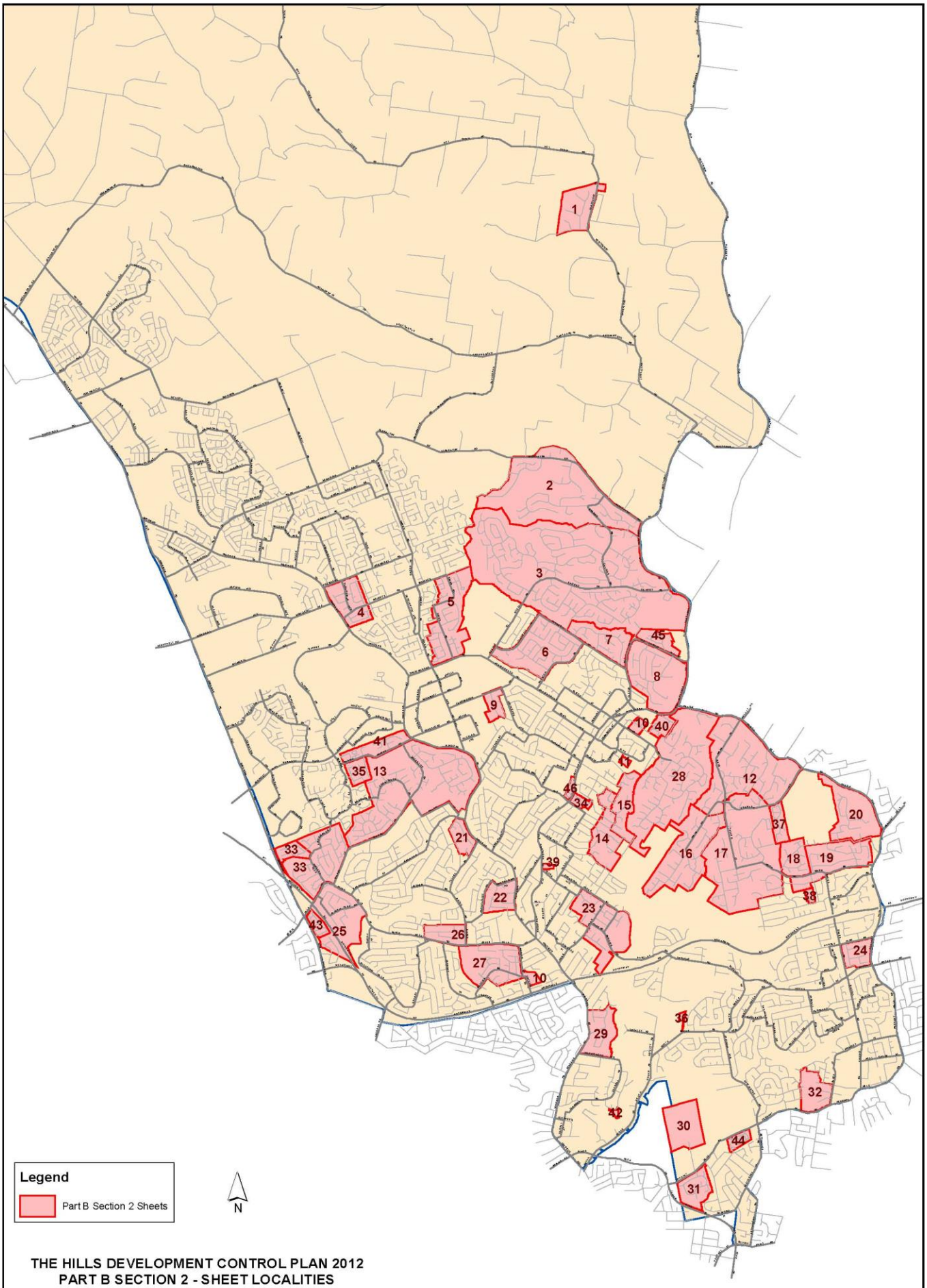
(i) To ensure that fencing is of a high visual quality, compliments the character of the area and is compatible with the surrounding streetscape.

DEVELOPMENT CONTROLS

(a) There shall be no colourbond fencing located along the street frontages of Barina Downs Road and Mackillop Drive.

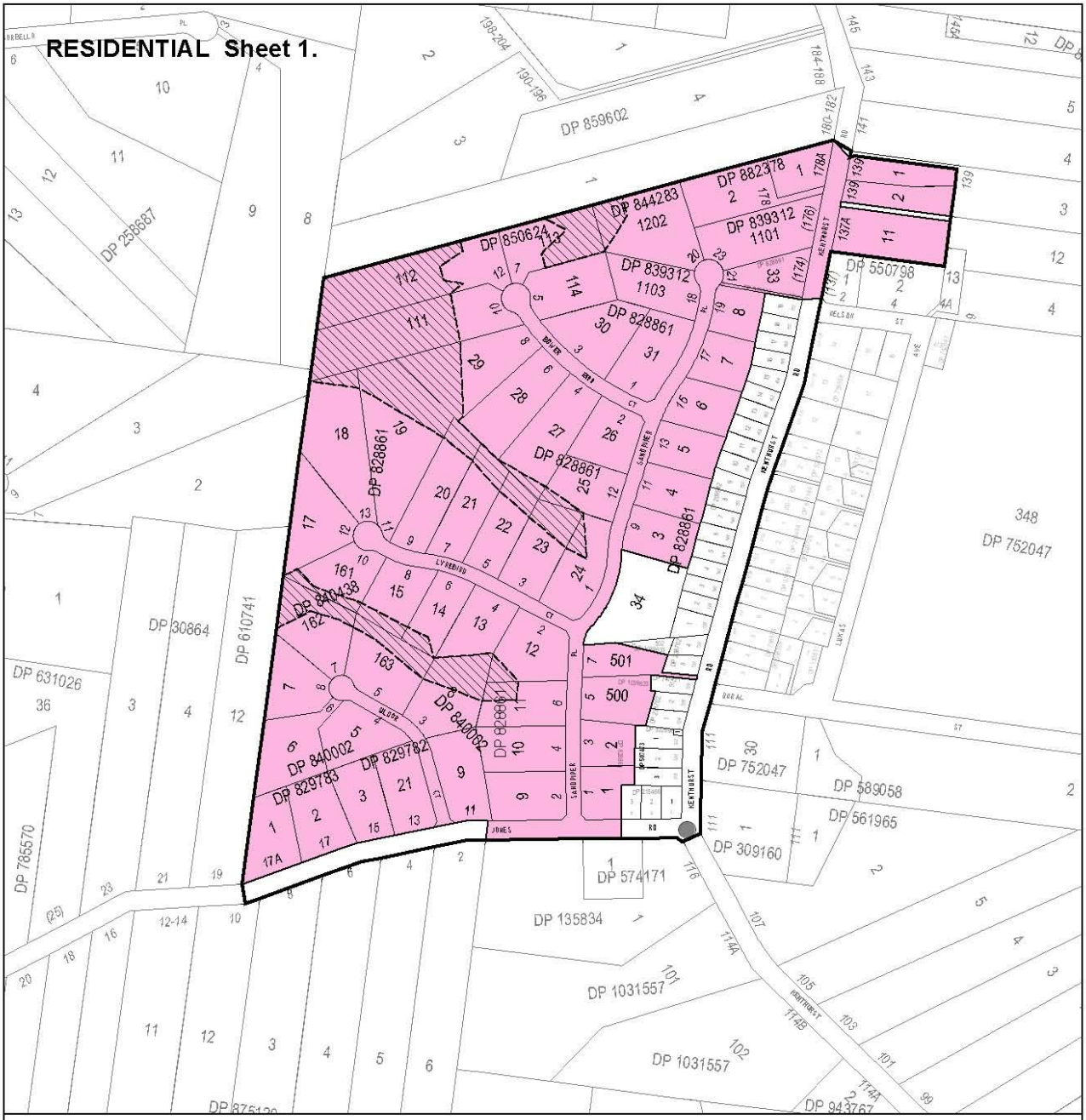
(b) Any fencing in the rear setback (facing Barina Downs Road) over 1.2 metres in height shall be setback from the rear boundary a minimum of 500mm to allow landscaping to soften the impact of the fence.

(c) Side and rear boundary fencing shall be a maximum height of 1.8 metres in height.



THE HILLS DEVELOPMENT CONTROL PLAN 2012
PART B SECTION 2 - SHEET LOCALITIES

DATE:20/10/2006



LOCALITY: KENTHURST

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

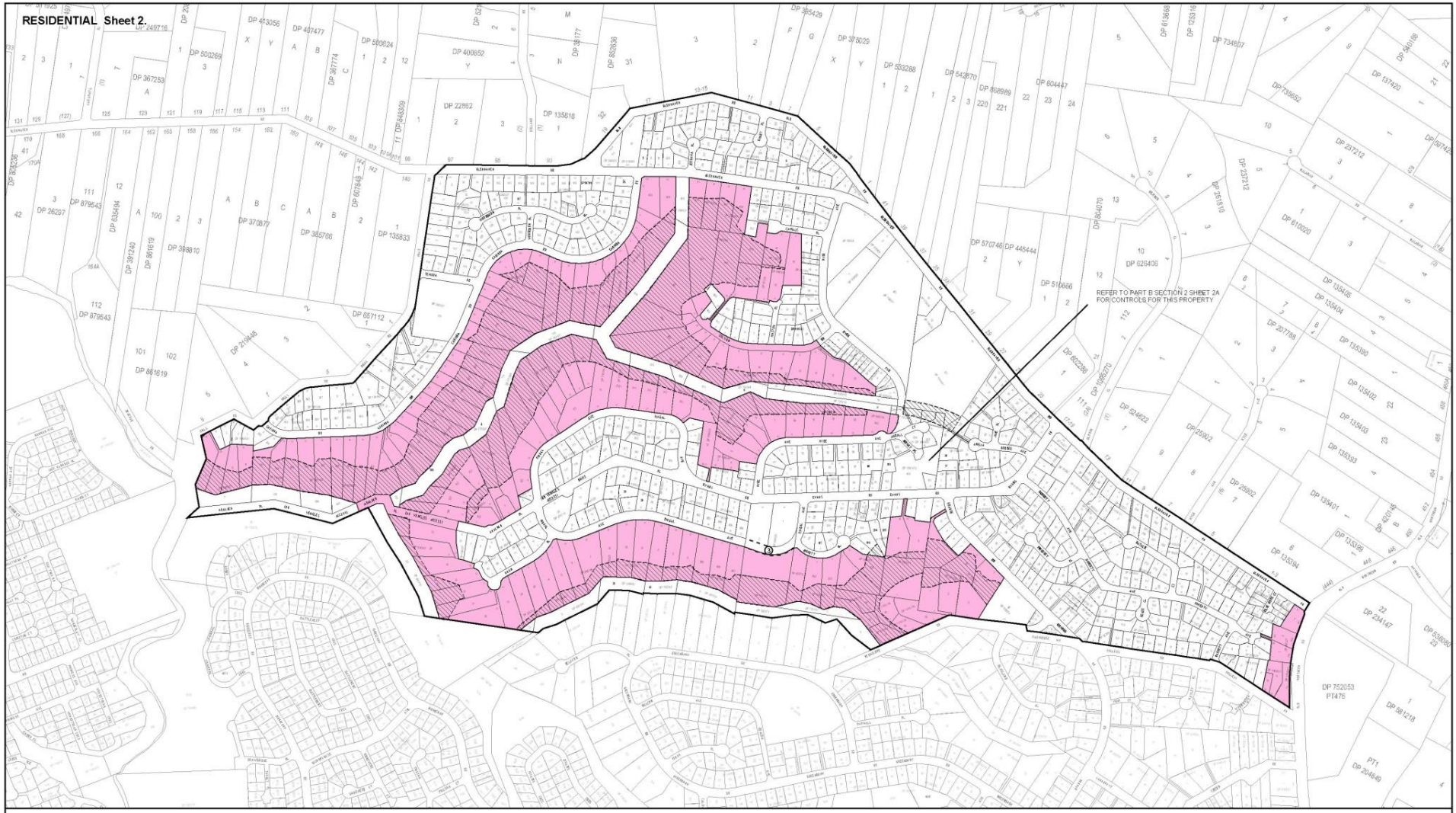
THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 1 of 46

DRAWN BY	B. CLISSOLD	DATE 20/10/2010	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010	
PLANNING OFFICER	V. D'EMANUELE	DATE 20/10/2010	Date of Adoption: Minute No. Came into Force:
FILE No.	FP 171		

Map Document: S:\Projects\Plan Serv\Consolidating_DCP\The_Hills_DCP_2012\Draft\PartB_Sec2\Sheet_1\PartB_Sec2_Sh1.mxd



ROAD CLASSIFICATION

ROAD TYPE	VERGE	CARRIAGEWAY	VERGE
⊙	3.5	11.0	3.5

N

SCALE: 1:4,000

60 25 0 50 100 150 200 250 Metres

LOCALITY: GLENHAVEN

Legend

Sheet Boundary | Restricted Development | Control 2.14.2

Proposed Road

DRAWN BY	B. CLISSOLD	DATE 20/10/2010
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010
PLANNING OFFICER	V. D'EMANUELE	DATE 20/10/2010
FILE No.	FP 171	

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

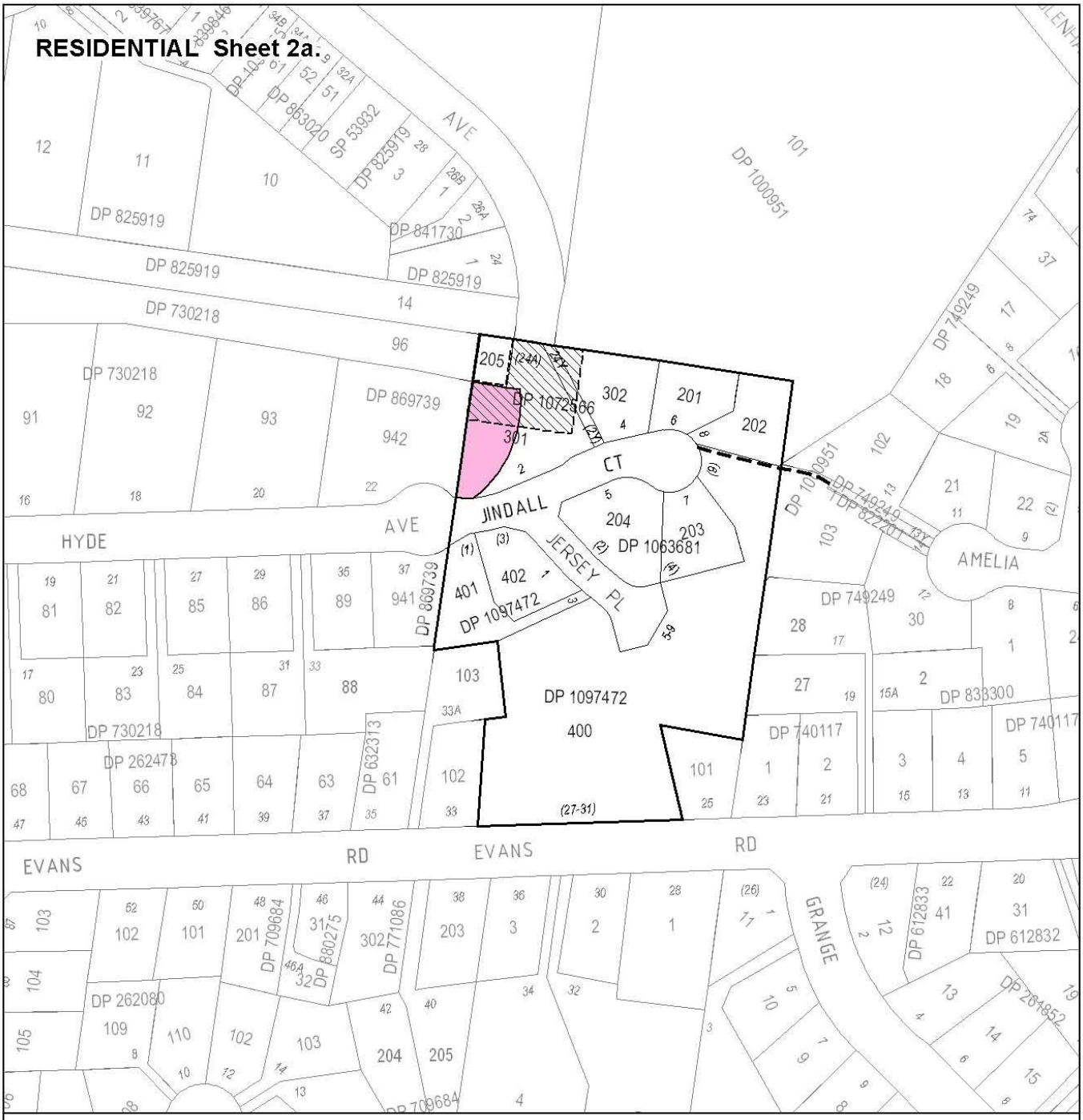
THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 2 of 46

STATEMENT OF RELATIONSHIP WITH OTHER PLANS

This plan is to be read in conjunction with The Hills DCP Statement and The Hills LEP 2012

Date of Adoption: Minute No: Came into Force:	Date of Amendment:



Legend

- Sheet Boundary
- Restricted Development
- Control 2.14.2
- Council will consider a pathway in this location, subject to the consent of all relevant land owners being lodged with any subdivision application.

SCALE: 1:1,500

20 10 0 20 40 60 Metres

N

LOCALITY: GLENHAVEN

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

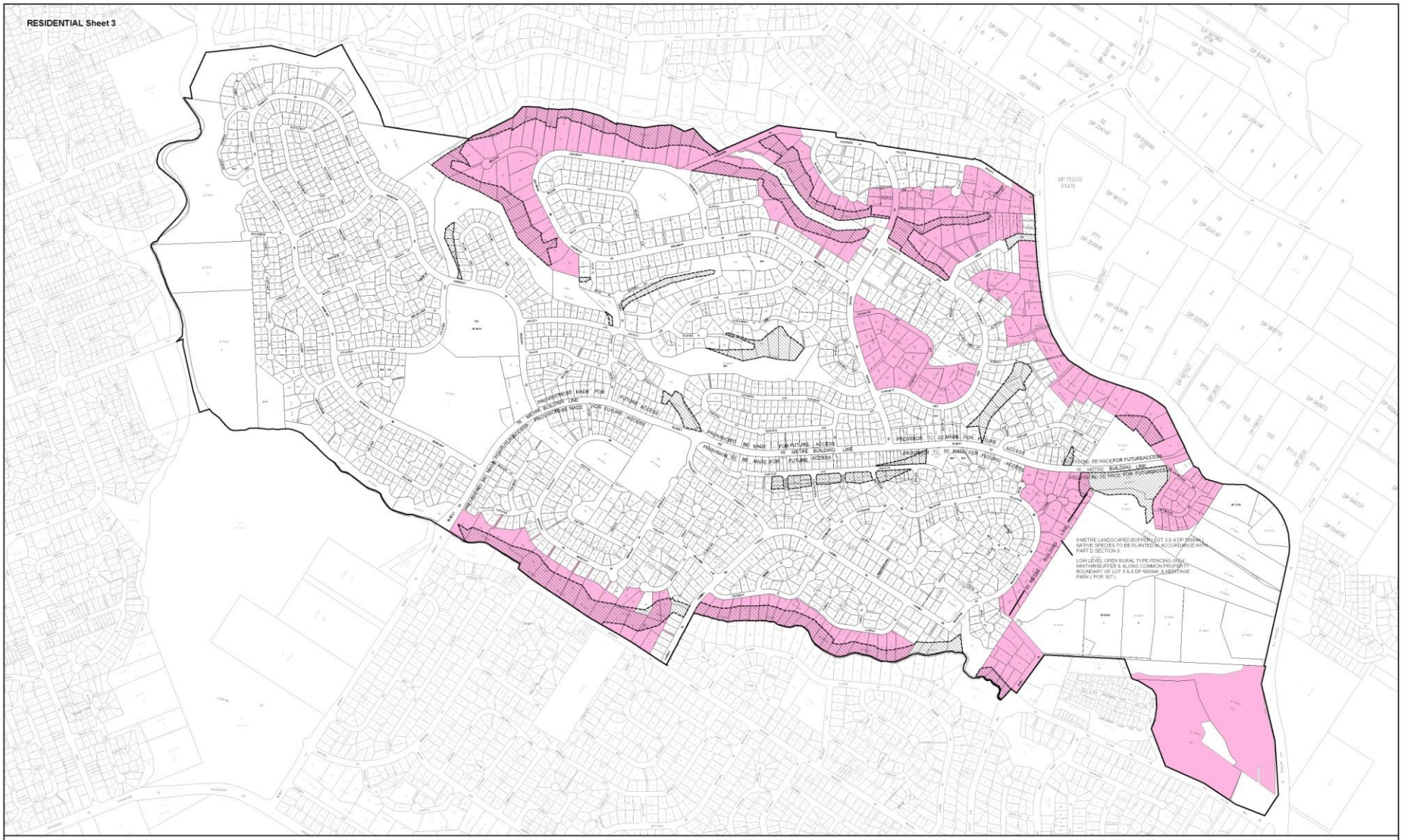
THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 2a of 46

DRAWN BY	B. CLISSOLD	DATE 20/10/2010	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010	
PLANNING OFFICER	V. D'EMANUELE	DATE 20/10/2010	Date of Adoption: Minute No. Came into Force:
FILE No.	FP 171		

Map Document: S:\Projects\Plan Sets\Consolidating_DCP\The_Hills_DCP_2012\Draft\Part B_Sec2\Sheet_2a\Part B_Sec2_Sh2a.mxd

RESIDENTIAL Sheet 3



Legend

Sheet Boundary | Restricted Development | Control 2.14.2

N

SCALE: 1:4,000

60 30 0 60 120 180 240 300 360 Metres

LOCALITY: CASTLE HILL

DRAWN BY	B. CLISSOLD	DATE 20/10/2010
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010
PLANNING OFFICER	V. DEMANUELE	DATE 20/10/2010
FILE No.	FP 171	

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

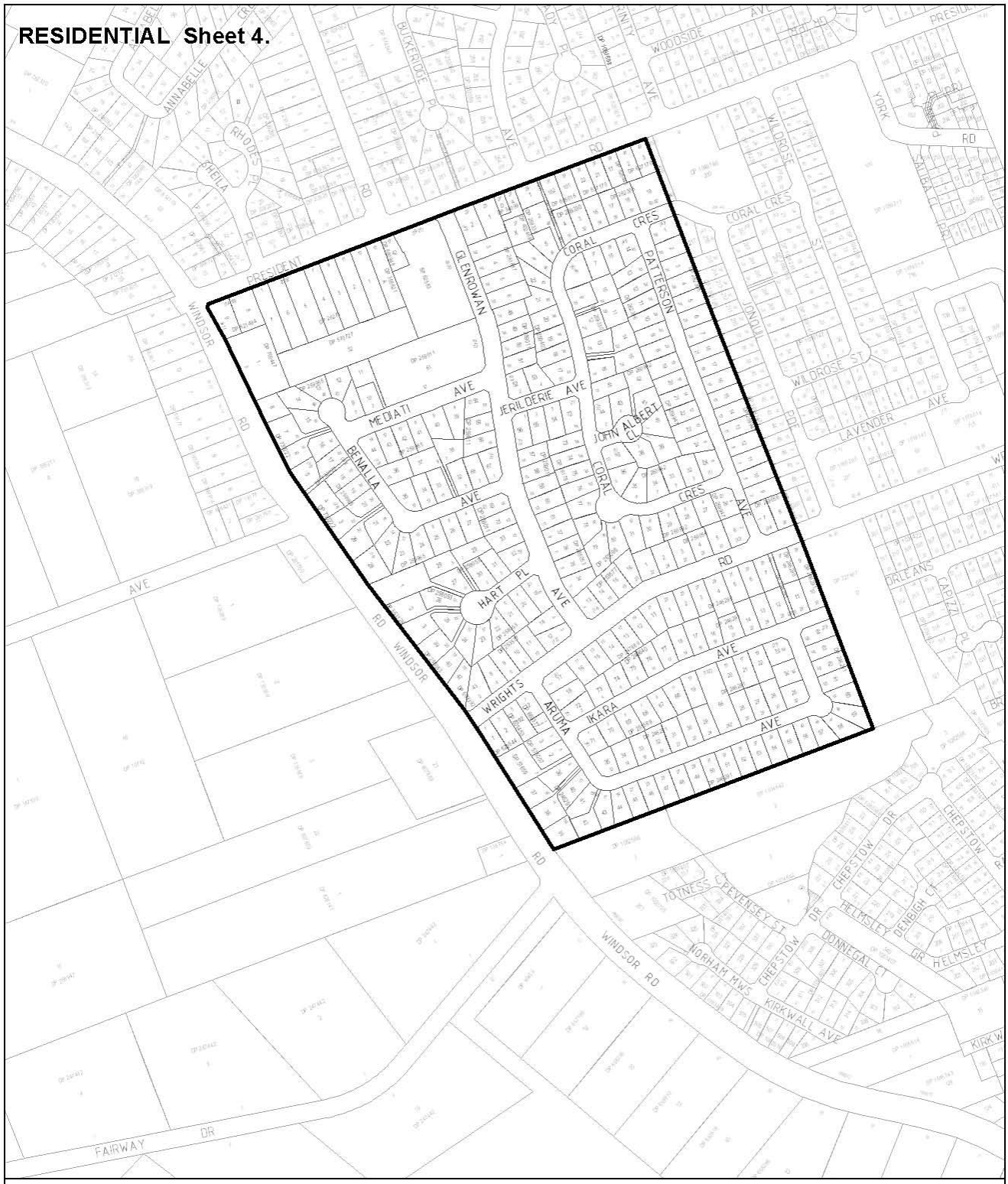
Part B Section 2 Map Sheet 3 of 46

STATEMENT OF RELATIONSHIP WITH OTHER PLANS

This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012.

Date of Adoption: Minute No. Came into Force:	Date of Amendment:

RESIDENTIAL Sheet 4.



Legend

Sheet Boundary

SCALE: 1:4,000

50 25 0 50 100 150 Metres

N

LOCALITY: KELLYVILLE

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 4 of 46

DRAWN BY	B. CLISSOLD	DATE 20/10/2010
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010
PLANNING OFFICER	V. D'EMANUELE	DATE 20/10/2010
FILE No.	FP 171	

STATEMENT OF RELATIONSHIP WITH OTHER PLANS
This plan is to be read in conjunction with
The Hills DCP statement and The Hills LEP 2012

Date of Adoption:
Minute No.
Came into Force:

Map Document: S:\Projects\PlanSem\Consolidating_DCP\The_Hills_DCP_2012\Draft\Part8_Sec2\Sheet_4\Part8_Sec2_Sh4.mxd

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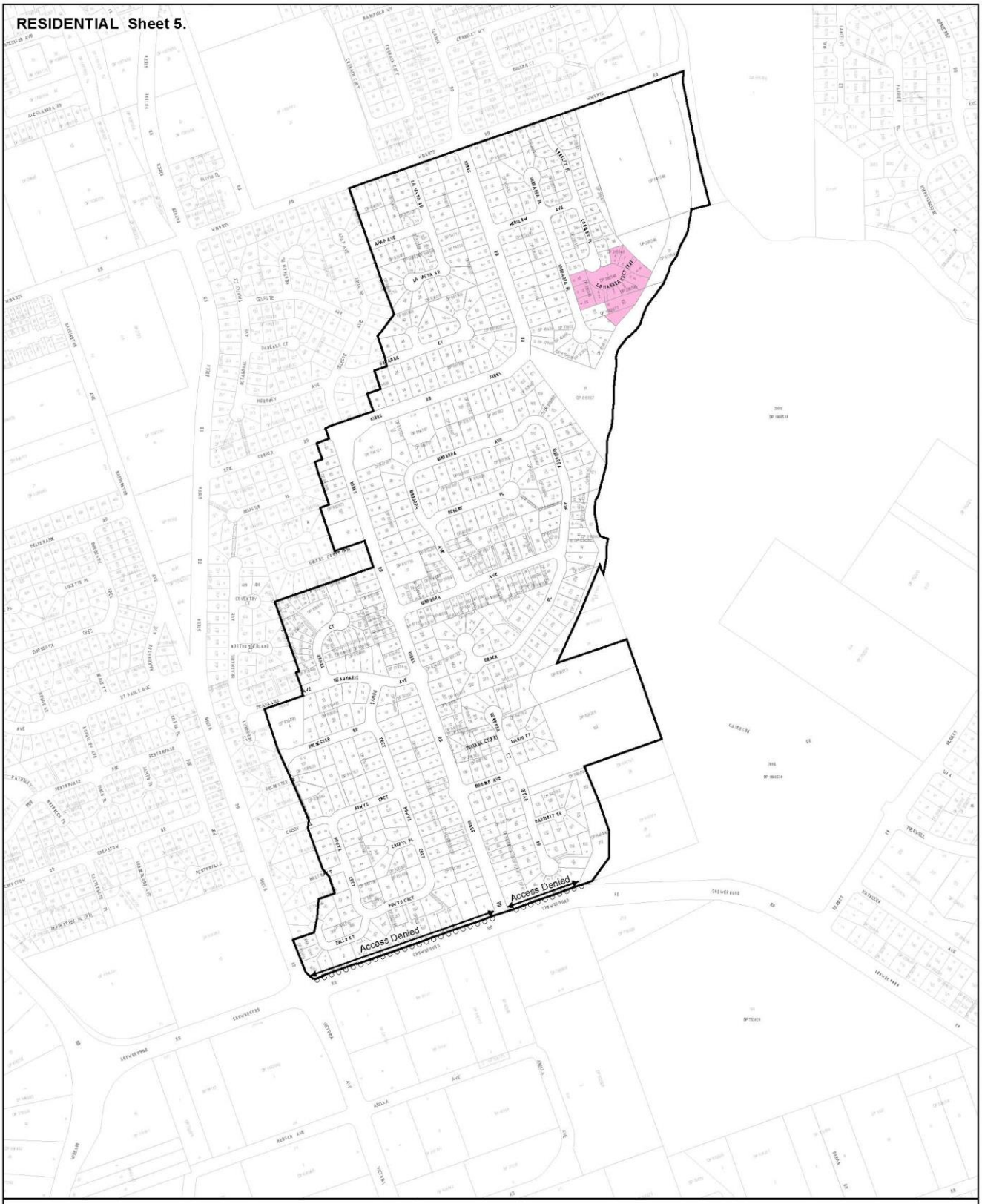

Legend

Sheet Boundary | Control 2.14.2 | ○○○ Footpath 1.2m wide

N

SCALE: 1:4,000

60 30 0 60 120 180 240 Metres

LOCALITY: CASTLE HILL

DRAWN BY	B. CLISSOLD	DATE 20/10/2010
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010
PLANNING OFFICER	V. D'EMANUELE	DATE 20/10/2010
FILE No.	FP 171	

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 5 of 46

STATEMENT OF RELATIONSHIP WITH OTHER PLANS

This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012

Date of Adoption:
Minute No.
Came into Force:

Map Document: G:\Projects\Planning\Council\Mapping_DCP\The_Hills_DCP_2012\Draft\Part B_Sec2\Sheet_5\Part B_Sec2_Sht5.mxd

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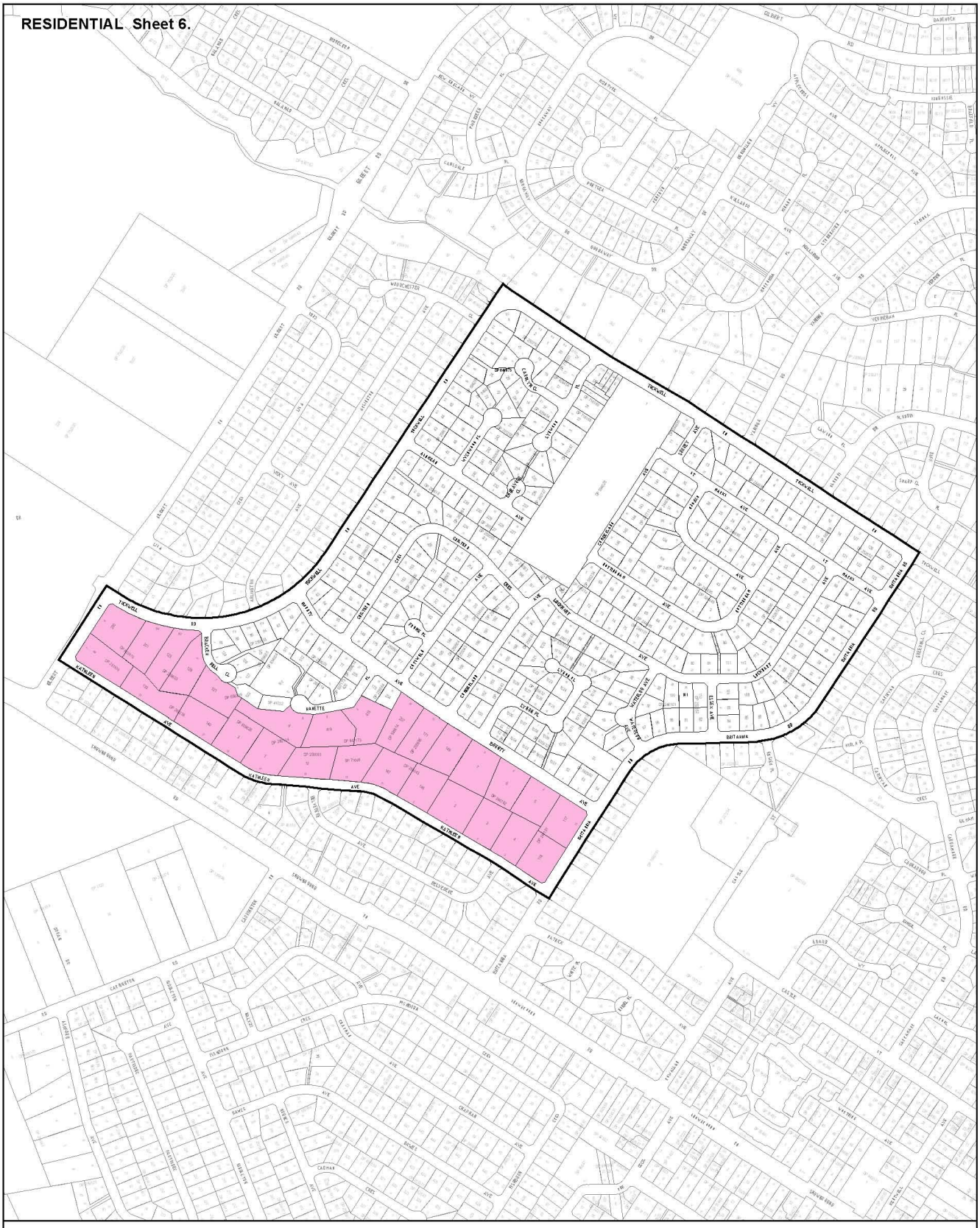


Legend

Sheet Boundary | Control 2.14.2 | Proposed Road

ROAD CLASSIFICATION

ROAD TYPE	VERGE	CARRIAGEWAY	VERGE	
1	3.5	6.0	3.5	(Maximum 10 lots)
2	3.5	8.0	3.5	

N

SCALE: 1:4,000

50 25 0 50 100 150 200 Metres

LOCALITY: CASTLE HILL

DRAWN BY	B. CLISSOLD	DATE	20/10/2010
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE	20/10/2010
PLANNING OFFICER	V. D'EMANUELE	DATE	20/10/2010
FILE No.	FP 171		

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 6 of 46

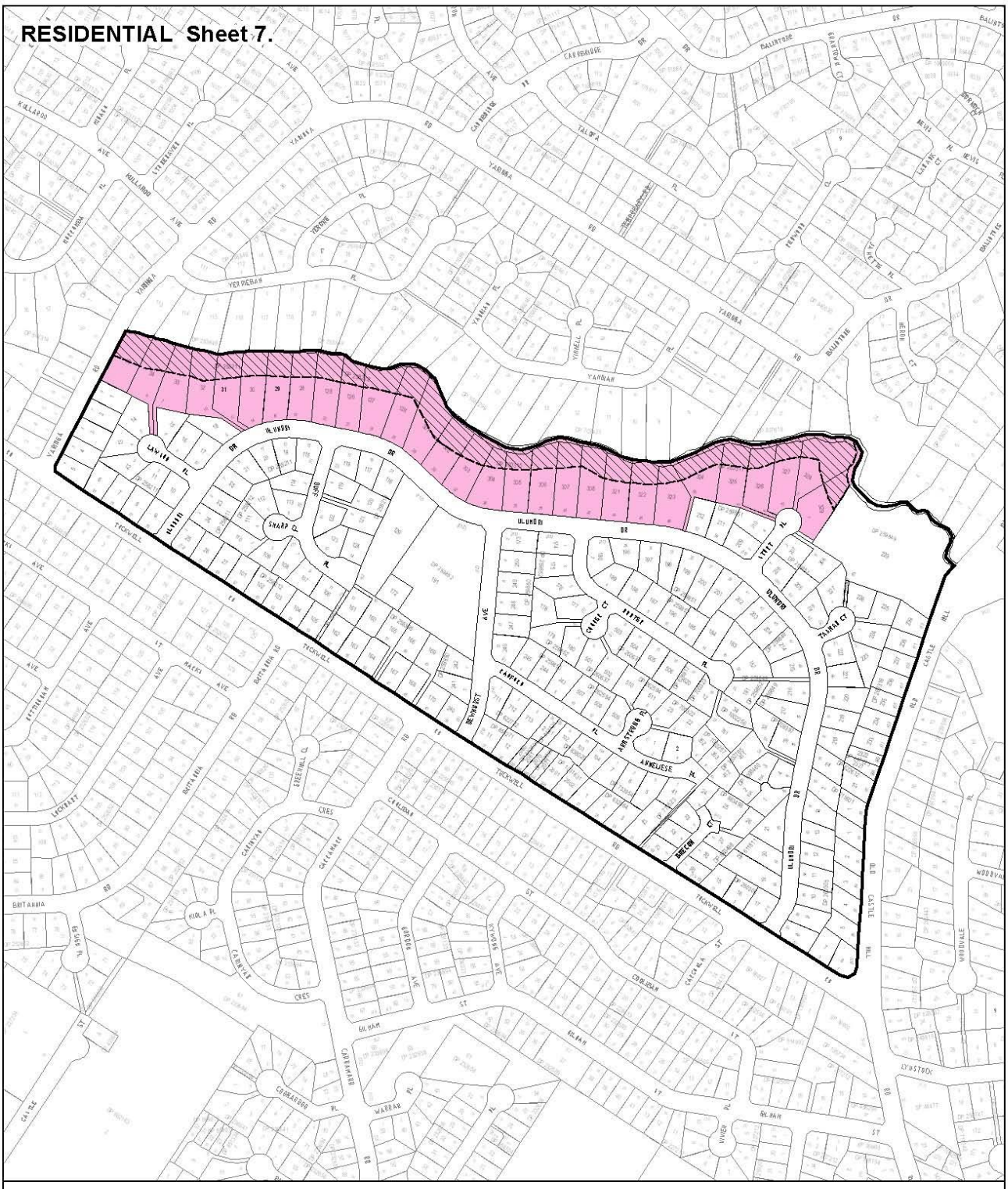
STATEMENT OF RELATIONSHIP WITH OTHER PLANS

This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012

Date of Adoption:
Minute No.
Came into Force:

Map Document:S:\Projects\PlanSeis\Consolidating_DCP\The_Hills_DCP_2012\Draft\Part B_Sec2\Sheet_6\Part B_Sec2_Sh6.mxd

RESIDENTIAL Sheet 7.



SCALE: 1:4,000

N

50 25 0 50 100 150
Metres

Legend

Sheet Boundary | Restricted Development | Control 2.14.2

LOCALITY: CASTLE HILL

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 7 of 46

DRAWN BY	B. CLISSOLD	DATE 20/10/2010
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010
PLANNING OFFICER	V. D'EMANUELE	DATE 20/10/2010
FILE No.	FP 171	

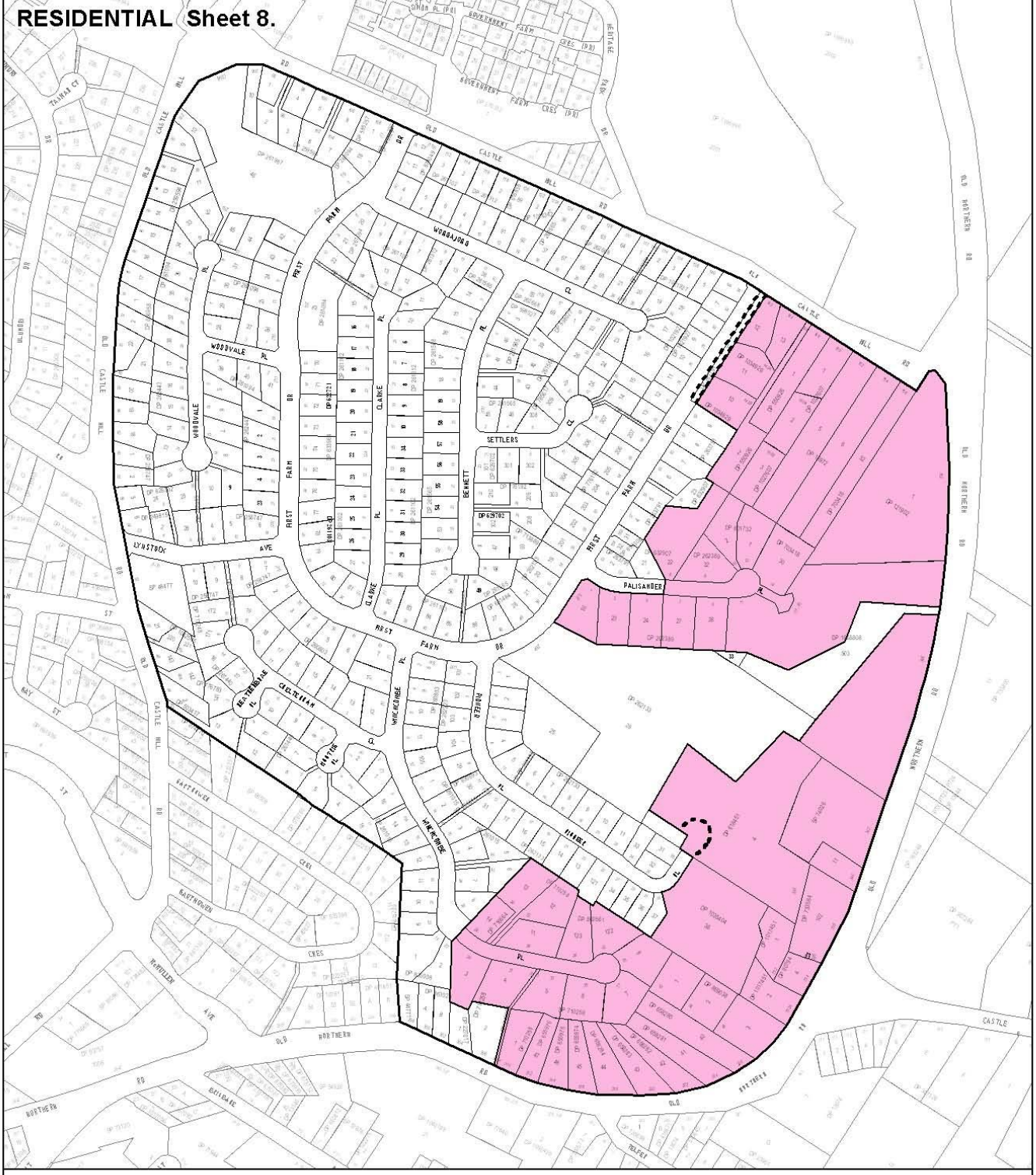
STATEMENT OF RELATIONSHIP WITH OTHER PLANS

This plan is to be read in conjunction with The Hills DCP Statement and The Hills LEP 2012

Date of Adoption:
Minute No.
Came into Force:

Map Document: G:\Projects\PlanSec\Consolidating_DCP\The_Hills_DCP_2012\Draft\Part8_Sec2\Sheet_7\Part8_Sec2_Sh7.mxd

RESIDENTIAL Sheet 8.



SCALE: 1:4,000

50 25 0 50 100 150

Metres

N

Legend

Sheet Boundary | Control 2.14.2 | Proposed Road

LOCALITY: Castle Hill

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

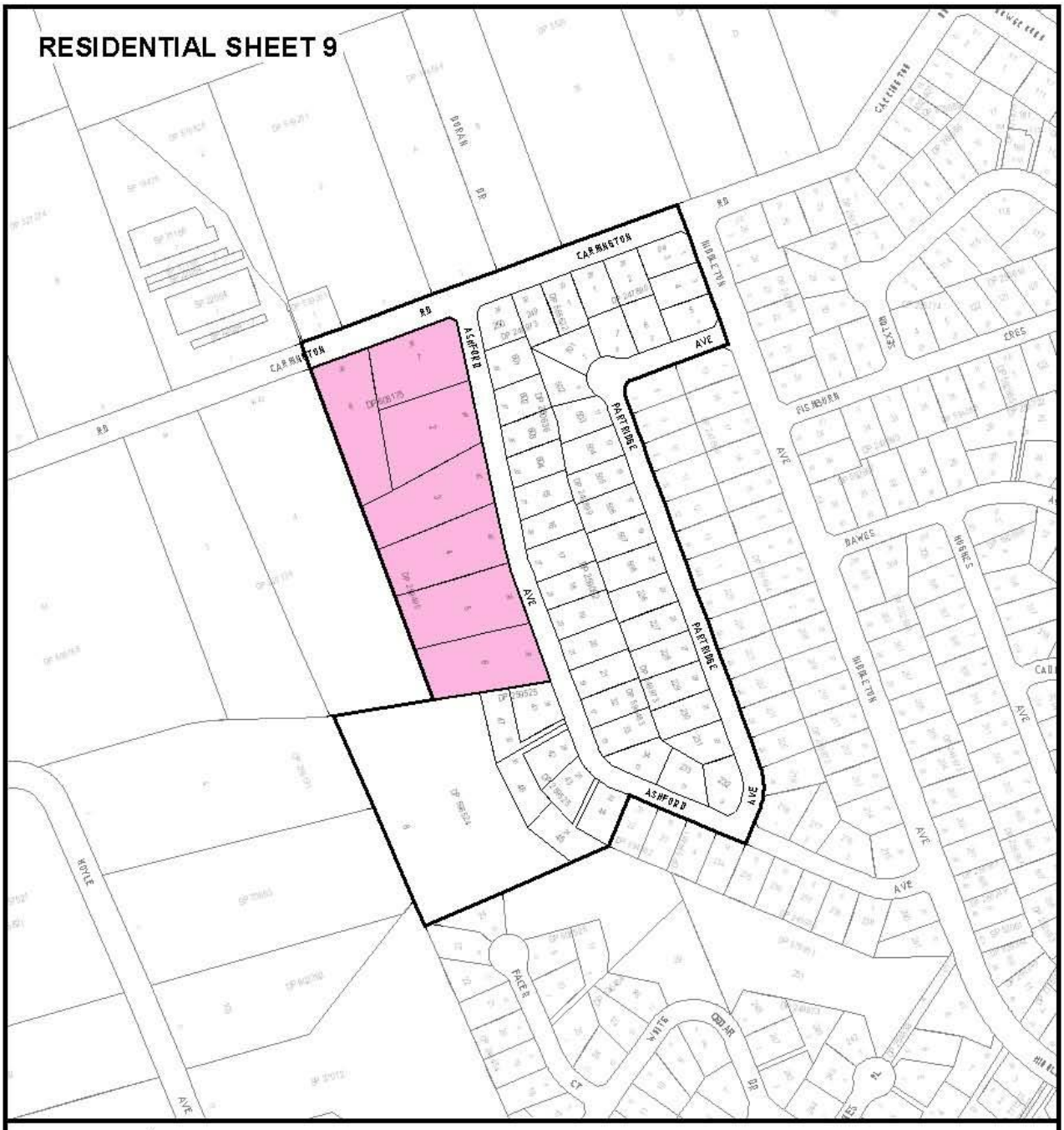
THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 8 of 46

DRAWN BY	B. CLISSOLD	DATE 20/10/2010	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010	
PLANNING OFFICER	V. D'EMANUELE	DATE 20/10/2010	Date of Adoption: Minute No. Came into Force:
FILE No.	FP 171		

Map Document: S:\Projects\Plan Serv\Consolidating_DCP\The_Hills_DCP_2012\Draft\Part B_Sec2\Sheet_8\Part B_Sec2_Sh8.mxd



ENVIRONMENTAL PLANNING & ASSESSMENT ACT1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 9 of 46

DRAWN BY	B. CLISSOLD	DATE 20/10/2010
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010
PLANNING OFFICER	V. D'EMANUELE	DATE 20/10/2010
FILE No.	FP 171	

STATEMENT OF RELATIONSHIP WITH OTHER PLANS
This plan is to be read in conjunction with
The Hills DCP statement and The Hills LEP 2012

Date of Adoption:
Minute No.
Came into Force:

Map Document: S:\Projects\PlanServ\Consolidating_DCP\The_Hills_DCP_2012\Draft\Part B_Sec2\Sheet_9\Part B_Sec2_Sh9.mxd

RESIDENTIAL Sheet 10.



LOCALITY: BAULKHAM HILLS



LOCALITY: CASTLE HILL

SCALE: 1 : 3,000

N

50 25 0 50 100 150 Metres

Legend

Sheet Boundary | Road Widening

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

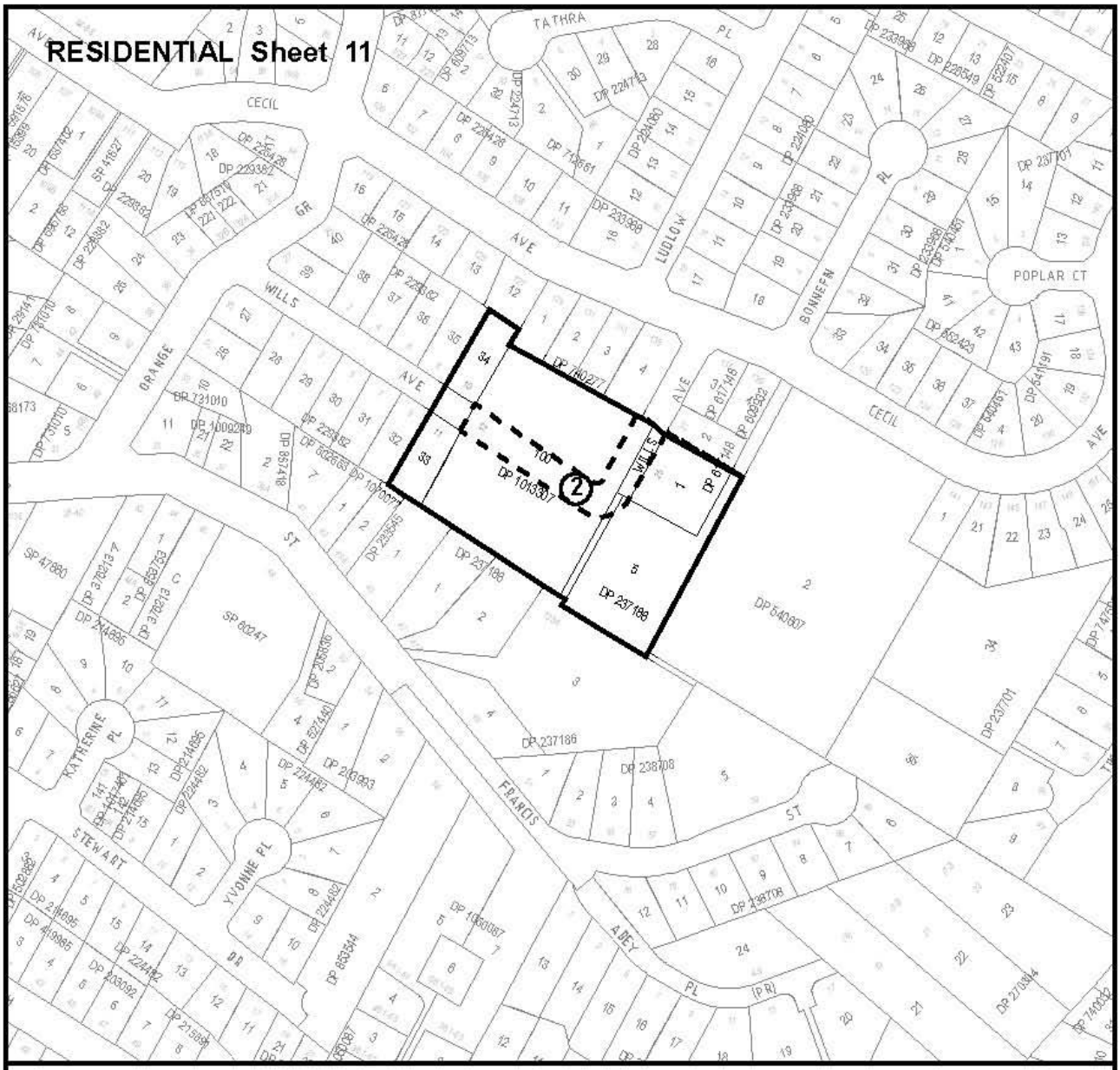
THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 10 of 46

DRAWN BY	B. CLISSOLD	DATE 20/10/2010	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010	
PLANNING OFFICER	V. D'EMANUELLE	DATE 20/10/2010	Date of Adoption: Minute No. Came into Force:
FILE No.	FP 171		

Map Document: S:\Projects\PlanSeu\Consolidating_DCP\The_Hills_DCP_2012\Draft\Part8_Sec2\Sheet_10\Part8_Sec2_Sh10.mxd



ROAD CLASSIFICATION

ROAD TYPE		VERGE	CARRIAGEWAY	VERGE
②	15 Metres Wide	3.5	8.0	3.5

Legend

- Sheet Boundary
- Proposed Road

N

SCALE: 1:3,000

50 25 0 50 100 Metres

LOCALITY: CASTLE HILL

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 11 of 46

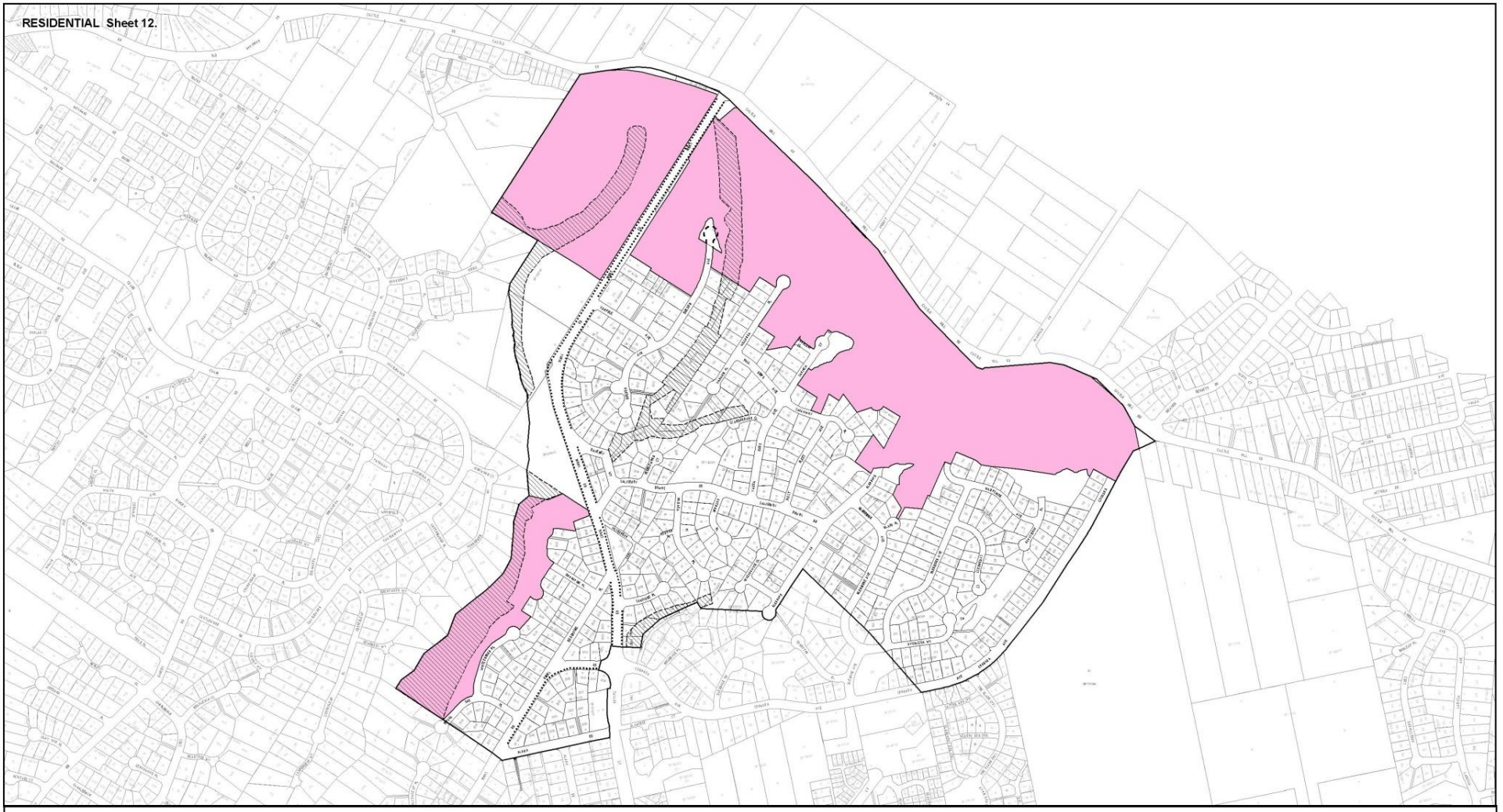
DRAWN BY	B. CLISSOLD	DATE	20/10/2010
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE	20/10/2010
PLANNING OFFICER	V. D'EMANUELLE	DATE	20/10/2010
FILE No.	FP 171		

STATEMENT OF RELATIONSHIP WITH OTHER PLANS

This plan is to be read in conjunction with
The Hills DCP statement and The Hills LEP 2012

Date of Adoption:
Minute No.
Came into Force:

Map Document: S:\Projects\Plan Sem\Consolidating_DCP\The_Hills_DCP_2012\Draft\Part8_Sec2\Sheet_11\Part8_Sec2_Sh11.mxd



N

SCALE: 1:4,000

50 25 0 50 100 150 200 250

Metres

LOCALITY: West Pennant Hills

Legend

- Sheet 12 Boundary
- Restricted Development (Sht 12)
- Proposed Road
- Control 2.14.2
- 1.2m Wide Concrete Footpath

DRAWN BY	B. CLISSOLD	DATE 20/10/2010
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010
PLANNING OFFICER	V. D'EMANUELE	DATE 20/10/2010
FILE No.	FP 171	

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 12 of 46

STATEMENT OF RELATIONSHIP WITH OTHER PLANS

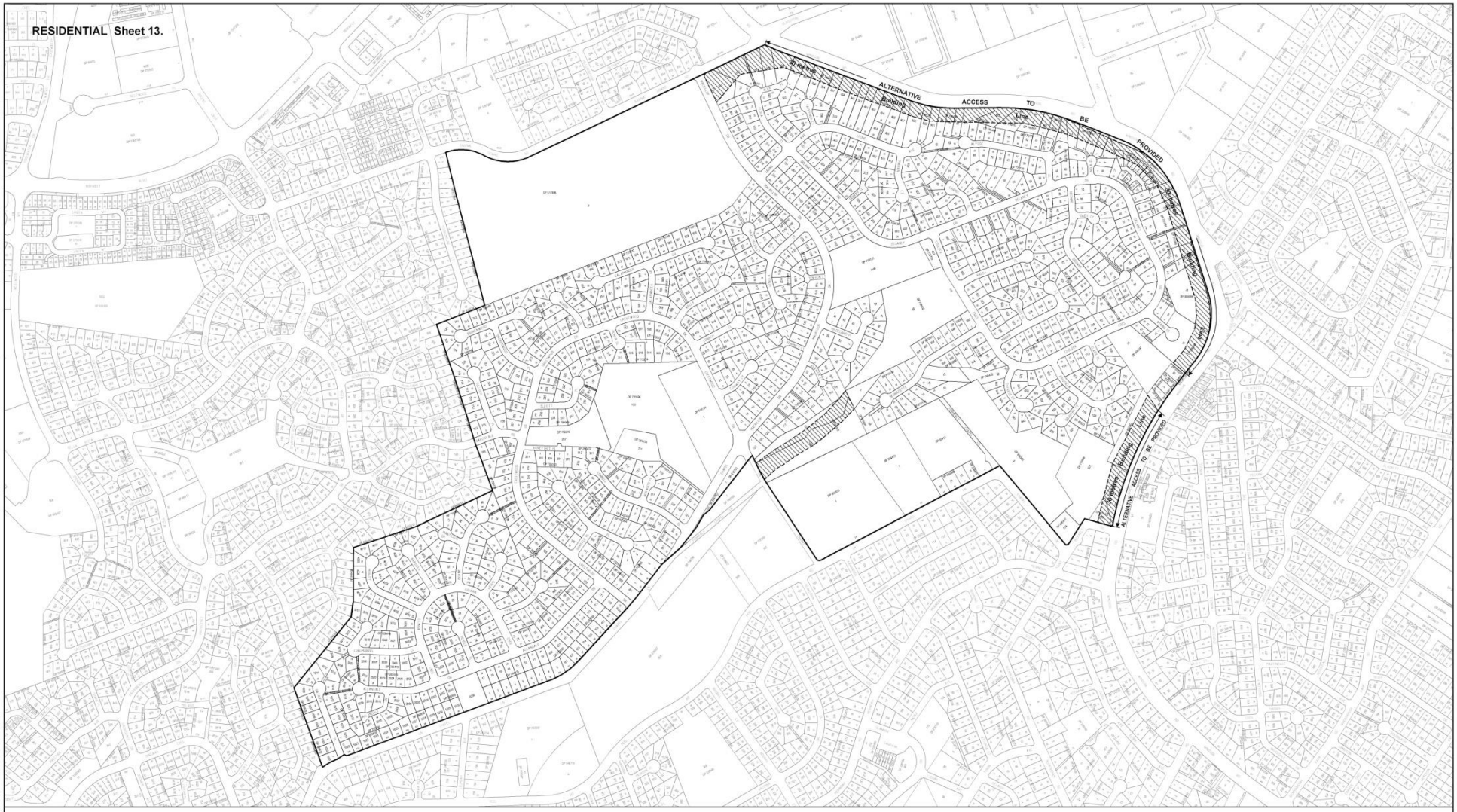
This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012

Date of Adoption:
Minute No.:
Came into Force:

Date of Amendment:

Map Document: S:\Projects\PlanSwm\Consolidating_DCP\The_Hills_DCP_2012\Draft\Part B_Sec2\Sheet_12\Part B_Sec2_Sht12.mxd

RESIDENTIAL Sheet 13.



Legend

Sheet Boundary

Restricted Development

N

SCALE: 1:4,000

50 25 0 50 100 150 200 250 Metres

LOCALITY: BAULKHAM HILLS

DRAWN BY	L. LI	DATE 02/05/2013
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 02/05/2013
PLANNING OFFICER	A. BANYAI	DATE 02/05/2013
FILE No.	FP 171	

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 13 of 46

STATEMENT OF RELATIONSHIP WITH OTHER PLANS

This plan is to be read in conjunction with
The Hills DCP statement and The Hills LEP 2012

Date of Adoption: 28/05/2013
Minute No.
Came into Force:

Date of Amendment:

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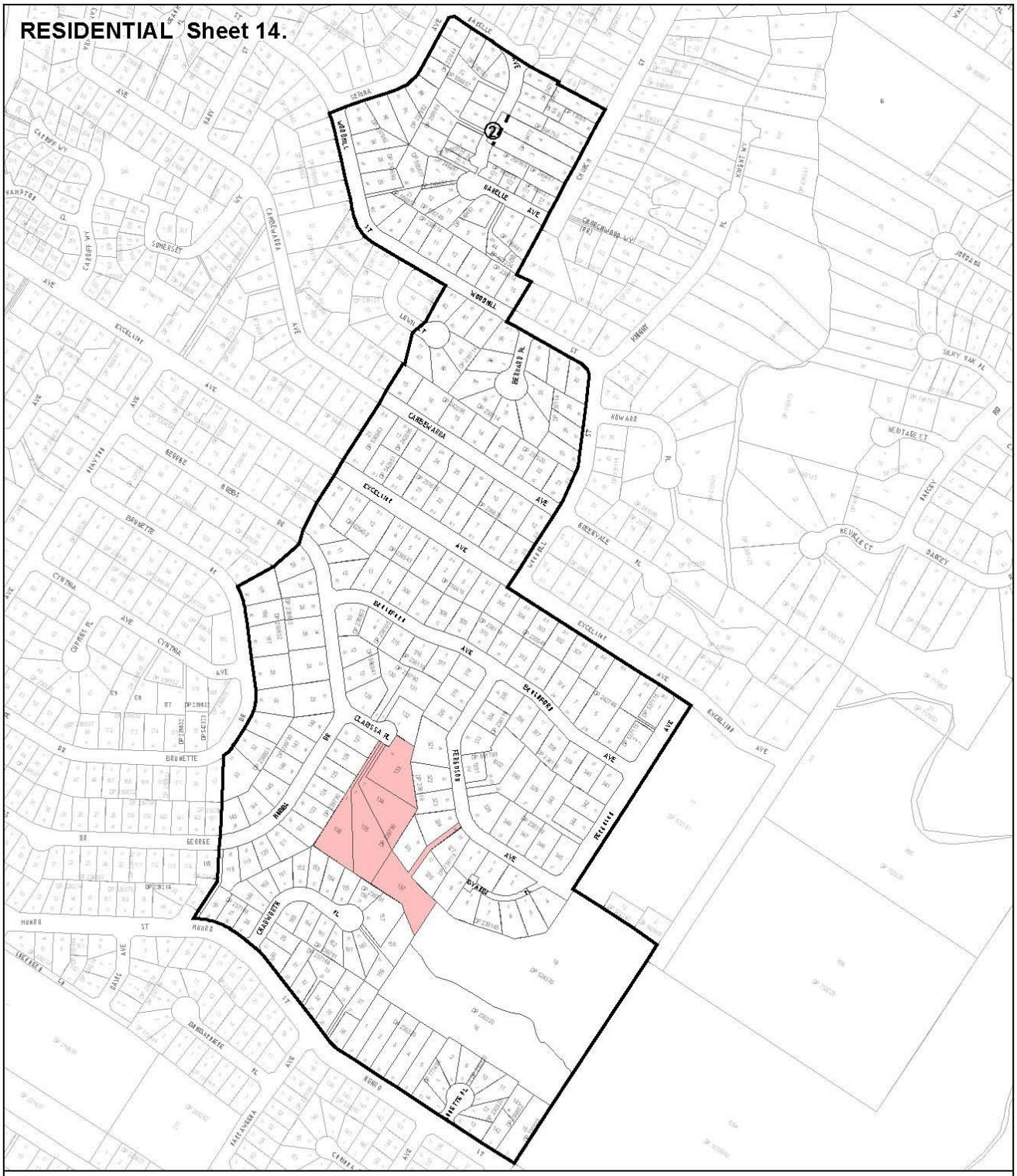


ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 14 of 46

DRAWN BY	W. WRIGHT	DATE	20/10/2006
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE	20/10/2006
PLANNING OFFICER	A. HOWARTH	DATE	20/10/2006
FILE No.	FP 171		

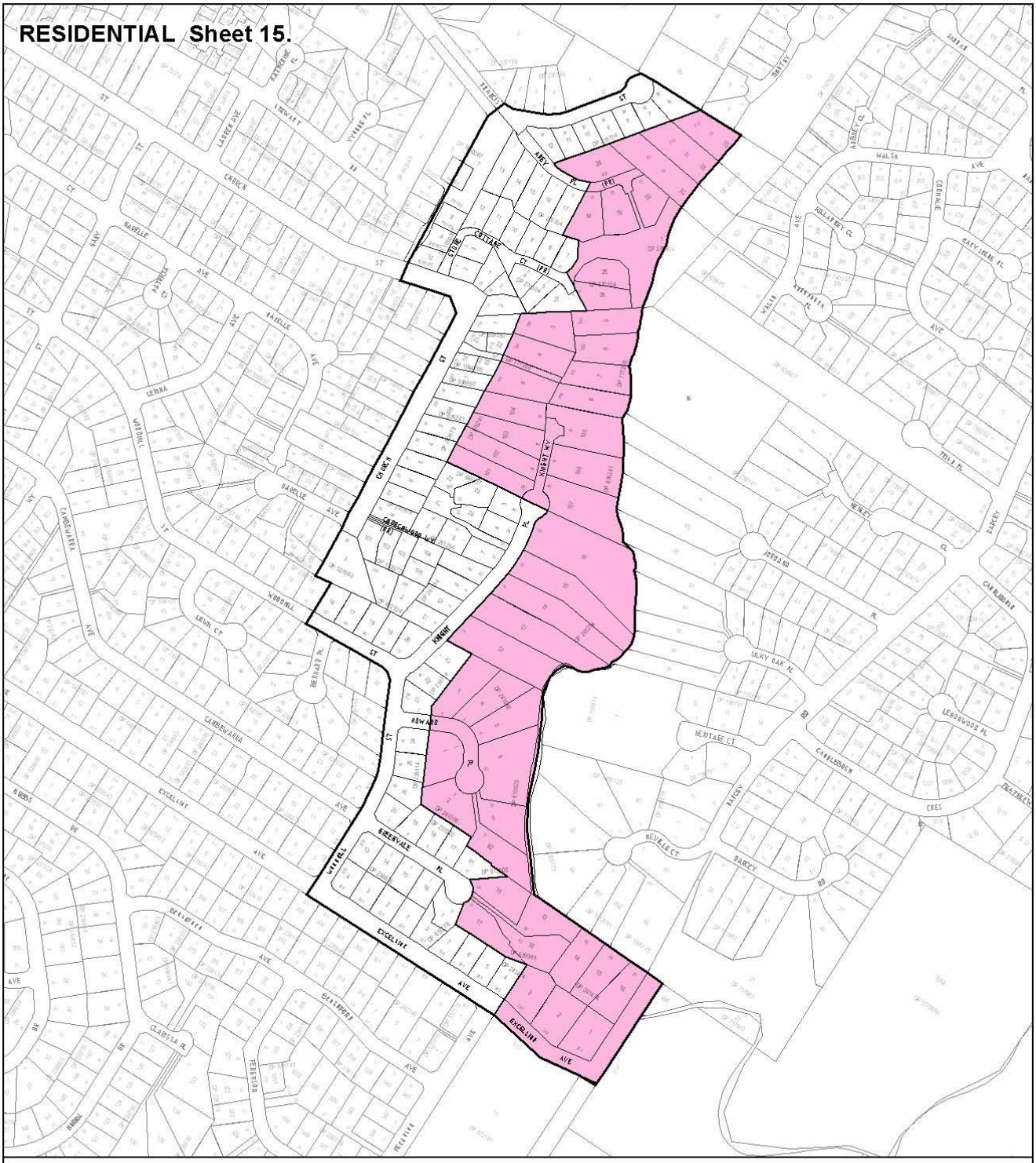
STATEMENT OF RELATIONSHIP WITH OTHER PLANS

This plan is to be read in conjunction with
The Hills DCP statement and The Hills LEP 2012

Date of Adoption:
Minute No.
Came into Force:

Map Document: S:\Projects\PlanSet\Consolidating_DCP\The_Hills_DCP_2012\Draft\PartB_Sec2\Sheet_14\PartB_Sec2_Sh14.mxd

RESIDENTIAL Sheet 15.



Legend

Sheet 15 Boundary

Control 2.14.2

SCALE: 1:4,000

50 25 0 50 100 150

Metres

N

LOCALITY: CASTLE HILL

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

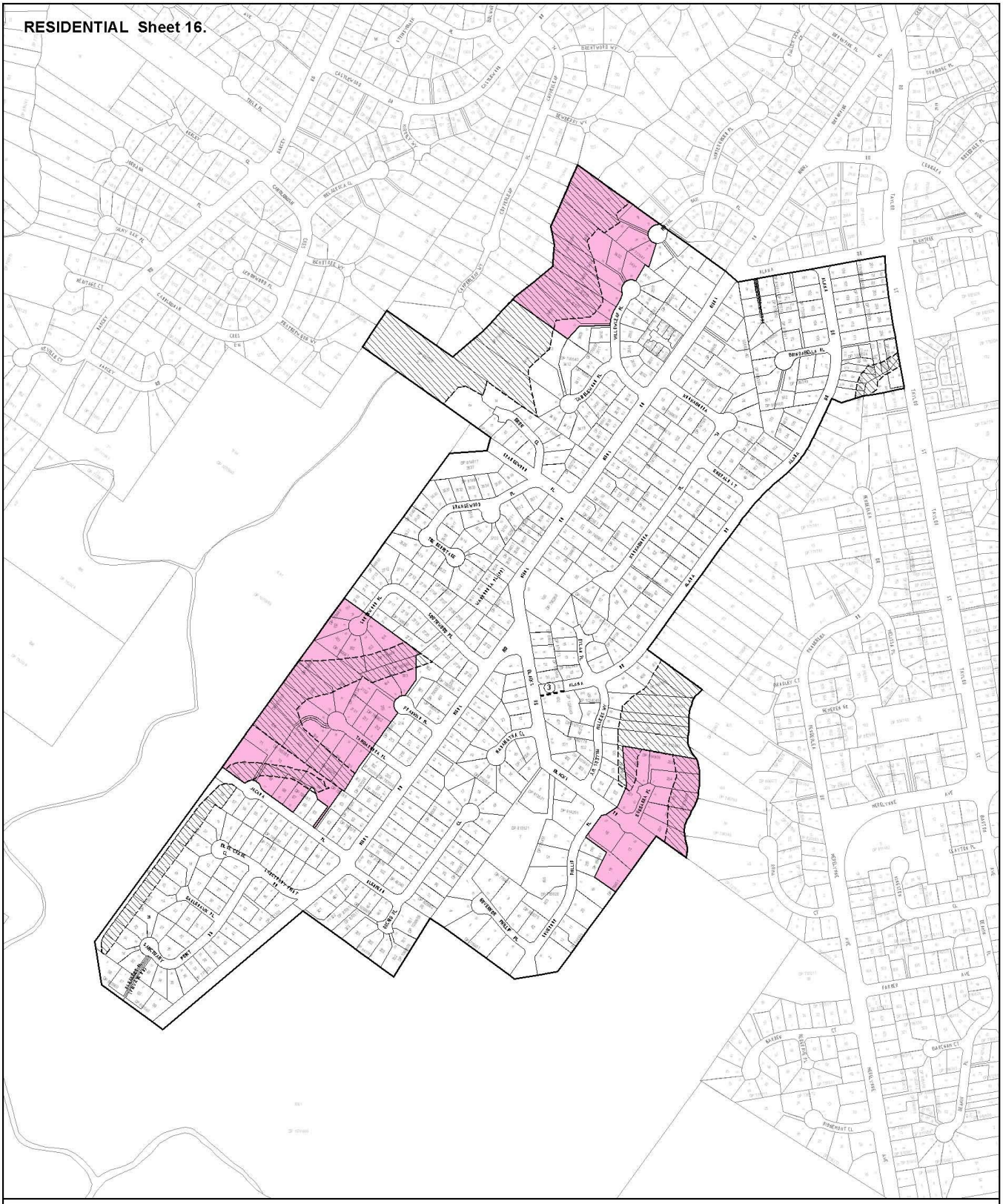
THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 15 of 46

DRAWN BY	B. CLISSOLD	DATE 20/10/2010	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010	
PLANNING OFFICER	V. D'EMANUELE	DATE 20/10/2010	Date of Adoption: Minute No. Came into Force:
FILE No.	FP 171		

Map Document:S:\Projects\PlanSeal\Consolidating_DCP\The_Hills_DCP_2012\Draft\Part8_Sec2\Sheet_15\Part8_Sec2_Sh15.mxd

RESIDENTIAL Sheet 16.



ROAD TYPE	ROAD CLASSIFICATION VERGE	CARRIAGEWAY	VERGE
3	3.5	11	3.5

Legend

- Sheet Boundary
- Restricted Developement
- Control 2.14.2
- Proposed Road

N

SCALE: 1:4,000

50 25 0 50 100 150 200 Metres

LOCALITY: WEST PENNANT HILLS

DRAWN BY	B. CLISSOLD	DATE 20/10/2010
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010
PLANNING OFFICER	V. D'EMANUELE	DATE 20/10/2010
FILE No.	FP 171	

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

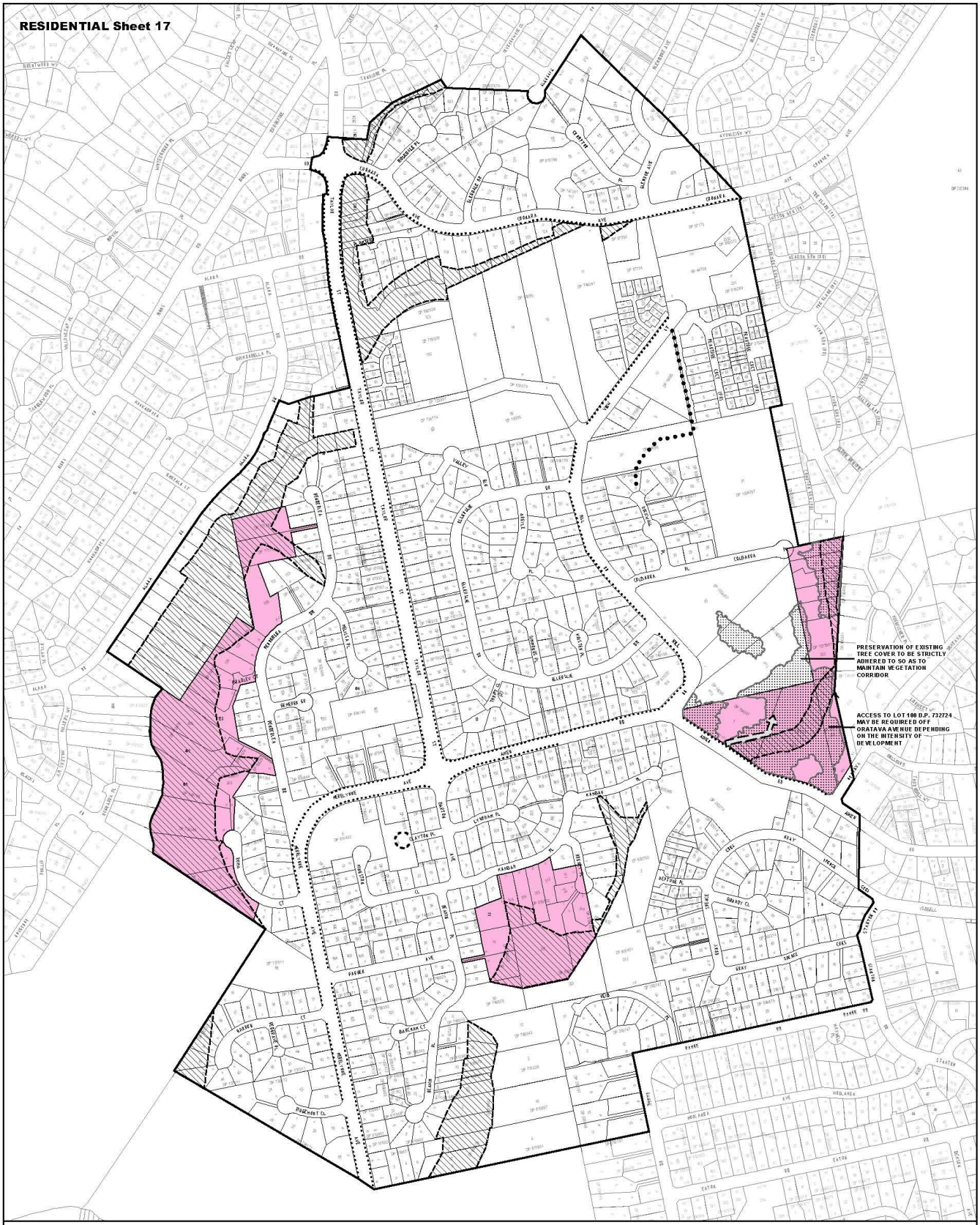
Part B Section 2 Map Sheet 16 of 46

STATEMENT OF RELATIONSHIP WITH OTHER PLANS

This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012

Date of Adoption:
Minute No.
Came into Force:

Map Document: S:\Projects\PlanSets\Consolidating_DCP\The_Hills_DCP_2012\DraftPartB_Sec2\Sheet_16\PartB_Sec2_Sh16.mxd



N

SCALE: 1:4,000

50 25 0 50 100 150 200 Metres

Legend

- Sheet 17 Boundary
- Restricted Development
- Proposed Road
- Vegetation Corridor
- Predestrian Access
- Preferred line of vehicular access
- Control 2.14.2
- 1.2m wide concrete footpath 600mm from boundary

LOCALITY: West Pennant Hills

DRAWN BY	B. CLISSOLD	DATE	20/10/2010
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE	20/10/2010
PLANNING OFFICER	V. D'EMANUELE	DATE	20/10/2010
FILE No.	FP 171		

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

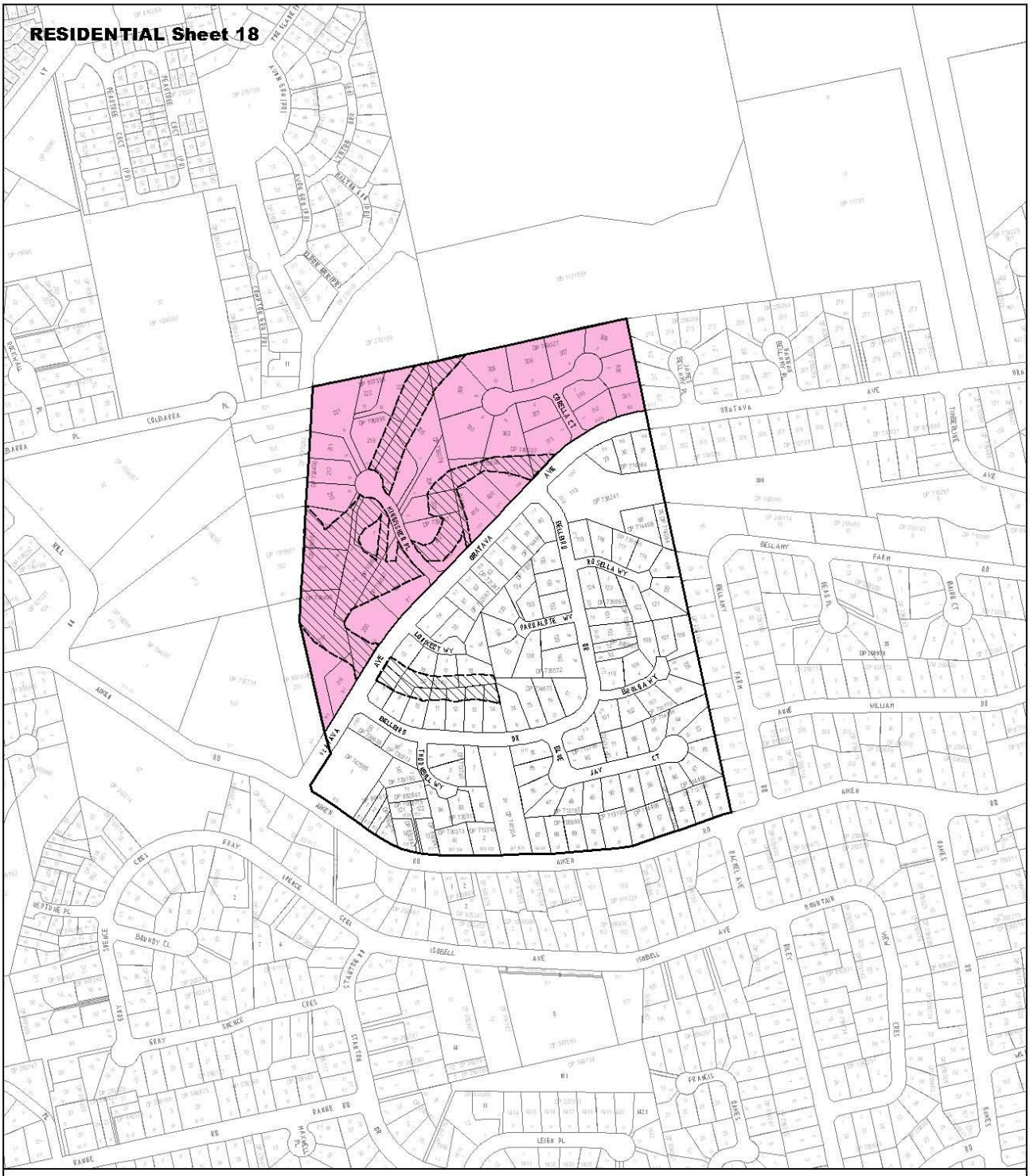
Part B Section 2 Map Sheet 17 of 46

STATEMENT OF RELATIONSHIP WITH OTHER PLANS

This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012

Date of Adoption:
Minute No.
Came into Force:

Map Document: S:\Projects\PlanSen\Consolidating_DCP\The_Hills_DCP_2012\Draft\Part B_Sec2\Sheet_17\Part B_Sec2_Sh17.mxd



Legend

Sheet Boundary | Restricted Development | Control 2.14.2

SCALE: 1:4,000

50 25 0 50 100 150
Metres

N

LOCALITY: CASTLE HILL

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 18 of 46

DRAWN BY	B. CLISSOLD	DATE 20/10/2010	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010	
PLANNING OFFICER	V. D'EMANUELE	DATE 20/10/2010	Date of Adoption: Minute No. Came into Force:
FILE No.	FP 171		

Map Document: G:\Projects\PlanSeri\Consolidating_DCP\The_Hills_DCP_2012\Draft\Part B_Sec2\Sheet_18\Part B_Sec2_Sh18.mxd



ROAD CLASSIFICATION

ROAD TYPE	VERGE	CARRIAGEWAY	VERGE
2	3.5	8.0	3.5

Legend

Sheet Boundary

Proposed Road

N

SCALE: 1:4,000

50 25 0 50 100 150 200 Metres

LOCALITY: WEST PENNANT HILLS

DRAWN BY	B. CLISSOLD	DATE 20/10/2010
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010
PLANNING OFFICER	V. D'EMANUELE	DATE 20/10/2010
FILE No.	FP 171	

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

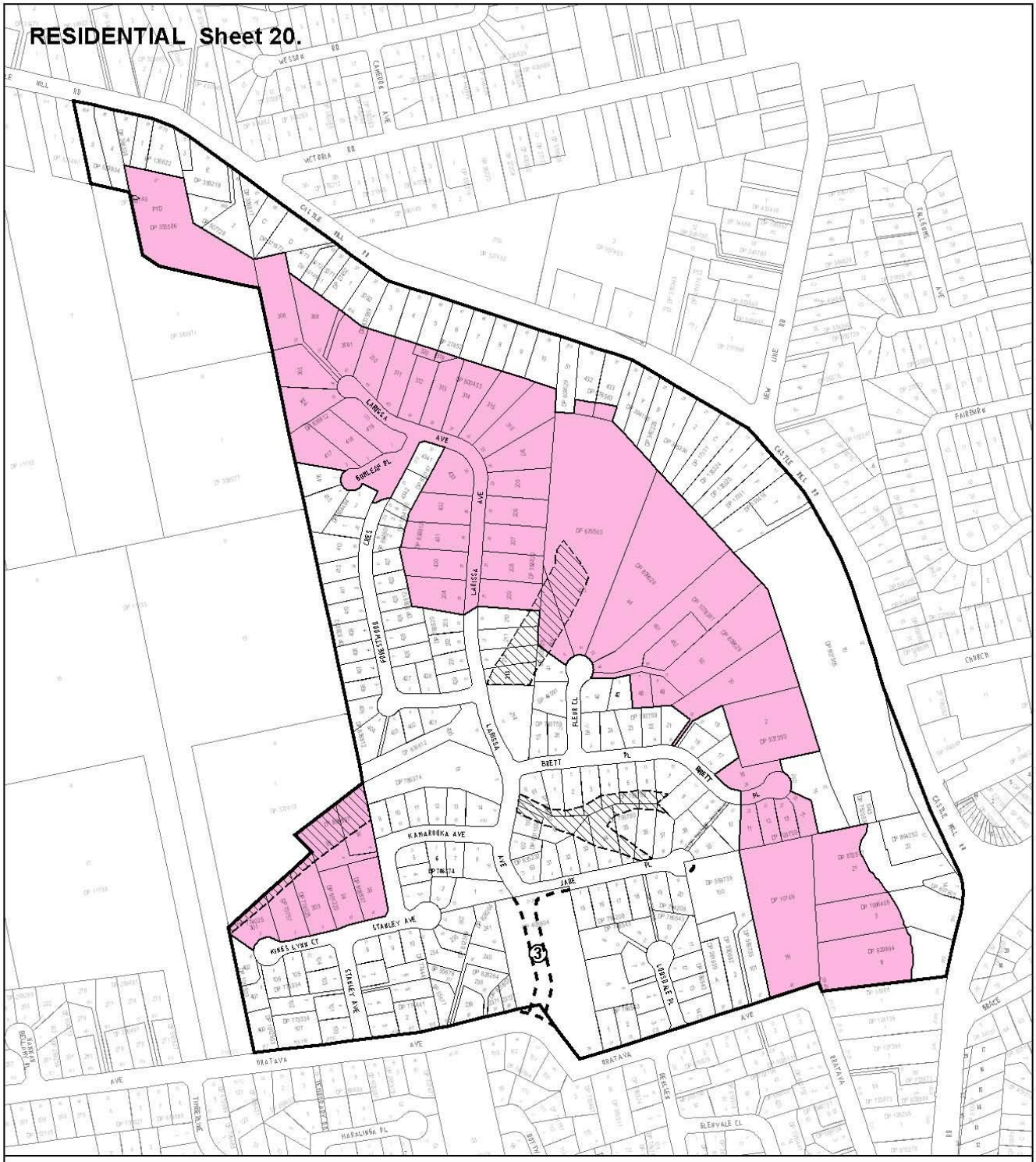
Part B Section 2 Map Sheet 19 of 46

STATEMENT OF RELATIONSHIP WITH OTHER PLANS

This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012

Date of Adoption:
Minute No.
Came into Force:

Map Document: S:\Workdir\Data\Consolidating_DCP\The_Hills_DCP_2012\Draft\Part B_Sec2\Sheet_19\Draft_Sec2_Sh19.mxd



ROAD CLASSIFICATION

ROAD TYPE	VERGE	CARRIAGEWAY	VERGE
(3)	3.5	11.0	3.5

SCALE: 1 : 4,000

N

50 25 0 50 100 150 Metres

Legend

- Sheet Boundary
- Restricted Development
- Control 2.14.2
- Proposed Road

LOCALITY: WEST PENNANT HILLS

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

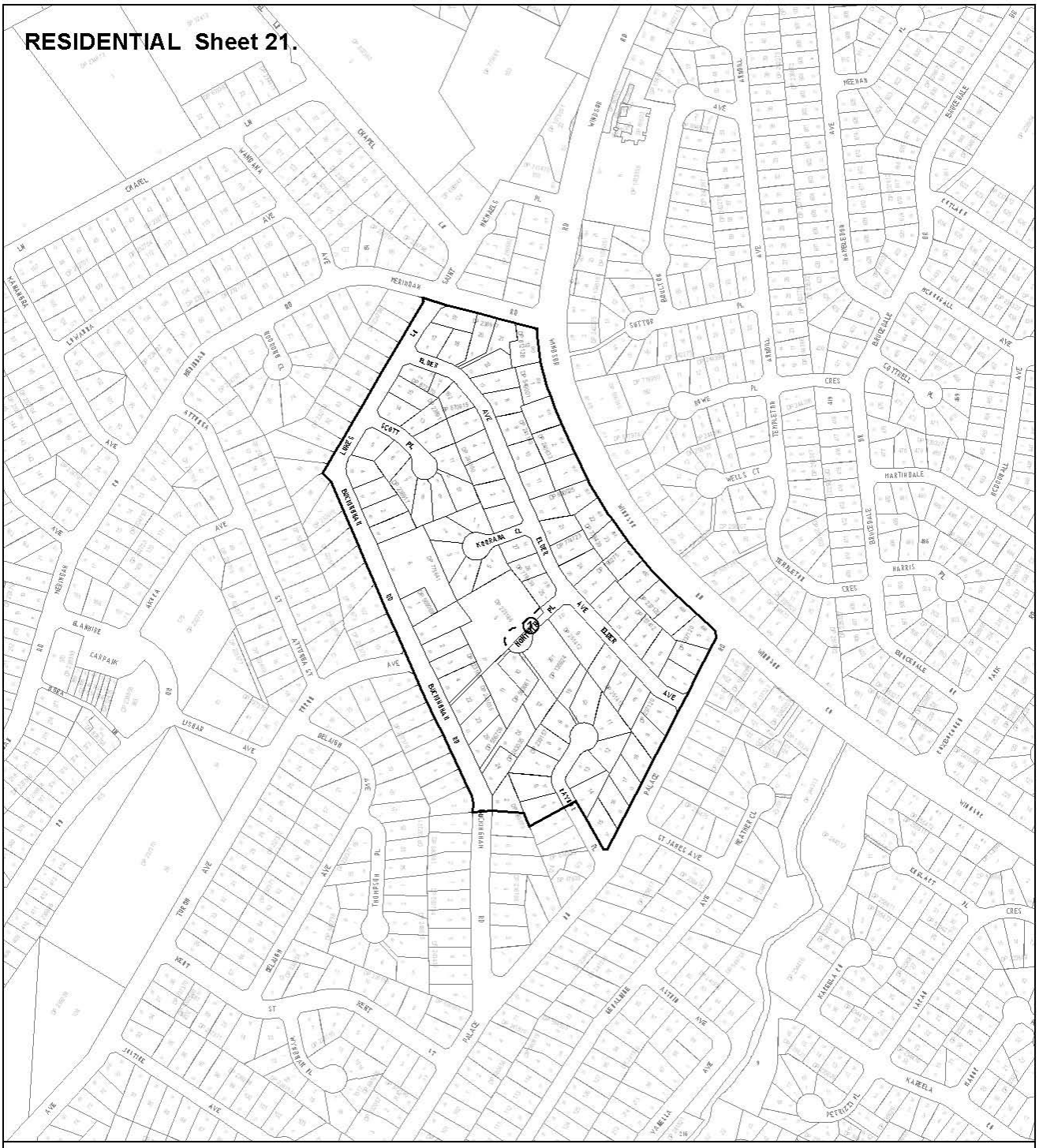
THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 20 of 46

DRAWN BY	B. CLISSOLD	DATE 20/10/2010	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010	
PLANNING OFFICER	V. D'EMANUELE	DATE 20/10/2010	Date of Adoption: Minute No. Came into Force:
FILE No.	FP 171		

Map Document: S:\Projects\PlanSets\Consolidating_DCP\The_Hills_DCP_2012\Draft\PartB_Sec2\Sheet_20\PartB_Sec2_Sh20.mxd


RESIDENTIAL Sheet 21.
BUCKINGHAM RD
ELDER AVE
KERRAM CL
SCOTT PL
HUNTER PL
WINDSOR RD
WINDSOR
ROAD
CHAPEL
WANDANA
AVE
HEREWARD
AVE
BLAMIRE
CARPARK
LISBAR
AVE
BELAIR
AVE
THOMPSON
PL
HEAT
ST
JAYTHE
AVE
WYKEHAM
PL
ATTUNGA
CT
ATTUNGA
AVE
WOODBURN
CL
BRIDGEDALE
AVE
HAWKESBURN
AVE
ANMAL
AVE
WEENAH
AVE
BRIDGEDALE
AVE
FERNLEA
AVE
MCKELLAR
AVE
CRES
GOTHBEL
PL
TEMPLETON
CRES
WELLS CT
MARTINDALE
CRES
BRIDGEDALE
AVE
HARRIS
PL
BRIDGEDALE
AVE
WINDSOR
RD
PALACE
AVE
ST JAMES AVE
WEATHER CL
KERRATA
PL
CRES
KAMBALA
CRES
KAMBELA
AVE
PETRIZZI PL
KAMBELA
AVE
MCKELLAR
AVE
BALTAN
PL
SUTTON
PL
BALTAN
AVE
MCKELLAR
AVE
WINDSOR
RD
WEENAH
AVE
BRIDGEDALE
AVE
FERNLEA
AVE
WINDSOR
RD
CHAPEL
RD
CHAPEL
LN
WANDANA
AVE
HEREWARD
AVE
WOODBURN
CL
ATTUNGA
AVE
HEREWARD
AVE
BLAMIRE
CARPARK
LISBAR
AVE
BELAIR
AVE
THOMPSON
PL
HEAT
ST
JAYTHE
AVE
WYKEHAM
PL
ATTUNGA
CT
ATTUNGA
AVE
BUCKINGHAM
RD
ELDER
AVE
SCOTT
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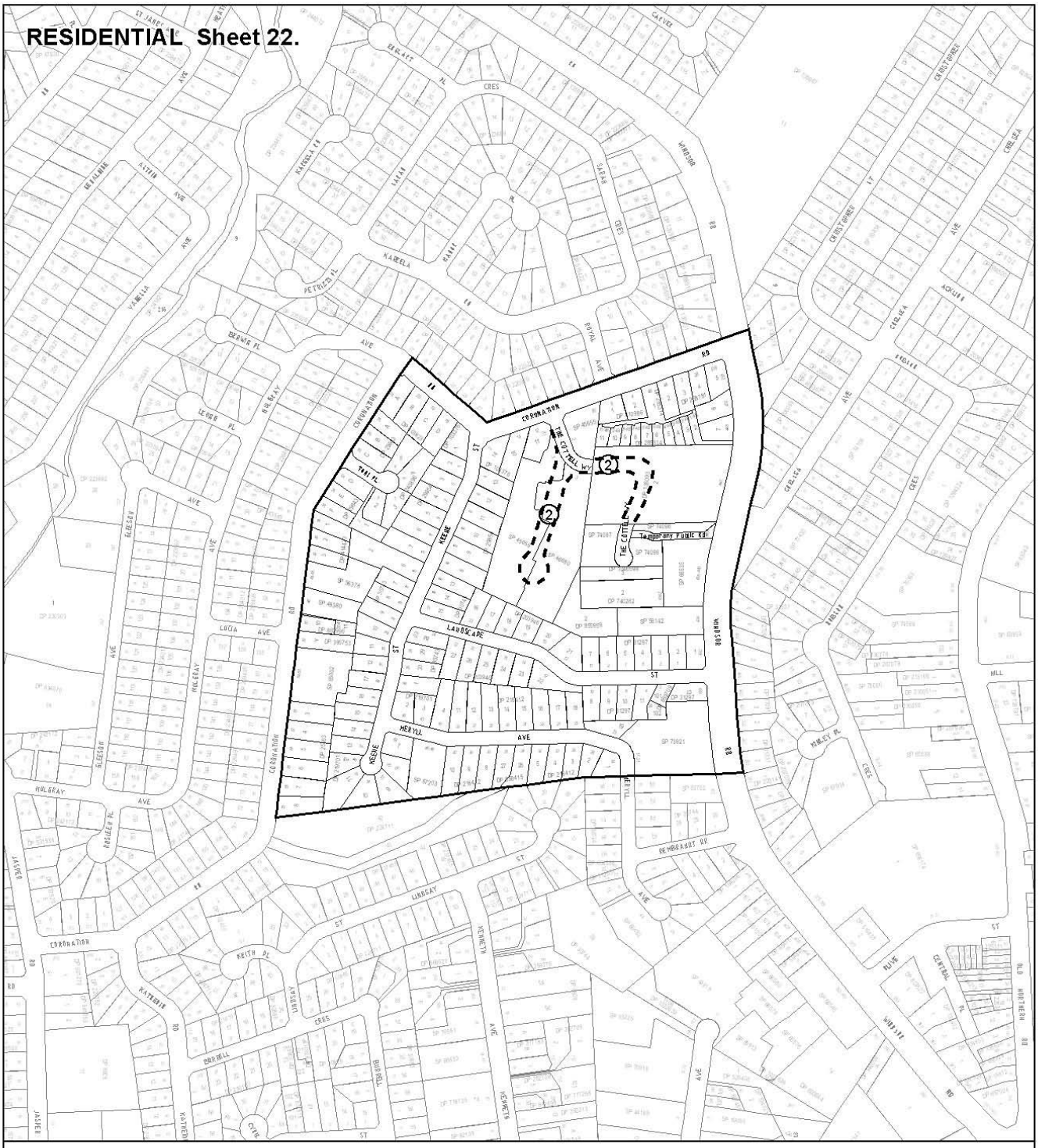
KERRAM
CL
HUNTER
PL
ELDER
AVE
BUCKINGHAM
RD
BUCKINGHAM
RD


RESIDENTIAL Sheet 22.

ROAD CLASSIFICATION

ROAD TYPE	VERGE	CARRIAGEWAY	VERGE
2	3.5	8.0	3.5

Legend

Sheet Boundary

Proposed Road

SCALE: 1 : 4,000

N

50 25 0 50 100 150 Metres

LOCALITY: BAULKHAM HILLS

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 22 of 46

DRAWN BY	B. CLISSOLD	DATE	20/10/2010
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE	20/10/2010
PLANNING OFFICER	V. D'EMANUELE	DATE	20/10/2010
FILE No.	FP 171		

STATEMENT OF RELATIONSHIP WITH OTHER PLANS
This plan is to be read in conjunction with
The Hills DCP statement and The Hills LEP 2012

Date of Adoption:
Minute No.
Came into Force:

Map Document: S:\Projects\PlanSem\Consolidating_DCP\The_Hills_DCP_2012\Draft\Part B_Sec2\Sheet_22\Part B_Sec2_Sh22.mxd

RESIDENTIAL Sheet 23.



Legend

Sheet 23 Boundary

Restricted Development

Building Setback (6 metre & variable)

N

SCALE: 1:3,000

40 20 0 40 80 120 160 Metres

LOCALITY: BAULKHAM HILLS

DRAWN BY	B. CLISSOLD	DATE	20/10/2010
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE	20/10/2010
PLANNING OFFICER	V. D'EMANUELE	DATE	20/10/2010
FILE No.	FP 171		

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 23 of 46

STATEMENT OF RELATIONSHIP WITH OTHER PLANS

This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012

Date of Adoption:
Minute No.
Came into Force:

Map Document: S:\Projects\PlanSer\Consolidating_DCP\The_Hills_DCP_2012\Draft\Part B_Sec2\Sheet_23\Part B_Sec2_Sh23.mxd



SCALE: 1:3,000

N

40 20 0 40 80 120 Metres

Legend

Sheet Boundary

Proposed Road

LOCALITY: CARLINGFORD

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 24 of 46

DRAWN BY	B. CLISSOLD	DATE 20/10/2010	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010	
PLANNING OFFICER	V. D'EMANUELE	DATE 20/10/2010	Date of Adoption: Minute No. Came into Force:
FILE No.	FP 171		

Map Document: G:\Projects\PlanSer\Consolidating_DCP\The_Hills_DCP_2012\Draft\PartB_Sec2\Sheet_24\PartB_Sec2_Sh24.mxd



ROAD CLASSIFICATION

ROAD TYPE	VERGE	CARRIAGEWAY	VERGE
2	3.5	8.0	3.5

Legend

Sheet Boundary

Proposed Road

N

SCALE: 1:4,000

60 25 0 50 100 150 200 Metres

LOCALITY: BAULKHAM HILLS

DRAWN BY	B. CLISSOLD	DATE 20/10/2010
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010
PLANNING OFFICER	V. D'EMANUELE	DATE 20/10/2010
FILE No.	FP 171	

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

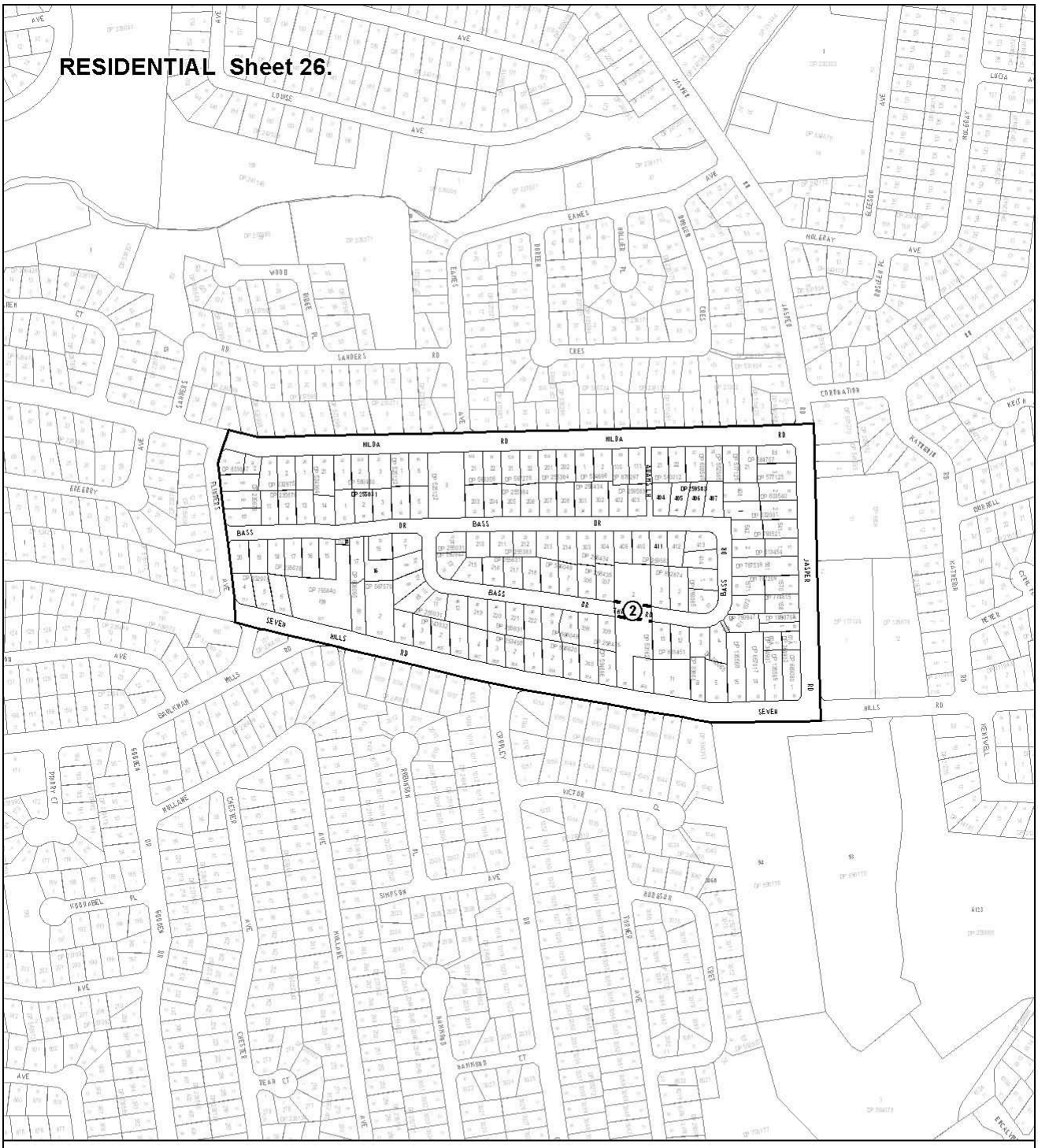
THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 25 of 46

STATEMENT OF RELATIONSHIP WITH OTHER PLANS
This plan is to be read in conjunction with
The Hills DCP statement and The Hills LEP 2012

Date of Adoption:
Minute No.
Came into Force:

Map Document: G:\Projects\Plans\Consolidating_DCP\The_Hills_DCP_2012\Draft\Part B_Sec2\Sheet_25\Part B_Sec2_Sht25.mxd



N

SCALE: 1:4,000

50 25 0 50 100 150 Metres

ROAD CLASSIFICATION

ROAD TYPE	VERGE	CARRIAGEWAY	VERGE
2	3.5	8.0	3.5

Legend

Sheet Boundary

Proposed Road

LOCALITY: BAULKHAM HILLS

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 26 of 46

DRAWN BY	B. CLISSOLD	DATE	20/10/2010
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE	20/10/2010
PLANNING OFFICER	V. D'EMANUELE	DATE	20/10/2010
FILE No.	FP 171		

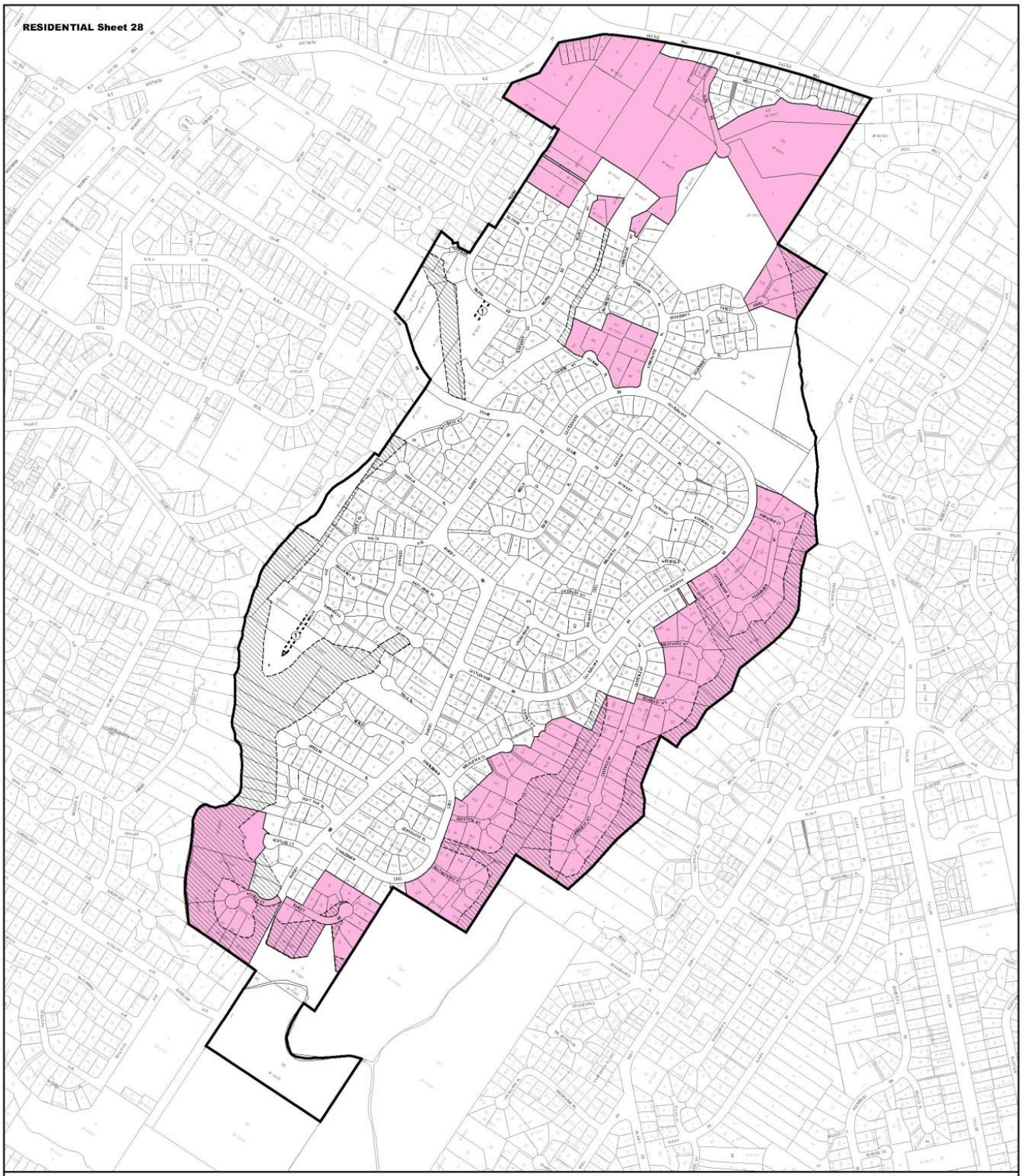
STATEMENT OF RELATIONSHIP WITH OTHER PLANS
This plan is to be read in conjunction with
The Hills DCP statement and The Hills LEP 2012

Date of Adoption:
Minute No.
Came into Force:

Map Document: S:\Projects\PlanSem\Consolidating_DCP\The_Hills_DCP_2012\Draft\PartB_Sec2\Sheet_26\PartB_Sec2_Sh26.mxd

Residential Sheet 27


WILLIAM THOMPSON
CRES
GEORGE
ST
BASIATA
AVE
WATKINS
DR
CRES
ST
AVE
ROSE
ST
CHARLES
ST
WATKINS
DR
CRES
ST
AVE
ST
AVE
ST
AVE



ROAD CLASSIFICATION

ROAD TYPE	VERGE	CARRIAGEWAY	VERGE	
1	3.5	8.0	3.5	(Max 10 Lots)

N

SCALE: 1:4,000

LOCALITY: CASTLE HILL

LEGEND

Sheet Boundary | Restricted Development | Control 2.14.2

Proposed Road

DRAWN BY	B. CLISSOLD	DATE 20/10/2010
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010
PLANNING OFFICER	V. D'EMANUELE	DATE 20/10/2010
FILE No.	FP 171	

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 28 of 46

STATEMENT OF RELATIONSHIP WITH OTHER PLANS
This plan is to be read in conjunction with
The Hills DCP statement and The Hills LEP 2012

Date of Adoption:
Minute No:
Came into Force:



SCALE: 1:4,000

50 25 0 50 100 150 Metres

N

Legend

Sheet Boundary

LOCALITY: Northmead

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

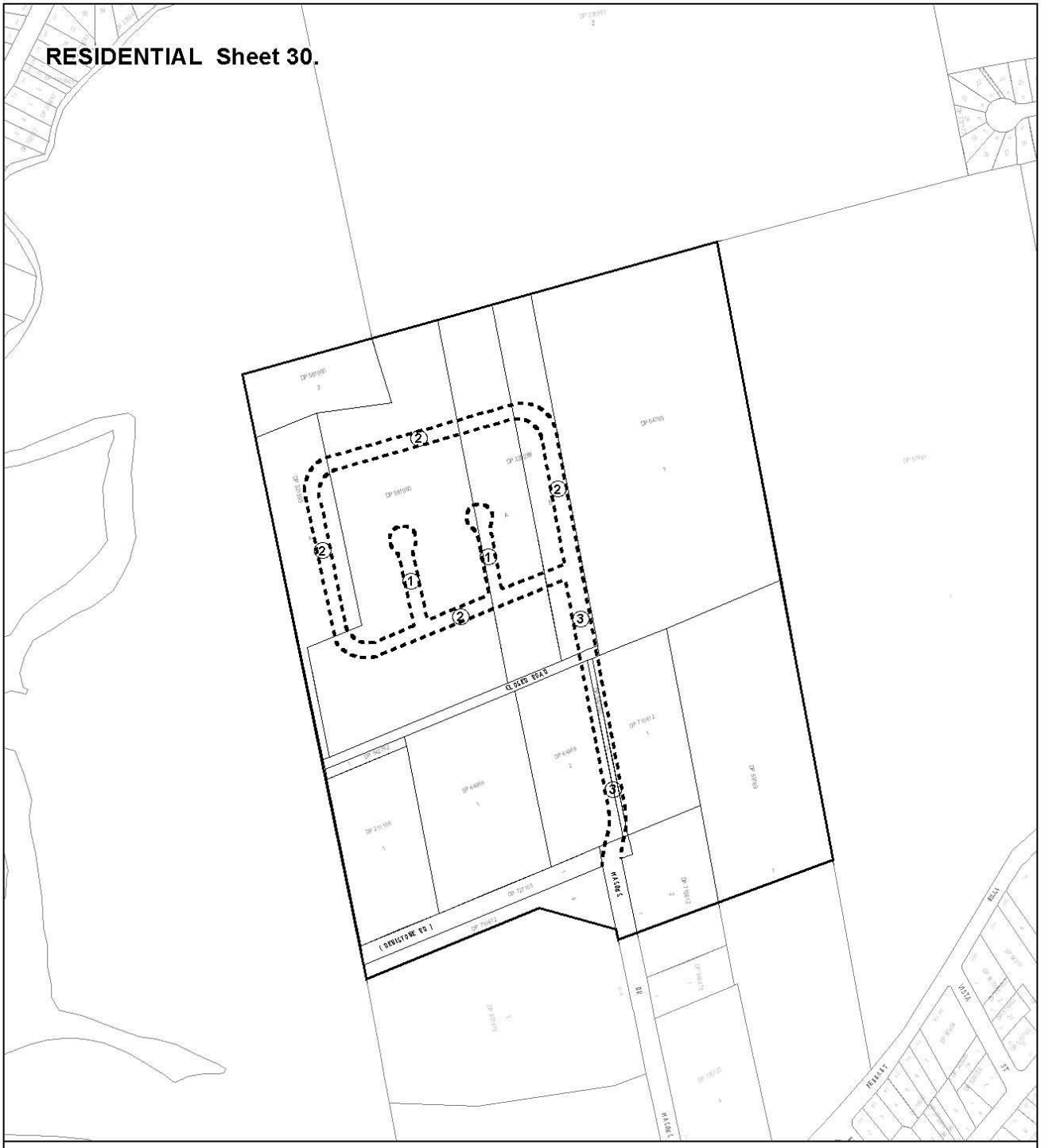
THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 29 of 46

DRAWN BY	B. CLISSOLD	DATE 20/10/2010	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010	
PLANNING OFFICER	V. D'EMANUELE	DATE 20/10/2010	Date of Adoption: Minute No. Came into Force:
FILE No.	FP 171		

Map Document: S:\Projects\PlanSeries\Consolidating_DCP\The_Hills_DCP_2012\Draft\Part B_Sec2\Sheet_29\Part B_Sec2_Sh29.mxd

RESIDENTIAL Sheet 30.



ROAD CLASSIFICATION

ROAD TYPE	VERGE	CARRIAGEWAY	VERGE	
1	3.5	6.0	3.5	(Maximum 10 lots)
2	3.5	8.0	3.5	
3	3.5	11.0	3.5	

Legend

Sheet Boundary

Proposed Road

N

SCALE: 1:4,000

50 25 0 50 100 150 Metres

LOCALITY: North Parramatta

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 30 of 46

DRAWN BY	B. CLISSOLD	DATE 20/10/2010	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010	
PLANNING OFFICER	V. D'EMANUELE	DATE 20/10/2010	Date of Adoption: Minute No. Came into Force:
FILE No.	FP 171		

Map Document: S:\Projects\PlanSer\Consolidating_DCP\The_Hills_DCP_2012\Draft\Part B_Sec2\Sheet_30\Part B_Sec2_Sh30.mxd

RESIDENTIAL Sheet 31

Development Control Plan Provisions

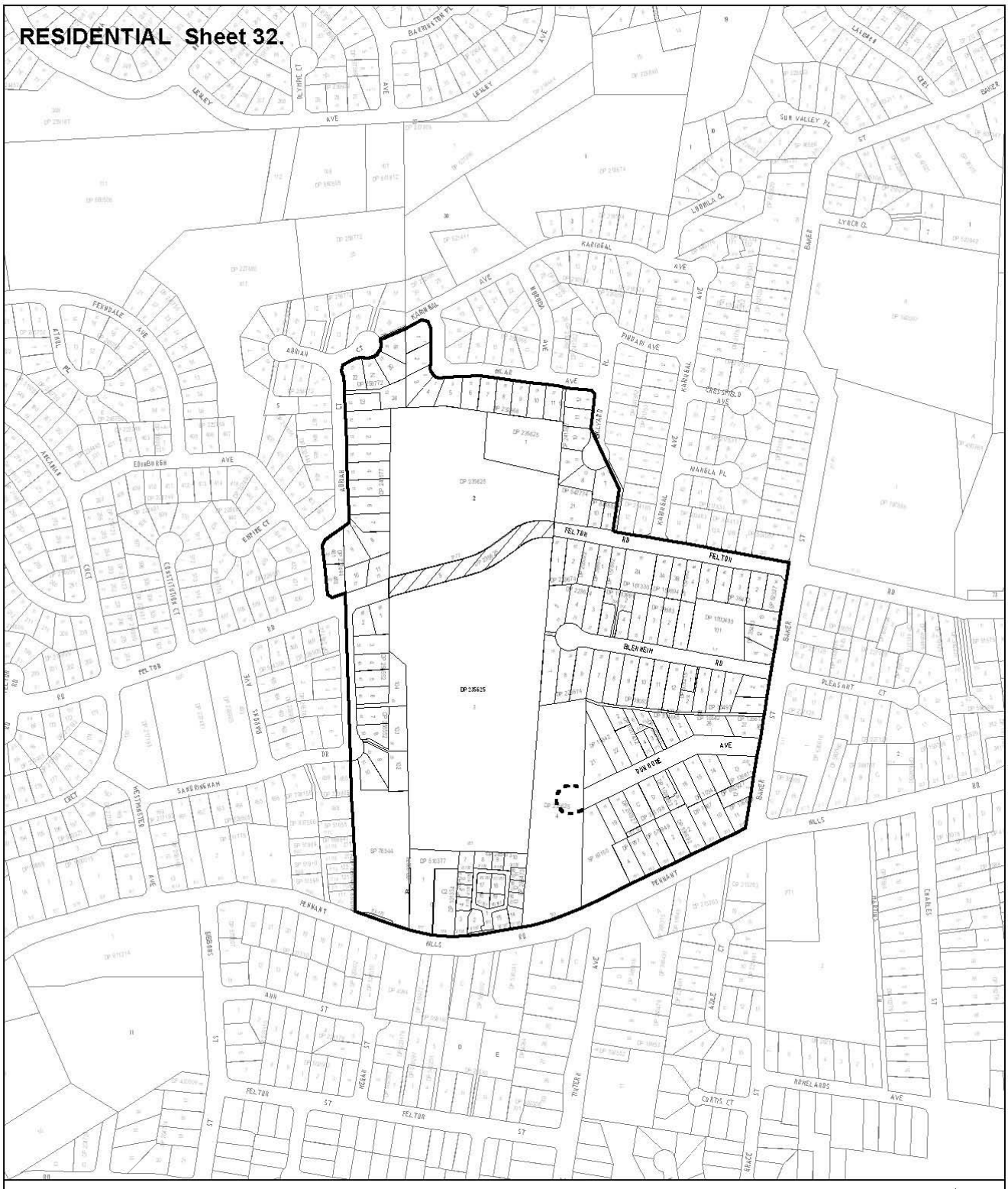
1 A tree preservation order is in force and requirements of this order are to be observed.

2 A community uses area suited to the needs of the future residents of the development area to be provided on site to Council satisfaction.

3 Reasonable conformity with the proposed road pattern shown on the development control plan to be observed. However, departures from that shown will be considered by Council upon merit.

4 Regarding the neighbourhood shop proposed on Pennant Hills Road. The building, by virtue of its set-back from that road and any future public roads in the immediate vicinity, its design, the materials used in its construction and any associated advertising signs or structures, is to complement adjoining development, to the satisfaction of Council to be accessible to vehicular trafffic from public roads other than Pennant Hill Road or any road immediately off that thoroughfare.





ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 32 of 46

DRAWN BY	B. CLISSOLD	DATE 20/10/2006	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2006	
PLANNING OFFICER	A. HOWARTH	DATE 20/10/2006	Date of Adoption: Minute No. Came into Force:
FILE No.	FP 171		

Path: S:\Projects\PlanSem\Consolidating_DCP\The_Hills_DCP_2012\Draft\PartB_Sec2\Sheet_32\PartB_Sec2_Sh32.mxd

RESIDENTIAL Sheet 33.



NOTES:

Road access at intersection of Seven Hills Road & Chapel Lane to be restricted to Left in/Left Out

Legend

Sheet Boundary ●●●●● Cycleway ○○○○○ Footpath 1.2 metres wide

N

SCALE: 1:4,000

50 25 0 50 100 150 200 Metres

LOCALITY: BELLA VISTA

DRAWN BY	B. CLISSOLD	DATE 20/10/2010
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010
PLANNING OFFICER	V. D'EMANUELE	DATE 20/10/2010
FILE No.	FP 171	

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 33 of 46

STATEMENT OF RELATIONSHIP WITH OTHER PLANS

This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012

Date of Adoption:
Minute No.
Came into Force:

Map Document: S:\Projects\PlanServ\Consolidating_DCP\Tks_Hills_DCP_2012\Draft\PartB_Sec2\Sec1_33\PartB_Sec2_S33.mxd

RESIDENTIAL Sheet 33a.

NOTES:

This area (10 metres in width) is to be used only for the purposes of screen planting and is to be landscaped in accordance with the provisions of Council's DCP Part C Section 3 - Lanscaping so as to protect the privacy and amenity of residential development to adjoin existing commercial and future industrial uses, and to encompass existing remnant vegetation.

This area (10 metres in width) is to be used only for the purposes of landscaping and may include hard surfaced paving, the erection of minor structures such as gazibos, pools, barbeques, fixed outdoor seating, garden sheds and the like, but no habitable structures.

The minimum road frontage setback along the northern side of this road is 6 metres. For all other setbacks reference should be made to the standards contained within Council's Development Control Plan Part B Section 2 - Residential.



Legend

Sheet Boundary | Building Setback Landscape | Building Setback Screen

N

SCALE: 1:3,000

50 25 0 50 100 150 Metres

LOCALITY: BELLA VISTA

DRAWN BY	B. CLISSOLD	DATE 20/10/2010
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010
PLANNING OFFICER	V. D'EMANUELE	DATE 20/10/2010
FILE No.	FP 171	

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 33a of 46

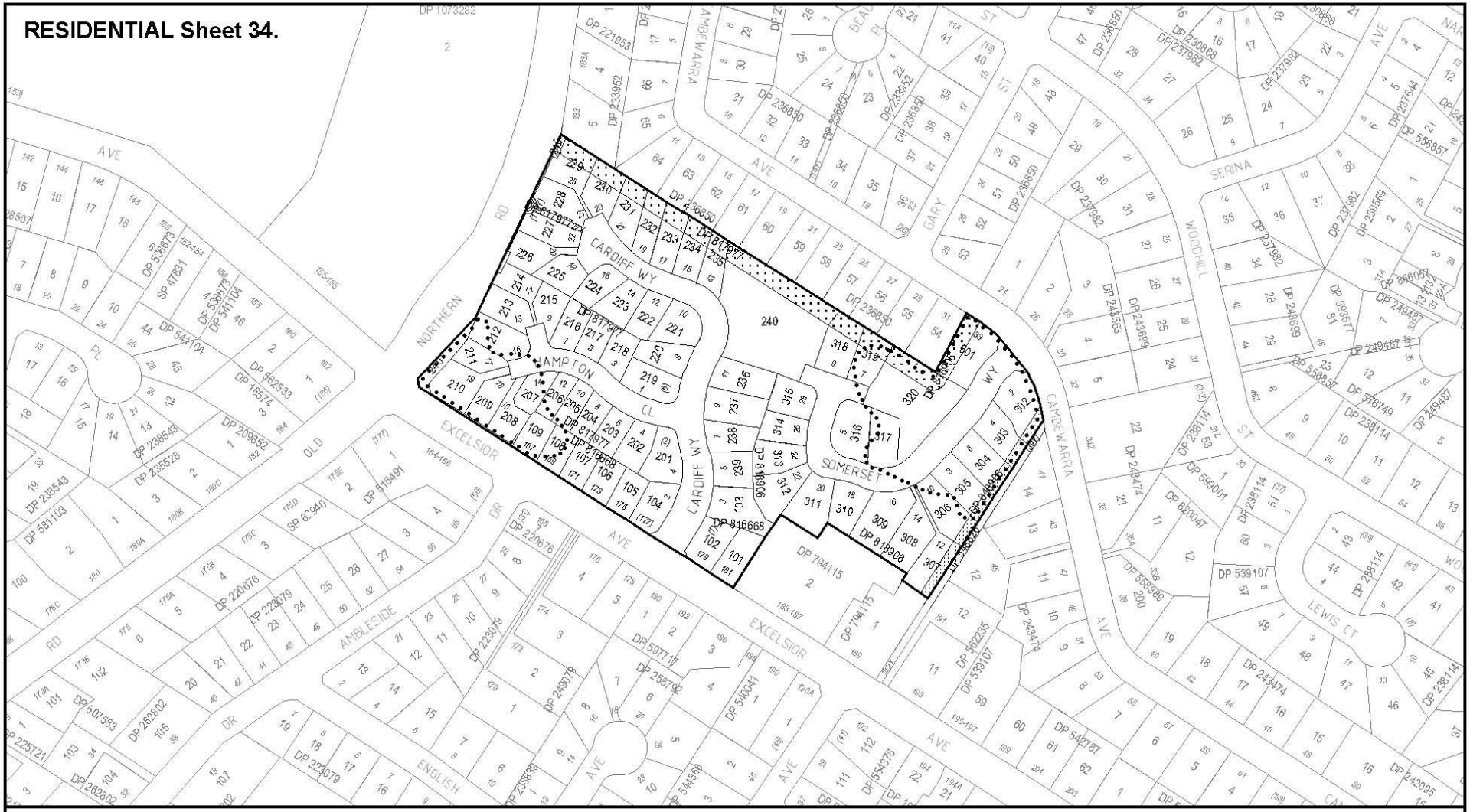
STATEMENT OF RELATIONSHIP WITH OTHER PLANS

This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012

Date of Adoption:
Minute No.
Came into Force:

Map Document: S:\Projects\PlanServ\Consolidating_DCP\The_Hills_DCP_2012\Draft\PartB_Sec2\Sheet_33a\PartB_Sec2_Sh33a.mxd

RESIDENTIAL Sheet 34.



Legend

Sheet Boundary | 6m Building Setback | 9m Building Setback | Existing Strands of Trees

SCALE: 1 : 2,000

40 20 0 40 80 120 Metres

N

LOCALITY: Castle Hill

DRAWN BY	B. CLISSOLD	DATE 20/10/2010
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010
PLANNING OFFICER	V. D'EMANUELE	DATE 20/10/2010
FILE No.	FP 171	

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 34 of 46

STATEMENT OF RELATIONSHIP WITH OTHER PLANS

This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012

Date of Adoption:
Minute No.
Came into Force:

Map Document: S:\Projects\Plan Serv\Consolidating_DCP\The_Hills_DCP_2012\Draft\PartB_Sec2\Sheet_34\PartB_Sec2_Sh34.mxd

RESIDENTIAL Sheet 35.



Legend

Sheet Boundary ••••• Cycleway

N

SCALE: 1:1,500

30 15 0 30 60 90 Metres

LOCALITY: BELLA VISTA

DRAWN BY	B. CLISSOLD	DATE	20/10/2010
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE	20/10/2010
PLANNING OFFICER	V. D'EMANUELE	DATE	20/10/2010
FILE No.	FP 171		

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

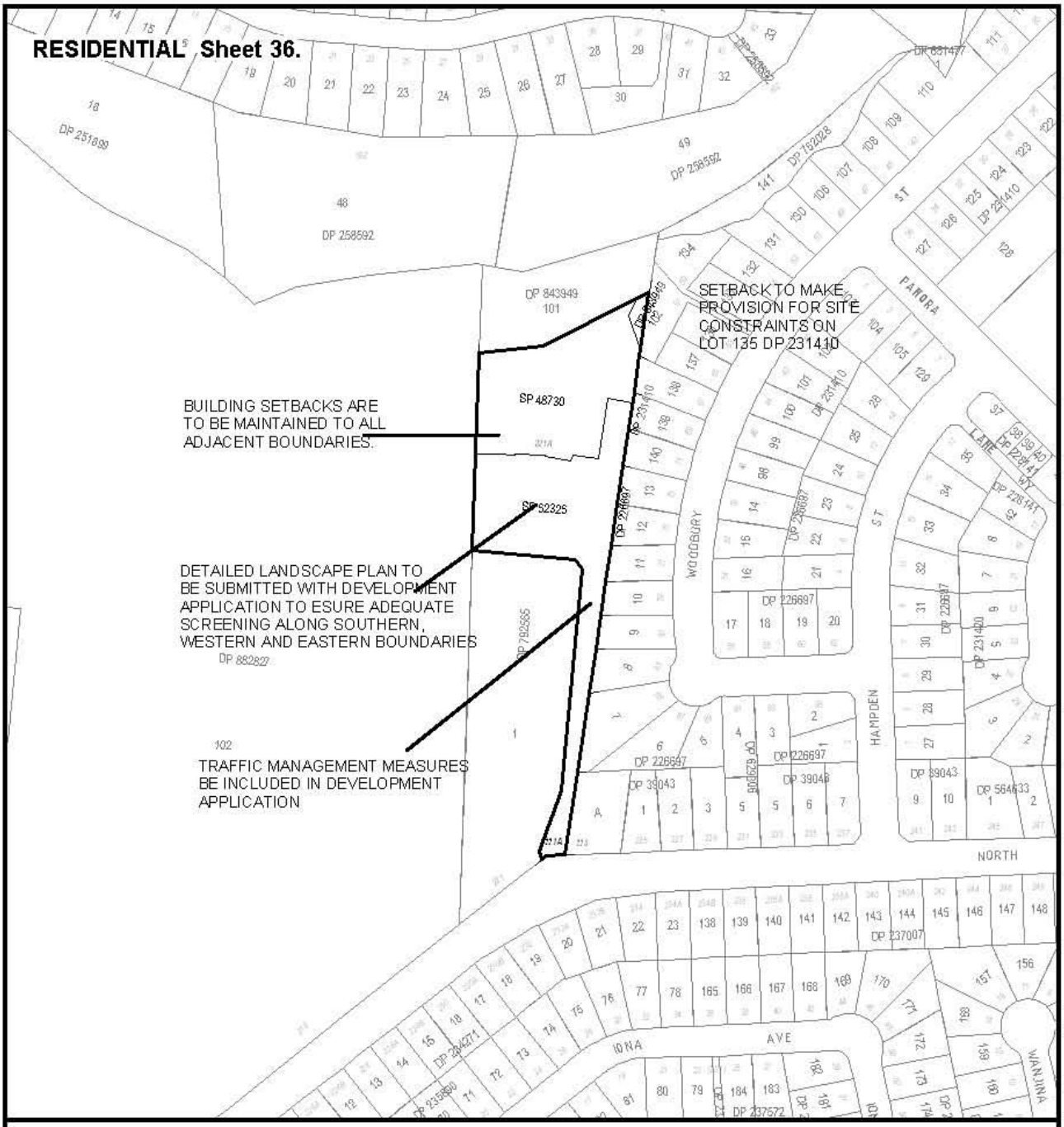
Part B Section 2 Map Sheet 35 of 46

STATEMENT OF RELATIONSHIP WITH OTHER PLANS

This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012

Date of Adoption:
Minute No.
Came into Force:

Map Document: S:\Projects\PlanServ\Consolidating_DCP\The_Hills_DCP_2012\Draft\Part B_Sect2\Sheet_35\Part B_Sect2_Sh35.mxd



N

SCALE: 1:3,000

50 25 0 50 100 150 Metres

Legend

Sheet Boundary

LOCALITY: NORTH ROCKS

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

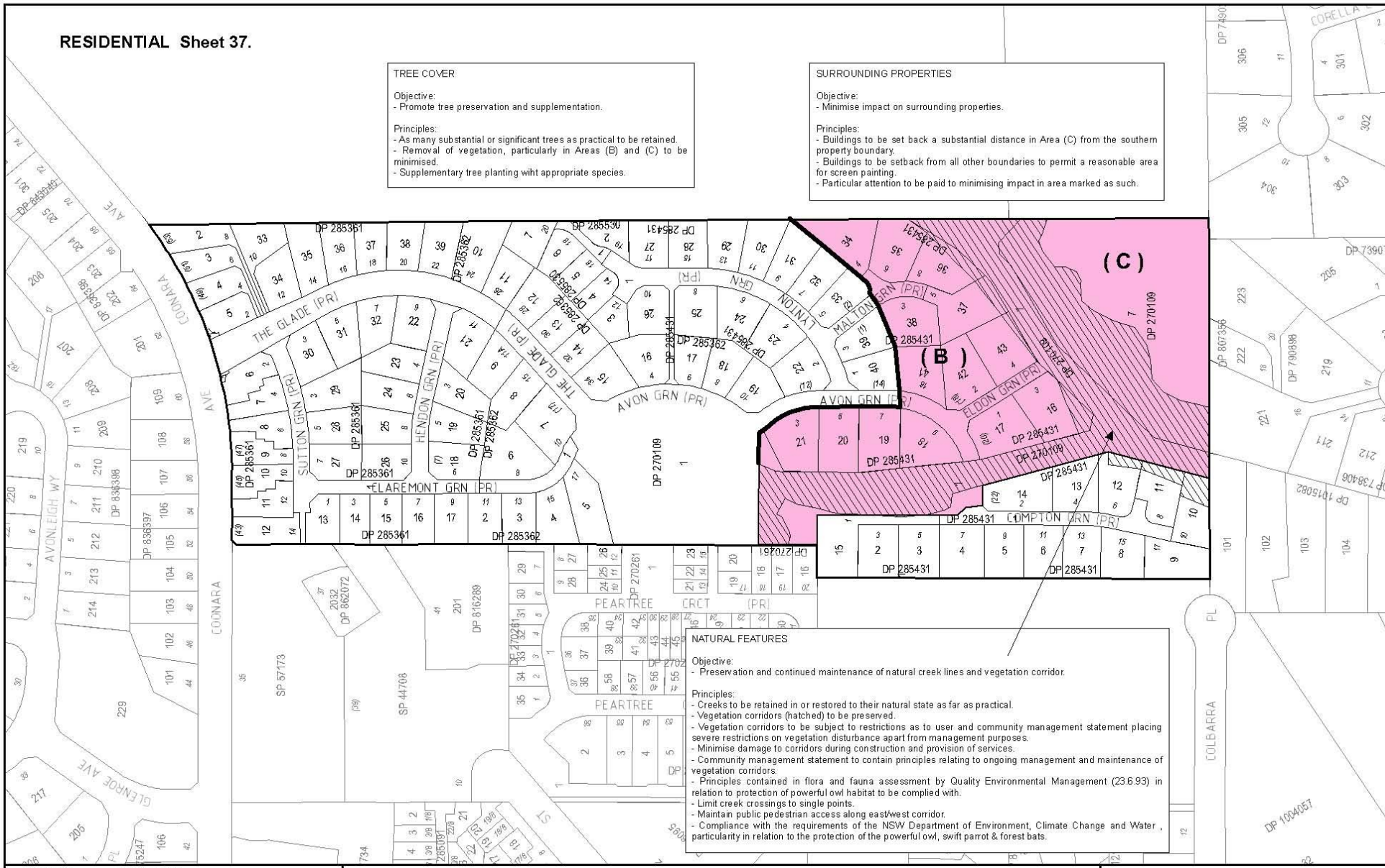
THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 36 of 46

DRAWN BY	B. CLISSOLD	DATE 20/10/2010	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010	
PLANNING OFFICER	V. D'EMANUELE	DATE 20/10/2010	Date of Adoption: Minute No. Came into Force:
FILE No.	FP 171		

Map Document: S:\Projects\PlanSen\Consolidating_DCP\The_Hills_DCP_2012\Draft\PartB_Sec2\Sheet_36\PartB_Sec2_Sh36.mxd

RESIDENTIAL Sheet 37.



DRAWN BY	B. CLISSOLD	DATE 20/10/2010
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010
PLANNING OFFICER	V. D'EMANUELE	DATE 20/10/2010
FILE No.	FP 171	

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 37 of 46

LOCALITY: West Pennant Hills

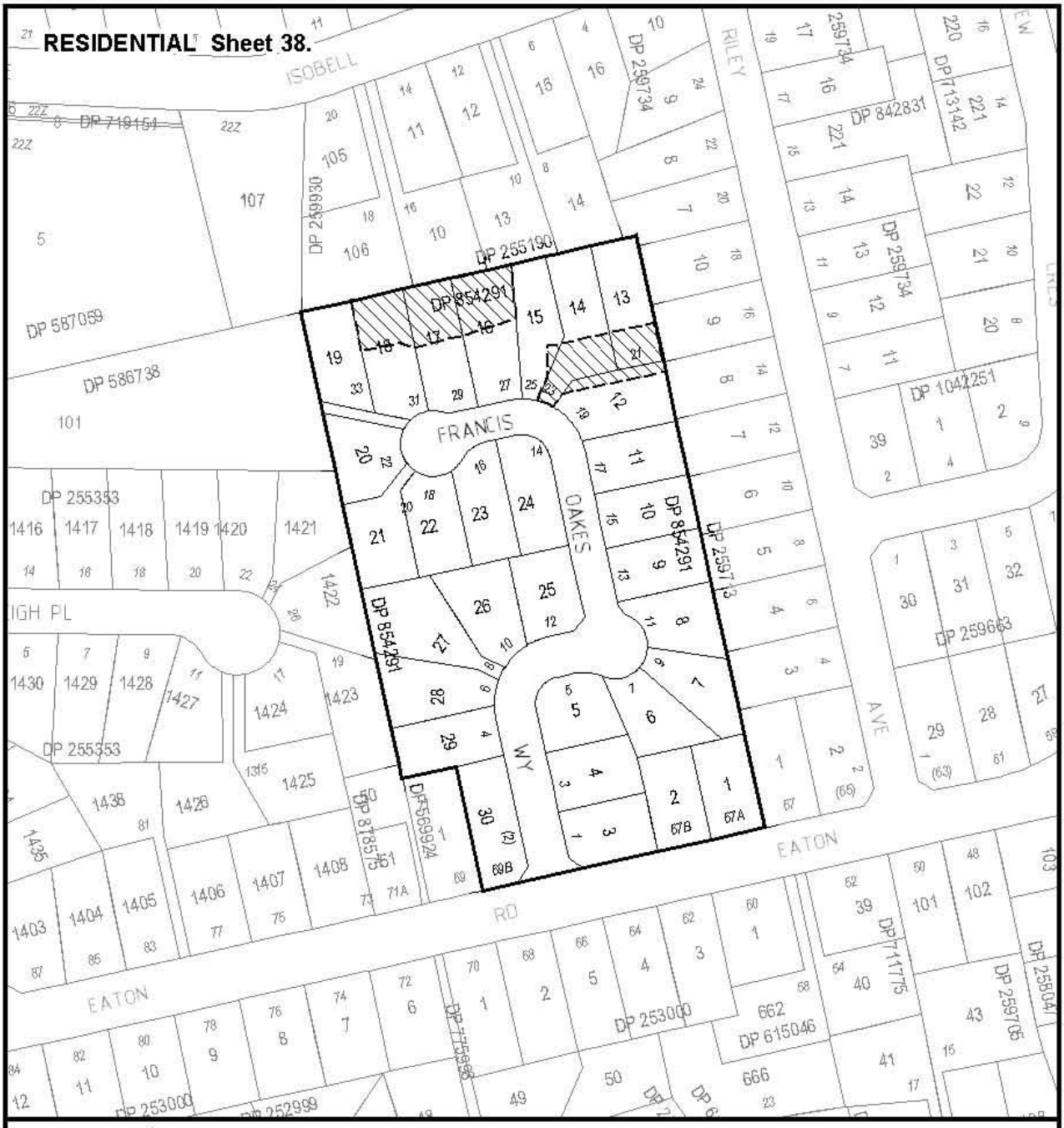
SCALE: 1 : 2,000

STATEMENT OF RELATIONSHIP WITH OTHER PLANS

This plan is to be read in conjunction with
The Hills DCP statement and The Hills LEP 2012

Date of Adoption:
Minute No.
Came into Force:

Map Document: S:\Projects\PlanSem\Consolidating_DCP\The_Hills_DCP_2012\Draft\PartB_Sec2\Sheet_37\PartB_Sec2_Sh37.mxd



N

SCALE: 1:2,000

20 10 0 20 40 60 80 Metres

Legend

Sheet Boundary

Restricted Development subject to a report from a practising Landscape Architect on the condition & longevity of the trees at the subdivision stage.

LOCALITY: WEST PENNANT HILLS

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

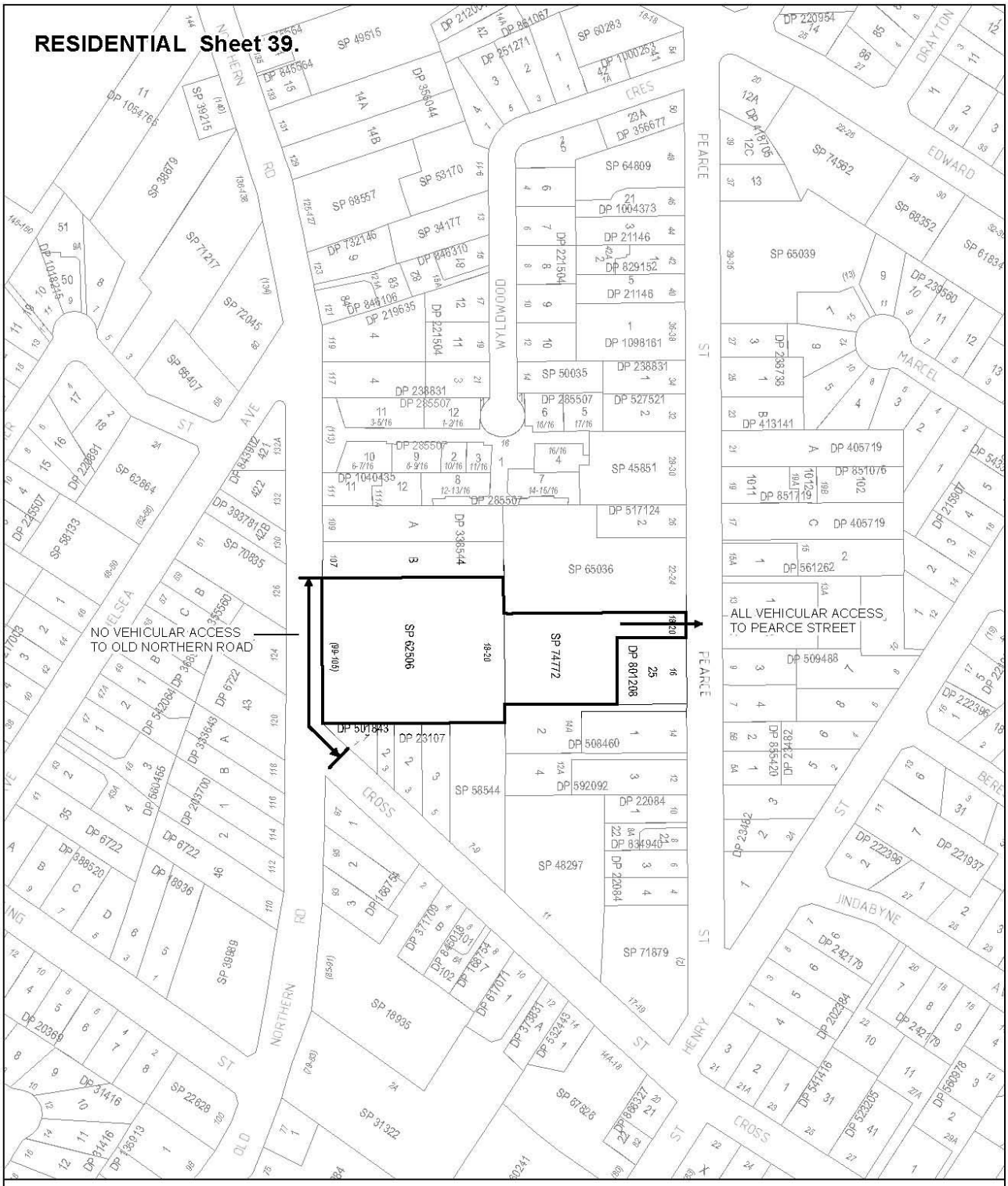
Part B Section 2 Map Sheet 38 of 46

DRAWN BY	B. CLISSOLD	DATE	20/10/2010
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE	20/10/2010
PLANNING OFFICER	V. D'EMANUELE	DATE	20/10/2010
FILE No.	FP 171		

STATEMENT OF RELATIONSHIP WITH OTHER PLANS
This plan is to be read in conjunction with
The Hills DCP statement and The Hills LEP 2012

Date of Adoption:
Minute No.
Came into Force:

Map Document: S:\Projects\PlanServ\Consolidating_DCP\The_Hills_DCP_2012\Draft\Part8_Sec2\Sheet_38\Part8_Sec2_Sh38.mxd



SCALE: 1 : 2,000

N

20 10 0 20 40 60 80 Metres

Legend

Common development site with all vehicular access to Pearce Street

LOCALITY: BAULKHAM HILLS

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 39 of 46

DRAWN BY	B. CLISSOLD	DATE 20/10/2010	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010	
PLANNING OFFICER	V. D'EMANUELE	DATE 20/10/2010	Date of Adoption: Minute No. Came into Force:
FILE No.	FP 171		

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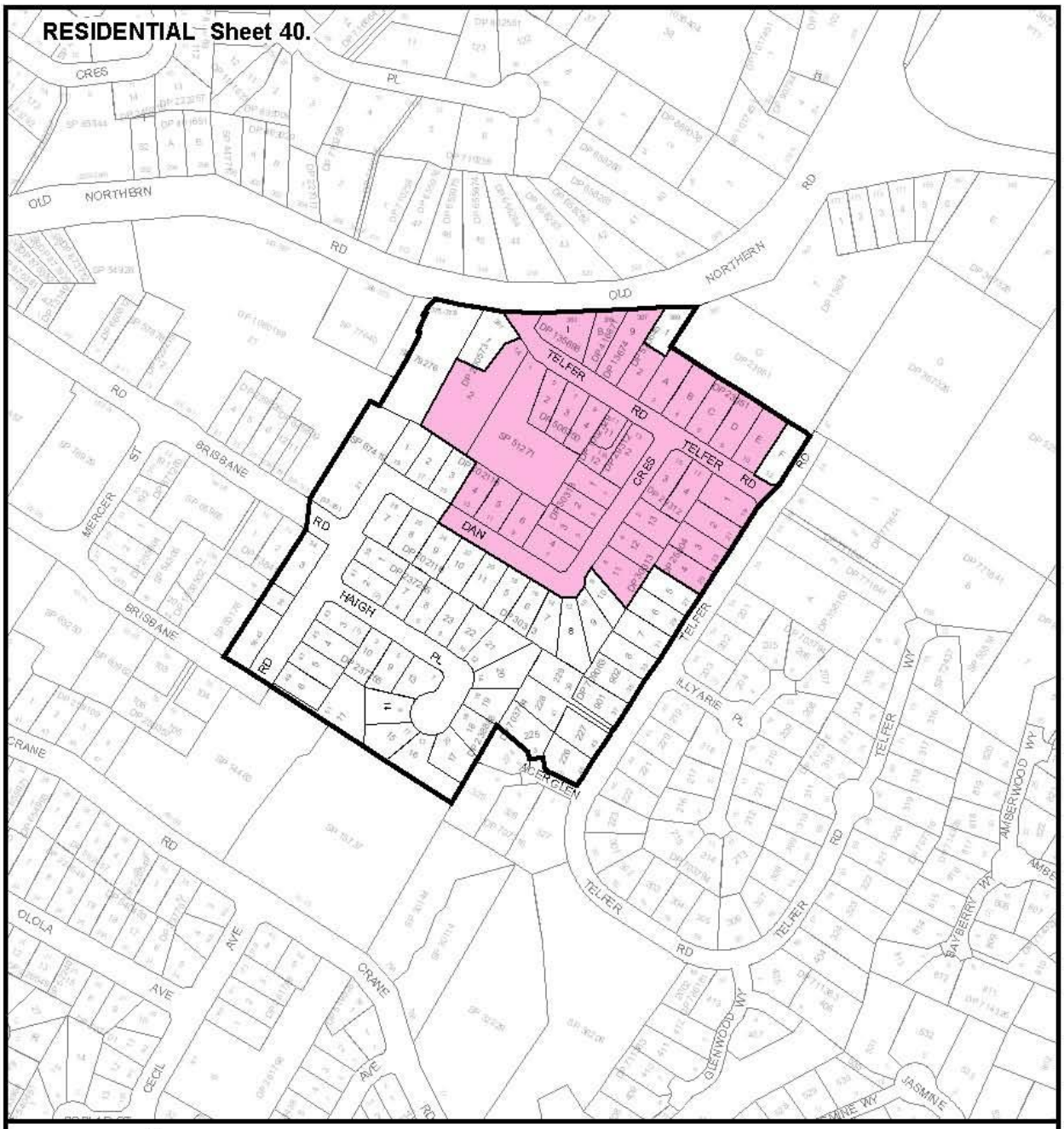

N

SCALE: 1:4,000

50 25 0 50 100 150 Metres

Legend

Sheet Boundary

Refer to Controls 2.13.2(e) and 2.14.2 of Part B Section 2 - Residential

LOCALITY: CASTLE HILL

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THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 40 of 46

DRAWN BY	B. CLISSOLD	DATE 20/10/2010	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012
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PLANNING OFFICER	V. D'EMANUELLE	DATE 20/10/2010	Date of Adoption: Minute No. Came into Force:
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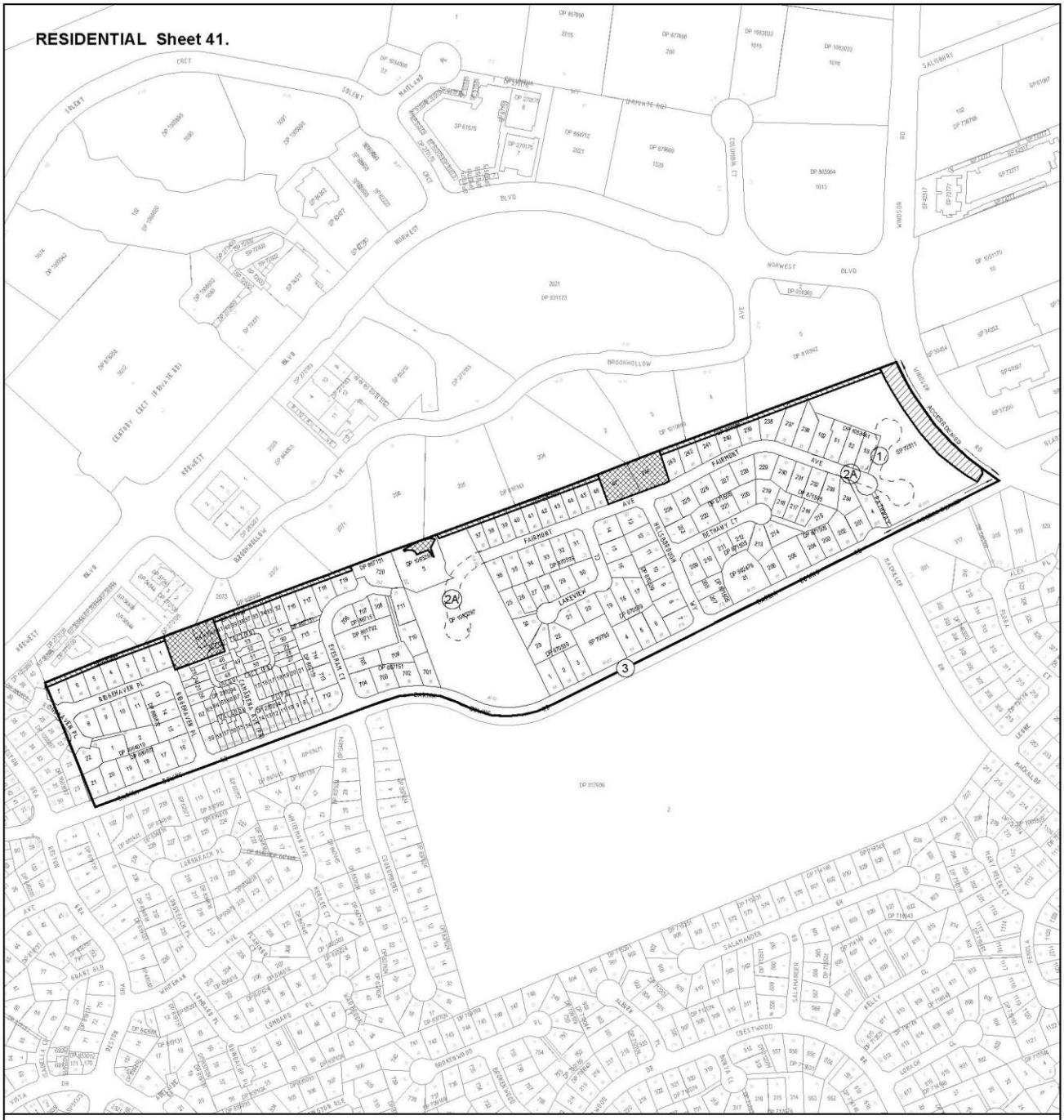
RESIDENTIAL Sheet 41.



ROAD CLASSIFICATION

ROAD TYPE	VERGE	CARRIAGEWAY	VERGE
1	3.5	5.5	3.5
2A	3.5	6.5	3.5
3	4.5 (except where cycleway shown)	11	4.5 F/path 1.2m

NOTES:

1. Minimum 10.6 lots per net residential Hectare
2. All Lots to be capable of containing a minimum Building Platform of 10m x 15m
3. 6 metre Building setback
4. Lot 1 DP 227129 Access Denied to Barina Downs Rd and Windsor Rd.

LEGEND

- 20 metre Building Setback to Windsor Road Access denied.
- Stormwater Dentention Basins :- All Catchments to have water quality control features
- Existing vegetation, where appropriate, is to be maintained as a 5 m landscape buffer to reduce noise and visual impact of adjacent Industrial Development.
- Sheet Boundary

N

SCALE: 1:3,000

50 25 0 50 100 150 Metres

LOCALITY: CRESTWOOD

DRAWN BY	B. CLISSOLD	DATE 20/10/2010
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2010
PLANNING OFFICER	V. D'EMANUELE	DATE 20/10/2010
FILE No.	FP 171	

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Part B Section 2 Map Sheet 41 of 46

STATEMENT OF RELATIONSHIP WITH OTHER PLANS

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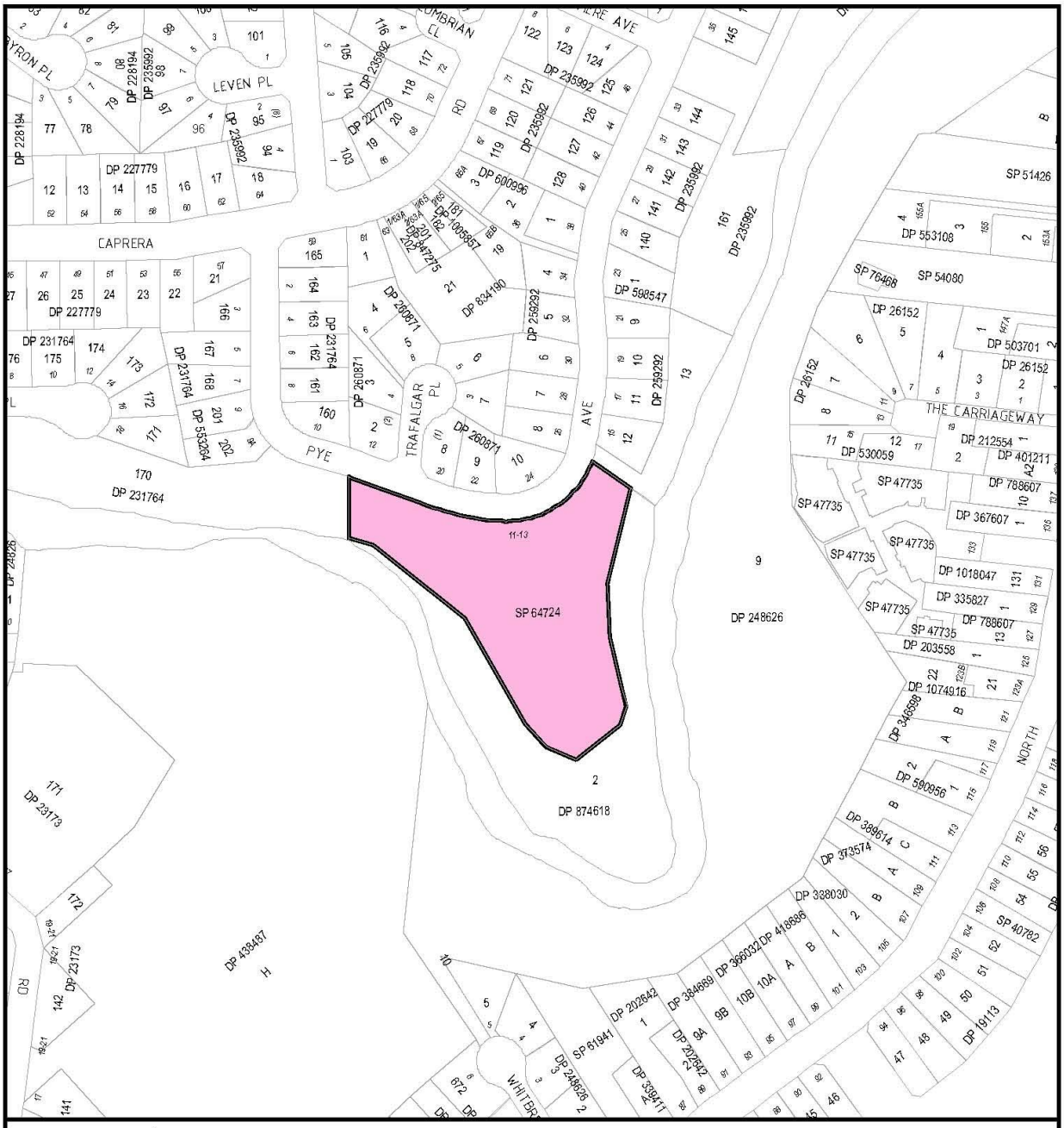

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THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 42 of 46

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PLANNING OFFICER	V. D'EMANUELLE	DATE 20/10/2010	Date of Adoption: Minute No. Came into Force:
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Legend

Part B Section 2 Map Sheet 43 of 46

SCALE: 1:4,000

50 25 0 50 100 150
Metres

N

LAND TO WHICH THIS SECTION OF THE PLAN APPLIES
- **CORNER OF OLD WINDSOR ROAD &**
  SEVEN HILLS ROAD BAULKHAM HILLS

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

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THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 43 of 46

	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012	
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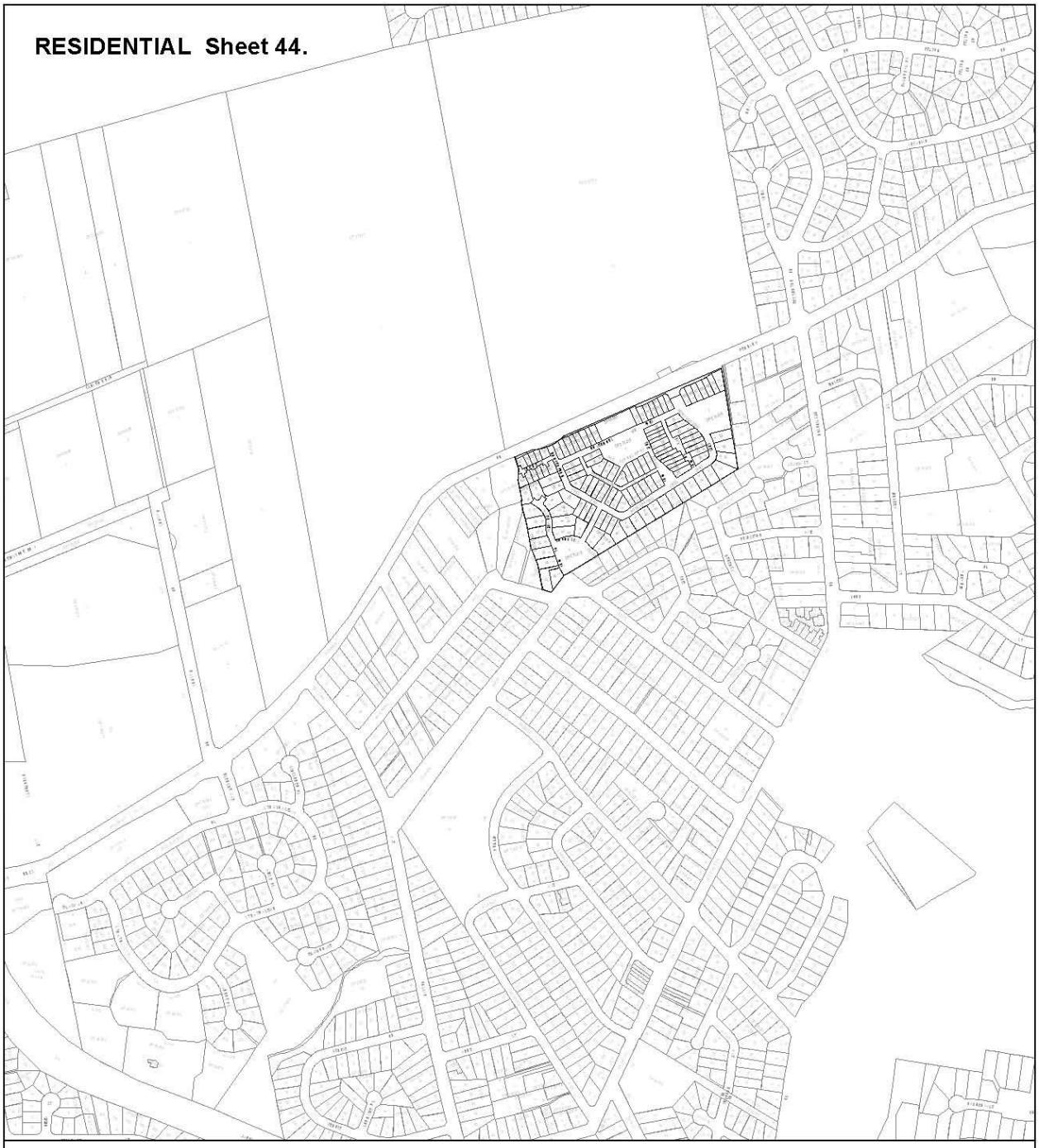
RESIDENTIAL Sheet 44.



Legend

Sheet Boundary

SCALE: 1:6,000

50 25 0 50 100 150 200
Metres

N

LAND TO WHICH THIS SECTION OF THE PLAN APPLIES
- HUNTERFORD ESTATE, OATLANDS

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 44 of 46

	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012	
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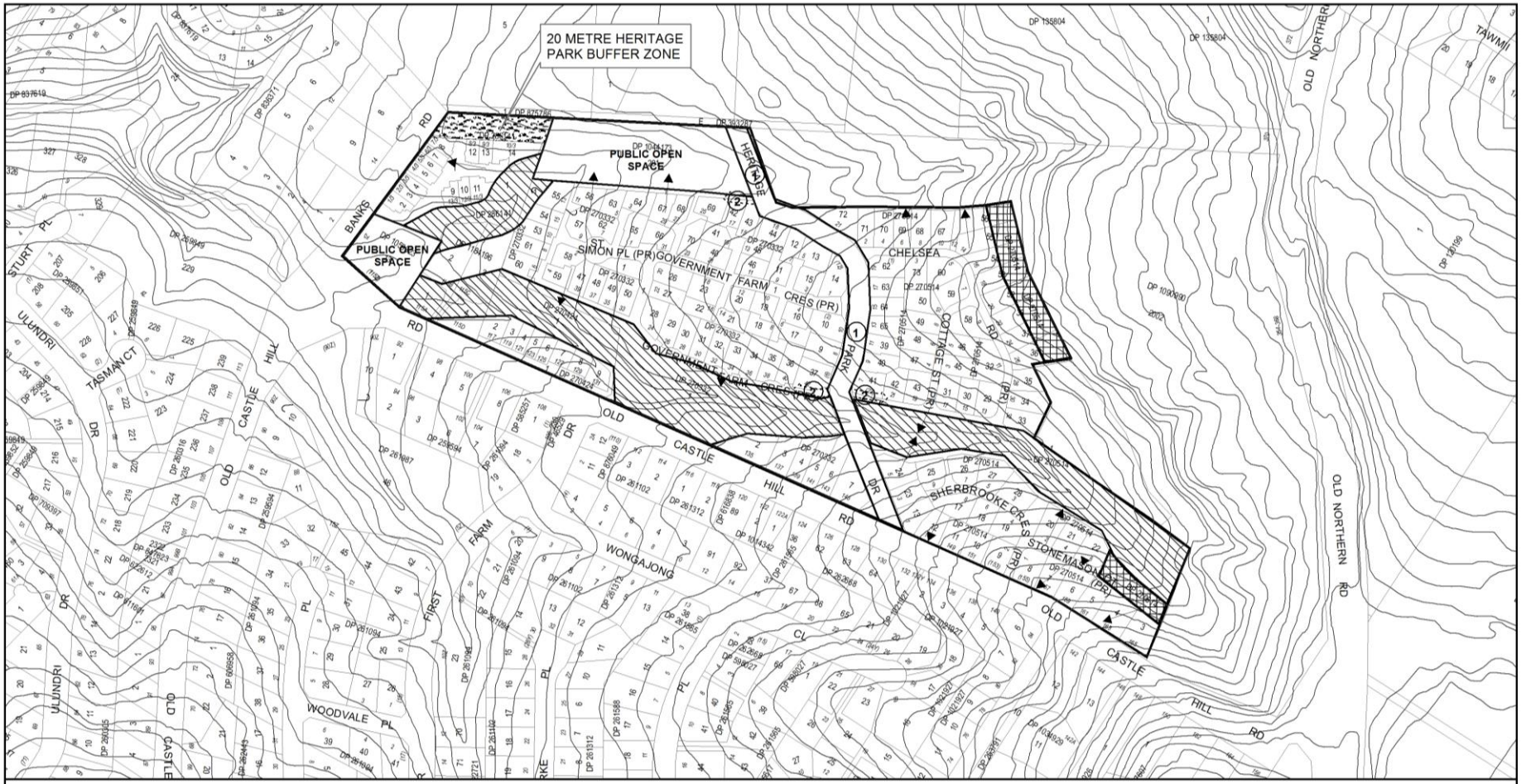

Roads

(1) 3.5 - 8.5 - 3.5m

(2) 3.5 - 5 - 1m (Public Road adjacent to Open Space or Buffer Zone)

Legend

- No House Construction Zone
- Restricted Development
- 20 m Herirtage Park Buffer
- Sheet Boundary
- Views
- Proposed Road

N

SCALE: 1:3,000

50 25 0 50 100 150 200 Metres

LOCALITY: CASTLE HILL

DRAWN BY	B. CLISSOLD	DATE 21/07/2014
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 21/07/2014
PLANNING OFFICER	A. JENKINS	DATE 21/07/2014
FILE No.	FP 171	

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 45 of 46 - Land Adjoining Heritage Park

STATEMENT OF RELATIONSHIP WITH OTHER PLANS

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The Hills DCP statement and The Hills LEP 2012

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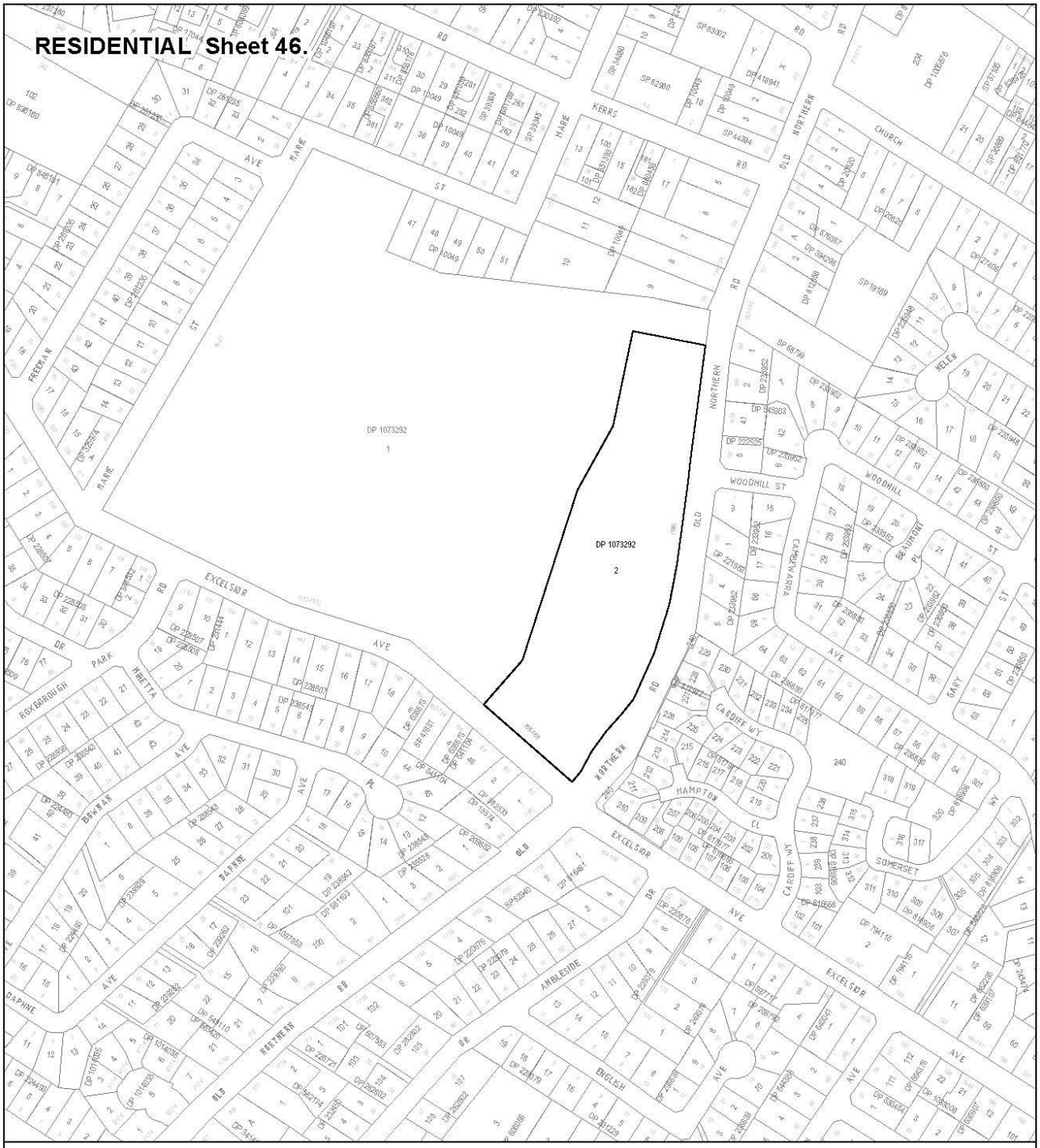

Legend

Sheet_Boundary

SCALE: 1:3,000

50 25 0 50 100 150
Metres

LAND TO WHICH THIS SECTION OF THE PLAN APPLIES
- GILROY COLLEGE (Former Target Site), CASTLE HILL

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 2 Map Sheet 46 of 46

	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012	
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The Hills Development Control Plan (DCP) 2012

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THE HILLS Sydney's Garden Shire



Part B Section 3
Dual Occupancy

B3

In Force 21 May 2019

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1. INTRODUCTION

This Section of the DCP must be read in conjunction with Part A – Introduction of this DCP.

1.1. LAND TO WHICH THIS SECTION OF THE PLAN APPLIES

This Section of the DCP applies to land where, under the provisions of The Hills Local Environmental Plan (LEP) 2012, dual occupancy, dual occupancy (attached) and dual occupancy (detached) development is a permissible use.

1.2. AIMS AND OBJECTIVES OF THIS SECTION OF THE DCP

The aim of this Section of the DCP is to identify Council's objectives for dual occupancy development in the Shire and identify controls to ensure the objectives are achieved.

Council's overarching objectives for dual occupancy development are:

OBJECTIVES

(i) Encourage a high standard of aesthetically pleasing and functional developments that sympathetically relate to adjoining and nearby developments.

(ii) Ensure that development will not detrimentally affect the environment of any adjoining lands and ensure that satisfactory measures are incorporated to ameliorate any impacts arising from the proposed development.

(iii) Encourage innovative and imaginative design with particular emphasis on the integration of buildings and landscaped areas that add to the character of the neighbourhood.

(iv) Provide high levels of amenity for future residents of any development.

(v) Implement the principles of Ecologically Sustainable Development.

(vi) To facilitate the implementation of the aims and objectives of residential development as set out in The Hills LEP 2012.

Additional objectives covering a range of specific issues related to dual occupancy development in the Shire, are identified in section 2 of this Section of the DCP. These specific objectives are all related to the six objectives identified above.

1.3. DUAL OCCUPANCY

Examples of these dwelling types are illustrated in Figures 1 and 2 below.



Figure 1 - Dual Occupancy (attached)

The photographs and site layout show a dual occupancy (attached) development.

This particular dual occupancy is for a corner site which is ideal in that it permits each dwelling to be oriented towards a separate street.

Other design options exist and any proposed design must address the objectives and development controls, detailed in section 2 of this Section of the Development Control Plan.

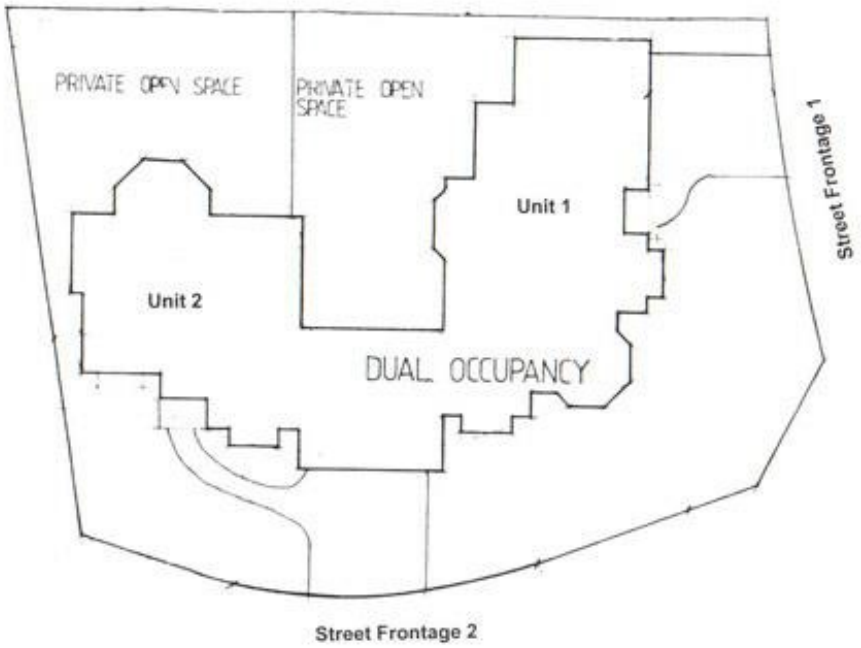




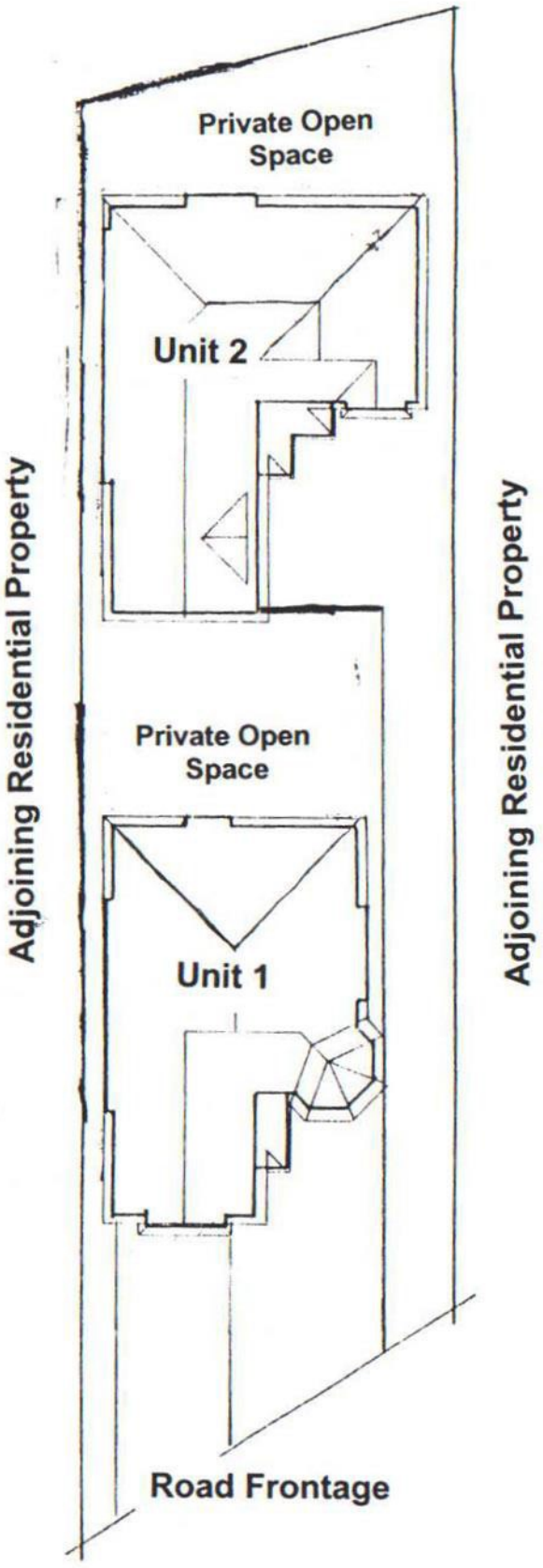


Figure 2 - Dual Occupancy (Detached)

The photographs and site layout show a dual occupancy (detached) development.

This particular dual occupancy is in a battle-axe arrangement.

Again other design options exist and any proposed design must address the objectives and development controls, detailed in section 2 of this Section of the Development Control Plan.



1.4. SUBDIVISION

Subdivision of dual occupancies is prohibited pursuant to Clause 4.1C *Subdivision of dual occupancies* of The Hills Local Environmental Plan (LEP) 2012.

2. OBJECTIVES AND DEVELOPMENT CONTROLS

Objectives and development controls for dual occupancies are set out in the following sections.

In addition to the policies, guidelines and documents specified in section 1.4 of Part A – Introduction, this dual occupancy Section is to be read in conjunction with other relevant Sections including:

- Part B Section 1 – Rural
- Part C Section 2 - Signage
- Part C Section 3 – Landscaping
- Part B Section 2 – Residential
- Part C Section 4 – Heritage
- Part C Section 1 - Parking
- Part C Section 6 – Flood Controlled Land

A checklist is provided as a summary in Appendix A Development Control Compliance Check Sheet of this Section (Part B Section 3 – Dual Occupancy).

2.1. SITE REQUIREMENTS

OBJECTIVES

(i) To maintain allotments of sufficient size to satisfy the requirements of this Section of the DCP and to enable flexibility in housing design.

(ii) To ensure development on a particular site has due regard to adjoining developments in accordance with Council's ESD objective 7.

(iii) To control the density of residential development.

(iv) To prevent excessive site coverage.

DEVELOPMENT CONTROLS

a) The minimum lot size for dual occupancies is prescribed in Clause 4.1A *Minimum lot sizes for dual occupancy, multi dwelling housing and residential flat buildings* of The Hills Local Environmental Plan 2012.

b) The minimum lot size is exclusive of any restricted development areas or rights of way in favour of other properties.

c) The floor space ratio of all dwellings shall not exceed 0.5:1.

SUBMISSION REQUIREMENT

- Site Plan

2.2. SITE ANALYSIS

OBJECTIVES

(i) To encourage a comprehensive approach to site planning, design and assessment of development.

(ii) To facilitate assessment of how future buildings will relate to their immediate surroundings and each other.

(iii) To facilitate development of a design that minimises the negative impacts on the amenity of adjoining commercial, residential or rural development in accordance with Council's ESD objective 7.

(iv) To ensure development is compatible with land capability.

(v) To minimise adverse impacts on the environment in accordance with Council's ESD objective 4.

(vi) To ensure during consideration of the site layout and design, that disturbance to the natural environment is minimised in accordance with Council's ESD objective 3.

DEVELOPMENT CONTROLS

a) Development should be designed to respect site constraints such as topography, drainage, soil landscapes, flora, fauna and bushfire hazard.

b) Disturbance to existing natural vegetation and landforms, watercourses, wetlands and overland flow paths should be minimised.

c) Development on land adjoining bushland reserves, should incorporate measures (such as setbacks and buffers) to prevent any impact on the reserves.

d) Development should be sited on the area of land presenting the least topographic constraints.

e) Development should be sited away from steep slopes (particularly those containing natural vegetation) so that, where possible, these features can be kept in a natural state.

f) Land with a slope greater than 20% is generally not suitable for development.

g) Development applications for proposals on land with a slope of between 15-20% should be accompanied by a geotechnical report.

SUBMISSION REQUIREMENT

- Site analysis

2.3. SETBACKS

OBJECTIVES

(i) To provide setbacks that complement the streetscape, protect the privacy of and minimise overshadowing of adjoining properties in accordance with Council's ESD objective 7.

(ii) To provide opportunities for landscaping between dwellings.

(iii) To ensure adequate site area and curtilage is provided to all development.

DEVELOPMENT CONTROLS

a) The minimum side and rear boundary setback requirements are:

Table 1 - Side and rear setbacks

Height of Building	Minimum distance of wall to boundary line	Minimum distance of eave to boundary line
1 storey	900 mm	675 mm
2 storey (ground floor)	900mm	675mm
2 storey (second floor)	4 metres	3775mm

Note. The side and rear setbacks must be such that the requirements for private open space can be met.

b) The minimum road frontage setback requirements for dual occupancy developments are:

Table 2 - Building setback requirements

Frontage	Setback
1. Classified Roads	
- Urban	10 metres
- Rural	30 metres
2. Other Roads	Consistent with the setbacks in the locality to a minimum of 4.5 metres
3. Corner Allotment (setback from each street frontage)	
- Rural	10 metres
- Urban	Consistent with the setbacks in the locality to a minimum of 4.5 metres

Note. The setback listed in 1 above applies for a corner allotment with frontage to a classified road.

c) Where a development site has a slope such that the minimum setbacks shown in Table 1 and 2 do not achieve the objectives in respect of overshadowing, privacy and amenity for adjoining land uses, the setbacks will be increased to the point where the objectives are achieved.

d) The minimum setback requirement between dwellings in detached dual occupancy developments shall be five (5) metres between walls.

SUBMISSION REQUIREMENTS

- Site Plan showing building setback dimensions.

2.4. LANDSCAPED AREA

OBJECTIVES

(i) To ensure a high standard of environmental quality of dual occupancy developments and the overall visual amenity and character of the neighbourhood in accordance with Council's ESD objective 7.

(ii) To ensure that landscaped areas can be efficiently maintained.

(iii) To provide useable outdoor open space for residents.

(iv) To provide a satisfactory relationship between buildings, landscaping areas and adjoining developments.

(v) To ensure that existing trees are given every opportunity to be incorporated into the final design.

(vi) To minimise stormwater runoff and provide the opportunity for on-site groundwater recharge in accordance with Council's ESD objective 3.

(vii) To ensure that vegetation removed as a part of the land development process is replaced by suitable endemic species in accordance with Council's ESD objective 4.

DEVELOPMENT CONTROLS

a) In urban zones, a minimum of 50% of the site shall be provided with landscaped areas, exclusive of access driveways and parking.

b) In urban zones a minimum of 30% of the site should retain permeable surfaces to permit infiltration of stormwater into the site.

c) Landscaped areas created for the purpose of screening shall have a minimum width of 2 metres.

d) Landscaping is to be provided in accordance with the provisions set out in Part C Section 3 - Landscaping.

e) Existing trees should be preserved.

f) Consideration should be given to the use of trees that provide shade in summer and allow sunlight to penetrate in winter.

g) Dwellings should be sited to:
   - protect natural and cultural features; and
   - Acknowledge site constraints including soil erosion, overland flow paths and bush fire risk and special features such as trees and views.

h) Native species are to be used to maintain a strong natural theme for the neighbourhood and rural areas because of their low maintenance characteristics, relative fast growth, aesthetic appeal and suitability to the natural habitat.

i) Consideration should be given to Council's Safer by Design Guidelines in respect of natural surveillance, sightlines and lighting.

SUBMISSION REQUIREMENTS

- Landscape Plan.

- Tree Management details.

2.5. PRIVATE OPEN SPACE

OBJECTIVES

(i) To maximise the area available for private open space.

(ii) To ensure that the orientation of private open space takes into account solar access for year round use.

(iii) To provide a service space for clothes drying.

DEVELOPMENT CONTROLS

a) The minimum useable private open space for each dwelling shall be as follows:

Table 3 - Minimum useable private open space

Dwelling Size	Gross Floor Space (Exclusive of garages)	Private Open Space Required
Small Dwelling	80 m^2	80 m^2
Medium Dwelling	80m^2 –125m^2	90m^2
Large Dwelling	>125m^2	100m^2

b) In assessing the area of useable private open space any driveway area or area with a dimension less than 2.5 metres will not be included.

c) The majority of the private open space is to be capable of being an extension to indoor living areas and directly accessible from the rear or side of the house. This part of the private open space shall be capable of containing a rectangle 4 metres x 6 metres exclusive of landscaping.

d) Adequate outdoor space with solar access must be provided for clothes drying in accordance with section 2.11 of this DCP.

SUBMISSION REQUIREMENTS

- Site Plan showing private open space areas.

2.6. BUILDING HEIGHT

OBJECTIVES

(i) To ensure that buildings reflect the existing landform of the neighbourhood, including ridgelines and drainage depressions.

(ii) To protect privacy and amenity of surrounding allotments and residential development in accordance with Council's ESD objective 7.

(iii) To minimise overshadowing of adjoining allotments.

(iv) To minimise the visual bulk of the building.

(v) To ensure the dwelling does not unreasonably impose on rural landscapes.

DEVELOPMENT CONTROLS

a) For dual occupancy (detached) developments in residential areas where there is an existing dwelling-house the second dwelling-house shall not exceed 3.6 metres in height when measured from the underside of the ceiling to natural ground level before development is carried out.

b) If the proposal is to erect two detached houses in residential areas, then the house furthest from the street frontage shall not exceed 3.6 metres in height as described above. If the site has two street frontages or the two dwellings are to have equal setbacks one of the two dwellings must satisfy these criteria.

c) In any case one of the detached dwellings in a dual occupancy (detached) development shall not exceed 3.6 metres as described above.

d) Dual occupancies (attached) are permitted to be in the form of a two-storey construction.

SUBMISSION REQUIREMENTS

- Elevation Plans indicating building heights.

2.7. BUILDING HEIGHT ENVELOPE

OBJECTIVES

(i) To improve and enhance the visual aspect of developments when viewed from the street, public place and surrounding properties in accordance with Council's ESD objective 7.

(ii) To provide dual occupancy development of a size and bulk generally in keeping with neighbouring development and the surrounding environment.

(iii) To minimise the impact of dual occupancy development in new release areas and in areas where single dwelling housing is dominant.

DEVELOPMENT CONTROLS

a) For dual occupancy (detached) development in residential areas where there is an existing dwelling-house, the second dwelling shall not exceed a building height plane projected at an angle of 45 degrees over the land from a vertical distance of 1.8 metres above the natural ground level at any boundary of the site (refer to Figure 3).

b) Where a dual occupancy (detached) development in residential areas involves the erection of two dwellings, the dwelling closest to the street shall not exceed a building height plane projected at an angle of 45 degrees over the land from a vertical distance of 5 metres above the natural ground level at any boundary of the site. The dwelling furthest from the street shall not exceed a building height plane projected at an angle of 45 degrees over the land from a vertical distance of 1.8 metres above the natural ground level at any boundary of the site (refer to Figures 3 & 4).

c) In any case one of the two detached dwellings shall not exceed a building height plane projected at an angle of 45 degrees over the land from a vertical distance of 1.8 metres above the natural ground level at any boundary of the site (refer to Figure 3).

d) For dual occupancies (attached), the building and any associated structure shall not exceed a building height plane projected at an angle of 45 degrees over the land from a vertical distance of 5 metres above ground level at any boundary of the site (refer to Figure 4).

Figure 3 - Building height envelopes: single storey dwellings

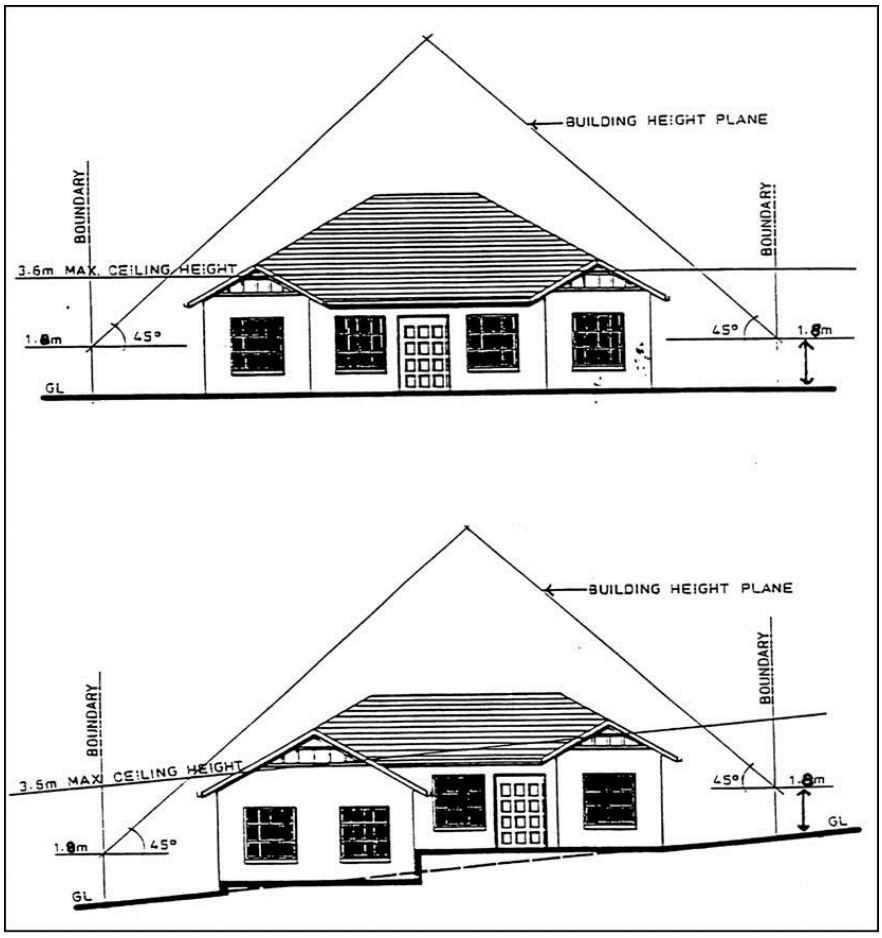
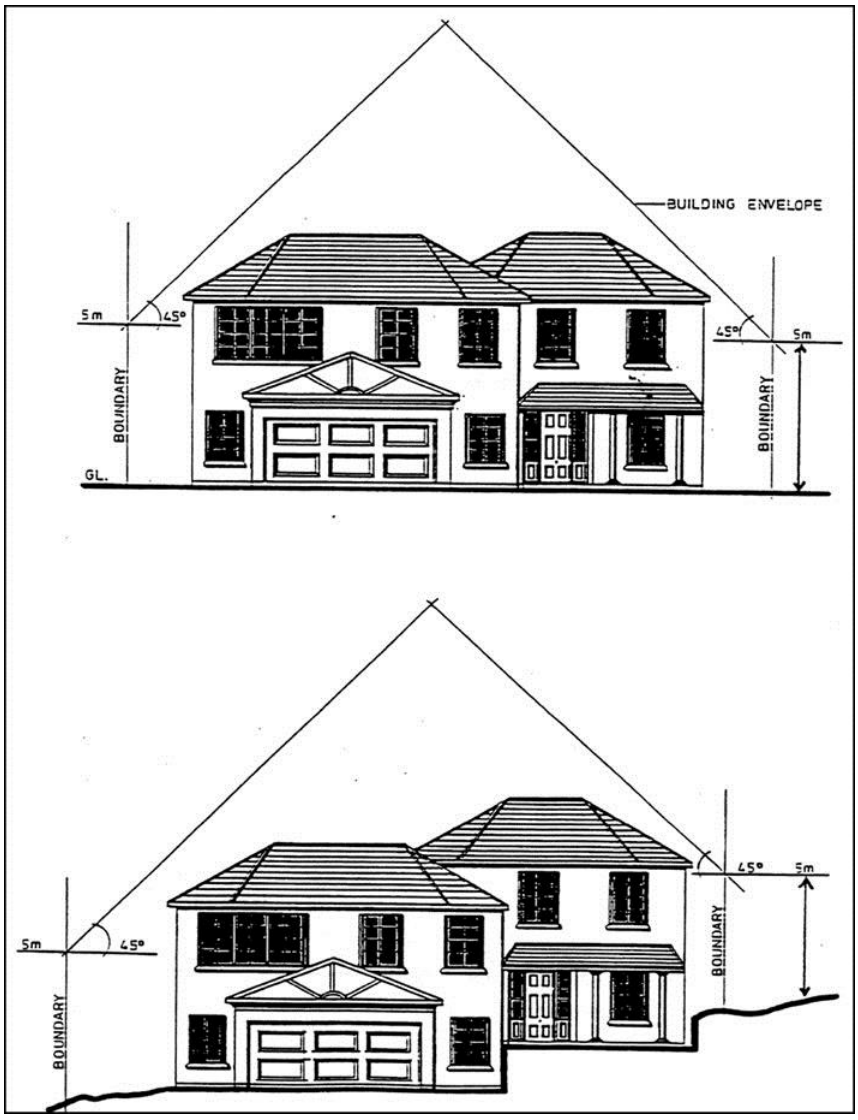


Figure 4 - Building height envelopes: two-storey dwellings



2.8. BUILDING DESIGN AND STREETSCAPE

OBJECTIVES

(i) To ensure the appearance of dual occupancy developments enhance the streetscape, complement adjoining and surrounding residential or rural development in terms of scale and character.

(ii) To ensure dual occupancy developments are compatible with the desired nature of housing within the Shire, in accordance with Council's ESD objective 7.

(iii) To achieve dual occupancy development that is of a high standard of design and construction in terms of both internal and external appearance.

DEVELOPMENT CONTROLS

a) Dual occupancies (attached) are to portray an external appearance of a single dwelling.

b) Mirror imaged designs are not acceptable.

c) Architectural relief to facades is encouraged to avoid the appearance of excessive scale and bulk.

d) Where a dual occupancy development is to be created by extensions to an existing dwelling, the design, roofline and materials should be compatible with the existing building. The roof forms of buildings should be designed so as to avoid unduly increasing the bulk of the building.

e) The roof forms of new dual occupancy developments must be compatible with adjoining and surrounding dwellings in the neighbourhood.

f) Applicants should avoid repeating designs used in other developments, particularly those located in close proximity to the proposal.

g) Relocatable or moveable dwellings and conversions of detached garages to create a dual occupancy development will only be permitted where the design, external materials and rooflines are compatible with the existing housing in the area.

h) Carports and garages should be located behind the building line and should not be prominent elements in the streetscape. They should be incorporated into the overall building design to complement the dwellings and streetscape rather than dominate them.

i) Dual occupancies (attached) must be connected by a common wall separating habitable rooms of each respective dwelling, or by a garage with each sharing a wall of the garage. In all cases, the area of the common wall shall not be less than half the area of the wall on each elevation.

j) Where the method of attachment is by way of a garage, such a connecting link is to include a continuous roofline, having a design and external appearance similar to that of the two dwellings and that physically connects to the opposing walls of each dwelling.

k) Attachment by way of a pergola, breezeway, verandah or the like that does not integrate the design of the two dwellings is not permitted.

l) Wherever possible and without endangering any trees, dual occupancies (attached or detached) on corner allotments should endeavour to site buildings so that each dwelling addresses a separate street frontage.

m) Consideration should be given to Council's Safer by Design Guidelines in regards to ensuring entrances are highly visible and that entrapment spaces are eliminated.

SUBMISSION REQUIREMENTS

- Elevations (including proposed and existing dwellings).
- Isometric Presentation.

2.9. BUILDING MATERIALS

OBJECTIVES

(i) To promote integrated, visually harmonious and attractive buildings in residential and rural areas.

(ii) To encourage the use of renewable, energy efficient materials that are durable and cost effective in accordance with Council's ESD objective 5.

(iii) To reduce waste generation and wastage of resources in accordance with Council's ESD objective 6.

(iv) To encourage consideration of the long-term impact of the production and use of materials used in construction of the development.

DEVELOPMENT CONTROLS

a) All building construction must comply with the Environmental Planning and Assessment Act 1979, Local Government Act 1993, and Building Code of Australia.

b) The choice of materials and external finishes are to be compatible with surrounding developments and landscape features in terms of colours, textures and quality.

c) The following factors must be considered when selecting materials:
   - suitability for the purpose;
   - durability;
   - long term appearance;
   - local environmental impacts;
   - broader and longer term environmental impacts; and
   - the quantity of material required.

d) Avoid oversupply and waste of materials by careful assessment of quantities needed.

e) Avoid materials that are likely to contribute to poor internal air quality such as those generating formaldehyde or those that may create a breathing hazard in the case of fire (eg polyurethane).

f) Select materials that will minimise the long-term environmental impact over the whole life of the development.

g) Preference should be given to recycled materials and subsequently to materials derived from renewable sources or those that are sustainable and generate a lower environmental cost,

recycled material or materials with low embodied energy, better lifecycle costs and durability.

h) Choice of materials should be based on consideration of both their environmental and economic costs.

SUBMISSION REQUIREMENTS

- Schedule of external materials and finishes.
- Detailed descriptions and samples of internal materials.
- Streetscape perspective including landscaping.

2.10. SOLAR ACCESS

OBJECTIVES

(i) To maximise solar access to internal living and open space areas in winter.

(ii) To ensure no adverse overshadowing of adjoining allotments/developments.

(iii) To orient the development in a way that best allows for appropriate solar access and shading, to ensure energy efficient outcomes in accordance with Council's ESD objective 5.

(iv) To minimise the need for artificial lighting in dwellings during the day, to ensure energy efficient outcomes in accordance with Council's ESD objective 5.

(v) To orientate dwellings so that the living areas face north.

DEVELOPMENT CONTROLS

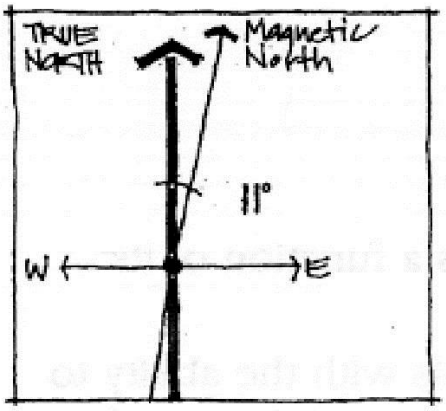
a) At least 50% of the required private open space is to receive direct sunlight for a minimum of 3 hours between 9am and 3pm on 21 June.

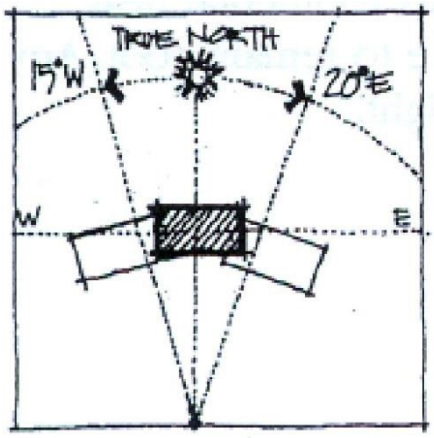
b) Dwellings should be sited to allow adequate provision for access of direct sunlight to adjacent properties. The impact of the development on solar penetration into primary living areas and open space areas on adjoining sites will be considered. Other considerations include the ability of adjoining properties to utilise direct sunlight for clothes drying purposes and electricity generation.

c) Living areas of dwellings shall be orientated to the north wherever possible.

d) Maximise the amount of direct sunlight available to clothes drying areas.

e) Orient buildings so that each dwelling obtains direct sunlight where possible. Ideally, face the long axis of the development up to 30 degrees east and 20 degrees west of true north. This is illustrated in the following diagrams:





Source: BDP Environment Design Guide

f) Where winter solar access is not optimum consider the use of double-glazing or high performance glass.

g) Main windows should have suitable shading or other solar control to avoid summer overheating.

h) Consider the use of horizontal shading devices (for north facing windows) including eaves, verandahs, pergolas, awnings and external horizontal blinds to allow low winter sun whilst providing shade from high summer sun.

i) West facing windows can cause excess heat in summer. If suitable, minimise the size of east and west facing windows, or consider external vertical shading devices such as vertical blinds, blade walls and thick vegetation.

j) Shading elements are to be integrated into the overall elevation design.

SUBMISSION REQUIREMENTS

- Shadow diagram(s) for two storey dual occupancies or where development exceeds 4 metres.

2.11. VENTILATION

OBJECTIVES

(i) To maximise ventilation flows in dual occupancy dwellings.

(ii) To minimise the filtering of cold or warm air through gaps in the construction of dwellings in accordance with Council's ESD objective 5.

DEVELOPMENT CONTROLS

a) Consider ventilation in early design stages.

b) Consider prevailing breezes in relation to building orientation, window design and internal circulation.

c) Place windows to allow for cross ventilation.

d) Consider the installation of fans, roof vents, louvered windows and high-level windows for rooms or spaces where cooling the room rather than heating is the priority.

e) Windows should be lockable in a partly open position.

f) Provide security screen doors at dwelling entries.

g) Minimise air gaps by incorporating door and window seals.

SUBMISSION REQUIREMENT

- Details outlining how natural ventilation is to be achieved in a development.

2.12. LIGHTING

OBJECTIVES

(i) To maximise the use of natural lighting and to minimise the energy consumption of dual occupancy developments in accordance with Council's ESD objective 5.

DEVELOPMENT CONTROLS

a) Lighting is to be provided and installed in accordance with the Building Code of Australia.

b) The design should maximise the use of natural lighting through window placement and skylights.

c) Incorporate dimmers, motion detectors and automatic turn-off switches where appropriate.

d) Provide separate switches for special purpose lights.

SUBMISSION REQUIREMENT

- Details of the fittings to be used within the dwellings.

2.13. ON-SITE SEWAGE MANAGEMENT

Dual occupancies (attached) in rural areas or the unsewered residential areas of Wisemans Ferry, Glenorie, Kenthurst and Lower Portland will need to address on-site sewage management requirements.

OBJECTIVES

(i) To ensure all new installations are appropriate for the situation and site.

(ii) To ensure all development has adequate provision for water and sewage facilities. Where sewage services are not provided by Sydney Water, adequate provision must be made for an on-site sewage system.

(iii) To provide guidance on the minimum requirements and land size needed for the commonly required systems.

(iv) To protect the amenity of an area.

(v) To ensure the protection of the environment and public health.

DEVELOPMENT CONTROLS

a) All applications proposing an On-site Sewage Management System (OSMS) shall be accompanied by a full site assessment with consideration to topography, soil composition and absorption capacity and vegetation of areas to be used for effluent disposal. Site assessments and designs of on-site sewage management systems shall be in accordance with AS/NZS 1547: 2000 "Onsite Domestic

Waste Water Management" and the Environment & Health Protection Guidelines: "Onsite Sewage Management for Single Households" February 1998.

b) In unsewered areas Council will require a separate OSMS for each dual occupancy dwelling. An exception will be made if one of the dwellings is small (i.e. 1 bedroom dwelling) where a common OSMS can be used.

c) Pump-out systems will not be permitted in residential zones.

d) Any alteration to a system shall require Council approval.

e) OSMS should be selected, sited, designed, constructed, operated and maintained so that surface waters and groundwater are not contaminated.

f) Effluent from primary treatment systems (i.e. septic tank) shall only be disposed of through soil absorption or removed from the site.

g) Contact with effluent from aerated systems shall be minimised or eliminated.

h) There shall be no contact with effluent from any other type of system.

i) Treated sewage shall not be used on edible crops.

j) Surface irrigation shall only occur with disinfected effluent from an aerated system.

k) Disposal areas should be fenced off from children's play areas.

SUBMISSION REQUIREMENTS

- Plans and details of the OSMS proposed including a detailed site assessment addressing the requirements of the documents referred to in (a) above.

2.14. STORMWATER MANAGEMENT

OBJECTIVES

(i) To provide for the management of stormwater on the site in efficient, equitable and environmentally sustainable ways in accordance with Council's ESD objective 3.

(ii) To control stormwater and to ensure that dual occupancy developments do not increase downstream drainage flows or adversely impact adjoining and downstream properties.

(iii) To ensure the integrity of watercourses is protected and enhanced in accordance with Council's ESD objective 4.

(iv) To provide for on-site detention of site drainage.

(v) To encourage the use of storm water on site.

DEVELOPMENT CONTROLS

a) Water Sensitive Urban Design (WSUD) measures should be employed in the management of the site's/development's stormwater in terms of water retention, reuse and cleansing.

In all dual occupancy development, one of the following water sensitive urban design measures should be utilised:-

M1 Low Impact Building Design

M2 Low Impact Landscape Design

Detailed description of the actions required to implement each of these measures is included in Appendix B Water Sensitive Urban Design of the DCP.

b) Rainwater tanks to reuse rainwater must be installed for each dwelling. The requirements for the installation and use are included in Appendix B under the heading:

M3 Rainwater Utilisation – toilet, irrigation

[*Applies only where BASIX exemption is relied on.]

c) Drainage systems are to be designed and constructed in accordance with the design guidelines set out in "Australian Rainfall and Runoff 1987" published by the Institute of Engineers, Australia.

d) On-site detention systems (OSD) where required, are to be designed in accordance with (a) above and the specific requirements of (as relevant) the Upper Parramatta River Catchment Trust On-site Detention Handbook.

(e) Concentrated stormwater flows must be connected to Council's drainage system. In some cases this may require the creation of drainage easements over downstream properties. In this circumstance, a letter of consent from the owner(s) of the downstream properties is to be submitted with the development application. On rural properties overflow from rainwater tanks must be dispersed

on site to ensure concentrated flows do not impact on adjoining properties or cause erosion.

(f) Reference should be made to the Restriction As To User on the title of the land to which the development is proposed in relation to requirements for on-site detention.

(g) Council is to be contacted prior to the submission of plans to confirm when OSD is required.

(h) Discharge points are to be controlled and treated to prevent soil erosion, and may require energy dissipating devices on steeper topography, to Council's requirements.

SUBMISSION REQUIREMENTS

- Preliminary Engineering Drainage Plans
- If required, easements are to be created over downstream properties prior to the release of the Building or Occupation certificate.
- On-Site Detention (OSD) Plans
- Details/plans of the water sensitive urban design measures incorporated into the design of the dwellings and site.

2.15. BUSHLAND AND BIODIVERSITY

OBJECTIVES

(i) To conserve and protect the biodiversity of the Shire including habitats of threatened flora and fauna species and communities in accordance with Council's ESD objective 1 and 4.

(ii) To ensure that development is consistent with the Threatened Species Conservation Act 1995.

DEVELOPMENT CONTROLS

a) Significant flora and fauna species, communities and ecological communities should be preserved.

b) Development should be designed to retain existing bushland and fauna habitats, including identifiable corridors and linkages.

c) Applications should include a Fauna and Flora Assessment in accordance with Section 5A of the Environmental Planning & Assessment Act 1979 if there is likely to be a significant effect on threatened species, populations or ecological communities, or their habitats;

d) Applicants may be required to submit a Species Impact Statement (SIS) for development likely to significantly affect threatened species, populations and ecological communities. Reference should be made to the requirements of the Environmental Planning & Assessment Act 1979, and the Threatened Species Conservation Act 1995.

SUBMISSION REQUIREMENT

- Fauna and Flora Assessment.

2.16. BUSH FIRE HAZARD MANAGEMENT

OBJECTIVES

(i) To promote the use of design guidelines for the development of land in areas subject to bushfire risk.

(ii) To reduce the risk to life and property in areas of bushfire risk.

(iii) In determining Development Applications, Council will have regard to any likely bushfire hazard.

DEVELOPMENT CONTROLS

a) Development subject to bushfire risk will be required to comply with the NSW Rural Fire Service guidelines entitled "Planning for Bushfire Protection 2006".

2.17. EROSION AND SEDIMENT CONTROL

Land degradation associated with urban development can be avoided or mitigated, largely through appropriate planning before commencement of earthworks and by using best management practices available.

OBJECTIVES

(i) Minimise land degradation, water pollution and damage to infrastructure from accumulated sediment in accordance with Council's ESD objective 5.

(ii) To provide development controls for all stages of development and to ensure a consistent approach to erosion and sediment control in

accordance with Council's ESD objectives 1 and 4.

DEVELOPMENT CONTROLS

a) Applications for development including subdivision are to be accompanied by an Erosion and Sediment Control Plan (ESCP) that will describe the measures to be taken at development sites to minimise land disturbance and erosion and control sediment pollution of waterways. ESCPs are to clearly identify the erosion and sediment control measures to be used.

b) Erosion and Sediment Control Plans shall be prepared in accordance with "Managing Urban Stormwater (Blue Book) – Soils and Construction", produced by the NSW Department of Housing.

c) The erosion and sediment control measures proposed may need to change during the development process to reflect alterations in soil and drainage patterns during the process. The erosion sediment control plan (ESCP) should address all these phases.

d) Erosion and sediment controls must be in place before work commences and be retained, and revised to reflect changes in site conditions, until the development is finalised and the site stabilised.

SUBMISSION REQUIREMENTS

- Erosion and Sediment Control Plan

2.18. PRIVACY – VISUAL AND ACOUSTIC

OBJECTIVES

(i) To site and design buildings to ensure visual privacy between dwellings in accordance with Council's ESD objective 7.

(ii) To avoid overlooking of living spaces in dwellings and private open spaces.

(iii) To contain noise within dwellings and communal areas without unreasonable transmission to adjoining dwellings.

DEVELOPMENT CONTROLS

a) Buildings are to be designed to ensure maximum protection of privacy, and, where appropriate:
   - using windows that are narrow, translucent, obscured or in the case of bathrooms, they have window sills a minimum of 1.5 metres above the upper storey floor level; and
   - ensuring that windows that face directly to the windows, balconies or yards of adjoining dwellings are appropriately screened.

b) First floor balconies will not be permitted where they overlook living areas of adjacent dwellings.

c) Windows should be placed to minimise direct viewing between dwellings.

d) Dwellings are to be designed to limit the potential for noise transmission to the living and sleeping areas of adjacent existing and future developments.

e) Careful consideration should be given to the location of air-conditioning systems, swimming pools and the like to minimise the impact on the amenity of adjoining properties.

f) Private open space areas and driveways are to be designed to minimise noise impacts.

g) Dwellings that adjoin arterial roads are to be designed to acceptable internal noise levels, based on Environmental Protection Authority – Environmental Criteria for Road Traffic Noise and Australian Standard 3671 – Road Traffic Noise Intrusion – Building Siting and Construction.

SUBMISSION REQUIREMENTS

- For dwellings that adjoin arterial roads, a statement is required from a qualified acoustic consultant certifying that the design and construction of the building meets the Environmental Protection Authority – Environmental Criteria for Road Traffic Noise and Australian Standard 3671 – Road Traffic Noise Intrusion – Building Siting and Construction.

2.19. VEHICLE ACCESS AND PARKING

OBJECTIVES

(i) To provide sufficient convenient parking and manoeuvring for residents in order to maintain the amenity of adjoining properties, the efficiency of the road network and the safety of road users in accordance with Council's ESD objective 7.

(ii) To ensure that all carparking demands generated by the development are accommodated on the development site.

DEVELOPMENT CONTROLS

a) Parking spaces required per dwelling are shown in the following table:

Dwelling Floor Space	Spaces Required
<125m^2	1
>125m^2	2 (one must be undercover)

b) The minimum dimensions of car parking spaces should be 2.6 metres x 5.5 metres.

c) Minimum internal dimensions of a single lock-up garage are to be 3 metres x 6 metres unobstructed with any car access opening being at least 2.4 metres wide, free of any encroachment from jamb fittings and hinges.

d) Parking spaces are to be an extra 300mm in width where they adjoin a solid wall.

e) Vehicle turning areas must be in accordance with Australian Standard 2890.1 – Off Street Car Parking, with the exception of the width of the turning areas for garages, which must be 6.7 metres wide.

f) Driveways should have a width of 3 metres.

g) Parking spaces forward of the building line will only be permitted where they are designed and landscaped to blend into the streetscape.

h) If vehicle access is proposed to a classified road, all entry and exit movements must be in a forward direction.

i) If vehicle access is not to a classified road, it is desirable for all entry and exit movements to and from the site, to be in a forward direction.

j) For further requirements, refer to Part C Section 1 – Parking.

SUBMISSION REQUIREMENTS

- Plans showing proposed vehicular access and circulation and calculations, specifically relating to vehicular movement, turning circles, parking spaces, and driveway widths. The Australian Standard 2890.1 – Off Street Car Parking templates must be overlaid on the appropriate plans.

2.20. FENCING

OBJECTIVE

(i) To ensure that fencing is of a high visual quality, compliments the character of the area and is compatible with the proposed development.

DEVELOPMENT CONTROLS

a) Boundary fencing constructed behind the road frontage building setback, shall be a maximum of 1.8 metres in height and of materials similar to the type and colour used in the construction of the dwelling situated on the property.

b) Any boundary fencing shall be subject to the requirements of the Dividing Fences Act.

c) Front fencing is discouraged to maintain an open streetscape appearance in areas where there are no existing front fences.

d) Where fencing within the road frontage setback areas, greater than one metre in height, is proposed it shall be of materials compatible with type and colour used in the construction of the dwelling.

e) Any fencing in the front setback shall be setback in from the front boundary to allow opportunities for landscaping when the fence exceeds 1.2 metres in height.

f) Consideration will be given to fencing on secondary road frontage setbacks, subject to there being no adverse affect on the immediate area and on traffic visibility and be of a design to incorporate features such as landscaping bays or a variation/combination of materials.

g) Fencing of private open space for dual occupancies in rural areas will not be required where access to extensive open space areas is available to each dwelling.

h) Consideration must be given to Council's Safer By Design Guidelines, particularly in regard to sightlines and materials.

SUBMISSION REQUIREMENTS

- Details of all fencing proposed for the site.

2.21. HERITAGE

OBJECTIVES

(i) To ensure that the development of land does not isolate a heritage item from its setting or context, thereby retaining its significance.

(ii) To ensure that the development of land in the vicinity of a heritage item is undertaken in a manner that has regard to the significance of the heritage item, particularly its setting and context.

(iii) To ensure that any development within a conservation area is compatible with the important or significant characteristics of the conservation area as a whole.

DEVELOPMENT CONTROLS

a) All developments must address and comply with the provisions of Part C Section 4 - Heritage where:
   - The development site is listed as a heritage item or heritage conservation area in Schedule 5 of The Hills Local Environmental Plan 2012; or
   - The development site adjoins a site listed in Schedule 5 of The Hills Local Environmental Plan 2012.
   - The Site is identified in any Draft LEP or Heritage Study that identifies potential heritage items or sites.
   - If the development site is within the Annangrove Road – Rouse Hill Development Area, additional controls under SREP No. 19 will apply.

SUBMISSION REQUIREMENTS

- When applicable, documentation to demonstrate how the objectives and controls of Part C Section 4 – Heritage are satisfied.

2.22. WASTE MANAGEMENT – STORAGE AND FACILITIES

OBJECTIVES

(i) To minimise the overall environmental impacts of waste.

(ii) To 18inimiza, through appropriate design, the opportunities to deal with domestic waste according to the Waste Hierarchy as given in Council's ESD objective 6.

(iii) To provide domestic waste management systems that allow for ease of use by occupants; and ease of service by collection contractors.

(iv) To provide waste storage areas that is integrated with the design of the development.

(v) To ensure minimum visual impact of the waste storage facilities.

(vi) To assist in achieving Federal and State Government waste 18inimization targets.

DEVELOPMENT CONTROLS

a) Waste collection and separation facilities must be provided for each dwelling. Each dwelling should have a waste storage cupboard in the kitchen capable of holding at least a single days waste, and be sufficient to enable separation of recyclable material.

b) All waste storage areas must be screened from view from any adjoining property or public place.

c) Waste storage areas must be kept clean, tidy and free from offensive odours at all times.

d) Bin storage space is to be:
   - incorporated into the landscape design of each dwelling; and
   - adequate for one 240 litre garbage bin and one 240 litre recycling bin at each dwelling.

e) Location of the bin storage space:
   - is to be convenient to the occupant(s) of the dwelling; and
   - must allow the bins to be wheeled to the street kerb over flat or ramped surfaces with a maximum grade of 7% and not over steps, landscape edging or gutters or through the dwelling.

f) The design of the bin storage facilities and on-going use by the occupants is to be addressed in the Design of Facilities and On-Going Management sections of the Waste Management Plan as required in the Submission Requirements of section 2.24 – Waste Management Planning.

2.23. WASTE MANAGEMENT PLANNING

OBJECTIVES

(i) To promote improved project management and to reduce the demand for waste disposal during demolition and construction.

(ii) To 19inimiza, reuse and recycle building/construction materials.

(iii) To encourage building designs and construction techniques that will minimise waste generation.

(iv) Minimise waste generation to landfill via the waste hierarchy in accordance with Councils ESD objective 6.

(v) To assist in achieving Federal and State Government waste 19inimization targets.

2.23.1. DEMOLITION

DEVELOPMENT CONTROLS

a) Site operations should provide for planned work staging, at source separation, re-use and recycling of materials and ensure appropriate storage and collection of waste.

b) Traditional comprehensive demolition should be replaced by a process of selective deconstruction and reuse of materials. Careful planning is also required for the correct removal and disposal of hazardous materials such as asbestos.

c) Project management must seek firstly to re-use and then secondly to recycle solid waste materials either on or off site. Waste disposal to landfill must be minimised to those materials that are not re-useable or recyclable.

d) When separated, materials are to be kept uncontaminated to guarantee the highest possible reuse value.

2.23.2. CONSTRUCTION

DEVELOPMENT CONTROLS

a) Avoid oversupply and waste of materials by careful assessment of quantities needed.

b) The use of prefabricated components may reduce waste.

c) Re-use of materials and use of recycled material is desirable where possible.

d) Site operations should provide for planned work staging, at source separation, re-use and recycling of materials and ensure appropriate storage and collection of waste.

e) All asbestos, hazardous and/or intractable wastes are to be disposed of in accordance with WorkCover Authority, EPA and Office of Environment and Heritage requirements.

SUBMISSION REQUIREMENTS

- Waste Management Plan.

2.24 SERVICES

OBJECTIVES

(i) To ensure adequate provision is made for services for each dwelling including garbage, sewer, water, drainage, electricity and telecommunications.

DEVELOPMENT CONTROLS

a) Unless it is satisfied that adequate provision has been made for the supply of water and disposal of sewage, Council may not grant consent to the development. In this regard pump out sewage systems will not be acceptable in residential zones.

b) All power, communication and gas services are to be located underground.

2.25. DEVELOPER CONTRIBUTIONS

OBJECTIVES

(i) To address the likely demands placed on public amenities and public services by an increasing residential population.

(ii) To determine a reasonable development contribution based upon the impact of residential development.

Refer to Council's Developer Contribution Plans. Where a Developer Contribution (Section 94) levy applies, development consents permitting additional dwellings will include a condition requiring the payment of Developer Contributions.

Applicants should consult with Council's Section 94 Contributions Plan and Council Officers to determine the required amount of Section 94 Contributions payable.

3. INFORMATION REQUIRED FOR A DEVELOPMENT APPLICATION

The following plans and details are required as part of the formal submission with the relevant application form(s). In preparing plans applicants must also address the submission requirements in each Section is DCP.

STATEMENT OF ENVIRONMENTAL EFFECTS SITE

PLANS

SITE ANALYSIS

ARCHITECTURAL PLANS

- Floor Plan (existing and proposed)
- Elevations

ENGINEERING DRAINAGE PLANS INCLUDING ANY ON SITE DETENTION PLANS

LANDSCAPE PLAN SIGNAGE PLAN

WASTE MANAGEMENT PLAN

BASIX CERTIFICATE

Note. Refer to Part A – Introduction section 4.0 for general lodgment requirements and detailed requirements to be included in each of the above documentation.

APPENDIX A - DEVELOPMENT CONTROL COMPLIANCE CHECK SHEET

Give appropriate detail and/or explanation where applicable to demonstrate compliance (or non-compliance) with the development controls in this Section of the DCP.

Development Controls		Proposed Development	Compliance
1	**2.1 Minimum lot size**		
2	**2.2 Site Analysis**		
3	**2.3 Setbacks** (refer to Tables 1 & 2)		
	➢ Primary Road Frontage		
	➢ Secondary Road Frontage		
	➢ Side		
	➢ Rear		
4	**2.4 Landscaped area** – 50% landscape area and 3-% permeable landscaping.		
5	**2.5 Private Open Space** – Minimum 4m x 6m. (refer to Table-3)		
6	**2.6 Building Heights**		
7	**2.7 Building Height Envelope**		
8	**2.8 Building Design and Streetscape**		
9	**2.9 Building Materials**		
10	**2.10 Solar Access** ➢ Private Open Space – 50% for four hours between 9am – 3pm on 21 June.		
11	**2.11 Ventilation**		
12	**2.12 Lighting**		
13	**2.13 On Site Sewage Management**		

Development Controls		Proposed Development	Compliance
14	**2.14 Stormwater Management – WSUD measures**		
15	**2.15 Bushland and Biodiversity**		
16	**2.16 Bush Fire Hazard Management**		
17	**2.17 Erosion and Sediment Control**		
18	**2.18 Privacy**		
19	**2.19 Parking** ➢ <125m^2 – 1 under cover spaces ➢ >125m^2 – 2 under cover spaces ➢ Min. internal dimensions – car parking spaces 2.6 metres x 5.5 metres. ➢ Min. internal dimensions – single lock-up garage 3 metres x 6 metres		
20	**2.20 Fencing**		
21	**2.21 Heritage**		
22	**2.22 Waste Management**		
23	**2.23 Waste Management Planning**		
24	**2.24 Services**		
25	**2.25 Developer Contribution**		

The Hills Development Control Plan (DCP) 2012

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THE HILLS Sydney's Garden Shire





Part B Section 4
Multi Dwelling Housing

B4

In Force 21 May 2019

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1. INTRODUCTION

This Section of the DCP must be read in conjunction with Part A – Introduction of this DCP.

1.1. LAND TO WHICH THIS SECTION OF THE PLAN APPLIES

This Section of the DCP applies to land where multi dwelling housing is permissible, pursuant to The Hills LEP 2012.

1.2. ACCESS AND MOBILITY

This Section of the DCP seeks to ensure equitable access to suitable housing is provided for all people and should be read in conjunction with the following policies and legislation where applicable:

Disability Discrimination Act 1992 and Disability (Access to Premises Buildings) Standards

The Disability Discrimination Act 1992 aims to eliminate discrimination against people on the grounds of disability and includes provisions which make it unlawful to discriminate against a person with disability in relation to access to, or use of, premises.

The Disability (Access to Premises - Buildings) Standards prescribes a set of design and construction standards covering access to new buildings or an extension to/modification of an existing building. Compliance with the Premises Standards ensures compliance with the requirements of the Disability Discrimination Act.

National Construction Code and Australian Standards

The National Construction Code (NCC) is a uniform set of technical provisions for the design and construction of buildings and other structures throughout Australia. The NCC includes provisions that mirror the Premises Standards to ensure reasonable access to buildings for people with a disability.

Australian Standards referred to in this DCP:

Standard No.	Description
AS1428.1	Design for access and mobility – general requirements for access – New building work
AS1428.2	Design for access and mobility – general requirements for access – Enhanced and additional requirements – Buildings and facilities
AS4299	Adaptable housing
AS2890.6	Parking facilities - Off-street parking for people with disabilities

2. AIMS AND OBJECTIVES OF THIS SECTION OF THE DCP

OBJECTIVES

Council's objectives for multi dwelling housing development are:

(i) Encourage a high standard of aesthetically pleasing and functional multi dwelling housing developments that sympathetically relate to adjoining and nearby developments.

(ii) Ensure that development will not detrimentally affect the environment of any adjoining lands and ensure that satisfactory measures are incorporated to ameliorate any impacts arising from the proposed development.

(iii) Encourage innovative and imaginative design with particular emphasis on the integration of buildings and landscaped areas that add to the character of the neighbourhood.

(iv) Provide high levels of amenity and safety for future residents of any multi dwelling housing development.

(v) To ensure that multi dwelling housing developments integrate the principles of Ecologically Sustainable Development.

3. OBJECTIVES AND DEVELOPMENT CONTROLS

The controls in this Section are not an exhaustive list of the controls applicable to multi dwelling housing. In

addition to the polices, guidelines and documents specified in section 1.4 of Part A - Introduction, this Section is to be read in conjunction with other relevant Sections including:

- Part B Section 2 - Residential
- Part C Section 1 - Parking
- Part C Section 2 - Signage
- Part C Section 3 - Landscaping
- Part C Section 4 – Heritage
- Part C Section 6 – Flood Controlled Land

A checklist summarising the controls described in this section is included in Appendix A – Development Control Compliance Checklist to this Section.

3.1. SITE REQUIREMENTS

OBJECTIVES

(i) To ensure development sites have sufficient areas to provide adequate access, parking, landscaping and building separation.

(ii) To provide for the orderly development of residential land through the consolidation of lots.

(iii) To ensure development on a particular site has due regard to adjoining developments.

DEVELOPMENT CONTROLS

(a) The site shall have a minimum road frontage of 28 metres.

(b) The site shall have an average width of 30 metres.

(c) The site shall not be accessed via a battle-axe driveway.

(d) The site shall not isolate adjoining lots so that they are incapable of multi dwelling housing development, meaning there will be insufficient area to meet the minimum site area specified for multi dwelling housing pursuant to Clause 4.1A *Minimum lot sizes for dual occupancy, multi dwelling housing and residential flat buildings* of The Hills LEP 2012.

SUBMISSION REQUIREMENTS

- Site plan showing the dimensions and area of the site and the location of, and details of, existing or proposed development on adjoining sites.

3.2. SITE ANALYSIS

OBJECTIVES

(i) To encourage a comprehensive approach to site planning, design and assessment of development.

(ii) To facilitate assessment of how future buildings relate to their immediate surroundings and each other.

(iii) To facilitate development of a design that minimises the negative impacts on the amenity of adjoining commercial or residential development in accordance with Council's ESD objective 7.

(iv) To ensure development is compatible with land capability.

(v) To minimise adverse impacts on the environment in accordance with Council's ESD objective 4.

DEVELOPMENT CONTROLS

(a) Development should be designed to respect site constraints such as topography, drainage, soil, landscapes, flora, fauna and bushfire hazard.

(b) Development on land adjoining bushland reserves should incorporate measures (such as setbacks and buffers) to prevent any impact on the reserves.

(c) Development is to be sited so as to minimise the impact of the development on the amenity of adjoining residences while recognising the character of the area.

(d) Siting of development is to take into account passive solar design principles.

SUBMISSION REQUIREMENTS

- Site Analysis. An example of a site analysis diagram is shown in Figure 1. The Site Analysis provided at pre-lodgement stage must include an Isometric Drawing as shown in Figure 2.

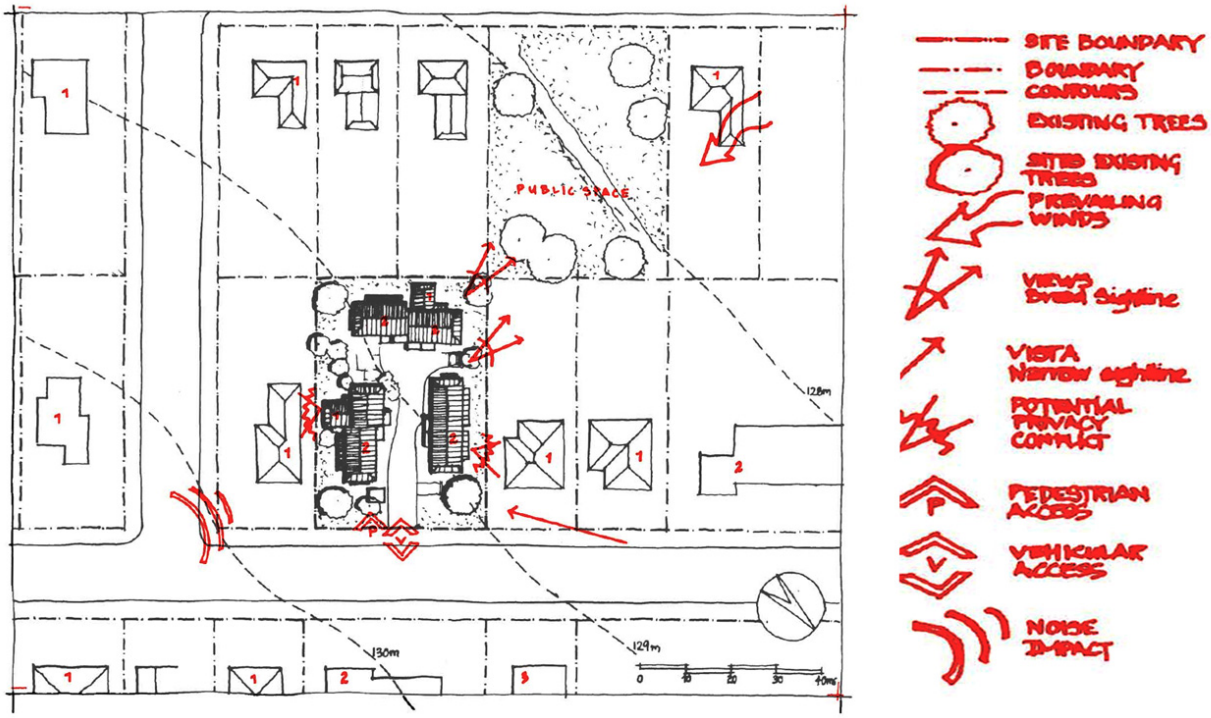


Figure 1 Site Analysis

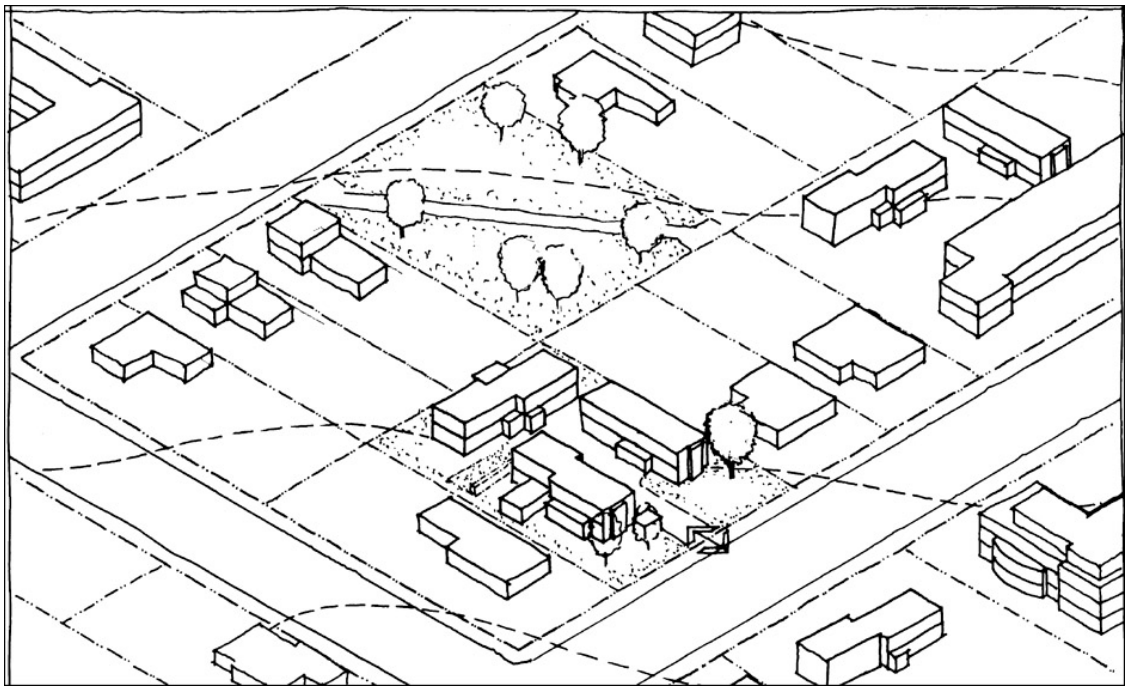


Figure 2 Isometric Drawing

Isometric Drawing

- An isometric drawing must be drawn to the same scale as the Site Plan and Site Analysis (1:500 or 1:1000), and include the following:
- Contours clearly marked – natural and man-made differentiated;
- Street patterns clearly identified;
- Proposed common areas;
- Proposed main entrances/exits; and
- Proposed landscaped treatments/features.

An example of an isometric drawing required at pre-lodgement stage is shown above.

3.3. SETBACKS

OBJECTIVES

(i) To provide an open streetscape with substantial areas for landscaping and screen planting.

(ii) To minimise overshadowing of adjoining properties.

(iii) To protect privacy and amenity of any adjoining land uses in accordance with Council's ESD objective 7.

(iv) To ensure developments are compatible with the character of surrounding housing areas in respect of the quantity and quality of open space.

DEVELOPMENT CONTROLS

Building Setback Requirement No 1 - Setbacks to Protect Trees

Setbacks are to be established so that any trees located within 10 metres of the front boundary and 4.5 metres of any rear or side boundary can be retained.

(a) Where trees are identified in the site analysis and are located within the 10 metre front setback or 4.5 metre side or rear setback, the setback should be set so that all buildings are 5 metres from the trees or clear of the drip line of the trees whichever is the greater distance. The distance must be measured from the outside of the tree trunk at ground level. The process for identifying significant trees is identified in Landscape section 3.7.

Building Setback Requirement No 2 – Building Alignment

(b) Except where a greater setback is required to satisfy "Building Zone Requirement No 1 - Setbacks to Protect Trees" all setbacks shall be in accordance with Table 1. Figure 3 provides a demonstration of how these may be applied.

(c) Where a development site has a slope such that the minimum setbacks shown in Table 1 do not achieve the objectives in respect of overshadowing, privacy and amenity for adjoining land uses, the setbacks will be increased to the point where the objectives are achieved.

Building Setback Requirement No 3 – Basement Car Park

Basement car parks must not cover the whole site as this restricts the opportunity to retain existing trees and provide for deep-rooted planting.

(d) Any basement car parking shall be located so as to ensure any trees identified are protected and must be a minimum of 5 metres from the tree or clear of the drip line. This will be measured in the manner specified above.

(e) Basement car parking cannot encroach into the front setback area.

(f) Where there are no significant trees in the setback area basement car parking must be a minimum of 2.5 metres from any side or rear boundary.

SUBMISSION REQUIREMENTS

- Building setback dimensions are to be shown on development application plans.

Table 1 Minimum Setback

	Setback
Primary Road Frontage	
Urban Classified Road	10 metres
Existing Urban Road	10 metres
Rouse Hill Development Area	6 metres
Secondary Road Frontage	
(Corner Allotments)	6 metres
Side/ Rear Boundary to Adjoining Property	
Single Storey Components	
➢ A 5 metre portion of the unit	1.5 metres
➢ The remainder of the single storey component	4.5 metres
Second Storey Components	6 metres

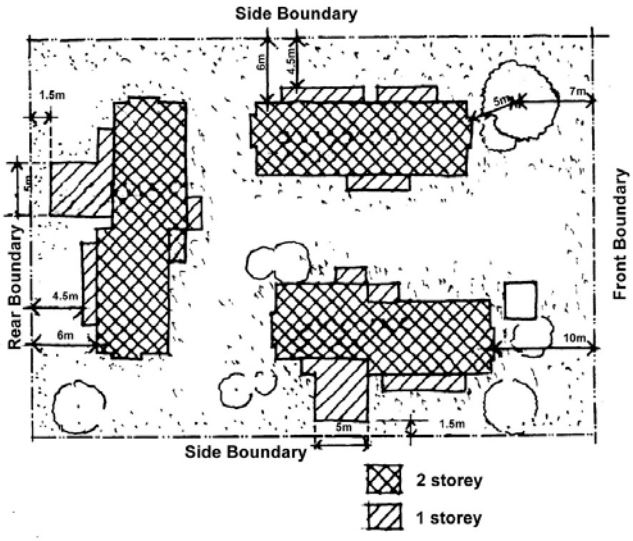


Figure 3 Setbacks

3.4. BUILDING HEIGHTS

OBJECTIVES

(i) To ensure that buildings reflect the existing landform of the neighbourhood, including ridgelines and drainage depressions.

DEVELOPMENT CONTROLS

(b) Refer to clause 4.3 *Height of buildings* of The Hills LEP 2012.

(b) Developments on sloping sites are to be stepped so that the floor level of habitable rooms does not exceed one metre above or below natural ground level when measured at any point on the ground floor.

(c) Notwithstanding the above, underfloor car parking will be considered on merit. Underfloor parking will only be considered on steeply sloping sites where the ground floor of the dwelling is not more than one metre above natural ground level.

(d) Council will only permit basement car parking where the applicant is able to demonstrate that the design achieves positive planning outcomes that otherwise will not be achieved. Potential positive planning outcomes that would be considered include:-

- ➢ Retention of sensitive environmental features such as significant trees or landscape features;
- ➢ Integration and regeneration of heritage buildings with a suitable curtilage within the development; or
- ➢ Provision of total landscape areas that exceed the minimum requirements of this Section of the DCP by 30%.

(e) Basement car parking may not protrude more than one metre above existing natural ground level.

SUBMISSION REQUIREMENTS

- Survey Plan
- Elevations and cross sections

3.5. DENSITY

OBJECTIVES

(i) To ensure multi dwelling housing development does not over-tax existing services and facilities.

(ii) To provide opportunities for a suitable housing form that is compatible with the existing surrounding development.

DEVELOPMENT CONTROLS

(a) The maximum population density permitted is 95 persons per hectare based upon the occupancy rates in Table 2:

Table 2 Occupancy Rates

Dwelling Type	Occupancy Rate (Persons)
Existing dwelling	3.5
1 bedroom dwelling	1.3
2 bedroom dwelling	2.1
3 bedroom dwelling	2.7
4 bedroom dwelling	3.5

SUBMISSION REQUIREMENTS

- Site Plan including density calculations.

3.6. BUILDING SEPARATION AND DRIVEWAY TREATMENT

OBJECTIVES

(i) To ensure there is sufficient space between dwellings to accommodate adequate vehicle manoeuvring space and landscaping.

(ii) To protect the privacy and amenity of residents.

(iii) To ensure the driveway areas are not dominated by hardstand areas and are appropriately landscaped.

(iv) To ensure that vehicles may enter and exit multi dwelling housing developments in a safe and efficient manner in accordance with Council's ESD objective 7.

(v) To maintain the performance of roads that provide an arterial or sub-arterial function in accordance with Council's ESD objective 7.

DEVELOPMENT CONTROLS

(a) A minimum separation of 10 metres between buildings facing each other is required. Stairs, eaves, bay windows, porticos, awnings, verandas and the like may encroach to the extent that a minimum separation of 8 metres is achieved between any points on buildings facing each other across internal driveways.

(b) Adequate vehicular entry and exit and circulation areas are to be provided. The design must:-

- Provide a safe environment for both pedestrians and vehicles using the site and surrounding road networks;
- Ensure vehicular ingress and egress to the site is in a forward direction at all times;
- Provide for service vehicles where possible; and
- Be designed to minimise the visual impact of hard paved areas.

(c) Long, straight (gun barrel) driveways are to be avoided.

(d) Landscape bays shall be provided along the edge of driveways.

- Where a unit fronts the driveway a landscape area must be provided between the unit and the driveway (except where entrance and garages are located). The landscape area must be at least 2 metres wide.
- Where driveways are located along a property boundary there must be a landscape area (minimum 2 metres wide) between the driveway and the boundary.

(e) Driveway dimensions:

- The maximum permitted pavement width for the driveway is 6.7 metres in areas adjacent to garages where manoeuvring area is required for vehicles.
- Driveways are to have a minimum width of 6 metres at the property boundary for a distance of 6 metres within the development to ensure easy entry/exit of vehicles.
- Except where a wider driveway (between 6 metres and 6.7 metres) is required for manoeuvring or safe entry/exit to or from the site the width of the driveway must be minimised. A minimum pavement width of 3 metres will be permitted.

(f) The location of the driveway entry point along the road frontage and gradient of the driveway should be in accordance with the requirements in Part C Section 1 – Parking.

Careful consideration should be given to design and material selection for the driveway. Layouts and finishes that minimise the impact on the environment

and the visual amenity of the area should be selected. Suggested approaches include:-

- A mix of impervious and pervious pavements with pervious pavements to be used in less trafficked areas;
- A mix of finishes and materials that minimise the visual prominence of the driveway;
- Locating landscape areas so they screen paved areas from view from the street; and
- Locating buildings to permit curving driveways so as to reduce sight lines along the driveway.

SUBMISSION REQUIREMENTS

- Applicants are required to submit plans and details with the Development Application of proposed vehicular access and circulation for Council's approval. Details must specifically relate to vehicular movement, layout and turning paths.

3.7. LANDSCAPED AREA

OBJECTIVES

(i) To provide a satisfactory relationship between buildings, landscaped areas and adjoining developments.

(ii) To minimise stormwater runoff and provide the opportunity for on-site groundwater recharge in accordance with Council's ESD objective 3.

(iii) To ensure a high standard of environmental quality in multi dwelling housing developments and the overall visual amenity and character of the neighbourhood in accordance with Council's ESD objective 7.

(iv) To ensure that landscaped areas can be efficiently maintained.

(v) To ensure that existing trees are given every opportunity to be incorporated into the final design.

(vi) To ensure that vegetation removed as a part of the land development process is replaced by suitable endemic species in accordance with Council's ESD objective 4.

(vii) To avoid the creation of drainage and runoff problems through minimising the amount of impervious area.

(viii) To minimise bulk and scale of the development.

DEVELOPMENT CONTROLS

(a) A minimum of 50% of the site shall be provided with landscaping areas, exclusive of access driveways and parking.

(b) Where basement car parking is proposed a minimum of 30% of the developed site must be capable of deep-rooted planting.

(c) A Tree Management Statement must be submitted with any application. Existing trees should be preserved wherever possible. In particular consideration must be given to retaining trees in the front, rear and side setback areas. Prior to preparing any design you should discuss the development site with Council's Tree Management Officer who may provide preliminary advice on which trees should be retained.

(d) All setback areas are to be landscaped and maintained to a high standard.

(e) Landscaping is to be provided in accordance with the provisions set out in Part C Section 3 – Landscaping.

(f) Landscape treatments are to harmonise with building designs and should consist of trees, shrubs, groundcovers and grass (Kikuyu is prohibited in any landscaping or lawn area).

(g) Native species are to be used to maintain a strong natural theme for the neighbourhood and due to their low maintenance characteristics, relative fast growth, aesthetic appeal and suitability to the natural habitat.

(h) All landscaped areas are to have a minimum width of 2 metres.

(i) When required, landscaping watering systems should incorporate drip rather than spray mechanisms and be manually operated.

(j) The landscape design should take into consideration the safety of residents and permit natural surveillance of common areas and pathways.

SUBMISSION REQUIREMENTS

- Landscape Plan
- Tree Management Detail

3.8. UNIT FLOOR AREA

OBJECTIVE

(i) To ensure that individual dwellings are of a size suitable to meet the needs of residents.

DEVELOPMENT CONTROLS

(a) The minimum internal floor area for each dwelling, excluding common passageways, car parking spaces and balconies shall be as follows:

Dwelling Type	Minimum Floor Area
1 bedroom	75 m^2
2 bedroom	110m^2
3 bedroom	135m^2

SUBMISSION REQUIREMENTS

- Site plan showing the location and size of the proposed dwellings with supporting floor area calculations.

3.9. BUILDING MATERIALS

OBJECTIVES

(i) To promote integrated, visually harmonious and attractive buildings that respects the established character of the existing residential areas.

(ii) To encourage the use of renewable, energy efficient materials that are durable and cost effective in accordance with Council's ESD objective 5.

(iii) To reduce waste generation and wastage of resources in accordance with Council's ESD objective 6.

(iv) To encourage consideration of the long-term impact of the production and use of materials used in construction of the development.

DEVELOPMENT CONTROLS

(a) All building construction must comply with the Local Government Act 1993 Local Government Regulations 2005 and Building Code of Australia.

(b) Building materials and appearance play a significant role in establishing the character of new development. Consideration should be given to the existing character and streetscape in the design of new development.

(c) Building materials should be selected carefully so as to reflect and complement the existing character of the street.

(d) Ensure that colours used are visually pleasing to the viewer and reflect the predominant colours in the area.

(e) Avoid the use of materials and colours that would cause excessive glare.

(f) Graffiti resistant materials should also be used in areas that are accessible by the general public and communal areas within the development.

(g) The following factors must be considered when selecting materials:

- suitability for the purpose;
- durability;
- long term appearance;
- local environmental impacts;
- broader and longer term environmental impacts; and
- the quantity of material required.

(h) Avoid oversupply and waste of materials by careful assessment of quantities needed.

(i) Avoid materials that are likely to contribute to poor internal air quality such as those generating formaldehyde (new carpets) or those that may create a breathing hazard in the case of fire (e.g. polyurethane).

(j) Select materials that will minimise the long-term environmental impact over the whole life of the development.

(k) Preference should be given to materials derived from renewable sources or those that are sustainable and generate a lower environmental cost, recycled material or materials with low embodied energy, better lifecycle costs and durability. For example, use of sustainable timbers rather than old growth or rainforest timbers.

SUBMISSION REQUIREMENTS

- Schedule of External Materials.
- Detailed descriptions and samples of internal materials.

- Details of alternative materials considered and reasons as to why proposed materials were selected ahead of other alternatives.
- Streetscape Perspective of proposed development including landscaping.

3.10. BUILDING DESIGN AND STREETSCAPE

OBJECTIVES

(i) Development, particularly when viewed from the street, should be compatible with the character and scale of any existing or adjoining residential development.

(ii) To ensure that the appearance of new development is of high visual quality, enhances the streetscape and complements surrounding development.

(iii) To ensure developments are of high quality and demonstrate good design.

(iv) To ensure development complements the desired character of housing within the Shire.

DEVELOPMENT CONTROLS

(a) Applicants must refer to "Baulkham Hills Multi-Unit Housing: Urban Design Guidelines" (2005) which have been adopted by Council as a guide to best practice in design for multi dwelling housing development.

(b) Developments must be varied in built form by stepping walls and rooflines of the development and avoiding long, straight, blank walls.

(c) Developments must not be repetitive in design and should incorporate variations into design features such as verandas, entrances, facades etc.

(d) External brick walls must not exceed more than 12 metres in length unless a return, recessed balcony or some other method of variation is adopted to break the straight run of brickwork.

(e) Any balconies must be recessed or otherwise treated to prevent the appearance of attachment to the walls.

(f) Common walls between units shall be of cavity or masonry construction of at least 0.23 metres thickness and shall be taken from ground floor level to underside of the roof cladding.

(g) Designs must be in harmony in terms of form, mass, colour and structure with the existing and likely future development in the street.

(h) The siting and design of dwellings should take advantage of any views to open space, public reserves and bushland to promote natural surveillance and to enhance the visual amenity of developments. Blank courtyard walls along boundaries shared with open space or reserves should be avoided and opportunities to create and orient dwellings to permit direct views from living areas into the open space/reserve should be pursued in design.

(i) Dwellings that have courtyards facing a street or public place should be avoided. Where other design constraints dictate the need for a fence, it should be constructed of masonry material similar to the construction of the dwelling and should be setback a minimum of 2 metres from the property boundary to enable adequate native landscaping.

(j) Building layout should take into consideration views into the site. Unobscured views of expanses of garage doors or rear paling or masonry fences should be avoided.

(k) Building design and layout should promote natural surveillance of common areas and all entrances. Dormant spaces and possible areas of entrapment must be avoided.

SUBMISSION REQUIREMENTS

- Elevation Plans

3.11. URBAN DESIGN GUIDELINES

(i) To encourage urban design principles which reinforce the character of the precinct.

(ii) To ensure that future development responds to and is compatible with the landscape, topography and visual setting of the area.

(iii) To promote a built form of high architectural quality which compliments existing streetscape character and improves the amenity of public space.

DEVELOPMENT CONTROLS

(a) Applications must demonstrate conformity with "Baulkham Hills Multi Unit Housing – Urban Design Guidelines" (2005) which has been

adopted by Council as a guide for the design of multi dwelling housing. This document also details desired future character statements for each precinct and sub-precinct.

SUBMISSION REQUIREMENTS

- Provide a detailed statement which addresses the "Baulkham Hills Multi Unit Housing – Urban Design Guidelines" (2005) – Section 6 – Precinct Character Statements and Section 7 – Sub-Precinct Character Statements.

3.12. OPEN SPACE

A. Private Open Space

OBJECTIVES

(i) To provide private outdoor living space that is an extension of the dwelling for the enjoyment of residents.

(ii) To provide private outdoor living space that receives a reasonable quantity of sunshine during all months of the year.

(iii) To provide a service space for clothes drying.

DEVELOPMENT CONTROLS

(a) One continuous area of private open space equal to 50% of the floor area of the dwelling shall be provided for each dwelling.

(b) Private open space areas will be contiguous to the dwelling for which it is provided and have a minimum useable area of 5.0 metres x 5.0 metres.

(c) Multi dwelling housing developments are to be designed to ensure that at least 80% of dwellings have a private open space that receives direct sunlight to 50% of the required courtyard area between 9am and 3pm on 21 June. For the remaining 20% of units 50% of each private open space area is to receive direct sunlight for 3 hours between 9am and 3pm on June 21.

(d) Collapsible or permanent clothes drying device is to be provided within the private open space area and should be located so as to maximise the amount of direct sunlight available to clothes drying areas.

(e) Private open space areas shall be enclosed with a wall or fence with an effective height of 1.8 metres from the finished ground level of the open space courtyard. All fencing enclosing private open space facing a common area or public place shall be constructed in masonry similar to the type and colour to be used in the building.

B. Common Open Space

OBJECTIVES

(i) To provide a functional open space area within the development for the informal recreation of residents and children's play.

(ii) To provide opportunities for additional landscaping and retention of any significant features that add to the amenity of the site in accordance with Council's ESD objective 4.

DEVELOPMENT CONTROLS

(a) Common open space areas comprising a children's play area shall be provided on the site behind the building line, for developments of more than five (5) dwellings.

(b) The common open space is to be centrally located and regularly shaped and must meet the following criteria:

Number of dwellings	Area Required	Dimensions
0 - 5	Not required	N/A
6 - 14	144m^2	12m by 12m
15 or more	10m^2 per unit	Minimum of 12m

c) Common open space should:

- Be suitable to enable it to be used for recreational activities, and be capable of deep-rooted planting to allow substantial vegetation to be planted. Dual use of the common open space for drainage purposes will not be permitted if inundation of the common open space restricts use of the land for recreational purposes or has a detrimental impact on landscaping provided;
- Be overlooked from adjoining units to ensure natural surveillance of the space.
- Achieve adequate solar access (50% of the common area should receive direct sunlight

between 9am and 3pm for 4 hours in mid-winter).

(d) In larger developments common open space must be designed to link to internal pedestrian paths through the site.

SUBMISSION REQUIREMENTS

- Plans are to indicate those areas including dimensions of any part of the site to be used for private and common open space.

3.13. SOLAR ACCESS

OBJECTIVES

(i) To maximise natural lighting to internal living and open space areas in winter and provide adequate shading to internal areas and private open space during summer to improve residential amenity.

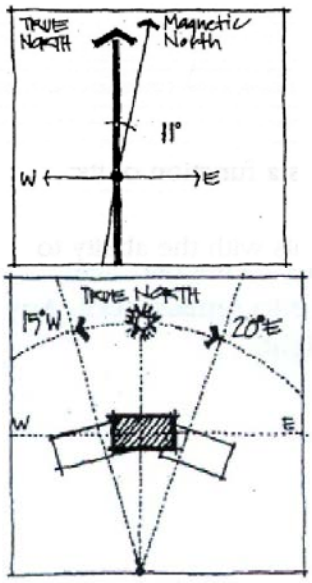
(ii) To ensure that development does not unreasonably diminish sunlight to adjoining properties.

DEVELOPMENT CONTROLS

(a) The design of the buildings shall demonstrate passive design principles in the following:-

- Window placement;
- Building orientation;
- Shading; and
- Incorporate suitable landscaping.

(b) Site buildings so that each dwelling obtains direct sunlight where possible. Ideally, face the long axis of the development up to 30 degrees east and 20 degrees west of true north. This is illustrated in the following diagrams:



Source: BDP Environment Design Guide

(c) Face living spaces to the north wherever possible.

(d) Consider the use of horizontal shading devices (for north facing windows) including eaves, verandahs, pergolas, awnings and external horizontal blinds to allow low summer sun whilst providing shade from high summer sun.

(e) West facing windows can cause discomfort in summer. If suitable, minimise the size of west facing windows, or consider external vertical shading devices such as vertical blinds and blade walls.

(f) Shading elements are to be integrated into the overall elevation design.

SUBMISSION REQUIREMENTS

- Shadow Diagrams

3.14. VENTILATION AND INFILTRATION

OBJECTIVES

(i) To maximise ventilation flows in each dwelling.

(ii) To minimise the filtering of cold or warm air through gaps in the construction of each dwelling.

DEVELOPMENT CONTROLS

(a) Consider ventilation in early design stages.

(b) Consider prevailing breezes in relation to building orientation, window design and internal circulation.

(c) Place windows to allow for cross ventilation i.e. on opposite sides of a building rather than in adjacent walls where possible.

(d) Consider the installation of fans, roof vents, louvered windows and high-level windows to aid air circulation.

(e) Windows should be lockable in a partly open position.

(f) Provide security screen doors at unit entries and doors to the courtyard area.

(g) Minimise air gaps by incorporating door and window seals.

SUBMISSION REQUIREMENTS

- Details of design measures implemented to ensure natural ventilation of units.

3.15. INSULATION AND THERMAL MASS

OBJECTIVES

(i) To maximise the use of natural lighting and to minimise the energy consumption of multi dwelling housing developments in accordance with Council's ESD objective 5.

DEVELOPMENT CONTROLS

(a) Lighting is to be provided and installed in accordance with the Building Code of Australia.

(b) Lighting in communal areas must be provided to ensure the security of residents and visitors.

(c) Maximise the use of natural lighting through window placement and skylights.

(d) Light switches in common areas are to be time switched.

(e) Motion detectors are to be used for unit entries, lobbies and outdoor security.

(f) Incorporate dimmers, motion detectors, and automatic turn-off switches where appropriate.

(g) Provide separate switches for special purpose lights.

SUBMISSION REQUIREMENT

- Applications will be accompanied with details outlining how the lighting objectives are to be achieved in the development.

3.16. STORMWATER MANAGEMENT

OBJECTIVES

(i) To control stormwater and to ensure that development does not increase downstream drainage flows or adversely impact adjoining and downstream properties.

(ii) To ensure the integrity of watercourses is protected and enhanced in accordance with Council's ESD objective 4.

(iii) To provide for the disposal of stormwater from the site in efficient, equitable and environmentally sensible ways in accordance with Council's ESD objective 3.

(iv) To provide for on-site detention of site drainage.

DEVELOPMENT CONTROLS

(a) Drainage systems are to be designed and constructed in accordance with the design guidelines set out in "Australian Rainfall and Runoff 1987" published by the Institution of Engineers, Australia.

(b) Drainage easements will be required where the development property does not drain directly into the existing stormwater drainage system or a public road. Formal Development Consent will not be issued until the submission of documents demonstrating the creation of any necessary easements over downstream properties.

(c) Discharge points are to be controlled and treated to prevent soil erosion, and may require energy dissipating devices on steeper topography, to Council's requirements.

(d) Downstream amplification of existing drainage facilities may be required.

(e) Developments within the Upper Parramatta River Catchment must comply with any requirements of the Sydney Catchment Management Authority.

(f) On-site detention and/or water recycling, and/or water quality management systems may be required to Council's and/or the Sydney

Catchment Management Authority requirements to counteract an increase in stormwater runoff.

(g) The design of drainage systems is to be in accordance with Council's Design Guidelines for Subdivisions/ Developments.

(h) Water Sensitive Urban Design (WSUD) principles shall be employed in the management of the site's stormwater in terms of water retention, reuse and cleansing. In this regard the drainage design is to include measures to manage the water quality of stormwater runoff. One measure that should be considered is integration of bio-retention filters along roadways, driveways and within open space areas.

SUBMISSION REQUIREMENTS

- Preliminary Engineering Drainage Drawings indicating the proposed drainage infrastructure.
- If required easements are to be created over downstream properties prior to the release of the linen plan for the subdivision, or prior to issue of a Building or Occupation Certificate whichever occurs first.
- If OSD is required, OSD plans must be submitted with the development application.
- Details of water quality measures and rainwater re-use system to be implemented.

3.17. CAR PARKING

OBJECTIVES

(i) To ensure that all car parking demands generated by the development are accommodated on the development site.

(ii) To protect the free flow of traffic into and out of multi dwelling housing developments and the surrounding street network in accordance with Council's ESD objective 7.

DEVELOPMENT CONTROLS

(a) All car parking required by Council shall be provided on-site in accordance with the requirements contained within Part C Section 1 – Parking.

(b) On site car parking is to be provided at the following rates:

1 bedroom	1 space
2, 3 or 4 bedrooms	2 spaces
Visitor Parking	2 spaces per 5 dwellings

Note. The above car parking rates are to be rounded up to the next whole number.

(c) Excavation to permit car parking to be provided underground will be considered on its merits. Underground parking can take the form of a common basement car park or on sloping sites individual garages may be excavated into the slope to provide for underfloor parking. Underfloor parking that results in taller and or bulkier elevations will not be supported, particularly if these elevations are visible from the street or any adjoining properties.

(d) Garages must not dominate the façade or driveway of multi dwelling housing developments. Where any dwelling requires two (2) garage spaces consideration should be given to enclosing only one space in a garage and treating the second space with a pergola or deck. This permits some flexibility in the use of this space.

(e) Where an enclosed double garage is proposed they will only be permitted where a minimum of two of the following design measures are employed:

- Garage doors are divided by a vertical masonry pillar or similar,
- Colours and textures are used to ensure garage doors do not dominate the elevation,
- A verandah or pergola is provided across the face of the garage,
- Vertical elements are utilised to mitigate the horizontal emphasis of the garage, and
- Garages are staggered whereby one garage is setback from the adjoining garage.

(f) Car parking spaces should be screened from the street.

(g) Single garages shall have a minimum internal clear dimension of 5.5 metres x 3.0 metres. Double garages, where they are proposed, must have internal clear dimensions of 5.5 metres x

5.4 metres. These garage dimensions are exclusive of the storage area requirement in section 3.18.

(h) Visitor parking must be provided with minimum dimensions of 5.5 metres x 2.6 metres and is to be made accessible at all times. Where visitor parking is proposed behind security gates, the access to visitor parking must be maintained through the operation of an intercom system installed at or near the gate. The intercom shall be located to allow a free movement of traffic around the stationary vehicle using the intercom to ensure queuing does not adversely affect traffic or pedestrian movement on the street. A maximum driveway gradient of 5% for 6 metres before the intercom is required to minimise problems associated with using the intercom on steep driveway gradients.

(i) A separate vehicle turning facility should be provided between the intercom location and the security door to ensure visitor vehicles are able to manoeuvre and leave the site in a forward direction using a 3 point turn manoeuvre should the resident be unavailable or deny access to the visitor.

(j) Car parking spaces are to be an extra 300mm in width where they adjoin a solid wall. This does not apply to garages, which must comply with the dimensions specified above.

(k) Parking areas within the front setback are discouraged.

(l) Car parking areas are to be separated from any adjoining property boundaries by a 2 metre wide landscaped strip to screen the parking from view.

(m) Disabled parking provision is to be provided in accordance with Australian Standard 2890.6.

(n) Developments in excess of 10 units are to provide separate pedestrian and vehicular access from the street.

(o) A carwash bay must be provided in accordance Part C Section 1 – Parking.

SUBMISSION REQUIREMENTS

- Site Plan showing the number of car parking spaces, calculations and the dimensions of all parking spaces and driveway widths and carwash bay.

3.18. STORAGE

OBJECTIVES

(i) To ensure that each dwelling has reasonable private storage space.

DEVELOPMENT CONTROLS

(a) At least $10m^3$ must be provided for storage space per dwelling within a lockable garage, not encroaching into the parking space, and with a minimum base area of $5m^2$ and a minimum width of 2 metres.

SUBMISSION REQUIREMENTS

- Plans must show the designated storage area for each dwelling.

3.19. ACCESS AND ADAPTABILITY

In order to provide for disabled people and the ageing population, dwellings must be capable of adaptation so as to accommodate residents who may have special needs, declining mobility or sight. This is in addition to being appropriately designed for everyday pedestrian use.

OBJECTIVES

(i) To ensure that developers comply with the provisions of Australian Standard 1428.1, in regard to appropriate and improved access and facilities for all persons.

(ii) To encourage designers/developers to consider the needs of people who are mobility impaired and to provide greater than minimum requirements for access and safety.

(iii) To ensure that dwellings are accessible to persons with impaired sight or partial mobility.

(iv) To ensure that building design does not prevent access by people with disabilities and incorporate measures appropriate for people with disabilities.

DEVELOPMENT CONTROLS

(a) Accessible paths of travel shall be provided as follows:

- An internal accessible path of travel shall comply with Australian Standard 1428 Part 1.

- An external accessible path of travel shall comply with Australian Standard 1428 Part 1, except that abutment tolerance shall be increased to 10mm at paving joints.

(b) One visitor parking bay must be provided complying with the provisions of Australian Standard 2890 for people with a disability as part of the requirements for visitor parking specified in the DCP.

(c) Adaptable or Accessible dwellings are to be provided in accordance with the table below:

No. of Dwellings	No. of Adaptable or Accessible Dwellings
5 or less	NIL
6-15	1
16-30	2
More than 30	10% of all dwelling units

Adaptable and Accessible dwellings are defined as follows:

- **Accessible Dwelling** means a dwelling unit that complies with Australian Standard 1428:2 and is suitable for occupation for a wheelchair user.
- **Adaptable Dwelling** means a dwelling unit that meets the specifications for a Class B Adaptable Dwelling in accordance with Australian Standard 4299 – 1995.

Each Adaptable or Accessible dwelling shall have an accessible parking bay complying with Australian Standard 2890 for people with a disability. An accessible path of travel must be provided from the car parking space to the dwelling.

SUBMISSION REQUIREMENTS

- Any application for six or more dwellings must be accompanied by:

(i) An access report prepared by a suitably qualified person, demonstrating the proposed developments ability to comply with the access requirements contained in the Disability (Access to Premises – Buildings) Standards as well as Australian Standards;

• AS 1428.1 General requirements for access – New building work;

• AS 1428.2 Enhanced and additional requirements – Buildings and facilities; and

• AS 4299 Adaptable Housing

as relevant to the proposal.

(ii) A pre and post-adaptation floor plan for adaptable housing.

3.20. PEDESTRIAN ACCESS, SAFETY AND SECURITY

OBJECTIVES

(i) To consider the needs of the residents with particular consideration to access requirements, safety and security.

(ii) To ensure that appropriate pathways, with high levels of pedestrian amenity are provided for residents in the locality along identified desire lines in accordance with Council's ESD objective 9.

(iii) To ensure provision is made for bicycle access and storage. In accordance with Council's ESD objective 9.

DEVELOPMENT CONTROLS

(a) Site planning, dwelling design and pathway locations must ensure natural surveillance of the pathway from primary living areas of adjoining units. Dwelling entries must not be hidden from view and must be easily accessible.

(b) Clearly defined paved pedestrian pathways are to be provided between each dwelling and the street.

(c) Developments are to have adequate lighting in common and access areas to ensure the safety of residents and property.

(d) Access to dwellings should be direct and without unnecessary barriers. All pathways and ramps should conform to requirements set out in Australian Standard 1428, Parts 1 and 2.

(e) Building and unit numbering and all signage is to be clear and easy to understand.

3.21. PRIVACY - VISUAL AND ACOUSTIC

OBJECTIVES

(i) To site and design buildings to ensure visual privacy between dwellings in accordance with Council's ESD objective 7.

(ii) To avoid overlooking of living spaces in dwellings and private open spaces.

(iii) To contain noise within dwellings and communal areas without unreasonable transmission to adjoining dwellings.

DEVELOPMENT CONTROLS

(a) Minimise direct overlooking of main internal living areas and private open space of dwellings both within and adjoining the development through building design, window locations and sizes, landscaping and screening devices.

(b) Consider the location of potential noise sources within the development such as common open space, service areas, driveways, and road frontage, and provide appropriate measures to protect acoustic privacy by careful location of noise-sensitive rooms (bedrooms, main living areas) and double glazed windows.

(c) Dwellings that adjoin arterial and sub-arterial roads are to be designed to acceptable internal noise levels, based on Australian Standard 3671 – Road Traffic Noise Intrusion Guidelines.

(d) Private areas in a development are to be clearly recognisable.

SUBMISSION REQUIREMENTS

- Statement of Environmental Effects must address design measures considered and ultimately selected to ensure the visual and acoustic privacy of future residents and residents of adjoining sites.
- Statement addressing Australian Standard 3671 – Road Traffic Noise Intrusion Guidelines.

3.22. SERVICES

OBJECTIVES

(i) To ensure that the physical services necessary to support multi dwelling housing development are available in accordance with Council's ESD objective 6.

(ii) To ensure that service facilities are integrated with the design of the development and are suitably sized for the convenience of the occupants.

(iii) To provide for the efficient collection of garbage.

(iv) To ensure minimum visual impact of garbage storage facilities on site.

DEVELOPMENT CONTROLS

(a) Site services and facilities (such as letterboxes and garbage compounds) shall be designed so as:

- To provide safe and convenient access by residents and the service authority,
- To be visually integrated with the development and to have regard to the amenity of adjoining development and streetscape.

(b) All electricity and telephone services on site must be underground.

(c) Laundries shall be provided to each dwelling with a permanent or collapsible clothes line provided in the courtyard.

(d) Pump out sewage management systems are not considered acceptable for multi dwelling housing developments.

SUBMISSION REQUIREMENTS

- Preliminary discussions should be held with the service authorities listed below prior to the submission of any application. Any advice provided by these authorities should be submitted with the application:
  - Sydney Water for potable and recycled water, sewage and drainage;
  - Telecommunications carrier for telephones and associated equipment;
  - Energy authority for underground electricity;
  - AGL for gas supplies; and
  - NSW Fire Brigades.
- Documentation to demonstrate how the objectives and development controls are satisfied.

3.23. WASTE MANAGEMENT – STORAGE AND FACILITIES

Waste collection for multi dwelling housing developments must be undertaken in a safe, healthy and clean manner. It is preferred that larger developments (8 or more dwellings) do not propose kerbside collection of waste. Kerbside collection is considered unsuitable in most circumstances given the high number of bins required to await collection, the time taken to service the bins and amenity and safety issues. Where it can be demonstrated that on-

site collection is not possible or practical, kerbside collection may be supported if this arrangement will not create any adverse appearance, amenity and safety outcomes. Matters which will be considered with respect to collection arrangements include whether the development is located on a road with high traffic volumes, the number of bins required to service the development, the length of the street frontage/s of the site and any other relevant considerations. Reference should be made to Council's Bin Storage Facility Design Specification and discussions undertaken with Council's Resource Recovery Team.

OBJECTIVES

(i) To minimise the overall environmental impacts of waste.

(ii) To maximise, through appropriate design, the opportunities to deal with domestic waste according to the Waste Hierarchy as given in Council's ESD objective 6.

(iii) To provide domestic waste management systems that allow for ease of use by occupants and safe and efficient service by collection contractors.

(iv) To encourage on-site waste collection where possible.

(v) To provide waste storage areas and collection that are integrated with the design of the development.

(vi) To ensure minimum visual impact of the waste storage facilities.

(vii) To assist in achieving Federal and State Government waste minimisation targets.

DEVELOPMENT CONTROLS

General

(a) Waste collection and separation facilities must be provided for each dwelling. Each dwelling should have a waste storage cupboard in the kitchen capable of holding at least a single day's waste, and sufficient to enable separation of recyclable material.

(b) Where on-site waste collection is proposed, internal access driveways, internal roads and/or basement carparking must be designed to provide adequate clearance and manoeuvring space to allow Council's (or its contractor's) waste collection vehicles to enter and exit in a forward direction, collect waste and recyclables with no need for reversing and without impeding upon general access to, from or within the site. Applicants should liaise with Council's Resource Recovery Department on truck sizes, required turning paths and access/servicing arrangements.

(c) Where kerbside collection is proposed, bin storage areas must be located to allow bins to be wheeled to the street kerb over flat or ramped surfaces with a maximum grade of 7% (5% for bulk garbage bins) to be serviced by a garbage truck on a flat surface and not over steps, landscape edging or gutters.

(d) All waste must be removed at regular intervals and not less frequently than once per week for garbage and fortnightly for recycling.

Storage and Facilities

(e) Adequate storage for waste materials must be provided on site.

(f) Waste storage areas should be incorporated into the design of the development and not be visible from the street.

(g) Waste storage and facilities must be convenient and accessible to the occupant(s) of all dwellings.

(h) For developments containing between 3 and 7 dwellings, adequate storage for one 240 litre garbage bin and one 240 litre recycling bin per dwelling must be provided.

(i) For developments containing 8 or more dwellings, adequate storage is required for the number of bulk or 240 litre bins according to the estimated waste generation rate from the total number of dwellings (as given in Appendix B - Bin Storage Facility Design Specifications to this Section). Storage areas must be accessible by wheelchair.

(j) When locating and designing waste storage areas consideration must be given to screening views of the facility while ensuring there is some natural surveillance from within the development to minimise vandalism and other anti-social activity. Communal storage areas should be located within reasonable travel distance from all dwellings within a development.

(k) Waste storage areas must be kept clean, tidy and free from offensive odours at all times.

(l) The design of the bin storage facilities and collection and on-going use by the occupants is to

be addressed in the Design of Facilities and On-Going Management sections of the Waste Management Plan as required by section 3.24 of this Section of the DCP. Where a development has 8 or more dwellings, the design is to be in accordance with Council's Bin Storage Facility Design Specification available on Council's website.

3.24. WASTE MANAGEMENT PLANNING

OBJECTIVES

(i) To promote improved project management and to reduce the demand for waste disposal during demolition and construction.

(ii) To maximise, reuse and recycle building/construction materials.

(iii) To encourage building designs and construction techniques that will minimise waste generation.

(iv) Minimise waste directed to landfill via the waste hierarchy in accordance with Councils ESD objective 6.

(v) To assist in achieving Federal and State Government waste minimisation targets.

Demolition

DEVELOPMENT CONTROLS

(a) Site operations should provide for planned work staging, at source separation, re-use and recycling of materials and ensure appropriate storage and collection of waste.

(b) Straight demolition should be replaced by a process of selective deconstruction and reuse of materials. Careful planning is also required for the correct removal and disposal of hazardous materials such as asbestos.

(c) Project management must seek firstly to re-use and then secondly to recycle solid waste materials either on or offsite. Waste disposal to landfill must be minimised to those materials that are not re-useable or recyclable.

(d) When separated, materials are to be kept uncontaminated to guarantee the highest possible reuse value.

(e) Details of waste sorting areas and vehicular access are to be provided on plan drawings.

(f) Prior to any demolition works commencing on the site, the applicant is to notify all adjoining and adjacent neighbours and Council, five (5) working days prior to work commencing.

Construction

DEVELOPMENT CONTROLS

(g) Avoid oversupply and waste of materials by careful assessment of quantities needed.

(h) The use of prefabricated components may reduce waste.

(i) Re-use of materials and use of recycled material is desirable where possible.

(j) Site operations should provide for planned work staging, at source separation, re-use and recycling of materials and ensure appropriate storage and collection of waste.

(k) All asbestos, hazardous and/or intractable wastes are to be disposed of in accordance with WorkCover Authority and Office of Environment and Heritage requirements.

SUBMISSION REQUIREMENTS

- Waste Management Plan (WMP) (Refer to Appendix A – Waste Management Plan of The Hills DCP for template).

3.25. FENCING

OBJECTIVES

(i) To ensure that fencing does not detract from the overall visual amenity and character of the area.

DEVELOPMENT CONTROLS

(a) The fencing materials chosen must protect the acoustic amenity and privacy of courtyards. All courtyard walls shall have an effective height of 1.8 metres. Courtyard walls facing common or public areas must be constructed of masonry similar to the type and colour used in the building.

(b) All fencing/walls fronting a street shall be setback a minimum of 2 metres from the boundary, to permit landscaping. These fences shall include recesses and other architectural features.

(c) All fencing or walls shall be combined and integrated with site landscaping.

(d) The following fencing or finishes are not acceptable because of poor visual appearance and/or acoustic performance issues:
   - Pre-painted solid, metal fencing; or
   - Rendered finishes where the entire fence is fully rendered in one colour.

SUBMISSION REQUIREMENTS

- Fencing details for the site, clearly showing the location, height and type of proposed fencing is to be submitted as part of the development application.

3.26. DEVELOPER CONTRIBUTIONS

Applicants should consult with Council's Section 94 Contributions Plan and Council Officers to determine the required amount of Section 94 Contributions payable.

4. INFORMATON REQUIRED FOR A DEVELOPMENT APPLICATION

In preparing plans applicants must also address the submission requirements listed in section 3 of this Section of the DCP relevant to the application. The following plans and details will be required with all multi dwelling housing applications along with the relevant application form(s).

STATEMENT OF ENVIRONMENTAL EFFECTS

SITE PLANS

SITE ANALYSIS refer to section 3.2.

ARCHITECTURAL PLANS

ENGINEERING PLANS

- Drainage Plans including any On Site Detention Plans

LANDSCAPE PLAN

- These plans are to be in accordance with Part C Section 3 – Landscaping.

EARTHWORKS PLAN

SIGNAGE PLANS

- Refer to Part C Section 2 – Signage.

STREETSCAPE PERSPECTIVE

MODEL

- For all developments comprising 10 or more units a scale model must be provided including adjoining properties at the time of the submission of the development application and be on display for the duration of the public exhibition period.
- Should a model not be submitted with the application, an immediate "stop the clock" order be placed on the development application until the model is presented.

WASTE MANAGEMENT PLAN

BASIX CERTIFCATE

Note. Refer to Part A – Introduction section 4.0 for general lodgement requirements and detailed requirements to be included in each of the above documentation.

5. REFERENCES

Australian Council of Business Design Professionals, (2000) BDP Environment Design Guide.

Baulkham Hills Shire Council, 1997 Residential Development Strategy.

Baulkham Hills Shire Council, 1999 Urban Capability Assessment of Residential Zones in Baulkham Hills Shire.

Department of Housing and Regional Development, (1995) AMCORD.

Department of Urban Affairs and Planning and the NSW Government Architect, 1998 Better Urban Living – Guidelines for Urban Housing in NSW.

Department of Urban Affairs and Planning State Environmental Planning Policy No. 53 - Metropolitan Residential Development

Donovan I, Cameron C, and Coombes P (1999). Water Sensitive Urban Development: Model Planning Provisions. Lake Macquarie City Council, Speers Point, on behalf of the Lower Hunter and Central Coast Environmental Management Strategy.

ERM Mitchell McCotter 1991, Baulkham Hills Shire Residential Development and Traffic Study, Prepared on behalf of Baulkham Hills Shire Council.

APPENDIX A - DEVELOPMENT CONTROL COMPLIANCE CHECKLIST

Give appropriate detail and/or explanation where applicable to demonstrate compliance (or non-compliance) with the development controls in this Section of the DCP.

Development Controls		Proposed Development	Compliance
1	**3.1 Site Requirements** Road Frontage – 28 metres Average Width – 30 metres		
2	**3.2 Site Analysis** Site Analysis provided		
3	**3.3 Building Zone** Clear of trees to be retained (5 metres or clear of drip line) Refer to Table 1 Basement car park – ➢ not encroaching into front setback ➢ 2.5 metre side and rear setback		
4	**3.4 Building Height** Floor within one metre of existing ground level.		
5	**3.5 Density** Maximum 95 persons per hectare		
6	**3.6 Building Separation and Driveway Treatment** Dwellings facing across any driveway must be 8 -10 metres apart. Landscape areas - 2 metres wide. Driveway Design – consider requirements re manoeuvring requirements, design, dimensions, materials and finishes.		
7	**3.7 Landscaped area –** 50% soft landscaping area. Minimum 30% capable of deep rooted planting where basement provided.		
8.	**3.8 Unit Floor Area** 1 bedroom dwelling –75m^2 2 bedroom dwelling– 110m^2 3 bedroom dwelling– 135m^2		
9	**3.9 Building Material** Applicant has demonstrated that they considered matching materials and colours to ensure they match the character of area. Applicant has demonstrated that they		

Development Controls		Proposed Development	Compliance
	considered materials that minimise the environmental cost of the development.		
10	**3.10 Building Design and Streetscape** Addresses Council's "Multi Unit Housing - Urban Design Guidelines" (2002). Variation: Avoids repetition in designs/features. Design takes into account views into and out of site and natural surveillance of common areas.		
11	**3.11 Urban Design Guidelines** Demonstrate conformity with "Baulkham Hills Multi Unit Housing – Urban Design Guidelines" (2002).		
12	**3.12 Open Space** Courtyard equal to 50% of unit floor area with minimum dimension 5 x 5 metres. Courtyards must: ➢ Achieve solar access requirements of 50% for 4 hours. ➢ Be contiguous to the dwelling and accessible from living areas.		
13	**3.13 Solar Access** Design utilises passive solar design principles.		
14	**3.14 Ventilation and Infiltration** Cross ventilation achieved in units.		
15	**3.15 Insulation and Thermal Mass** Design maximises availability of natural light for habitable rooms. Energy efficient switches and fittings used.		
16	**3.16 Stormwater Management** Designed in accordance with Australian Rainfall and Runoff 1987. OSD provided. Water Quality Measures Implemented.		
17	**3.17 Car parking** 1 bedroom dwelling – 1 space 2-3 or 4 bedroom dwelling – 2 spaces Visitor parking:- 2 space per 5 dwellings Car parking spaces/garages meet minimum dimension controls		

<table>
<tr><th colspan="2">Development Controls</th><th>Proposed Development</th><th>Compliance</th></tr>
<tr><td></td><td>Carwash bay</td><td></td><td></td></tr>
<tr><td>18</td><td>3.18 Storage
10m^3 storage area minimum area 5m^2 and width 2 metres.</td><td></td><td></td></tr>
<tr><td>19</td><td>3.19 Access and Adaptability
Adaptable or accessible dwellings provided in accordance with table below;
<table><tr><th>No. of Dwellings</th><th>No. of Adaptable or Accessible Dwellings</th></tr><tr><td>5 or less</td><td>NIL</td></tr><tr><td>6-15</td><td>1</td></tr><tr><td>16-30</td><td>2</td></tr><tr><td>More than 30</td><td>10% of all dwelling units</td></tr></table>Disabled parking provided.</td><td></td><td></td></tr>
<tr><td>20</td><td>3.20 Pedestrian Access, Safety and Security
Pathways are accessible to people with mobility impairments.
Adequate lighting, signage and choice of materials/ surfaces for all pathways.
Design allows natural surveillance of pathways.</td><td></td><td></td></tr>
<tr><td>21</td><td>3.21 Privacy – Visual And Acoustic
Overlooking of private spaces/ adjoining units and dwellings minimised.
Design considers and addresses potential noise conflicts.</td><td></td><td></td></tr>
<tr><td>22</td><td>3.22 Services
Appropriate services available.</td><td></td><td></td></tr>
<tr><td>23</td><td>3.23 Waste Management - Storage and Facilities
Required number of garbage bins and storage area provided.</td><td></td><td></td></tr>
<tr><td>24</td><td>3.24 Waste Management Planning
Waste Management Plan provided.</td><td></td><td></td></tr>
<tr><td>25</td><td>3.25 Fencing</td><td></td><td></td></tr>
</table>

Development Controls		Proposed Development	Compliance
	1.8 metre masonry fences for courtyards. Walls fronting the street setback 2 metres. Fences not fully rendered.		
26	**3.26 Developer Contributions** Contributions payable for this development		

APPENDIX B - BIN STORAGE FACILITY DESIGN SPECIFICATIONS

For residential developments of 8 units or more, all bin storage compounds are to be constructed:

- To store both garbage and recycling bins together in the same bay;
- Of brickwork compatible with the development with walls a minimum of 1.5 metres high;
- Of dimensions which will store and allow the manoeuvring of at least the minimum number of garbage and recycling bins required;
- With a level floor of 100mm thick reinforced concrete with a smooth, non-slip finish and suitably drained to landscaped areas;
- With a water supply and tap to facilitate bin washing onto turfed or garden areas (if tap is located inside the bin storage compound it is not to protrude into the space indicated for the placement of bins);
- With a minimum clear wall opening of:
  - 1.5 metres for a bin compound requiring a bin of maximum size 1100L bin;
  - One metre for a bin compound requiring bin of maximum size 660L bin; or
  - 820mm for a bin compound requiring only 240L bins;
- With a door (hinged or sliding gates of painted wood or metal, or panel-lift/roller/tilta door) in the wall opening which, when fully opened, is flush with the outside wall and/or not blocking the driveway or footway, and which allows most direct access to the bins for servicing by the collection vehicle;
- With a suitable resident access door (allowing wheelchair access for adaptable sites);
- With a 'bin servicing area' constructed of smooth, non-slip 100mm thick reinforced concrete, with a maximum grade of 5%, adjacent to the opening of the bin compound and extending out (including kerb crossing where required) to allow safe manoeuvring and servicing of the bulk garbage bin(s) by the garbage truck operator;
- With a heavy duty driveway and driveway crossing (suitably splayed) where the collection vehicles are required to enter the site;
- With signage provided by Council to be mounted in a visible location on an internal wall in the bin compound and is to be maintained by the Body Corporate (signage is to indicate the correct use of the garbage and recycling service);
- With permanent signage, which is to be maintained by the Body Corporate and mounted in a visible location on:
  - An internal wall in the bin compound, indicating which units or building the bin compound is allocated to (if bin compound is not provided for all units or if more than one bin compound is provided);
  - The front of the bin compound, indicating "No Parking in front of Bin Compound - 24 hours", where the bin compound opening and access path have frontage to the street or internal driveway (applicable only if the bin compound contains bulk garbage bins); and
  - For use only by the residents of the completed development and no builders or contractors waste is to remain in the bin compound; and

Details are to be submitted with the Development Application.

Note:
The ratios given below are used as a guide to determine the minimum number of bins that are required to be stored at medium density residential developments. The agreed number of bins that will require storage are given as a consent condition.

GARBAGE	An equivalent of 120 litres (minimum) available per unit per week (in the form of a shared bulk garbage bin).
RECYCLING	For one (1) bedroom units: one 240 litre bin per 4 units For two (2) bedroom units: one 240 litre bin per 3 units For three (3) bedroom units: one 240 litre bin per 2 units For four (4) bedroom units: one 240 litre bin per unit

The Hills Development Control Plan (DCP) 2012

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THE HILLS Sydney's Garden Shire





Part B Section 5
Residential Flat Building

B5

In Force 21 May 2019

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1. INTRODUCTION

This Section of the DCP must be read in conjunction with Part A – Introduction of this DCP.

1.1. LAND TO WHICH THIS SECTION OF THE PLAN APPLIES

This Section of the DCP applies to land where, under the provisions of The Hills Local Environmental Plan (LEP) 2012, residential flat buildings are a permissible use. The provisions of this Section also apply to shop top housing where specifically identified in the Part B Section 8 - Shop Top Housing of this DCP.

1.2. ACCESS AND MOBILITY

This Section of the DCP seeks to ensure equitable access to suitable housing is provided for all people and should be read in conjunction with the following policies and legislation where applicable:

Disability Discrimination Act 1992 and Disability (Access to Premises - Buildings) Standards

The Disability Discrimination Act 1992 aims to eliminate discrimination against people on the grounds of disability and includes provisions which make it unlawful to discriminate against a person with disability in relation to access to, or use of, premises.

The Disability (Access to Premises - Buildings) Standards prescribes a set of design and construction standards covering access to new buildings or an extension to/modification of an existing building. Compliance with the Premises Standards ensures compliance with the requirements of the Disability Discrimination Act.

National Construction Code and Australian Standards

The National Construction Code (NCC) is a uniform set of technical provisions for the design and construction of buildings and other structures throughout Australia. The NCC includes provisions that mirror the Premises Standards to ensure reasonable access to buildings for people with a disability.

Australian Standards referred to in this DCP:

Standard No.	Description
AS1428.1	Design for access and mobility – general requirements for access – New building work
AS1428.2	Design for access and mobility – general requirements for access – Enhanced and additional requirements – Buildings and facilities
AS4299	Adaptable housing
AS2890.6	Parking facilities - Off-street parking for people with disabilities

1.3. STATE ENVIRONMENTAL PLANNING POLICY NO. 65 (SEPP 65) – DESIGN QUALITY OF RESIDENTIAL FLAT DEVELOPMENT

Refer to State Environmental Planning Policy No. 65.

2. AIMS AND OBJECTIVES OF THIS SECTION OF THE DCP

OBJECTIVES

Council's objectives for residential flat building development are:

(i) Encourage a high standard of aesthetically pleasing and functional residential flat building developments that sympathetically relate to adjoining and nearby developments.

(ii) Ensure that development will not detrimentally affect the environment of any adjoining lands and ensure that satisfactory measures are incorporated to ameliorate any impacts arising from the proposed development.

(iii) Encourage innovative and imaginative designs with particular emphasis on the integration of buildings and landscaped areas that add to the character of the neighbourhood.

(iv) Provide high levels of amenity and safety for future residents of any residential flat building development.

(v) To ensure that residential flat building developments incorporate the principles of Ecologically Sustainable Development.

3. OBJECTIVES AND DEVELOPMENT CONTROLS

Objectives and development controls for residential flat buildings are set out in the following sections.

In addition to the polices, guidelines and documents specified in section 1.4 of Part A - Introduction, this Residential Flat Building Section is to be read in conjunction with other relevant Sections including:

- Part C Section 1 – Parking
- Part C Section 2 – Signage
- Part C Section 3 – Landscaping
- Part C Section 4 – Heritage
- Part C Section 6 – Flood Controlled Land

A checklist identifying the development controls is provided as a summary in Appendix A – Development Control Calculations/Compliance Sheet within this section.

3.1. SITE REQUIREMENTS

OBJECTIVES

(i) To ensure development sites have sufficient areas to provide adequate access, parking, landscaping and building separation.

(ii) To provide for the orderly development of residential land through the consolidation of lots.

(iii) To ensure development on a particular site has due regard to adjoining developments in accordance with Council's ESD objective 7.

DEVELOPMENT CONTROLS

(a) The minimum road frontage requirement is 30 metres.

(b) Development sites shall not be accessed via a right of way and/or access handle. Access driveways should be centrally located within any proposed residential flat building development site.

(c) A residential flat building development shall not isolate adjoining lots so that they are incapable of multi dwelling housing development, meaning there will be insufficient area to meet the minimum site area requirement in Clause 4.1A *Minimum lot sizes for dual occupancy, multi dwelling housing and residential flat buildings* of the LEP 2012.

SUBMISSION REQUIREMENTS

- Site plan
- Location and general description of any adjoining developments.

3.2. SITE ANALYSIS

OBJECTIVES

(i) To encourage a comprehensive approach to site planning, design and assessment of development.

(ii) To facilitate assessment of how future buildings relate to their immediate surroundings and each other.

(iii) To facilitate development of a design that minimises the negative impacts on the amenity of adjoining commercial or residential development in accordance with Council's ESD objective 7.

(iv) To ensure development is compatible with land capability.

(v) To ensure during consideration of the site layout and design, that disturbance to the natural environment is minimised in accordance with Council's ESD objective 4.

DEVELOPMENT CONTROLS

(a) Development is to be designed to respect site constraints such as topography, drainage, soil landscapes, flora, fauna and bushfire hazard.

(b) Development on land adjoining bushland reserves should incorporate measures (such as setbacks and buffers) to prevent any impact on the reserves.

(c) Development is to be sited so as to minimise the impact of the development on the amenity of adjoining residences while recognising the character of the area.

(d) Siting of development is to take into account solar passive design principles.

SUBMISSION REQUIREMENTS

- Site Analysis. An example of a site analysis diagram is shown in Figure.1. The site analysis provided at pre-lodgement stage must include an Isometric Drawing as shown in Figure 2.

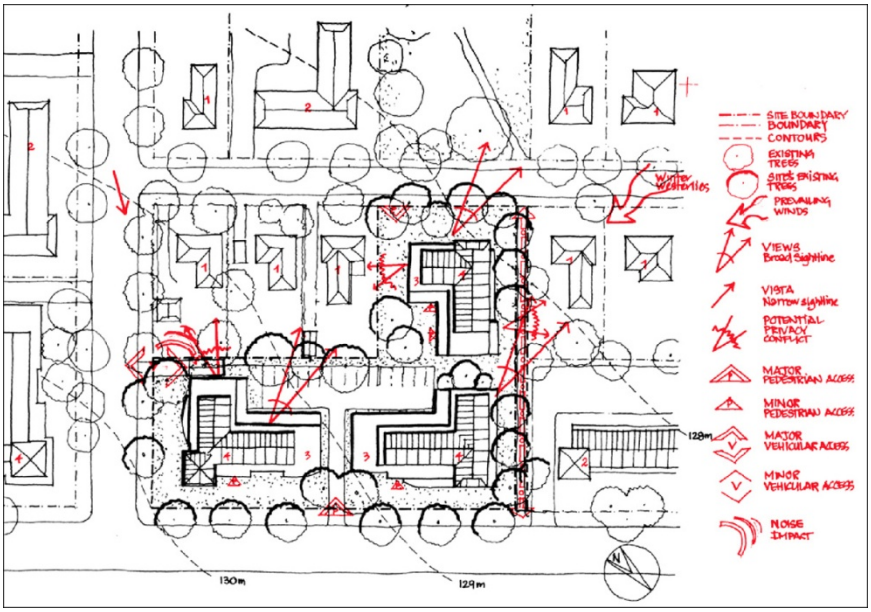


Figure 1 Site Analysis

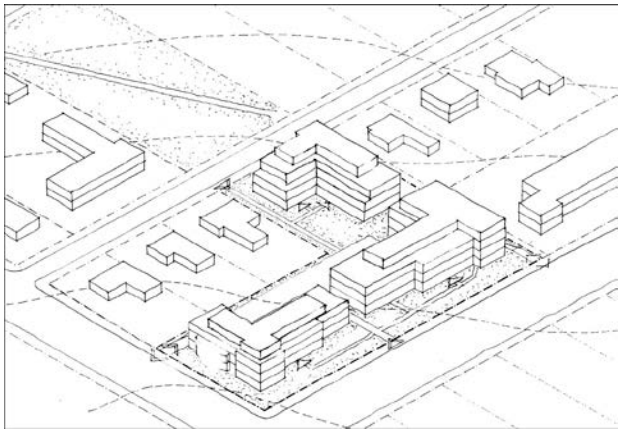


Figure 2 Isometric Drawing

Isometric Drawing

- An isometric drawing must be drawn to the same scale as the Site Plan and Site Analysis (1:500 or 1:1000), and include the following:
  - Contours clearly marked – natural and man-made differentiated;
  - Street patterns clearly identified;
  - Proposed common areas;
  - Proposed main entrances/exits; and
  - Proposed landscaped treatments/features.

3.3. SETBACKS – BUILDING ZONES

OBJECTIVES

(i) To provide setbacks that complement the setting and contributes to the streetscape and character of the street while allowing flexibility in siting of buildings.

(ii) To ensure that the space in front of the building is sufficient to permit landscaping that will complement the building form and enhance the landscape character of the street.

(iii) Side and rear setbacks are to be proportioned to the slope of the site having regard to the height and relationship of the buildings on adjoining properties.

(iv) The setbacks of proposed buildings are to minimise any adverse impacts such as overshadowing and privacy on adjacent and adjoining properties.

(v) To ensure placement of buildings takes into account the retention and protection of existing trees.

Building Zone

The Building Zone identifies the area where buildings may be erected. No building or works (other than landscaping, driveway, drainage works, post boxes, pergolas and barbecues) will be permitted outside the building zone. This includes any work on basement parking areas.

The identification of a Building Zone as part of the Site Analysis process identifies the setbacks for any particular site. The process for identifying the setbacks is provided below.

1. Building Zone Requirement No 1 - Setbacks to Protect Trees

Setbacks are to be established so that any trees located within 10 metres of the front boundary, 8 metres of the rear boundary and 6 metres of any side boundary can be retained.

DEVELOPMENT CONTROLS

(a) Where trees are identified in the site analysis and are located within the 10 metre front setback, 8 metre rear setback and 6 metre side setback, the Building Zone boundaries will be set so that all buildings are 5 metres from the trees or clear of the drip line of the trees (Figure 3) whichever is the greater distance. The distance must be measured from the outside of the tree trunk at ground level.

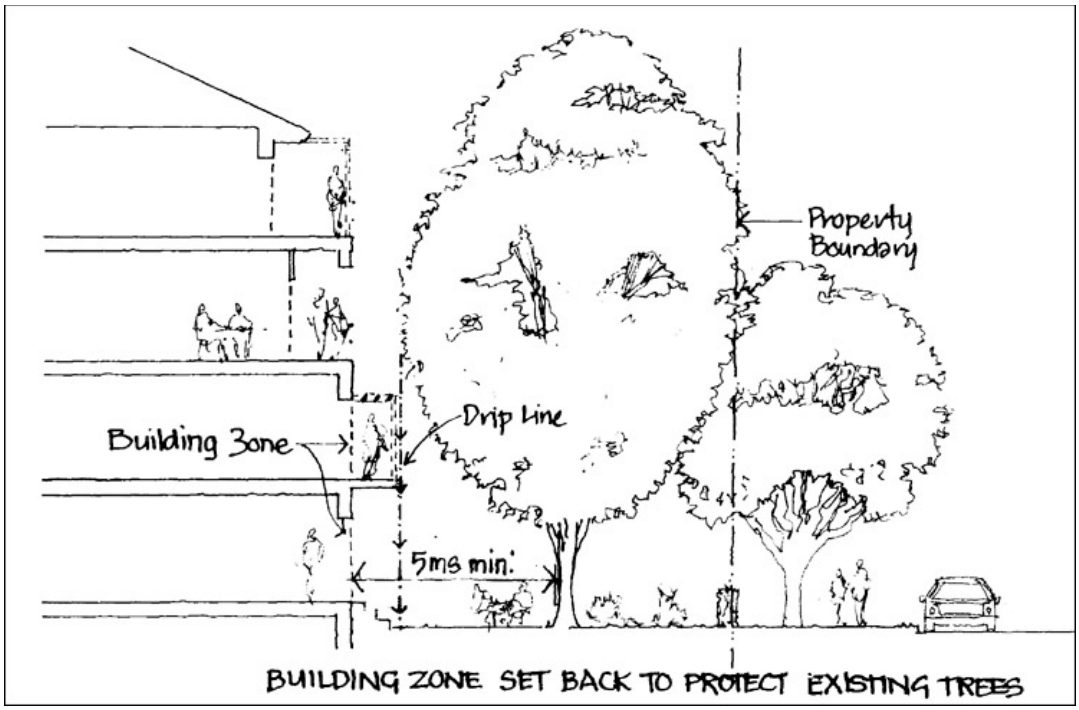


Figure 3 Building Zone Boundaries

2. Building Zone Requirement No 2 – Building Alignment

The setbacks outlined in Table 1 apply to residential flat building sites. Figures 4 and 5 provide a demonstration of how these may be applied.

DEVELOPMENT CONTROLS

(a) Except where a greater setback is required to satisfy Building Zone Consideration No 1 - Setbacks to Protect Trees, the setbacks shall be in accordance with Table 1.

Table 1 Setbacks

Front (one street frontage)	10 metres
Front (two street frontages) Primary Frontage Secondary Frontage	 10 metres 6 metres
Side	6 metres
Rear	8 metres

(b) Additional setback will be applied to sloping sites as calculated below:

$$S = \frac{H \times L}{4}$$

S = Side or Rear Setback
H = Height of building at the outmost wall from natural ground level to the ceiling of the uppermost floor.
L = Levels of building above natural ground level, with basement included as a level should it protrude more than 1m above natural ground level.

(c) Building closer to the side boundary may be permissible, subject to ensuring there is no unreasonable adverse impact on the privacy or solar access of adjoining properties.

(d) No balcony shall protrude into the setback area.

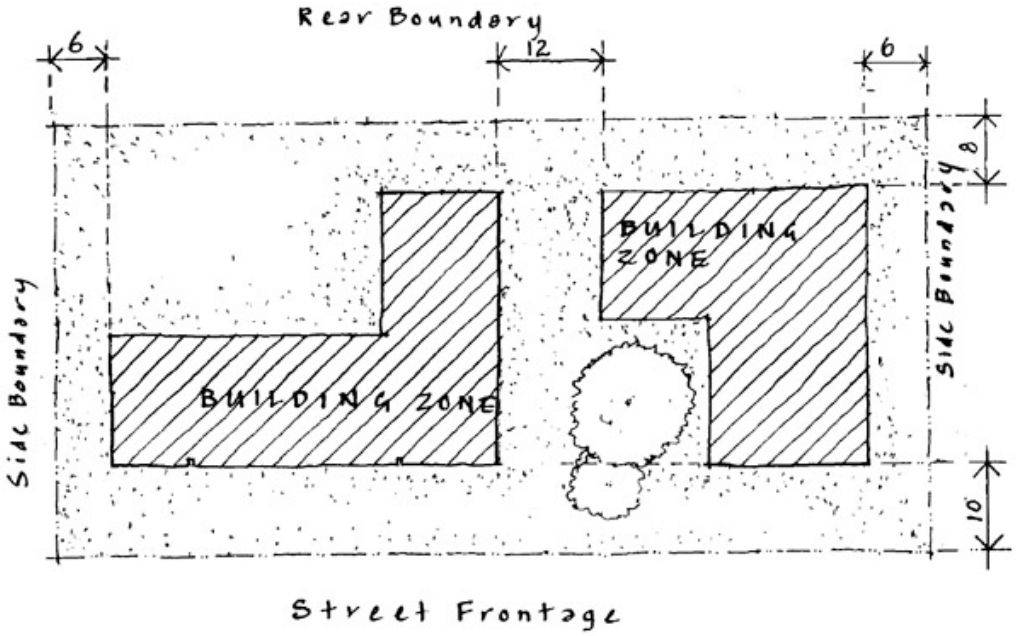


Figure 4 Ground Floor Building Zone Setbacks – One Street Frontage

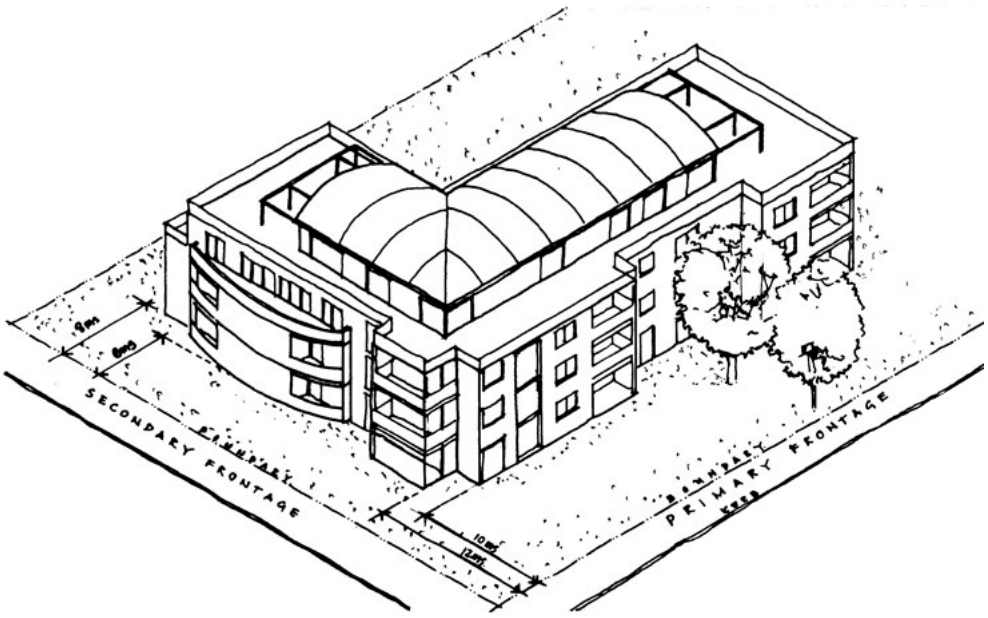


Figure 5 Building Zone Setbacks – Corner Site

3.4. BUILDING HEIGHTS

OBJECTIVES

(i) To ensure that buildings reflect the existing landform of the neighbourhood, including ridgelines and drainage depressions.

(ii) To protect privacy and amenity of surrounding allotments and residential development in accordance with Council's ESD objective 7.

(iii) To minimise overshadowing of adjoining properties.

DEVELOPMENT CONTROLS

(a) Developments on sloping sites are to be stepped so that the ground floor does not exceed one metre above natural ground level immediately below any point on the ground floor.

(b) The floor level of any residential room must be no lower than one metre below natural ground level.

(c) No building shall contain more than 4 storeys above natural ground level.

SUBMISSION REQUIREMENTS

- Shadow diagrams

3.5. BUILDING SEPARATION AND TREATMENT

OBJECTIVES

(i) To ensure privacy within buildings.

(ii) To avoid overlooking of living spaces and private open space.

(iii) To minimise the visual impact of residential flat building developments by minimising the bulk and scale of residential flat buildings and promoting suitable landscaping between buildings.

DEVELOPMENT CONTROLS

(a) The minimum separation between buildings is 12 metres.

(b) The space between buildings must be capable of extensive landscaping utilising deep rooted planting. In cases where underground parking limits the soil depth, landscape beds/tubs to provide additional soil depth, must be provided. Larger trees /shrubs must be integrated into the landscape design to ensure suitable planting is achievable between buildings.

3.6. LANDSCAPE AREA

OBJECTIVES

(i) To provide a satisfactory relationship between buildings, landscaping areas and adjoining developments.

(ii) To minimise stormwater runoff and provide the opportunity for on-site groundwater recharge in accordance with Council's ESD objective 3.

(iii) To ensure a high standard of environmental quality of residential flat building developments and the overall visual amenity and character of the neighbourhood.

(iv) To ensure that landscaped areas can be efficiently maintained.

(v) To ensure that existing trees are given every opportunity to be incorporated into the final design.

(vi) To ensure a satisfactory relationship between buildings and open spaces.

(vii) To ensure that vegetation removed as a part of the land development process is replaced by suitable indigenous species in accordance with Council's ESD objective 4.

(viii) To avoid the creation of drainage and runoff problems though minimising the amount of impervious area.

(ix) To minimise bulk and scale of the development.

DEVELOPMENT CONTROLS

(a) The landscape area shall be a minimum of 50% of the area of the site.

Such areas shall exclude building and driveway areas. Terraces and patios within one metre of natural ground level will be included in landscape area, including common open space above basement car park provided the area is grassed and suitably landscaped.

(b) Landscaped areas must have minimum dimensions of 2 metres. Areas less than 2

metres in width will be excluded from the landscape area calculation.

(c) Existing trees and vegetation should be preserved especially those in the front setback. The existing tree canopy should be retained and enhanced wherever possible.

(d) All setbacks and any above ground car parking areas are to be landscaped and maintained to a high standard.

(e) Landscaping is to be provided in accordance with the provisions set out in Part C Section 3 - Landscaping of this DCP.

(f) Landscape treatments are to harmonise with building designs. They should reflect the scale of the building and should consist of trees, shrubs, groundcovers and grass.

(g) Native species are to be used to maintain a strong natural theme for the neighbourhood and owing to their low maintenance characteristics, relative fast growth, aesthetic appeal and suitability to the natural habitat.

(h) The landscape design should take into consideration the safety of residents and permit natural surveillance of common areas and pathways.

SUBMISSION REQUIREMENTS

- Landscape Plan

3.7. BUILDING LENGTH

OBJECTIVES

(i) To reduce the visual bulk and scale of residential flat building developments.

(ii) To ensure that developments will enhance and contribute to the streetscape and desired character of the future and existing neighbourhood.

DEVELOPMENT CONTROL

(a) The maximum linear length of any residential flat building is to be 50 metres.

3.8. BUILDING DESIGN AND STREETSCAPE

OBJECTIVES

(i) To ensure residential flat building development of a high standard based on appropriate building design and attention to detail, which integrates suitably into the existing or future urban environment.

(ii) To achieve residential flat building developments that is of a high standard of design and construction in terms of both internal and external appearance.

(iii) To ensure that developments are aesthetically pleasing, encourage creativity and diversity in design, incorporating architectural relief and modulation of facades to avoid a bulky or monotonous appearance.

(iv) To ensure the appearance of residential flat building developments enhance the streetscape, complement adjoining and surrounding development in terms of scale and character.

DEVELOPMENT CONTROLS

(a) Applicants must refer to Council's "Multi-Unit Housing: Urban Design Guidelines, 2002" which have been adopted by Council as a guide for the design of residential flat building development.

(b) Designs must be in harmony in terms of form, mass, colour and structure with the existing and likely future development in the street.

(c) The siting and design should seek to ensure a clear definition of the street edge and reinforce street corners. Building lines together with landscaping treatments should distinguish the public and private realms.

(d) Developments must not be repetitive in design and should incorporate harmonious variations into design features such as verandas, entrances, facades etc.

Walls and Rooflines

(e) Walls should be articulated in plan and section to reduce building bulk.

(f) Walls should comprise a variety of colours to reduce monotony and add variety to the streetscape.

(g) Walls should incorporate windows to enhance façade appearance.

(h) Walls and roofs are the major elements that determine the development form, scale and bulk. Carefully designed walls with well-balanced vertical and horizontal proportions play a significant role in establishing the character of the development and the streetscape as a whole.

(i) Break up large horizontal facades, whether walls or roofs, into smaller sections of no longer than 10 metres, with careful consideration given to materials and colours.

(j) Enhance the façade through the use of well-proportioned and balanced projections and recesses.

(k) Provide architectural features in the façade that give human scale at ground floor level, such as entry porches, pergolas and so on.

Garages

(l) Any visible garage walls should be comprised of more than one material and colour to enhance visual attractiveness and interest.

(m) Any ground level car parking, garages and/or basement garage doorways should be concealed or screened by planting from the street and public view, as much as possible.

Entrances

(n) Entrances to residential flat buildings should be clearly visible from the public and semi-public areas. Lighting should be provided for safety at night. These entries contribute to the streetscape and character; therefore, they need to be considered in the design.

(o) Building entries should be readily apparent from the street and clearly visible from inside the dwelling to improve casual surveillance.

(p) The space around the building entrance should be sufficiently large to stand out and have a distinctive architectural form.

(q) Site entries should be distinctive, attractive and welcoming.

(r) Provide sheltered transitional areas around building entries.

(s) All ground floor dwellings should have their own entry at ground level.

(t) Building entries should be visible from, or address, the site front boundary. Building entries in walls should be clearly delineated and observable from the driveway.

Views and Siting

(u) Siting of the building is to take advantage of any views to nearby/adjoining landscaped open space or any public reserve.

(v) The siting and design of dwellings should also take advantage of any views to open space, public reserves and bushland to promote natural surveillance and to enhance the visual amenity of residents. Blank courtyard walls along boundaries shared with open space or reserves should be avoided and opportunities to create and orient dwellings to permit direct views from living areas into the open space/reserve should be pursued in design.

(w) Dwellings that have courtyards facing a street or public place should be avoided. Where other design constraints dictate the need for a fence facing a public street or space. The design must comply with the controls specified in section 3.27 - Fencing of this Section of the DCP and consideration must be given to streetscape and visual impact issues

SUBMISSION REQUIREMENTS

- Elevations Plans.
- Design verification as required by SEPP 65 (Refer to section 1.2).

3.9. URBAN DESIGN GUIDELINES

OBJECTIVES

(i) To encourage urban design principles which reinforce the character of the precinct.

(ii) To ensure that future development responds to and is compatible with the landscape, topography and visual setting of the area.

(iii) To promote a built form of high architectural quality which compliments existing streetscape character and improves the amenity of public space.

DEVELOPMENT CONTROLS

(a) Applications must demonstrate conformity with "Baulkham Hills Multi Unit Housing – Urban Design Guidelines, 2002" which has been adopted by Council as a guide for the design of residential flat buildings. This document also details desired future character statements for each precinct and sub-precinct.

SUBMISSION REQUIREMENTS

- Provide a detailed statement, which addresses the "Baulkham Hills Multi Unit Housing – Urban Design Guidelines 2002," – Section 6 - Precinct Character Statements and Section 7 - Sub-Precinct Character Statements.

3.10. DENSITY

OBJECTIVES

(i) To ensure residential flat building development does not over-tax existing services and facilities.

(ii) To provide opportunities for a suitable density housing form that is compatible with the existing surrounding development.

DEVELOPMENT CONTROLS

(a) The maximum population density permitted is 175 persons per hectare with a desirable range between 150-175 persons per hectare. The density is based upon the occupancy rates in Table 2:

Table 2 Occupancy Rates

Dwelling Type	Occupancy Rate (Persons)
Existing dwelling	3.5
1 bedroom unit	1.3
2 bedroom unit	2.1
3 bedroom unit	2.7
4 bedroom unit	3.5

Note. The maximum density should not be considered as a desired yield for each site. The yield will be dependent on identifying designs that address the objectives of this Section of the DCP.

SUBMISSION REQUIREMENTS

- Provide details of the proposed density of the development.

3.11. UNIT LAYOUT AND DESIGN

OBJECTIVES

(i) To ensure that individual units are of a size suitable to meet the needs of residents.

(ii) To ensure the layout of units is efficient and units achieve a high level of residential amenity.

(iii) To provide a mix of residential flat types and sizes to accommodate a range of household types and to facilitate housing diversity.

(iv) Address housing affordability by optimising the provision of economic housing choices and providing a mix of housing types to cater for different budgets and housing needs.

(v) To ensure designs utilise passive solar efficient layouts and maximise natural ventilation.

DEVELOPMENT CONTROLS

Apartment Mix

(a) No more than 25% of the dwelling yield is to comprise either studio or one bedroom apartments.

(b) No less than 10% of the dwelling yield is to comprise apartments with three or more bedrooms.

Residential Flat Development (less than 30 units)

(c) The minimum internal floor area for each unit, excluding common passageways, car parking spaces and balconies shall not be less than the following:

1 bedroom unit	75m^2
2 bedroom unit	110m^2
3 bedroom unit	135m^2

Residential Flat Development (30 or more units)

(d) The minimum internal floor area for each unit, excluding common passageways, car parking spaces and balconies shall not be less than the following:

Apartment Size Category	Apartment Size
Type 1	
1 bedroom	50m^2
2 bedroom	70m^2
3 or more bedrooms	95m^2
Type 2	
1 bedroom	65m^2
2 bedroom	90m^2
3 or more bedrooms	120m^2
Type 3	
1 bedroom	75m^2
2 bedroom	110m^2
3 or more bedrooms	135m^2

(e) Type 1 apartments shall not exceed 30% of the total number of 1, 2 and 3 bedroom apartments.

(f) Type 2 apartments shall not exceed 30% of the total number of 1, 2 and 3 bedroom apartments.

(g) All remaining apartments are to comply with the Type 3 apartment sizes.

All Residential Flat Buildings

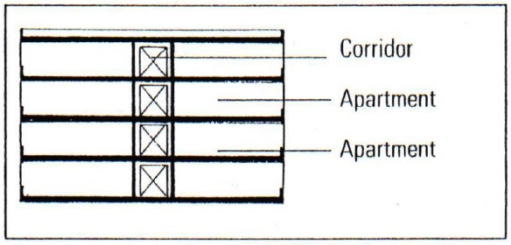
(h) Unit layouts that achieve the following are required:-

- Minimise corridors/circulation space and avoid dormant areas with little or no natural surveillance;
- Permit sunlight access;
- Achieve cross ventilation; and
- Protect the visual and acoustic privacy of residents.

(i) In this regard double loaded floor plans and single aspect units (Refer to Figure 6) must not be used unless:-

- Four (4) hours of direct sunlight is available for windows of primary living areas between 9am and 3pm on 21 June; and
- Adequate ventilation can be achieved.

Figure 6 Double Loaded Floor Plan With Corridor On Every Floor



Double-loaded floor plan with corridor every floor

Source: Better Urban Living Guidelines for Urban Housing in NSW.

(j) Floor to ceiling height must be in accordance with Building Code of Australia requirements. Where deeper floor plans are used higher floor to ceiling heights are encouraged to increase penetration of sunlight and air.

SUBMISSION REQUIREMENTS

- Site plan.
- Dimensioned development application plans including a schedule of floor areas for each dwelling. For developments containing 30 or more apartments the schedule is to specify the apartment size category for each apartment.

3.12. BUILDING MATERIALS

OBJECTIVES

(i) To promote integrated, visually harmonious and attractive buildings in residential areas.

(j) To encourage the use of renewable, energy efficient materials that are durable and cost effective in accordance with Council's ESD objective 5.

(iii) To reduce waste generation and wastage of resources in accordance with Council's ESD objective 6.

(iv) To encourage consideration of the long-term impact of the production and use of materials used in construction of the development.

DEVELOPMENT CONTROLS

(a) All building construction must comply with the Local Government Act–1993 Local Government Regulations and the Building Code of Australia.

(b) Building materials and appearance play a significant role in establishing the character of new development. Consideration should be given to the existing character and streetscape in the design of new development. A mix of materials (at least two types not including glass windows) should be used in any elevation visible from the street or any adjoining property. Elevations dominated by rendered masonry finishes will not be acceptable.

(c) Choice of materials should be based on consideration of both their environmental and economic costs.

(d) Buildings materials should be selected carefully so as to reflect and complement the existing character of the street.

(e) Graffiti resistant materials should be used in areas that are accessible by the general public and communal areas within the development.

(f) Ensure that colours used are visually pleasing to the viewer and reflect the predominant colours in the area.

(g) Avoid the use of materials and colours that would cause excessive glare.

(h) The following factors must be considered when selecting materials:

- Suitability for the purpose;
- Durability;
- Long term appearance;
- Local environmental impacts;
- Broader and longer term environmental impacts; and
- The quantity of material required.

(i) Avoid materials that are likely to contribute to poor internal air quality such as those generating formaldehyde or those that may create a breathing hazard in the case of fire (e.g. polyurethane).

(j) Select materials that will minimise the long-term environmental impact over the whole life of the development.

(k) Preference is to be given to materials derived from renewable sources or those that are sustainable and generate a lower environmental cost, recycled material or materials with low embodied energy, better lifecycle costs and durability. For example, use of sustainable timbers rather than old growth or rainforest timbers.

SUBMISSION REQUIREMENTS

- Schedule of materials.
- Streetscape Perspective of proposed development including landscaping.

3.13. OPEN SPACE

OBJECTIVES

(i) To provide open space for recreation and for use by residents within residential flat buildings.

(ii) To enhance the quality of the built environment by providing opportunities for landscaping.

Private Open Space

OBJECTIVES

(i) To provide private outdoor living space that is an extension of the dwelling for the enjoyment of residents.

(ii) To provide private outdoor living space that receives a reasonable quantity of sunshine during all months of the year.

DEVELOPMENT CONTROLS

(a) Private open space must be readily accessible from living areas of dwelling units.

At Ground Level:

(b) For dwellings with ground level access private open space shall be provided with a minimum width of 4 metres and depth of 3 metres.

(c) This private open space shall be provided within one metre of natural ground and may be included as part of the minimum landscape area requirements.

(d) Private (ground level) open space areas shall be enclosed with a wall/fence or landscape screen with an effective height of 1.8 metres from the finished ground level.

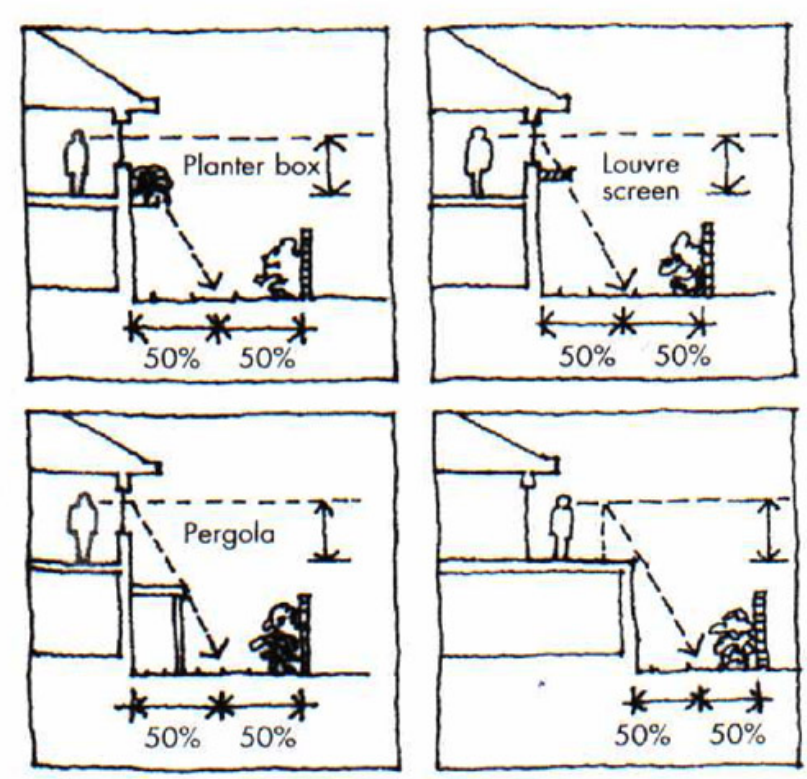
(e) The design of the building and landscaping treatment should ensure the privacy of these ground level spaces. Enclosing screen walls or fences shall be designed to ensure privacy, both from communal open space or access ways and from dwellings and their courtyards.

(f) Design techniques that protect the privacy of the courtyards by restricting overlooking from above

(g) are also encouraged. Potential techniques are shown in Figure 9 below.

Above Ground Level:

(h) In order to provide useable open space to dwellings above ground level, any balcony or terrace shall have a minimum area of 10m^2 and a minimum depth of 2.5 metres.



Techniques for providing visual privacy to a lower dwelling's private open space.

Figure 7 Protecting Privacy Of Courtyards

Source: Australia's Guide to Good Design – Residential.

Common Open Space

OBJECTIVES

(i) *To provide a functional open space area within the development for the informal recreation of all residential flat building residents and children's play.*

(ii) To provide opportunities for additional landscaping and retention of any significant features that add to the amenity of the site in accordance with Council's ESD objective 4.(iv)

DEVELOPMENT CONTROLS

(a) In order to provide for the recreational needs of the residents a common open space area is to be provided in a singular large parcel. Such open space area is to include opportunities for both active and passive recreation facilities (i.e. equipment such as seating, shade structures, BBQ and children's play equipment for passive recreational use).

(b) Large developments (greater than 20 dwellings) shall consider provision of a swimming pool, common room and hard stand outdoor play area.

(c) The common open space is to be centrally located and such area shall be capable of surveillance from at least two dwellings for safety reasons.

(d) The orientation and location of the open space should also take into consideration opportunities to maximise solar access to the open space during winter. It must receive at least four hours of sunlight between 9am and 3pm on 21 June.

(e) The area provided shall be equivalent to the rate of $20m^2$ per dwelling.

(f) Common open space must be sufficient in size to enable it to be used for recreational activities, or be capable of growing substantial vegetation.

(g) Common open space must be designed in conjunction with pedestrian pathways.

SUBMISSION REQUIREMENTS

- Plans are to indicate those areas including dimensions of any part of the site to be used for private and common open space.

3.14. SOLAR ACCESS

OBJECTIVES

(i) *To orient the development in a way that best allows for appropriate solar access and shading.*

(ii) To maximise natural lighting to internal living and open space areas in winter and provide adequate shading to internal areas and private open space during summer to improve residential amenity.

(iii) To ensure no adverse overshadowing of adjoining allotments/developments.

Solar Access Design Considerations

DEVELOPMENT CONTROLS

(a) Orient and design buildings to maximise the number of dwellings with direct sunlight where possible. Ideally, face the long axis of the development up to 30 degrees east and 20 degrees west of true north. This is illustrated in Figure 10.

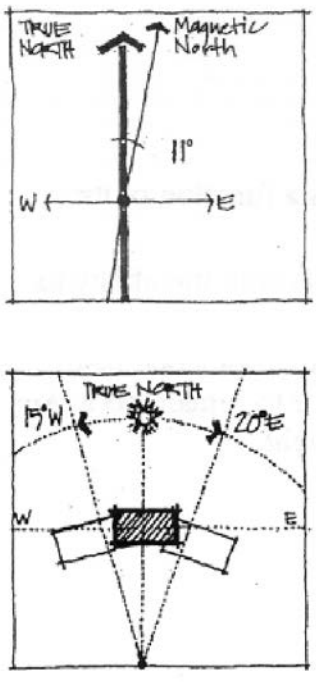


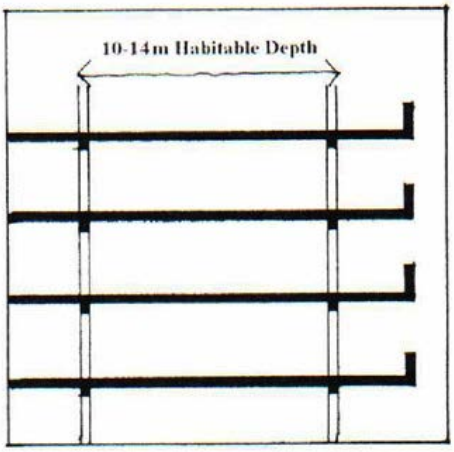
Figure 8 Building Orientation

(b) Face living spaces to the north wherever possible.

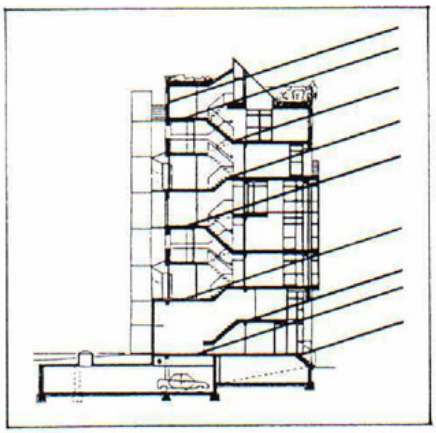
(c) Narrow footprint buildings and split level floor plans permit good solar access (Refer to Figure 9).

(d) Main windows should have suitable shading or other solar control to avoid discomfort (shutters/blinds/screens/retractable awnings).

(e) Use horizontal shading devices (for north facing windows) including eaves, verandas, pergolas, awnings and external horizontal blinds to allow low summer sun whilst providing shade from high summer sun.



Narrow footprint buildings allow good daylight access



Narrow buildings allow good daylight access. Split level plans can enhance environmental quality

Figure 9 Designing For Solar Access

Source: Better Urban Living Guidelines for Urban Housing in NSW.

(f) East and west facing windows can cause excess heat in summer. Minimise the size of east and west facing windows, or consider external vertical shading devices such as vertical blinds, blade walls and thick vegetation.

(g) Shading elements are to be integrated into the overall elevation design.

Overshadowing

DEVELOPMENT CONTROLS

(h) The common open space area must receive at least four hours of sunlight between 9am and 3pm on 21 June.

(i) Buildings must be designed to ensure that adjoining residential buildings and the major part of their landscape receive at least four hours of sunlight between 9am and 3pm on 21 June.

SUBMISSION REQUIREMENTS

- Shadow Diagrams

3.15. VENTILATION

OBJECTIVES

(i) To maximise ventilation flows in each dwelling.

(ii) To minimise the filtering of cold or warm air through gaps in the construction of each dwelling in accordance with Council's ESD objective 5.

DEVELOPMENT CONTROLS

(a) Consider ventilation in early design stages. Figure 10 identifies design options for achieving natural ventilation.

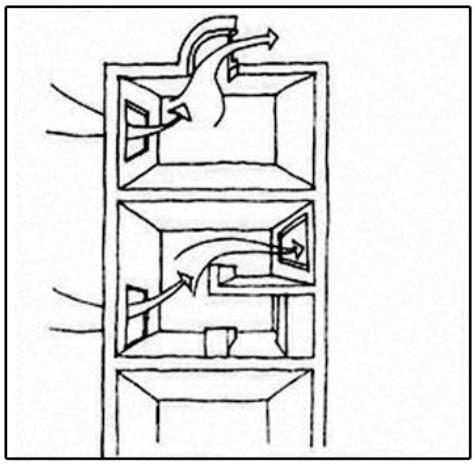
(b) Consider prevailing breezes in relation to building orientation, window design and internal circulation.

(c) Place windows to allow for cross ventilation i.e. on opposite sides of the building rather than adjacent walls where possible. These windows are to be lockable in a partly open position.

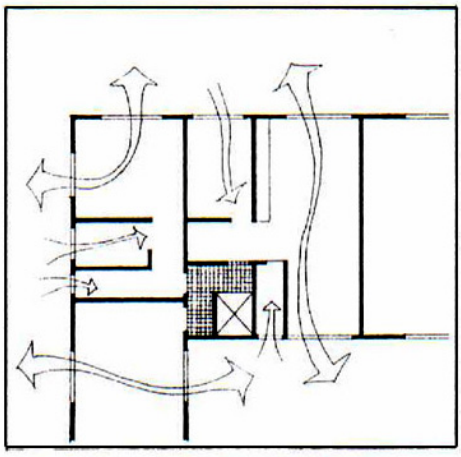
(d) Promote air circulation and consider the installation of fans, roof vents, louvered windows and high-level windows to aid air circulation.

(e) Provide security screen doors at unit entries.

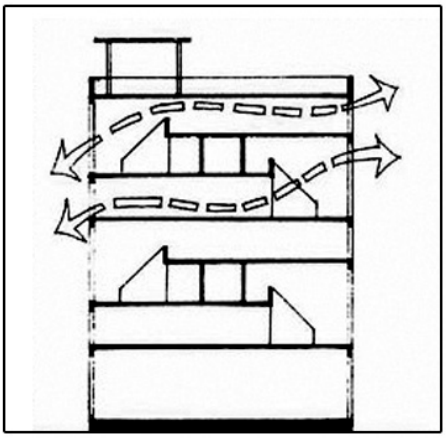
(f) Minimise air gaps by incorporating door and window seals.



Cross ventilation can be achieved through roof vents and air shafts. Apartments with mezzanines and two storey apartments assist in air movement.



Cross ventilation is best achieved through narrow floor plans



Good cross ventilation can be achieved with double orientation apartments, having split levels and corridors on alternative floors

Figure 10 Design Options - Ventilation

Source: Better Urban Living – Guidelines for Urban Housing in NSW.

3.16. LIGHTING

OBJECTIVE

(i) To maximise the use of natural lighting and to minimise the energy consumption of residential flat building developments in accordance with Council's ESD objective 5.

DEVELOPMENT CONTROLS

(a) Lighting is to be provided and installed in accordance with the Building Code of Australia.

(b) Lighting must be adequate to ensure the security and safety of residents and visitors.

(c) Maximise the use of natural lighting through window placement and skylights.

(d) In common areas lights are to be time switched and energy efficient fitting should be used.

(e) Motion detectors are to be used for unit entries, lobbies and outdoor security.

(f) Incorporate dimmers motion detectors, and automatic turn-off switches where appropriate.

(g) Provide separate switches for special purpose lights.

3.17. STORMWATER MANAGEMENT

OBJECTIVES

(i) *To control stormwater and to ensure that residential flat building developments do not increase downstream drainage flows or adversely impact adjoining and downstream properties.*

(ii) To ensure the integrity of watercourses is protected and enhanced in accordance with Council's ESD objective 4.

(iii) *To provide for the disposal of stormwater from the site in efficient, equitable and environmentally sensible ways in accordance with Council's ESD objective 3.*

(iv) To provide for on-site detention of site drainage.

DEVELOPMENT CONTROLS

(a) Drainage easements will be required where the development property does not drain directly into the existing stormwater drainage system or a public road. Development Consent will not be

issued until the submission of documents demonstrating the creation of any necessary easements over downstream properties.

(b) Discharge points are to be controlled and treated to prevent soil erosion, and may require energy dissipating devices on steeper topography, to Council's requirements.

(c) Where necessary, downstream amplification of existing drainage facilities will be required including Council infrastructure if required.

(d) Developments within the Upper Parramatta River Catchment must comply with any requirements of the Sydney Catchment Management Authority.

(e) On-site detention, water recycling, or water quality management systems may be required to Council's and/or the Sydney Catchment Management Authority and/or the Hawkesbury Catchment requirements, to counteract an increase in stormwater runoff.

(f) The design of drainage systems is to be in accordance with Council's Design Guidelines for Subdivisions/ Developments.

(g) Water Sensitive Urban Design (WSUD) principles shall be employed in the management of the site's stormwater in terms of water retention, reuse and cleansing. In this regard the drainage design is to include measures to manage the water quality of stormwater runoff. At a minimum the design is to integrate bio-retention filters along roadways, driveways and within open space area.

(h) On site detention tanks are only permitted in common areas within a proposed development (for example driveways, common open space) and not within private courtyards.

SUBMISSION REQUIREMENTS

- Preliminary Engineering Drainage Plans indicating the proposed drainage infrastructure.
- Details of easements to be created over downstream properties if they do not already exist, including the written concurrence of all the affected landowners.
  - If OSD is required, OSD plans must be submitted with the development application.

3.18. VEHICULAR ACCESS

OBJECTIVES

(i) To ensure that vehicles may enter and exit residential flat building developments in a safe and efficient manner in accordance with Council's ESD objective 7.

(ii) To maintain the performance of roads that provides an arterial or sub-arterial function in accordance with Council's ESD objective7.

DEVELOPMENT CONTROLS

(a) Access to the site is to be in accordance with the requirements within Part C Section 1 – Parking of this DCP.

(b) Adequate vehicular entry and exit and circulation areas are to be provided. The design must:

- Provide a safe environment for both pedestrians and vehicles using the site and surrounding road networks;
- Ensure vehicular ingress and egress to the site is in a forward direction at all times;
- Provide for service vehicles where possible; and
- Be designed to minimise the visual impact of hard paved areas.

(c) The driveway shall be centrally located within the development and be a minimum of 10 metres from any side boundary or street.

(d) Driveways are to have a minimum width of 6 metres at the property boundary for a distance of 6 metres within the development to ensure easy entry/exit of vehicles.

(e) Driveway gradients shall be in accordance with Australian Standard – AS 2890.1 – Part 1 – Parking Facilities – Off Street Car Parking.

SUBMISSION REQUIREMENTS

- Applicants are required to submit plans and details with the development application of proposed vehicular access and circulation for Council's approval. Details must specifically relate to vehicular movement, layout and turning circles.

3.19. CAR PARKING

OBJECTIVES

(i) To ensure that all car-parking demands generated by the development are accommodated on the development site.

(ii) To protect the free flow of traffic into and out of residential flat building developments and the surrounding street network in accordance with Council's ESD objective 7.

DEVELOPMENT CONTROL

(a) All car parking required by Council shall be provided on-site in accordance with the requirements of Part C Section 1 – Parking of this DCP.

(b) On site car parking is to be provided at the following rates:

- 1 bedroom unit 1 space
- 2 or 3 bedrooms unit 2 spaces

(c) Any car parking provided at ground level shall:

- Comprise lockable single garages with minimum clear dimensions of 5.5 metres x 3.0 metres (exclusive of any storage area) and lockable double garages of 5.5 metres x 5.4 metres exclusive of storage area (not applicable to visitor parking);
- Be enclosed in a manner that screens the vehicles from the street; and
- Be separated from any adjoining property boundaries by a 2 metre wide landscaped strip.

(d) Visitor parking:

- Must be provided at the rate of 2 per 5 dwellings. The number required will be rounded up to the nearest whole number;
- Have minimum dimensions of 5.5 metres x 2.6 metres; and
- Must be made accessible at all times. Where visitor parking is proposed behind security gates, the access to visitor parking must be maintained through the operation of an intercom system installed at or near the gate.

(e) The intercom shall be located to allow a free movement of traffic around the stationary vehicle using the intercom to ensure queuing does not adversely affect traffic or pedestrian movement on the street. A maximum driveway gradient of 5% for 6 metres before the intercom is required to minimise problems associated with using the intercom on steep driveway gradients.

(f) A separate vehicle turning facility should be provided between the intercom location and the security door to ensure visitor vehicles are able to manoeuvre and leave the site in a forward direction using a 3 point turn manoeuvre should the resident be unavailable or deny access to the visitor.

(g) If the side boundary of any car parking space is a wall or fence or if it is obstructed (i.e. column) so that door opening is restricted 300mm must be added to the width. If the space is obstructed on both sides 600mm must be added.

(h) Manoeuvring areas to all car parking spaces shall comply with the standards in Part C Section 1 – Parking. The layout must be designed to ensure vehicles utilising any parking spaces can enter and leave the site in a forward direction.

(i) Parking areas within the front setback are discouraged and in this regard, no more than 2 spaces shall be provided within the setback area.

(j) Developments in excess of 10 units are to provide pedestrian access from the street separate from the vehicular access.

(k) Vehicle reversing bays or an alternative arrangement is to be provided at the end of aisles to ensure all parking spaces can be accessed in a satisfactory manner.

(l) Resident car parking shall be safely secured with any opportunity for unauthorised entry minimised.

(m) A carwash bay must be provided in accordance with Part C Section 1 - Parking.

(n) All internal stairs that connect the car parking areas to the residential units are to be accessible only to the residents and their authorised visitors. All fire exits from the car parking areas must be designed to be independent from stairs that provide access to residential units.

SUBMISSION REQUIREMENTS

- Site Plan showing the number of car parking spaces, calculations and the dimensions of all parking spaces and driveway widths.

3.20. STORAGE

OBJECTIVES

(i) To ensure that each dwelling has reasonable private storage space (storage requirements include household items either within the dwelling or in secure garage areas).

DEVELOPMENT CONTROLS

(a) At least $10m^3$ must be provided for storage space per dwelling within a lockable garage. It must not encroach into the parking space, and must cover a minimum area of $5m^2$ with a minimum dimension of 2 metres required. The storage space shall be adjacent to a car space and not overhead.

(b) A suitable secure area for storing garden maintenance should be provided.

SUBMISSION REQUIREMENTS

- Plans must show the designated storage area for each dwelling.

3.21. ACCESS AND ADAPTABILITY

In order to provide for disabled people and the ageing population, dwellings must be capable of adaptation so as to accommodate residents who may have special needs, declining mobility or sight. This is in addition to being appropriately designed for everyday pedestrian use.

OBJECTIVES

(i) To ensure that developments provide appropriate and improved access and facilities for all persons (consistent with the provisions of Australian Standard AS1428.1).

(ii) To encourage designers/developers to consider the needs of people who are mobility impaired and to provide greater than minimum requirements for access and road safety.

(iii) To ensure that building design does not prevent access by people with disabilities.

(iv) Incorporate design measures that are appropriate to people with disabilities.

DEVELOPMENT CONTROLS

(a) All residential flat buildings must comply with the requirements of the Disability (Access to Premises – Buildings) Standards.

(b) One visitor parking bay and one pick-up and drop-off bay for mobility impaired people must be provided complying with the provisions of AS 2890 for people with a disability, additional to the requirements for any visitor parking elsewhere in this DCP.

(c) Adaptable or Accessible dwellings are to be provided in accordance with the table below:

No. of Dwellings	**No. of Adaptable or Accessible Dwellings**
5 or less	NIL
6-15	1
16-30	2
More than 30	10% of all dwelling units

Adaptable and Accessible dwellings are defined as follows:

- **Accessible Dwelling** means a dwelling unit that complies with Australian Standard 1428:2 and is suitable for occupation for a wheelchair user.
- **Adaptable Dwelling** means a dwelling unit that meets the specifications for a Class B Adaptable Dwelling in accordance with Australian Standard 4299.

Each Adaptable or Accessible dwelling shall have an accessible parking bay complying with Australian Standard 2890 for people with a disability. An accessible path of travel must be provided from the car parking space to the dwelling.

SUBMISSION REQUIREMENTS

- Any application for six or more dwellings must be accompanied by:
  - (i) An access report prepared by a suitably qualified person, demonstrating the proposed developments ability to comply with the access requirements contained in the Disability (Access to Premises – Buildings) Standards as well as Australian Standards;
    - AS 1428.1 General requirements for access –

New building work;

- AS 1428.2 Enhanced and additional requirements – Buildings and facilities; and
- AS 4299 Adaptable Housing

as relevant to the proposal.

(ii) A pre and post-adaptation floor plan for adaptable housing.

3.22. PEDESTRIAN / BICYCLE LINKS

OBJECTIVES

(i) To consider the needs of the residents with particular consideration to access requirements, safety and security.

(ii) To ensure that appropriate pathways, with high levels of pedestrian amenity are provided for residents in the locality along identified desire lines in accordance with Council's ESD objective 9.

(iii) To ensure provision is made for bicycle access and storage in accordance with Council's ESD objective 9.

Within the Site

DEVELOPMENT CONTROLS

(a) Access to dwellings should be direct and without unnecessary barriers. All external and internal pathways and ramps should conform to the requirements set out in Australian Standard 1428 Parts 1 and 2.

(b) Clearly defined pedestrian pathways are to be provided between proposed developments and proposed footpaths along sub-arterial roads.

(c) Developments are to have adequate lighting in common and access areas to ensure the safety of residents and property.

(d) Building and unit numbering and all signage is to be clear and easy to understand.

(e) Pathway locations must ensure natural surveillance of the pathway from primary living areas of adjoining units. Dwelling entries must not be hidden from view and must be easily accessible.

(f) A bicycle lockup facility is to be provided close to the main entry to the building.

Local Pedestrian Links

DEVELOPMENT CONTROLS

(a) Where it is possible, a pedestrian link through the site must be provided as part of the development to increase the connectivity of the area for local pedestrians. The following factors should be considered when identifying the most appropriate location for the link of the pathway:-

- The link must be no less than 3m wide;
- It should be a straight-line link through the site linking streets or other public spaces; and
- The link cannot include stairs and any ramps. It must have a reasonable gradient. Refer to AS 1428.1 Design for Access and Mobility and supplementary AS 1428.2.

(b) The design and layout of any building adjoining and landscaped spaces adjoining the pathway should ensure there is natural surveillance of the pathway to protect the amenity of users. A solid fence along the boundary of the pathway restricting views of the pathway from adjoining properties will not be acceptable.

(c) The pedestrian link must be dedicated to Council as a public footway and the footpath, and lighting must be provided at no cost to Council.

3.23. PRIVACY - VISUAL AND ACOUSTIC

OBJECTIVES

(i) To site and design buildings to ensure visual privacy between dwellings in accordance with Council's ESD objective 7.

(ii) To avoid overlooking of living spaces in dwellings and private open spaces.

(iii) To contain noise within dwellings and communal areas without unreasonable transmission to adjoining dwellings.

DEVELOPMENT CONTROLS

(a) Minimise direct overlooking of main internal living areas and private open space of dwellings both within and adjoining the development through building design, window locations and sizes, landscaping and screening devices (Refer to section 3.13 Open Space).

(b) Consider the location of potential noise sources within the development such as common open space, service areas, driveways, and road frontage, and provide appropriate measures to protect acoustic privacy such as careful location of noise-sensitive rooms (bedrooms, main living areas) and double glazed windows.

(c) Dwellings that adjoin arterial roads are to be designed to acceptable internal noise levels, based on AS 3671 – Road Traffic Noise Intrusion Guidelines.

SUBMISSION REQUIREMENTS

- Statement addressing AS 3671 – Road Traffic Noise Intrusion Guidelines.

3.24. SERVICES

OBJECTIVES

(i) To ensure that the physical services necessary to support residential flat building development are available in accordance with Council's ESD objective 6.

(ii) To ensure that service facilities are integrated with the design of the development and are suitably sized for the convenience of the occupants.

DEVELOPMENT CONTROLS

(a) Development consent will not be granted until arrangements satisfactory to the relevant authorities are made for the provision of services.

(b) Pump out sewage management systems are not considered acceptable for residential flat building developments.

(c) Site services and facilities (such as letterboxes, clothes drying facilities and garbage facility compounds) shall be designed so as:

- To provide safe and convenient access by residents and the service authority; and
- Be visually integrated with the development and to have regard to the amenity of adjoining development and streetscape.

(d) All electricity and telephone services on site must be underground.

(e) Laundries shall be provided to each dwelling.

SUBMISSION REQUIREMENTS

- Preliminary discussions should be held with the service authorities listed below prior to submission of any application. Any advice provided by these authorities should be submitted with the application.
  - Sydney Water for potable and recycled water, sewage and drainage;
  - Telecommunications carrier for telephones and associated equipment;
  - Energy authority for underground electricity;
  - AGL for gas supplies; and
  - NSW Fire Brigades.
- Documentation to demonstrate how the objectives and development controls are satisfied.

3.25. WASTE MANAGEMENT – STORAGE AND FACILITIES

Waste collection for residential flat building developments must be undertaken in a safe, healthy and clean manner. Kerbside waste collection is considered unsuitable in most circumstances given the high number of bins required to await collection, the time taken to service the bins and amenity and safety issues. Accordingly, it is required that all developments provide for on-site waste collection either at grade or via a basement. Where this is not possible due to site-specific constraints, kerbside collection may be supported if it can be demonstrated that this arrangement will not create any adverse appearance, amenity and safety outcomes. Matters which will be considered with respect to collection arrangements include whether the development is located on a road with high traffic volumes, the number of bins required to service the development, the length of the street frontage/s of the site and any other relevant considerations. Reference should be made to Council's Bin Storage Facility Design Specification and discussions undertaken with Council's Resource Recovery Team.

OBJECTIVES

(i) To minimise the overall environmental impacts of waste.

(ii) To maximise, through appropriate design, the opportunities to deal with domestic waste

according to the Waste Hierarchy as given in Council's ESD objective 6.

(iii) To provide domestic waste management systems that allow for ease of use by occupants and safe and efficient service by collection contractors.

(iv) To encourage on-site waste collection.

(v) To provide waste storage and collection areas that are integrated with the design of the development.

(vi) To ensure minimum visual impact of the waste storage facilities.

(vii) To assist in achieving Federal and State Government waste minimisation targets.

DEVELOPMENT CONTROLS

General

(a) Waste collection and separation facilities must be provided for each dwelling. Each dwelling should have a waste storage cupboard in the kitchen capable of holding at least a single days waste, and sufficient to enable separation of recyclable material.

(b) On-site storage and collection of waste must be provided and integrated with the design of the development.

(c) Sufficient clearance and manoeuvring space must be provided to allow Council's (or its contractor's) waste collection vehicles to enter and exit in a forward direction, collect waste and recyclables with minimal or no need for reversing and without impeding upon general access to, from or within the site. Applicants should liaise with Council's Resource Recovery Department on truck sizes, required turning paths and access/servicing arrangements.

(d) Where Council is satisfied that on-site collection is not possible, bin storage areas must be located to allow bins to be wheeled to the street kerb over flat or ramped surfaces with a maximum grade of 7% (5% for bulk garbage bins) to be serviced by a garbage truck on a flat surface and not over steps, landscape edging or gutters.

(e) All waste must be removed at regular intervals and not less frequently than once per week for garbage and fortnightly for recycling.

Storage and Facilities

(f) Adequate storage for waste materials must be provided on site.

(g) Waste storage and facilities must be convenient and accessible to the occupant(s) of all units. Storage areas must be accessible by wheelchair where dwellings do not have access to waste garbage chutes or recycling cupboards.

(h) Adequate storage is to be provided for the number of bins required in accordance with the ratios provided below or as advised by Council's Resource Recovery Department:

GARBAGE	RECYCLING
An equivalent of 120 litres (minimum) available per unit per week (in the form of a shared bulk garbage bin)	For one bedroom units: 1 x 240 litre bin per four units For two bedroom units: 1 x 240 litre bin per three units For three bedroom units: 1 x 240 litre bin per two units For four bedroom units: 1 x 240 litre bin per unit

Note: The required number of bins will be assessed as part of the development application process and will be given as a condition of consent.

(i) In locating and designing waste storage areas consideration must be given to screening views of the facility from any adjoining property or public place while still ensuring there is some natural surveillance from within the development to minimise vandalism and other anti-social activity. Communal storage areas should be located within reasonable travel distance from all dwellings within a development.

(j) Waste storage areas must be kept clean, tidy and free from offensive odours at all times.

(k) The design of the bin storage and collection facilities and on-going use by the occupants is to be addressed in the Design of Facilities and On-Going Management sections of the Waste Management Plan as required in the Submission Requirements of section 3.26 – Waste Management Planning. The design is to be in accordance with Council's Bin Storage Facility Design Specification available on Council's website.

3.26. WASTE MANAGEMENT PLANNING

OBJECTIVES

(i) To promote improved project management and to reduce the demand for waste disposal during demolition and construction.

(ii) To maximise, reuse and recycle building/construction materials.

(iii) To encourage building designs and construction techniques that will minimise waste generation.

(iv) Minimise waste generation to landfill via the waste hierarchy in accordance with Council's ESD objective 6.

(v) To assist in achieving Federal and State Government waste minimisation targets.

Demolition

DEVELOPMENT CONTROLS

(a) Site operations should provide for planned work staging, at source separation, re-use and recycling of materials and ensure appropriate storage and collection of waste.

(b) Straight demolition should be replaced by a process of selective deconstruction and reuse of materials. Careful planning is also required for the correct removal and disposal of hazardous materials such as asbestos.

(c) Project management must seek firstly to re-use and then secondly to recycle solid waste materials either on or off site. Waste disposal to landfill must be minimised to those materials that are not re-useable or recyclable.

(d) When separated, materials are to be kept uncontaminated to guarantee the highest possible reuse value.

(e) Details of waste sorting areas and vehicular access are to be provided on plan drawings.

Construction

DEVELOPMENT CONTROLS

(a) Avoid oversupply and waste of materials by careful assessment of quantities needed.

(b) The use of prefabricated components may reduce waste.

(c) Re-use of materials and use of recycled material is desirable where possible.

(d) Site operations should provide for planned work staging, at source separation, re-use and recycling of materials and ensure appropriate storage and collection of waste.

(e) All asbestos, hazardous and/or intractable wastes are to be disposed of in accordance with WorkCover Authority and Office of Environment and Heritage and Water requirements.

SUBMISSION REQUIREMENTS

- Waste Management Plan

3.27. FENCING

OBJECTIVE

(i) To ensure that fencing does not detract from the overall visual amenity and character of the area.

DEVELOPMENT CONTROLS

(a) The fencing materials chosen must protect the acoustic amenity and privacy of courtyards. Courtyard fences shall be constructed of masonry.

(b) All boundary fencing/ walls fronting a street shall be setback a minimum of 2 metres, to permit landscaping, and shall include recesses and other architectural features.

(c) All fencing or walls shall be combined and integrated with site landscaping.

(d) The following fencing or finishes are not acceptable because of its poor visual appearance:

- Pre-painted solid, metal fencing; or
- Rendered finishes where the entire fence is fully rendered.

SUBMISSION REQUIREMENT

- Fencing details for the site, clearly showing the location, height and type of proposed fencing is to be submitted as part of the development application.

3.28. DEVELOPER CONTRIBUTIONS

Applicants should consult with Council's Section 94 Contributions Plan and Council Officers to determine the required amount of Section 94 Contributions payable.

4. INFORMATON REQUIRED FOR A DEVELOPMENT APPLICATION

In preparing plans applicants must also address the submission requirements listed in section 3 of this Section of the DCP relevant to the application. The following plans and details will be required with all residential flat building applications along with the relevant application form(s).

STATEMENT OF ENVIRONMENTAL EFFECTS

SITE PLANS

SITE ANALYSIS

- Refer to section 3.2.

ARCHITECTURAL PLANS

- Internal layout of unit/building (existing and proposed)
- Elevations

PRELIMINARY ENGINEERING DRAINAGE PLANS

- Including any On Site Detention Plans

LANDSCAPE PLAN

- These plans are to be in accordance with Part C Section 3 - Landscaping.

EARTHWORKS PLAN

SIGNAGE PLANS

- See Part C Section 2- Signage

STREETSCAPE PERSPECTIVE

MODEL

- For all developments comprising 10 or more units a scale model must be provided including adjoining properties at the time of the submission of the development application and be on display for the duration of the public exhibition period.
- Should a model not be submitted with the application, an immediate “stop the clock” order be placed on the development application until the model is presented.

WASTE MANAGEMENT PLAN

DESIGN VERIFICATION

- As per SEPP 65 requirements.

BASIX CERTIFICATE

Note. Refer to Part A – Introduction section 4.0 for general lodgement requirements and detailed requirements to be included in each of the above documentation.

5. REFERENCES

Australian Council of Business Design Professionals, (2000) BDP Environment Design Guide.

Baulkham Hills Shire Council, 1997 Residential Development Strategy.

Baulkham Hills Shire Council, 1999 Urban Capability Assessment of Residential 2(a) Zones in Baulkham Hills Shire.

Department of Urban Affairs and Planning and the NSW Government Architect, 1998 Better Urban Living – Guidelines for Urban Housing in NSW.

Department of Urban Affairs and Planning State Environmental Planning Policy No. 53 - Metropolitan Residential Development.

Department of Urban Affairs and Planning State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development.

Donovan I, Cameron C, and Coombes P (1999). Water Sensitive Urban Development: Model Planning Provisions. Lake Macquarie City Council, Speers Point, on behalf of the Lower Hunter and Central Coast Environmental Management Strategy.

ERM Mitchell McCotter 1991, Baulkham Hills Shire Residential Development and Traffic Study, Prepared on behalf of Baulkham Hills Shire Council.

Faculty of the Constructed Environment, RMIT University et al, Australia’s Guide to Good Design – Residential, Prepared on behalf of the National Office for Local Government.

NSW Planning Department, 2002, Residential Flat Design Code, Tools for improving the design of residential flat buildings.

APPENDIX A - DEVELOPMENT CONTROL CALCULATIONS/COMPLIANCE SHEET

Give appropriate detail and/or explanation where applicable to demonstrate compliance (or non-compliance) with the development controls in this Section of the DCP.

Development Controls		Proposed Development	Compliance
1	**3.1 Site Requirements** ➢ Min. frontage – 30m		
2	**3.3 Setbacks – Building Zone** ➢ 5 metres clear of existing trees (or the drip line) ➢ Complies with Table 1		
3	**3.4 Building Heights**		
4	**3.5 Building Separation and Treatment** 12 metre building separation		
5	**3.6 Landscaped Area – 50%**		
6	**3.7 Building Length –** max 50 metres		
7	**3.8 Building Design & Streetscape**		
8	**3.9 Urban Design Guidelines** Demonstrate conformity with "Baulkham Hills Multi Unit Housing – Urban Design Guidelines 2002".		
9	**3.10 Density** ➢ 150-175 persons per Ha		
10	**3.11 Unit Layout and Design** ➢ 1 bedroom – 75m^2 ➢ 2 bedroom – 110m^2 ➢ 3 bedroom – 135m^2		
11	**3.13 Open Space** Private: ➢ Ground level – min 4 metres x 3 metres ➢ Above ground – min 10m^2, min. depth 2.5 metres Common: ➢ 20m^2 per dwelling		

Development Controls		Proposed Development	Compliance
12	**3.14 Solar Access** ➢ Adjoining buildings & / open space areas – four hours between 9am & 3pm on 21 June ➢ Common open space – four hours between 9am & 3pm on 21 June		
13	**3.17 Stormwater Management**		
14	**3.19 Car parking** Rate per unit & visitor parking: ➢ 1 bedroom – 1 space ➢ 2 or 3 bedroom – 2 spaces ➢ Visitor – 2 spaces per 5 dwellings ➢ Lockable single garages min. dimension – 5.5 metres x 3 metres (exclusive of storage) ➢ Lockable double garages min. dimension – 5.5 metres x 5 metres (exclusive of storage) ➢ Visitor parking dimensions – 5.5 metres x 2.6 metres **Manoeuvring and ramps:** ➢ The first 6 metres of the driveway inside the property boundary to be a maximum of 5% ➢ Ramp grades comply with Australian Standard 2890.1 ➢ Manoeuvring in accordance with Australian Standard 2890.1		
15	**3.20 Storage** $10m^3$ with an area $5m^2$ and dimension 2 metres.		

<table>
<tr><th colspan="2">Development Controls</th><th>Proposed Development</th><th>Compliance</th></tr>
<tr><td>16</td><td>3.21 Adaptability, Pedestrian Access & Safety

➢ Adaptable or accessible housing provided in accordance with the following table;

<table><tr><th>No. of Dwellings</th><th>No. of Adaptable <u>or</u> Accessible Dwellings</th></tr><tr><td>5 or less</td><td>NIL</td></tr><tr><td>6-15</td><td>1</td></tr><tr><td>16-30</td><td>2</td></tr><tr><td>More than 30</td><td>10% of all dwelling units</td></tr></table>
➢ Compliance with Disability (Access to Premises – Buildings) Standards
➢ Disabled parking provided.</td><td></td><td></td></tr>
</table>

The Hills Development Control Plan (DCP) 2012

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THE HILLS Sydney's Garden Shire





Part B Section 6
Business

B6

In Force 12 November 2021

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1. INTRODUCTION

This Section of the DCP must be read in conjunction with Part A – Introduction of this DCP.

1.1. LAND TO WHICH THIS SECTION OF THE PLAN APPLIES

This Section of the DCP applies to all Business zoned land and land where commercial land uses are permissible under The Hills Local Environmental Plan 2012.

1.2. ACCESS AND MOBILITY

This Section of the DCP seeks to ensure equitable access to suitable housing is provided for all people and should be read in conjunction with the following policies and legislation where applicable:

Disability Discrimination Act 1992 and Disability (Access to Premises - Buildings) Standards
The Disability Discrimination Act 1992 aims to eliminate discrimination against people on the grounds of disability and includes provisions which make it unlawful to discriminate against a person with disability in relation to access to, or use of, premises.

The Disability (Access to Premises - Buildings) Standards prescribes a set of design and construction standards covering access to new buildings or an extension to/modification of an existing building. Compliance with the Premises Standards ensures compliance with the requirements of the Disability Discrimination Act.

National Construction Code and Australian Standards
The National Construction Code (NCC) is a uniform set of technical provisions for the design and construction of buildings and other structures throughout Australia. The NCC includes provisions that mirror the Premises Standards to ensure reasonable access to buildings for people with a disability.

Standard No.	Description
AS1428.1	Design for access and mobility – general requirements for access – New building work
AS2890.6	Parking facilities Off-street parking for people with disabilities

1.3. AIMS AND OBJECTIVES OF THIS SECTION OF THE DCP

The aim of this Section is to establish objectives and development controls for the development of commercial and retail land within The Hills Shire.

OBJECTIVES

1. *To promote a distinctive and high quality employment environment attractive to a range of business and commercial developments.*
2. *To provide opportunities for a range of commercial, business and retail development which will contribute to the economic, employment and social growth of the area.*
3. *To encourage innovative and imaginative design with particular emphasis on the integration of buildings and landscaped areas which incorporate the principles of Ecologically Sustainable Development.*
4. *To provide a range of locational and development opportunities to suit a variety of business needs within a flexible employment zone.*
5. *To provide for the conservation of Bella Vista Farm Park and the protection of significant views to and from the Park.*
6. *To ensure that the Shire is served by an efficient transport system for the movement of people and goods and to provide for integration with existing and future transport systems operating in the region.*

Australian Standards referred to in this DCP:

1.4. HIERARCHY OF CENTRES

Refer to Council's Centres Direction.

2. OBJECTIVES AND DEVELOPMENT CONTROLS

Objectives and development controls for business development are set out in the following sections.

In addition to those policies, guidelines and documents specified in section 1.4 of Part A - Introduction, this Section is to be read in conjunction with other relevant Sections including:

- Part C Section 1 - Parking
- Part C Section 2 - Signage
- Part C Section 3 - Landscaping
- Part C Section 4 - Heritage
- Part C Section 6 - Flood Controlled Land
- Part D Section 6 - Rouse Hill Regional Centre

2.1. PRECINCT PLANS

OBJECTIVES

1. *To ensure the development of specific commercial/retail areas is consistent with the precinct plans adopted by Council for the wider business area.*
2. *To provide for the orderly development of commercial/retail land.*
3. *To provide development controls for particular areas to recognise the specific constraints or characteristics of these areas.*

DEVELOPMENT CONTROLS

(a) Precinct plan maps should be referred to in addition to this written Section to ensure the proposed development is consistent with the planned character and development of the area. These maps are contained within Appendix A – Precinct Plan Maps to this Section and apply to the following areas:-

i. Terminus St, Castle Hill;
ii. Old Castle Hill Rd/McMullen Ave, Castle Hill;
iii. Old Northern Rd/Hill St, Baulkham Hills;
iv. Coonara Ave, West Pennant Hills;
v. Old Northern Rd, Glenorie;
vi. Windsor Rd, Kellyville;
vii. Old Northern Rd, Baulkham Hills;
viii. Kenthurst Rd/Old Northern Rd, Dural;
ix. Lawndale Ave/North Rocks Rd, North Rocks;
x. Campbell St, Northmead;
xi. Terminus Street Car Park;
xii. Wrights Road retail precinct, Kellyville;
xiii. Kentwell Ave and Castle St, Castle Hill; and
xiv. Norwest Business Park (Also, refer to Appendices A – Precinct Plan Maps to B – Norwest Business Park).

OBJECTIVES

1. *To encourage a comprehensive approach to site planning, design and assessment of development.*
2. *To facilitate assessment of how future developments relate to their immediate surroundings and to each other.*
3. *To facilitate development of a design that minimises negative impacts on the amenity of adjoining commercial or residential development in accordance with Council's ESD objective 7.*
4. *To facilitate development of a design that is energy efficient and permits adoption of renewable energy sources in accordance with Council's ESD objective 5.*
5. *To ensure development is compatible with land capability.*
6. *To minimise adverse impacts on the environment in accordance with Council's ESD objective 7.*
7. *To ensure during consideration of the site layout and design that disturbance to the natural*

environment is minimised in accordance with Council's ESD objective 4.

DEVELOPMENT CONTROLS

(a) Development should be designed to respect site constraints such as topography, drainage, soil landscapes, flora, fauna and bushfire hazard.

(b) Disturbance to existing natural vegetation, landforms, creeks, wetlands and overland flow paths should be minimised.

(c) Development on land adjoining bushland reserves should incorporate measures (such as setbacks and buffers) to prevent any impact on these reserves.

(d) Development should be sited away from steep slopes (particularly those containing natural vegetation) so that, where possible, these features can be kept in a natural state.

(e) Land with a slope greater than 20% is not suitable for development.

(f) Development applications for proposals on land with a slope of between 15-20% must be accompanied by a geotechnical report.

(g) Development on land adjoining Bella Vista Farm Park should incorporate measures (such as setbacks and buffers) to minimise any impact on the Bella Vista Farm Park.

SUBMISSION REQUIREMENTS

- Site Plan, including an indication of how social and environmental issues have been considered in the design.
- Site Analysis.

2.3. DEVELOPMENT SITES

OBJECTIVES

1. *To ensure development sites have sufficient area to provide adequate access, parking, landscaping and building separation in accordance with Council's ESD objective 7.*
2. *To provide for the orderly development of land through subdivision or the consolidation of lots.*
3. *To provide a satisfactory relationship between buildings, landscaping areas and adjoining developments in accordance with Council's ESD objective 7.*
4. *To ensure that development occurs only where adequate sewer, water, drainage, energy supply and telecommunications are available to the satisfaction of the relevant authorities.*
5. *To minimise stormwater runoff and provide for on-site groundwater recharge in accordance with Council's ESD objective 3.*

DEVELOPMENT CONTROLS

(a) The minimum site frontage requirement is 18 metres, except in Balmoral Road Release Area where the minimum road frontage is 60 metres.

(b) Development should ensure that adequate provision has been made for water, sewerage, energy supply, telecommunications and stormwater drainage to the satisfaction of the relevant authorities.

(c) Development consent will not be granted until arrangements satisfactory to the relevant authorities are made for the provision of services.

(d) All services shall be underground and the installation of services should occur in a co-operative manner for efficiency and to minimise ground disturbance.

(e) Consent may not be granted to an application that isolates an area of land that does not meet the minimum site area requirements.

(f) For development located in the Norwest Business Park, the maximum site coverage is 50 percent. (Refer to Appendix B in this Section).

(g) For child care centres, refer to Appendix E.

SUBMISSION REQUIREMENTS

- Site Plan - site coverage calculations (excluding uncovered car parking areas and driveways) with supporting site plan showing the location and size of the proposed buildings/structures.
- Site Analysis Plan
- Evidence of suitable arrangements with the following are required to be submitted with development applications:
  - Sydney Water Corporation for potable and recycled water, sewage and drainage;
  - Telecommunications carrier for telephones and associated equipment;
  - Integral Energy for underground electricity;
  - AGL for gas supplies and
  - NSW Fire Brigades.

2.4. FLOOR SPACE RATIO

Refer to Clauses 4.4 *Floor Space Ratio* and 4.5 *Calculation of floor space ratio and site area* of The Hills Local Environmental Plan 2012 written instrument and Floor Space Ratio Maps.

DEVELOPMENT CONTROLS

(a) The total retail gross leasable floor area of all buildings within B2 Local Centre located in the Norwest Business Park (commonly referred to as Norwest Marketown) is not to exceed 15,000m^2.

SUBMISSION REQUIREMENTS

- Site plan showing the location and size of the proposed buildings/structures with supporting floor space ratio calculations (excluding uncovered parking areas, internal loading bays and driveways).
- Dimensioned development application plans including a schedule of areas for each separate occupancy unit proposed.

2.5. SETBACKS

OBJECTIVES

1. *To provide an attractive streetscape and substantial areas for landscaping and screen planting.*
2. *To ensure adequate sight distance is available for vehicles entering and leaving the site.*
3. *To minimise overshadowing of adjoining properties.*
4. *To protect privacy and amenity of any adjoining land uses.*
5. *To provide a desirable and aesthetically pleasing working environment.*
6. *To ensure endangered ecological communities are protected.*

DEVELOPMENT CONTROLS

For all business zoned land except Norwest Business Park:

(a) All single and two storey retail/commercial development located along a public road may utilize a zero setback, other than in those site specific areas specified on the precinct plan maps contained in Appendix A of this Section.

(b) For buildings greater than two storeys or 8 metres in height, the remaining storeys are to be setback within a building height plane of 45° starting from a height of 8 metres.

(c) Where any proposed development is opposite or adjacent to Residential, Special Purpose or Recreation zones, the building shall be setback a minimum of 6 metres, or as specified on the precinct plan maps contained in Appendix A to this Section. This area is to be used exclusively for landscaping and screening purposes or for the protection of endangered ecological communities present on a site.

(d) Redevelopment of any commercial/retail development, operating under existing use rights in a residential zone, will be required to comply with the residential setback applying to the locality.

(e) Council will require written concurrence from Integral Energy for developments proposed within an electricity easement.

(f) The setback to a creek is to be no less than 40 metres from the top of the bank of the creek or otherwise to the requirements of the Office of Environment and Heritage.

(g) Where a development site is affected by a road widening proposal the minimum setback will be

measured from the proposed new alignment of the road.

For land zoned B7 Business Park in Norwest Business Park:

(h) The building setback to all public roads is to be a minimum of 20 metres except where provided below.

(i) In the case where the development site has two or more public road frontages, the setback to the principal road frontage (as determined by Council) shall be a minimum of 20 metres and 50% of the depth of setback areas to the other road frontages may be used for car parking provided the first 10 metres is formally landscaped to screen that car parking.

(j) The building setback on corner sites is to be splayed to provide adequate sight distance at the road intersections.

(k) The setback to side and rear boundaries where the adjoining land use is of an industrial, business or commercial nature shall be a minimum of 10 metres except in the case of car parking where a 5 metre setback applies provided the first 5 metres is landscaped to screen that car parking.

(l) The side and rear building setbacks from property boundaries adjoining land zoned for residential, rural or open space purposes shall be a minimum of 15 metres. This area is to be exclusively used for landscaping.

(m) The building setback for property boundaries adjoining the Bella Vista Farm Park conservation area shall be a minimum of 15 metres. The setback area is to be landscaped to screen the development from view from within the Farm, but so as not to obscure significant views available to and from the Farm. Car parking is not permitted within this setback.

(n) The building setback areas are not to be used for the display or storage of goods / materials.

(o) The setback to lakes, creeks and other water features may be considered on merit subject to the requirements of the Department of Planning.

(p) All building setbacks are to be landscaped in accordance with section 2.13 of this Section of the DCP.

For land zoned B2 Local Centre in Norwest Business Park:

(q) The building setback to roads within land zoned B2 Local Centre and the area identified as the Norbrik Neighbourhood Business Centre are to be considered on merit.

(r) The setback to lakes, creeks and other water features may be considered on merit subject to the requirements of the Office of Environment and Heritage.

(s) All building setbacks are to be landscaped in accordance with section 2.13 of this Section of the DCP.

SUBMISSION REQUIREMENT

- Building setback dimensions are to be shown on development application plans.

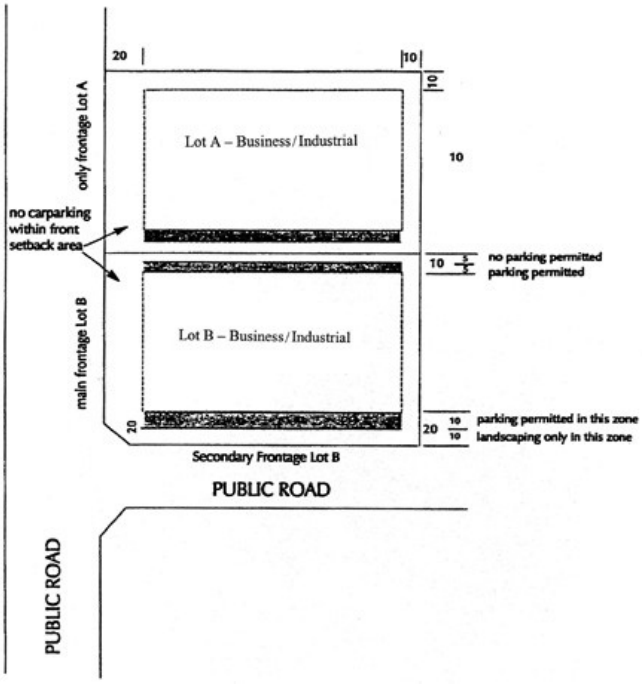


Figure Typical setbacks

2.6. BUILDING HEIGHT

OBJECTIVES

1. *To ensure that building heights respond to the existing landform of the neighbourhood, including ridgelines and drainage depressions.*

2. *To protect privacy and amenity of surrounding allotments and residential development in accordance with Council's ESD objective 7.*
3. *To minimise overshadowing of adjoining allotments.*
4. *To retain significant views to and from the Bella Vista Farm conservation area, in particular the following:*

- *Vistas from the Homestead generally south.*
- *Vistas from the outer farmyard generally north.*
- *Views into the site from the former alignment of Old Windsor Road.*
- *Views into the site from Norwest Boulevard.*
- *Distant views to the site from the Castle Hill Seventh Day Adventist Church site and Pearce Family Cemetery.*

DEVELOPMENT CONTROLS

(a) Refer to Clause 4.3 *Height of buildings*, Clause 5.6 *Architectural roof features* and Height of Buildings Maps in The Hills Local Environmental Plan 2012.

(b) The maximum height of buildings within the B2 Local Centre zone shall be 3 storeys or as specified on The Hills Local Environmental Plan 2012 Height of Buildings Map or on the precinct plan maps contained in Appendix A to this Section of the DCP.

(c) For development not in the B2 Local Centre zone, the maximum height of buildings shall be 2 storeys.

(d) For development within the B7 Business Park zone, located in Coonara Avenue, West Pennant Hills, identified on Sheet 4 of the precinct plan maps, no building shall have more than 4 floors.

(e) Where a building creates overshadowing of an adjoining property the roof shall be designed so as to minimize shadow effects.

SUBMISSION REQUIREMENTS

- Shadow Diagrams where the proposed development is greater than 2 storeys (8 metres) and adjoins residential development.

2.7. BUILDING DESIGN AND MATERIALS

OBJECTIVES

5. *To ensure business developments are of a high quality and demonstrate an appreciation for urban design.*
6. *To promote integrated, visually harmonious and attractive buildings in commercial/retail areas.*
7. *To promote the use of materials that involve minimal impact on the environment in accordance with Council's ESD objective 5.*
8. *To protect the privacy and amenity of any adjoining residential properties.*
9. *To ensure the design and layout takes into account the safety of occupants and visitors to the site.*
10. *To ensure the design permits surveillance of the site to discourage vandalism and criminal activity in commercial and retail areas.*

DEVELOPMENT CONTROLS

(a) All building construction must comply with the Environmental Planning & Assessment Act 1979 (EP & A Act) and the Building Code of Australia.

(b) All external walls of buildings shall be constructed of brick, glass, pre-cast exposed aggregate panels of similar material. However, use of new materials that generate a lower environmental cost will be considered on their merits. Under no circumstances will masonry block work be permitted on external walls.

(c) Design of buildings shall give consideration to the privacy of adjoining residential development.

(d) Balconies/terraced areas adjacent to residential zones shall be suitably screened to prevent overlooking and privacy impacts on adjoining properties.

(e) Natural ventilation is preferred, however where mechanical ventilation is necessary any roof ventilators, exhaust towers, hoppers and the like should be located so as not to be visible from any public place or residential area. Where feasible, the design of such items should be complementary to the design and appearance of the building as a whole.

(f) Consideration should be given to use of low reflectivity building materials on building facades.

(g) Avoid materials that are likely to contribute to poor internal air quality such as those generating formaldehyde (new carpets) or those that may create a breathing hazard in the case of fire (e.g. polyurethane).

(h) Select materials that will minimise the long-term environmental impact over the whole life of the development.

(i) Preference should be given to materials derived from renewable sources or those that are sustainable and generate a lower environmental cost, recycled material or materials with low embodied energy, better lifecycle costs and durability. For example, use plantation rather than old growth timbers.

(j) Choice of materials should be based on consideration of both their environmental and economic costs.

(k) In accordance with the "Designing Safer Communities Guidelines" buildings should be designed with visible entrances, no entrapment spaces and utilise anti-graffiti surfaces.

For land in Norwest Business Park:

(l) The following factors must be considered when selecting materials:

- Suitability for the purpose.
- Durability.
- Long term appearance.
- Local environmental impacts.
- Broader and longer term environmental impacts.
- The quantity of material required.
- Life cycle assessment.

(m) All building materials are to complement landscaped areas and ensure a high standard of visual and environmental quality.

(n) Attractive building designs can be achieved at comparatively low cost and applicants are encouraged to consider variations in fascia treatments, rooflines and selection of building materials to achieve an attractive and functional design.

(o) External finishes of building facades to street frontages are to be constructed of colours and textures that are compatible with surrounding developments and landscape features.

(p) The roof colour of any built structure to be located south of Norwest Boulevard, and which will be easily viewed from the Bella Vista Farm conservation area shall be of a dark, non-reflective colour (such as dark grey or green).

(q) Design of the buildings and landscaping should ensure natural surveillance of pathways and open space setback areas around buildings is possible from within the building, and/or from adjoining roads and open space areas.

(r) Building design should ensure building entrances are visible and discourage entrapment.

(s) Appropriate lighting and signage is to be provided to identify and promote use of safe access routes.

SUBMISSION REQUIREMENTS

- Site plan showing the design of buildings and measures to promote safety.
- Schedule of external finishes.
- Streetscape Perspective including landscaping.

2.8. SIGNAGE

Refer to Part C Section 2 – Signage of The Hills DCP 2012.

2.9. HOURS OF OPERATION

OBJECTIVES

1. *To ensure that commercial/retail developments operate in a manner compatible with adjoining land uses.*

DEVELOPMENT CONTROLS

(a) Proposed hours of operation must take into account the operation of loading docks, waste collection services and the use of cleaning/maintenance vehicles, out of hours.

(b) For land in Norwest Business Park, construction of developments within the area to which this plan applies is to be restricted to 7.00 am to 6.00 pm Monday to Saturday with no work or activity to be carried out on Sundays or Public Holidays.

(c) For land in Norwest Business Park, hours of operation for developments on land to which this Section of the DCP applies may be 24 hours, 7 days per week provided operations do not adversely affect adjoining properties or businesses.

(d) Justification is required to be submitted for the hours of operation and which address noise or other operational issues arising from particular developments. Conditions may be imposed to ameliorate any impact on the adjoining land uses.

(e) For child care centres, refer to Appendix E - Child Care Centres in this Section.

SUBMISSION REQUIREMENTS

- Details of days and hours of operation are to be provided in the development application with the statement of environmental effects. This is to include a justification for the proposed hours of operation.
- A statement of compliance from an acoustical consultant may be required to demonstrate that the noise generated by development generally does not exceed 5dB (A) above the background noise levels, where measured at any boundary adjoining or adjacent to a residential property.
- The statement of compliance will also include an assessment and schedule of truck movements, type and times.

2.10. ENERGY EFFICIENCY

Energy efficient design will assist in creating ecologically sustainable environments, reducing the use of fossil fuels and encouraging the use of renewable energy.

OBJECTIVES

1. *To facilitate the design and construction of energy efficient buildings in accordance with Council's ESD objective 5.*
2. *To require building designs that will minimise energy needs and utilize passive solar design principles in accordance with Council's ESD objective 5.*

DEVELOPMENT CONTROLS

(a) The design of all buildings shall demonstrate passive solar design principles i.e.
   - Window placement;
   - Building orientation;
   - Shading;
   - Insulation;
   - Thermal mass;
   - Ventilation; and
   - Incorporation of suitable landscaping.

(b) All buildings shall achieve as a minimum a 4 star Building Greenhouse rating with respect to energy efficiency. Details of the rating for each

building are to be provided with the development application.

Note. Advice on the Building Greenhouse rating can be obtained from the Office of Environment and Heritage or the Australian Building Greenhouse Rating website www.abgr.com.au. Where a hot water service is provided to any sole-occupancy building or unit a hot-water system with a greenhouse gas emission score of 3.5 or greater is to be installed to suit the needs of that building or unit.

For land in Norwest Business Park:

(c) In designing the building consideration must be given to utilising the large areas of roof space for generating electricity via solar panels or other relevant technology.

(d) Issues that need to be considered are: -

- The orientation and pitch of the roof. The portions of the roof suitable for solar panels must be oriented north to maximise sunlight on these areas; and
- The capability of the roof to accommodate, or to be easily reinforced so it can accommodate solar panels and/or other relevant equipment.

SUBMISSION REQUIREMENT

- Details of energy efficiency measures are to be provided in the development application.

2.11. BIODIVERSITY

Refer to Clause 7.4 *Biodiversity (Terrestrial)* of The Hills LEP 2012.

2.12. EROSION AND SEDIMENT CONTROL

Land degradation associated with development can be avoided or mitigated largely through appropriate planning before commencement of earthworks and by using best management practices available.

OBJECTIVES

1. *To minimise land degradation, water pollution and damage of infrastructure from erosion and accumulated sediment in accordance with Council's ESD objective 3.*
2. *To provide development controls for all stages of development and to ensure a consistent approach to erosion and sediment control in accordance with Council's ESD objective 3.*

DEVELOPMENT CONTROLS

(a) Applications for all development, including subdivision, are to be accompanied by an Erosion and Sediment Control Plan (ESCP) that will describe the measures to be undertaken at development sites to minimise land disturbance and erosion, and to control sediment pollution of creeks. ESCPs are to clearly identify the erosion and sediment control measures to be used.

(b) Erosion and Sediment Control Plans shall be prepared in accordance with "Managing Urban Stormwater – Soils and Construction", produced by Landcom.

SUBMISSION REQUIREMENTS

- Erosion and Sediment Control Plan

2.13. FENCING, LANDSCAPING AND TREE PRESERVATION

OBJECTIVES

1. *To ensure a high standard of environmental quality of individual developments and of the overall visual amenity and character of the area.*
2. *To ensure that existing landscaping and vegetation is retained and integrated into the design of the development in accordance with Council's ESD objective 4.*
3. *To ensure that landscaped areas can be appropriately maintained.*
4. *To ensure that existing trees are given every opportunity to be retained and incorporated into the final*

development in accordance with Council's ESD objective 4.

5. *To ensure that vegetation removed as a part of the land development process is replaced by suitable endemic species in accordance with Council's ESD objective 4.*
6. *To ensure that fencing does not detract from the overall visual amenity and character of retail and commercial areas.*

DEVELOPMENT CONTROLS

(a) Existing trees and surrounding shrubs, groundcovers and grasses should be preserved.

(b) All setback and car parking areas are to be regenerated and maintained to a high standard utilising endemic species.

(c) Native species are to be used to maintain a strong natural theme for the neighbourhood, owing to their low maintenance characteristics, relative fast growth, aesthetic appeal and suitability to the natural habitat.

(d) Landscape treatments are to harmonise with building designs and should consist of trees, shrubs, groundcovers and grass (Kikuyu is prohibited in any landscaping or lawn area).

(e) Landscaping is to be provided in accordance with the provisions set out in Part C Section 3 - Landscaping.

(f) Grassed embankments are not to exceed a 1:6 slope.

(g) All landscaped areas are to have a minimum width of 2 metres.

(h) In accordance with the "Designing Safer Communities Guidelines" landscaping should incorporate natural surveillance, good sightlines, lighting and active use of open space.

(i) Endangered ecological communities are to be preserved and maintained in accordance with a Vegetation Management Plan.

(j) For child care centres, refer to Appendix E in this DCP Section.

For land in Norwest Business Park:

Landscaping is to be provided in accordance with the provisions set out in Part C Section 3 – Landscaping and the following:-

(k) Grassed embankments are not to exceed a 1:6 slope, while vegetated embankments planted with soil stabilising species may be as steep as 1:3.

(l) Earth mounding is desirable within setback areas to reduce noise-associated impacts.

(m) Landscape treatments are to harmonise with building designs and should consist of trees, shrubs, groundcovers and grass.

(n) Native species are to be used to maintain a strong natural theme for the neighbourhood owing to their low-maintenance characteristics, relative fast growth, aesthetic appeal and suitability to the natural habitat.

(o) Any development of land south of Norwest Boulevard shall ensure that the landscape treatments:-

- Are based on an understanding of the development of the cultural landscape, and interpret where possible former plantings (refer to Section 10.5 of the Bella Vista Farm Conservation Management Plan, 2000).
- Will not obscure significant views to and from the Bella Vista Farm Park when mature.
- Utilise plantings endemic to the area to screen views of the proposed building and all associated hard paved areas (such as car parks, loading areas and driveways).

(p) No fencing, other than of a low, ornamental type may be erected within the setback area to any road.

(q) Fencing along rear boundaries adjacent to drainage or open space land shall be integrated with any landscaping of the required building setback area.

(r) All chain-wire fencing is to be black or dark green in colour.

(s) Pre-painted solid, metal fencing is not acceptable because of its poor visual appearance.

(t) Fencing immediately adjoining the Bella Vista Farm Park conservation area shall generally be of simple, low-level, rural type design of timber

construction or as otherwise specified by Council.

SUBMISSION REQUIREMENTS

- Landscaping plan.
- Tree Management Details.
- Fence details including a materials and colours schedule.
- A Vegetation Management Plan prepared by an appropriately qualified Bushland Management Consultant is to be submitted with Development Applications where endangered ecological communities exist.
- Fencing details for the site, clearly showing the location, height and type of fencing.

2.14. TERMINUS STREET CAR PARK

Refer to Part D Section 11 – Terminus Street Precinct.

2.15. VEHICULAR ACCESS

OBJECTIVES

1. *To ensure the safety of all road users in commercial/retail areas.*
2. *To ensure that vehicles can enter and exit sites in a safe and efficient manner.*
3. *To promote the orderly redevelopment of land having frontage to a main road.*
4. *To maintain the performance of roads that provides an arterial or sub-arterial function.*

DEVELOPMENT CONTROLS

(a) Vehicular access to main roads shall not be permitted where alternative access is available or can be acquired.

(b) Adequate vehicular entry and exit from the development is to be provided and shall be designed to provide a safe environment for both pedestrians and vehicles using the site and surrounding road network.

(c) Vehicular ingress and egress to the site must be in a forward direction at all times.

(d) All internal driveways, circulation and parking areas are to be sealed with a hard-stand, all-weather material that complies with Council's "Work Specification Subdivision/ Development" policy.

(e) All roads intended to be dedicated to Council as public roads shall be constructed to Council's requirements.

(f) Driveways from public roads will be:

- Perpendicular to the road within the building setback;
- Separated or divided at the property boundary for ingress and egress movements;
- Sight distances are to be in accordance with Part C Section 1 – Parking of this DCP and Council's Design Guideline for Subdivisions/Developments.

For development within the business zone:-

(g) Located on the western side of Post Office Road, Glenorie, vehicular access shall be restricted and future access roads provided, as specified on Map Sheet No.5.

(h) Located on the northern side of Windsor Road, Kellyville provision shall be made for rights of carriageway as specified on the Map Sheet No.6.

(i) Located on the northern side of Wrights Road, Kellyville vehicular access shall be provided as specified on the development control map, Map Sheet No.12 to align with entry/exit from Wrights Road Reserve.

(j) All internal roadways are to have a minimum width suitable to the proposed activities of the site. Road widths will be assessed on the individual merits of the road design and layout, and subject to approval by Council.

(k) In addition to the above, all development in the Norwest Business Park should ensure that access to the site is via internal roads. Restrictions on access to development sites from Old Windsor Road, Windsor Road and parts of Norwest Boulevard are as indicated on the map in Appendix B of this Section of the DCP.

SUBMISSION REQUIREMENTS

- Applicants are required to submit plans and details with the development application of proposed vehicular access and circulation. Details must specifically relate to vehicular movement, layout and turning circles.

2.16. CAR PARKING

OBJECTIVES

5. *To ensure the safety of all road users in commercial/retail areas.*
6. *To ensure that all car parking demands generated by the development are accommodated on the development site.*
7. *To ensure the free flow of traffic into and out of the development and the surrounding street network.*
8. *To ensure that the provision of off-street parking facilities does not detract from the overall visual amenity and character of the neighbourhood in relation to streetscape in accordance with Council's ESD objective 7.*

DEVELOPMENT CONTROLS

Design standards for car parking and manoeuvring areas together with more details on provision rates for specific land uses are contained in Part C Section 1 - Parking. The location and design of driveways and parking areas should enable the opportunity for landscape screening.

SUBMISSION REQUIREMENTS

- Site Plan showing the number of car parking spaces and calculations.
- Dimensions of all parking spaces and driveway widths.
- Details of the proposed number of employees.

2.17. BICYCLE PARKING

Cycling is a healthy, low cost, environmentally friendly form of transport which offers a flexible and low-impact alternative to the use of private motor vehicles.

OBJECTIVES

1. *To make it easier and more convenient for people to travel to and from places using bicycles.*
2. *To reduce the rate at which the demand for car travel increases in the future, thereby helping to improve air quality.*

DEVELOPMENT CONTROLS

(a) Bicycle parking facilities are required for all new and redeveloping commercial/business centres. For all land zoned business (except Norwest Business Park), bicycle facilities are required to be provided for:-

- Any new commercial/retail development, which exceeds 5,000m^2 in GFA; and
- Any extensions to existing commercial/retail developments which will have the effect of increasing the size of the total development to greater than 5,000m^2.

(b) For developments in Norwest Business Park: bicycle parking facilities are required for all new developments. At a minimum these facilities are required to be provided for: -

- Any new development, which exceeds 4,000m^2 in GFA.
- Any developments which will have the effect of increasing the size of the total development to greater than 4,000m^2.

(c) Bicycle parking spaces for the above developments are to be provided at a minimum rate of 2 spaces plus 5% of the total number of car parking spaces required for the development. Consideration should be given to the provision of undercover facilities.

(d) Bicycle parking should be located in close proximity to the building's entrance and clustered in lots not exceeding 16 spaces.

(e) Each bicycle parking space shall be not less than 1.8 metres in length and 600mm in width and shall have a bicycle rack system.

(f) Bicycle parking facilities shall support bicycles in a stable position without damage to wheels, frames or other components.

(g) Bicycle parking facilities should be located in highly visible, illuminated areas to minimise theft and vandalism.

(h) Bicycle parking facilities shall be securely anchored to the site surface so they cannot easily be removed and shall be of sufficient strength to resist vandalism and theft.

(i) Bicycle parking facilities shall not impede pedestrian or vehicular circulation and should be in harmony with their environment and design. Parking facilities should be incorporated wherever possible into building or street furniture.

(j) Racks must not be placed so close to any wall or other obstruction so as to make use difficult.

(k) Bicycle parking facilities within car parking areas shall be separated by a physical barrier to protect bicycles from damage by cars, such as curbs, wheel stops or other similar features.

(l) Consideration should be given to providing staff change rooms and washing facilities.

SUBMISSION REQUIREMENTS

- Documentation to demonstrate bicycle facilities.

2.18. LOADING FACILITIES

OBJECTIVES

1. *To ensure that adequate areas are set aside on site to allow for the safe and efficient manoeuvring of delivery and service vehicles.*
2. *To ensure that loading facilities required in association with developments do not detract from the amenity of nearby public spaces and residential land uses.*
3. *To ensure no interference is caused to off-street car parking arrangements.*

DEVELOPMENT CONTROL

(a) Loading docks shall be located so they are not visible from adjoining residential areas and do not transmit excessive noise to adjoining residential areas.

(b) Provision of loading docks is to be commensurate with the size and nature of the development proposed.

(c) Where a residential development and commercial development occupy the same site or development, loading docks are to be suitably sized for waste collection vehicles by Council and its contractor.

(d) The number of loading bays required for supermarkets, department stores, mixed small shops and offices is specified in DCP Part C Section 1 - Parking. For all other permissible development, there is to be a minimum one loading dock space, suitable to the size of the development.

(e) Turning provisions are to be provided within the site for the manoeuvring of vehicles using the loading and unloading facilities in accordance with AUSTROADS Design Vehicular and Turning Templates.

(f) For land in Norwest Business Park, the minimum number of loading bays required shall be in accordance with the provisions in Part C Section 1 – Parking of this DCP.

SUBMISSION REQUIREMENTS

- Plans and details of proposed delivery access and circulation detailing vehicular/truck movements, size, time layouts and turning circles.
- Plans and details that demonstrate the loading dock facilities are adequate to serve the development.

2.19. ACCESS AND MOVEMENT

OBJECTIVES

1. *To ensure that developers comply with the provisions of* the Disability (Access to Premises – Buildings) Standards *and Australian Standard AS1428.1, in regard to appropriate and improved access and facilities for all persons.*

2. *To require designers/developers to provide for the needs of people who are mobility impaired and to provide greater than minimum requirements for access and road safety.*
3. *To promote incorporation of pedestrian safety and convenience in all aspects of development design.*
4. *To ensure that building design does not prevent access by people with disabilities and incorporate measures appropriate for people with disabilities.*

DEVELOPMENT CONTROLS

(a) All new buildings and alterations and additions to existing buildings must comply with the requirements of the Disability (Access to Premises – Buildings) Standards.

(b) Accessible car parking spaces and layout should be designed to comply with Australian Standard AS2890.6.

(c) All internal and external pathways and ramps should conform to the requirements set out in AS1428.1 – Design for Access and Mobility.

(d) In accordance with the "Designing Safer Communities Guidelines" pathways should be open to provide greater visibility and be well-lit at night.

(e) Proposed development in Norwest Business Park should provide clearly defined pedestrian pathways:

- Between proposed developments.
- Along sub-arterial or arterial roads.
- As links to proposed North West Rail Link and North West T-way stations.

SUBMISSION REQUIREMENTS

- Documentation to demonstrate how the objectives and development controls have been satisfied.
- Any application for new buildings **or** alterations and additions where the floor area of the building is increased by 50% or more; must be accompanied by an access report prepared by a suitably qualified person, demonstrating the proposed developments ability to comply with the Disability (Access to Premises – Buildings) Standards.

2.20. PARENTING FACILITIES

OBJECTIVES

1. *To provide convenient, comfortable and quiet areas for parents to feed and care for their children in privacy.*
2. *To provide easily accessible parenting facilities in business/commercial developments within the Shire.*

DEVELOPMENT CONTROLS

(a) Parenting rooms are to be provided for:-

- All new retail developments which exceed 3,000m^2 in floor area;
- Any extensions to existing retail developments which will have the effect of increasing the size of the total development to greater than 3,000m^2; and

(b) Parenting rooms should provide users with the following services and facilities:-

- A quiet convenient place for parents to feed children in privacy;
- Comfortable seating, preferably armchair style and couches for twins;
- An allocated area safe and clean to change nappies;
- A curtained breastfeeding area to maintain privacy of breast feeding women so that male carers of infants can access the area without disturbing breast feeding mothers;
- Provision of warm and cold water and hand drying facilities;
- Bottle warming facilities;
- Waste containers with tight fitting lids;
- A smoke free zone;
- Easy pram/stroller access;
- Adequate clear signage to identify the room/facility and such signage is not to include symbols such as stylized baby's bottles;
- Directional signage to identify the location of the room/facility;
- Entry doors which are light to push, and have the ability to be propped open for pram and wheelchair access, but not automatic as toddlers can escape;
- Toddler toilet with low mirror and low wash basin with automatic cut off taps;

- Hot water thermostat regulators to be installed on taps;
- Comfortable lighting and ventilation or air conditioning;
- Disposable cup dispenser; and
- Separate male and female toilets with sufficient additional space within each cubicle for a pram or a stroller.

2.21. STORMWATER MANAGEMENT

OBJECTIVES

1. *To ensure that commercial/retail development does not impact on the water quality of adjacent properties or creeks in accordance with Council's ESD objective 2.*
2. *To ensure that development does not increase downstream flooding.*
3. *To encourage reuse, recycling and harvesting of stormwater to reduce wastage of water in accordance with Council's ESD objective 2.*
4. *To encourage the re-use of stormwater for the irrigation of landscaped areas, particularly during establishment periods in accordance with Council's ESD objective 2.*
5. *To provide for the disposal of stormwater from the site in efficient, equitable and environmentally sensible ways.*

DEVELOPMENT CONTROLS

(a) Water Sensitive Urban Design (WSUD) principles shall be employed in the management of the site's/development's stormwater in terms of water retention, reuse and cleansing.

(b) In all development, two of the following water sensitive urban design measures must be implemented in the development:-

M1 Low Impact Building Design
M2 Low Impact Landscape Design
M3 Porous Paving
M4 Rainwater Utilisation – toilet, hot water
M5 Grey Water Utilisation – toilet
M6 On-site Infiltration System
M7 Stormwater Treatment System
M8 Infiltration or Retention Basin
M9 Stormwater Utilisation – irrigation
M10 Grey Water Utilisation – irrigation

(c) For development in Norwest Business Park, two of the measures M1 to M8 inclusive must be implemented. Details on the actions required to implement each of these measures is included in Appendix B – Water Sensitive Urban Design of The Hills DCP 2012.

(d) No adverse effects are to be experienced by downstream landowners from discharges from site that slope down from the fronting street.

(e) Discharge points are to be accessible for water quality testing.

(f) Discharge points are to be controlled and treated to prevent soil erosion, and may require energy dissipating devices on steeper topography, to Council's requirements.

(g) On-site detention may be required to Council's satisfaction to counteract an increase in stormwater runoff.

(h) Where required, on-site detention (OSD) plans will be required to be submitted with the development application. OSD plans are to be prepared in accordance with the Upper Parramatta River Catchment Trust OSD Handbook, (which also includes controls for the Hawkesbury/Nepean Catchment) by a suitably qualified design consultant.

(i) Concentrated stormwater flows must be connected to Council's drainage system. In some cases this may require the creation of drainage easements over downstream properties. In this circumstance, a letter of consent from the owner(s) of the downstream properties is to be submitted with the development application. Development consent will be conditional upon registrations of the created easement.

(j) Reference should be made to the Restriction As to User on the title of the land, or the development consent to which the development is proposed in relation to requirements for on-site detention.

(k) The design of drainage systems is to be in accordance with Council's Design Guidelines for Subdivisions/Developments.

(l) Natural drainage lines and creeks should be retained.

(m) The piping of creeks is not encouraged.

SUBMISSION REQUIREMENTS

- Preliminary Engineering Drainage Plans indicating the proposed drainage infrastructure.
- Method of pollutant removal during and after development.

If required, easements are to be created over downstream properties prior to the Council granting operative development consent.



Wetland To Improve Water Quality

2.22. WASTE MANAGEMENT – STORAGE AND FACILITIES

OBJECTIVES

1. *To minimise the overall environmental impacts of waste.*
2. *To maximise, through design, the opportunities to deal with commercial waste according to the waste hierarchy as given in Council's ESD Objective 6 – reduce, reuse and recycle.*
3. *To reduce the demand for waste disposal by providing detailed criteria for the consideration of design and management of recycling, composting and waste storage and collection facilities within developments.*
4. *To provide commercial waste management systems that allow for ease of use by occupants; and ease of service by collection contractors.*
5. *To encourage building designs and construction techniques that will minimise waste generation.*
6. *To assist in achieving Federal and State Government waste minimisation targets.*
7. *To promote development design that is appropriate and provides convenient waste storage, recycling and collection facilities on site.*

DEVELOPMENT CONTROLS

(a) Adequate storage for waste materials must be provided on site. Ideally waste storage containers should be kept inside units and under no circumstances should waste storage containers be stored in locations that restrict access to any of the car parking spaces provided on site.

(b) Where a residential development and commercial development occupy the same site or development, the waste handling, storage and collection systems for residential and commercial waste are to be completely separate and self-contained.

(c) All waste must be removed at regular intervals and not less frequently than once per week.

(d) All waste storage areas must be screened from view from any adjoining residential property or public place.

(e) Waste storage areas must be kept clean, tidy and free from offensive odours at all times.

SUBMISSION REQUIREMENTS

- Waste Management Plan (WMP).
- Appendix A of The Hills Shire DCP 2012 contains a Waste Management Plan Template that can assist in the preparation of a Waste Management Plan.
- Applications for development are to be accompanied by a Waste Management Plan (WMP). The WMP accompanying the application must demonstrate appropriate design of facilities and on-going management techniques that minimise waste and the WMP will include the following details:
  - Type of future use for the development.
  - Types of waste to be generated.

- Estimated volume of waste to be generated per week.
- Show on plans and describe on-site storage and/or treatment facilities for waste.
- State the destination for waste produced.

- A Trade Waste Licence is required for the disposal of wastewater from any proposed retail or commercial development, prior to the issue of a Construction Certificate. A Trade Waste Licence must be obtained from Sydney Water before discharge into the sewer can commence. A Trade Waste application can be obtained from at the Section 73 Certificate application stage.

2.23. WASTE MANAGEMENT PLANNING

OBJECTIVES

1. *To promote improved project management and to reduce the demand for waste disposal during demolition and construction.*
2. *To maximise reuse and recycling of building/construction materials.*
3. *To encourage building designs and construction techniques that will minimise waste generation.*
4. *Minimise waste generation to landfill via the waste hierarchy.*
5. *To assist in achieving Federal and State Government waste minimisation targets.*

A Demolition

DEVELOPMENT CONTROLS

(a) Site operations should provide for planned work staging, at source separation, re-use and recycling of materials and ensure appropriate storage and collection of waste.

(b) Straight demolition should be replaced by a process of selective deconstruction and reuse of materials. Careful planning is also required for the correct removal and disposal of hazardous materials such as asbestos and is to be carried out by persons accredited from WorkCover in accordance with Office of Environment and Heritage requirements.

(c) Project management must seek firstly to re-use and then secondly to recycle solid waste materials either on or off site. Waste disposal to landfill must be minimised to those materials that are not re-useable or recyclable.

(d) When separated, materials are to be kept uncontaminated to guarantee the highest possible reuse value.

(e) Details of waste sorting areas and vehicular access are to be provided on plan drawings.

(f) Prior to any demolition works commencing on the site, the applicant is to notify all adjoining and adjacent neighbours and Council, five (5) working days prior to work commencing.

(g) All asbestos, hazardous and/or intractable wastes are to be disposed of in accordance with Work Cover Authority and Office of Environment and Heritage requirements.

B Construction

DEVELOPMENT CONTROLS

(a) Avoid oversupply and waste of materials by careful assessment of quantities needed.

(b) The use of prefabricated components may reduce waste.

(c) Re-use of materials and use of recycled material is desirable where possible.

(d) Site operations should provide for planned work staging, at source separation, re-use and recycling of materials and ensure appropriate storage and collection of waste.

(e) All asbestos, hazardous and/or intractable wastes are to be disposed of in accordance with Work Cover Authority and Office of Environment and Heritage requirements.

SUBMISSION REQUIREMENTS

- Waste Management Plan

2.24. HERITAGE

OBJECTIVES

1. *To ensure that the development of land within the vicinity of the Bella Vista Farm does not isolate the item from its context, thereby retaining its significance.*

DEVELOPMENT CONTROLS

(a) All development should be in accordance with Part C Section 4 – Heritage and Clause 5.10 *Heritage Conservation* of The Hills LEP 2012.

(b) Applications for development on any land adjoining the Bella Vista Farm conservation area are to be accompanied by a heritage impact assessment prepared in accordance with Part C Section 4 – Heritage and The Hills LEP 2012, in particular those provisions relating to development in the vicinity of a heritage item.

SUBMISSION REQUIREMENTS

- A Heritage Impact Assessment for the re-development of those properties adjacent to the Bella Vista Farm conservation area.
- Details of all building and landscape materials, colours and finishes.



Southern Elevation – "Bella Vista" Homestead

2.25. DEVELOPER CONTRIBUTIONS

Applicants should consult with Council's Section 94 Contributions Plans or contact Council's Infrastructure and Release Areas Team to ascertain rates that apply.

2.26. SITE INVESTIGATION

OBJECTIVE

1. *To conserve and protect the health and wellbeing of residents and visitors of the Shire.*

DEVELOPMENT CONTROLS

(a) A contamination assessment report is to be submitted with any Development Application for the Wrights Road precinct as referred to on Sheet 12 in Appendix A to this Section of the DCP.

(b) A validation report will be required at the completion of works to ensure the remediation is sufficient to enable appropriate use of the site.

2.27. POLLUTION CONTROL

OBJECTIVES

1. *To ensure that pollution sources are contained on site and not transmitted*

to non-compatible land uses, in accordance with Council's ESD objective 1.

2. *To ensure the environmental and social qualities of the surrounding areas are maintained, in accordance with Council's ESD objective 7.*

DEVELOPMENT CONTROLS

(a) The emission of air impurities, as defined under the Protection of the Environment Operations Act 1997, is to be controlled to the satisfaction of Council at all times.

(b) Certain uses may be required to be licensed under the Protection of the Environment Operations Act 1997.

(c) Any machinery or activity considered to create a noise nuisance must be adequately soundproofed in accordance with the provisions of the Protection of the Environment Operations Act 1997.

(d) The use of mechanical plant and equipment may be restricted where sites are located near existing and proposed residential areas.

(e) Incinerators are not permitted for waste disposal.

SUBMISSION REQUIREMENTS

- Documentation and plans indicating the proposed pollution control measures and their effectiveness.

2.28. BULKY GOODS PREMISES - ADDITIONAL CONTROLS

OBJECTIVES

1. *Ensure that the design of bulky goods premises development contributes positively to the streetscape and public domain by high quality architecture, materials and finishes.*
2. *Establish the requirements for bulky goods premises including minimum size of individual tenancies and ancillary retailing.*

DEVELOPMENT CONTROLS

(a) An individual tenancy within a bulky goods premises development is to have a sales floor area accessible to the public of greater than 500sqm.

(b) Bulky goods premises developments are to be designed to:

- Address and activate street frontages with large display windows;
- Define and enhance the public domain and be in scale with surrounding buildings;
- Have setbacks consistent with surrounding development, or if there is no setback established, 5m from the street alignment;
- Incorporate detail and architectural interest especially at visually prominent building locations such as lower level front facades, roof tops and at the terminations of street vistas;
- Avoid ambiguous external spaces with poor pedestrian amenity and security;
- Provide a clearly identifiable and dedicated pedestrian access to the building and across the site from the primary street frontage; and
- Create a visually interesting place for pedestrians, and where possible, enhance pedestrian and cycle networks/linkages to surroundings.

(c) The design is to be flexible to cater for different future uses of the building by providing high ceilings and adaptable open planning for the ground and first floor.

(d) Where existing built form contributes significantly to the streetscape it is to be retained and adapted appropriately.

(e) A staging plan for the development is to address access to and from the site, building form and scale, landscaping and the location of breakout open space on site.

(f) Where the development site has a boundary to residential land, a 15m wide landscaped buffer area is to be provided along this boundary.

(g) To minimise the impact of noise on residential properties, the landscape buffer area is to contain appropriate acoustic treatment. For example, this may include vegetation on raised mounds, acoustic feature walls, or a combination of both.

(h) No parking areas or access roads are to be within the landscape buffer area.

(i) All loading and unloading activity is to be contained within the building to minimise detrimental amenity impacts on residential dwellings.

(j) The building is to be sited close to the street alignment, and designed so that key operational spaces are legible from the street. Parking is not to occur between the front boundary and the building.

(k) Public toilets are to be provided in a bulky goods premises development at the minimum rate of:

- 1 male toilet per 1,200 customers visiting the site per day;
- 1 male urinal per 600 customers visiting the site per day;
- 1 female toilet per 300 customers visiting the site per day; and
- 1 unisex disabled toilet.

(l) A bulky goods premises development is to provide at least one independent non gender specific parent room.

(m) Signage is not permitted to cover fenestration or to detract from the architectural quality of the building design.

(n) When altering or expanding bulky goods premises development, development should incorporate improvements in the relationship of the development to the streetscape / public domain and to pedestrian access by:

- Increasing the number of active uses addressing the street frontage; and
- Ensuring separated and safe pedestrian access is provided from the street to the development.

(o) Pick-up areas are to be provided to avoid the necessity for customers to carry large items to vehicles.

(p) A development is to provide sufficient manoeuvring areas on site to accommodate large truck movements, frequency of servicing, and high turnover of client vehicles.

Note. Part B Section 7 – Industrial of the DCP also contains relevant controls where bulky goods developments are permitted within the Castle Hill Industrial Area.

2.29. WRIGHTS ROAD, KELLYVILLE LOCAL CENTRE

OBJECTIVES

1. *To enhance the amenity and vitality of the Wrights Road, Kellyville Local Town Centre by providing high levels of civic amenity and a centre that makes a positive contribution to the local area.*
2. *To create a sense of place and identity through quality built form that takes advantage of the proximity of, and integrates with, adjoining retail development, community facilities, open space, vegetation, pedestrian and cycleway linkages.*

DEVELOPMENT CONTROLS

(a) Development shall demonstrate high quality civic amenity and urban design that will promote a vibrant centre with a sense of identity. The identity of the site shall be enhanced through:

- Gateway;
- Architectural elements;
- Feature tree plantings; and
- High quality landscaping.

(b) Where visible from a public place, elevations shall provide articulation, distinct architectural elements, openings and windows, avoiding large, unbroken lengths of solid materials.

(c) Development shall capitalise on views to the open space and vegetation located along the eastern boundary, and provides passive surveillance.

(d) A central space should be incorporated into the design to encourage social interaction and form a link between, and through, the development and the natural setting of the adjoining reserve and public areas.

(e) Convenient and direct pedestrian linkages shall be provided without conflict with vehicles, enabling high levels of accessibility within the precinct and the surrounding area.

(f) Pedestrian access is to be provided: -

- In at least one location along the eastern boundary from the adjoining cycle way;

- In at least one location along the western boundary to facilitate ease of movement to/from existing retail development adjacent to the site; and
- Along the Wrights Road frontage, to provide convenient access to and from the Wrights Road Reserve and community facilities, pedestrian crossings and bus stops. Pedestrian access point(s) along the Wrights Road frontage shall be determined by Council in relation to the adjoining development on the opposite side of Wrights Road.

(g) Loading areas shall be located so as to minimise pedestrian and vehicular conflicts, and to minimise the impact on the streetscape and the ability of the site to engage with the adjoining land.

(h) The bulk of parking should be provided in a basement car park. Some at-grade parking that provides convenient access for patrons and does not detract from the streetscape is acceptable.

(i) The exact location of vehicle access to the site shall be determined by Council, in relation to the development on the opposite side of Wrights Road.

2.30. KENTWELL AVENUE AND CASTLE STREET, CASTLE HILL

This section of the Development Control Plan applies to the land identified in Sheet 13 of Appendix A – Precinct Plan Maps.

The following objectives and controls aim to promote retail/commercial development of the Castle Hill Centre whilst maintaining and enhancing the amenity of adjoining residential and community uses. Objectives and controls contained in this subsection establish the scale, dimensions, form and separation of buildings appropriate for the Castle Hill Centre.

OBJECTIVES

1. *To promote a visually aesthetic retail/commercial and sustainable built form.*
2. *To enhance the vitality of the Castle Hill Centre in the vicinity of Kentwell Ave and Castle St, Castle Hill.*
3. *To protect the residential and public amenity of the Castle Hill Centre in the vicinity of Kentwell Ave and Castle St, Castle Hill.*
4. *To provide a high quality, safe and pleasant walking environment.*

DEVELOPMENT CONTROLS

Building Design

(a) Development shall be set back as indicated in Appendix A – Precinct Plan Maps Sheet 13.

(b) Built form shall contribute to the streetscape with high quality and durable building materials.

(c) Where visible from a public place, elevations shall provide articulation both in height and mass incorporating distinct architectural elements, openings and windows, avoiding large and unbroken lengths of solid materials.

(d) Façade should consist of a tripartite vertical composition i.e. distinct architectural elements and treatments for the base, middle and top facades.

(e) Elevations visible from Castle St, Kentwell Ave and the boundary between Castle Hill Community Centre and Library shall be treated with similar proportion and high quality detailing as other elements of the primary street façade.

(f) Development shall use opaque windows only where necessary for the privacy of adjoining residents. Transparent glass should be used in all other windows to promote natural surveillance.

(g) Development shall use neutral, visually recessive tones in colour schemes, avoiding reflective and overly textured surfaces.

(h) In the event of staged development, any visible external surfaces of future common walls must be finished to a standard consistent with the high quality and durable materials of the development, until the adjacent development has been undertaken.

(i) Development shall incorporate natural and electrical surveillance of the retail/commercial

development, landscaped areas and undeveloped land on the allotment.

(j) Internal and external lighting shall not adversely affect the amenity of residential and community use of adjoining development.

(k) Vehicle ingress/egress points should be integrated into the building design and contribute to high quality architecture.

Plant and equipment

(l) Roof plant, air-conditioning units, lift towers, vents and communication devices should all be considered as part of roof shape and design. Location and external appearance must not adversely affect the streetscape and sightlines.

(m) The location and noise emissions of plant and equipment shall not adversely affect residential and public amenity in the vicinity of Castle St and Kentwell Ave. Plant and equipment shall be concealed from view of adjoining residential properties and appropriate noise attenuation measures installed to minimize impact on adjoining land uses.

(n) Built form should consider measures to reduce visual and acoustic impacts of vehicular ingress/egress in the vicinity of Kentwell Ave and Castle St.

Pedestrian access and articulation

(o) The following design principles should be considered when locating entrances and exits:

- Entrances and exits shall be provided in visually prominent and convenient locations;
- Entrances should not be obscured by landscaping or other obstacles and shall have clear sight lines;
- Pedestrian access points and paths should not provide opportunities for entrapment;
- Building design should allow for casual surveillance of access ways, entries and driveways;
- Directional signage must be erected for the purposes of pedestrian accessibility at all entrances and exits;
- Entrances shall be clearly identifiable to reduce confusion and unintentional entry by incorporating measures such as architectural features and articulation, awnings, variations in colours and materials, changes in paving and landscaping;
- Location and design of pedestrian entrances traversing vehicular ingress/egress points should provide measures to reduce pedestrian and vehicular conflict;
- Public art installations are encouraged to provide visual interest in these spaces.

Landscaping

(p) Each of the following landscape features must be included in the Landscape Plan:

- Deep, terraced garden beds for screening purposes; and
- Public art in keeping with the scale and mass of the development e.g. sculpture, mural; and
- Feature tree plantings.
- A Landscape Plan shall include planting of trees species within the setback which reach a height of:

  - 10.0m or greater on Castle St;

  - 10.0m or greater in height at the boundary between retail/commercial zoned land and the Castle Hill Community Centre and Library;

  - 5.0m or greater in height on Kentwell Ave.

(q) Trees shall not impede or obscure view of vehicular ingresses/egresses, cycle ways, pedestrian access and movement between adjacent retail/commercial developments, residential development and the Castle Hill Community Centre and Library.

(r) Extensive landscaping within the setbacks along Kentwell Ave, Castle St and on boundaries between retail/commercial space and Castle Hill Community Centre and Library shall define spaces, link separate visual elements; provide screening, scale and landscape setting for development along Kentwell Ave and Castle St.

(s) The Landscape Plan should consider measures to reduce visual and noise impact of vehicular ingress/egress in the vicinity of Kentwell Ave and Castle St.

(t) All plant species shall be selected from Part C Section 3 Landscaping Appendix 2 – Recommended species and street trees.

2.31. 488-494 OLD NORTHERN ROAD, DURAL

This section of the Development Control Plan applies to the redevelopment of land at Lot 2 DP 839151 known as 488-494 Old Northern Road, Dural (Figure A). Land to which this section applies is also identified within Sheet 8 of Appendix A – Precinct Plan Maps.

The controls within this section apply in addition to other relevant controls in this DCP and in Part B Section 4 – Multi Dwelling Housing and Part B Section 5 – Residential Flat Building. Where there is any inconsistency the provisions of this section shall apply.



Figure A – The Site

2.31.1 SITE ANALYSIS

The site has a total area of approximately 2 hectares and is zoned part B2 – Local Centre and part R3 Medium Density Residential.

The site is immediately south of the existing Round Corner Town Centre located on the northern side of the Old Northern Road and Stonelea Court intersection.

The topography of the land slopes towards the western boundary of the site resulting in significant views over the Shire and surrounds to the Blue Mountains. The majority of vegetation on the site has been cleared, however there is a small concentration of Sydney Sandstone Gully Forest vegetation in the south western portion of the site, extending across the majority of the adjacent lots to the south and adjoining Dooral Dooral Creek.

The site has been identified as being geotechnically sensitive and possibly contaminated due to past land uses. Further geotechnical and contamination investigation will be required before development of the site can take place.

2.31.2 SITE OPPORTUNITIES AND KEY PLANNING PRINCIPLES

The site provides an opportunity to contribute to revitalisation of Round Corner and provide improvements to the centre in terms of appearance, amenity and accessibility.

A number of key principles will be addressed as part of the development of the site including:

- Gateway opportunities;
- Active frontages;
- Connectivity and access;
- View corridor preservation;
- Central civic space;
- Environmental protection.

There is opportunity for a well-designed “gateway” element to be established at the southern corner of the site, to provide a sense of arrival to the centre when approached from the south along Old Northern Road. Additionally, active uses including a focus on specialty retail is encouraged to ensure the development is inviting and addresses demand for specialty retailing within Round Corner. The incorporation of higher density residential uses as part of a mixed use development on the southern portion of the B2 Local Centre zoned land is encouraged.

The development provides opportunity to protect significant westerly views currently enjoyed from the site. A central civic plaza will address the issue of view preservation and will also assist with enhancing civic amenity by addressing the deficiency of civic space within Round Corner.

A new controlled four-way intersection at the southern edge of the site will facilitate future access for the site and provide connectivity for possible future development of rural land to the west and into the centre. Bus facilities along the Old Northern Road frontage of the site will support the safety and movement of users travelling through the centre and assist in improving northbound traffic flow along this road. Provision of pedestrian connections will enhance accessibility and integrate the site with the existing commercial centre to the north.

Vegetation along the southern boundary provides connectivity between the site and the landscape setting of the adjacent Dooral Dooral Creek. The development will provide opportunity to enhance this landscape setting through the planting of species endemic to the Sydney Sandstone Gully Forest on the site.

Images of the above development principles are provided as Figures B and C.

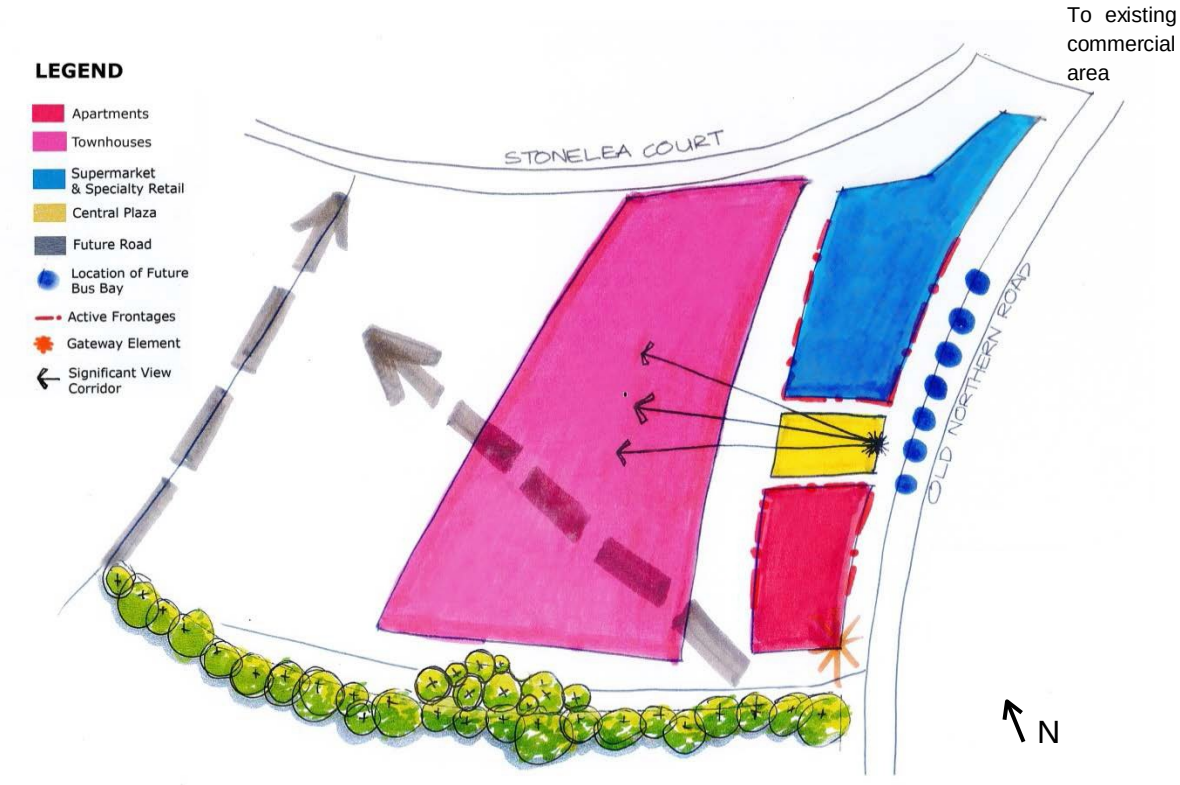


Figure B – Key principles for development

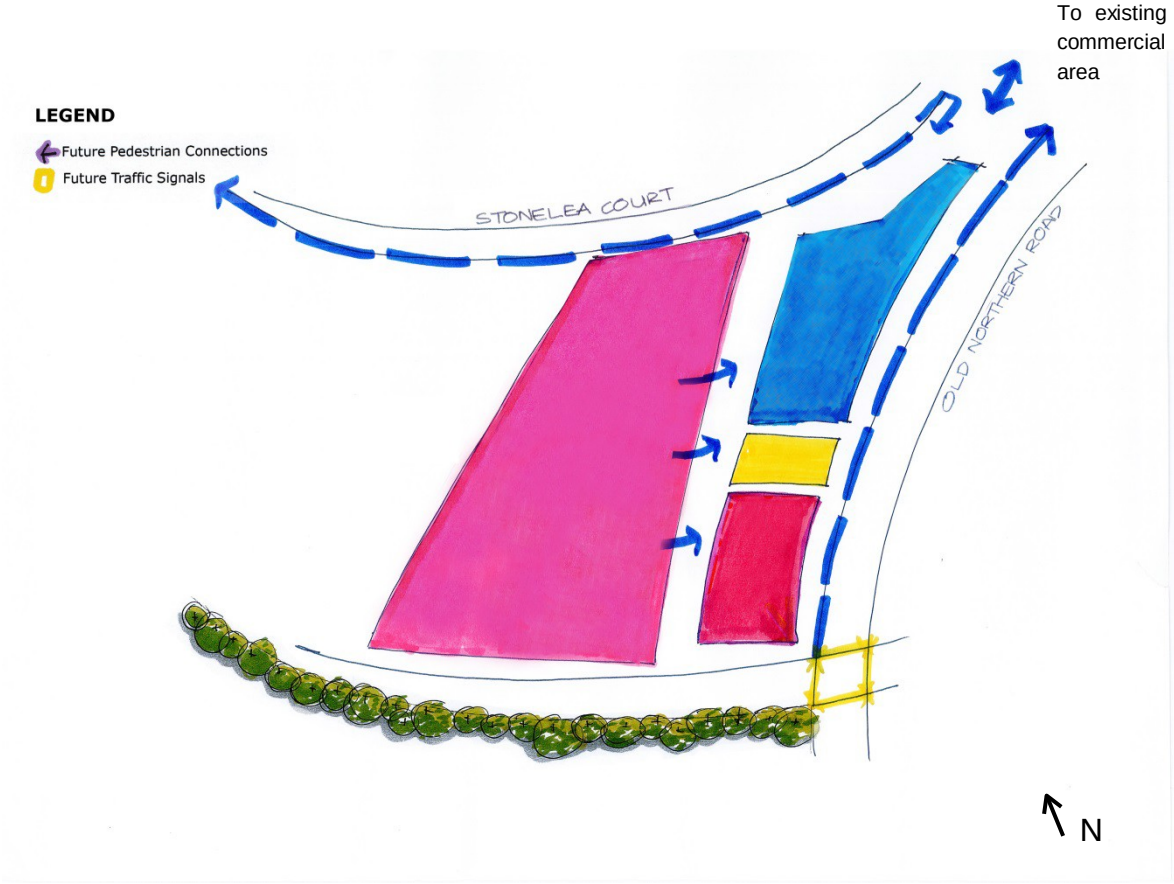


Figure C – Principles for Pedestrian Connectivity

2.31.3 FUNCTION AND USES

OBJECTIVES

(i) To provide a strong sense of arrival into Round Corner Town Centre.

(ii) To develop and promote a vibrant, integrated and mixed use Town Centre that provides a broad range of retail and commercial uses to service the needs of the community.

(iii) To ensure that the development is active and inviting and emphasises the pedestrian where practical and possible.

DEVELOPMENT CONTROLS

(a) An attractive, well-designed gateway element is to be provided at the southern edge of the site in accordance with Figure B.

(b) A range of retail and commercial uses including a focus on specialty retailing is to be provided.

(c) Mixed use development incorporating higher density residential uses is encouraged on the southern portion of the B2 Local Centre zoned land.

(d) Active frontages are required at ground level in accordance with Figure B. Active frontages are defined as one or a combination of the following:
- Entrance to retail;
- Shop front;
- Café or restaurant if accompanied by an entry from the street;
- Glazed entryway;
- Street entryway.

2.31.4 PUBLIC DOMAIN AND VIEWS

OBJECTIVES

(i) To enhance civic amenity and provide a gathering space for community activity and interaction.

(ii) To maintain significant westerly views from the site and Old Northern Road.

DEVELOPMENT CONTROLS

(a) The siting of buildings and central civic plaza should be located generally in accordance with Figure B.

(b) The centre point for the plaza shall be located approximately 120m from the south western boundary of the site. The plaza should be of a regular shape with a minimum width of 40 metres.

(c) Building structures are not to obscure views to the west from the central plaza.

(d) Public domain elements such as landscaping, street trees, paving, street furniture, lighting and signage are to be provided.

(e) Public art installations that reflect local character are encouraged to provide visual interest.

VARIATIONS

Minor variation to the minimum width for the central plaza may be considered where it can be demonstrated that proposed development demonstrates a high standard of architectural design, civic amenity and does not inhibit key views to Mount Wilson, Mount Tomah and Mount Irvine from any point within the plaza.

2.31.5 ACCESSIBILITY

OBJECTIVES

(i) To ensure safe and efficient vehicular access to and from the site.

(ii) To promote pedestrian movement and provide pedestrian connectivity through the site to the existing centre.

DEVELOPMENT CONTROLS

(a) Consent shall not be granted for future development unless the applicant has demonstrated that a Deed of Agreement has been entered into with the Roads and Maritime Services for the provision of traffic signals at the Old Northern Road and Franlee Road intersection.

(b) The design of the intersection is to include pedestrian crossings on all lengths, minimum 50 metre long right turn bays on Old Northern Road and provision of dual lanes for both approaches of Old Northern Road.

(c) The access road along the southern boundary of the site shall be constructed to Council's specifications for local roads contained within

The Hills Shire Council Subdivision and Development Design Guidelines.

(d) Pedestrian connections within and surrounding the site shall be provided in accordance with Figure C.

(e) Individual vehicular and pedestrian access to medium density dwellings on site must be independent from any commercial, retail, residential flat building or mixed use development components on the site.

2.31.6 PUBLIC TRANSPORT

OBJECTIVES

(i) To facilitate and maintain well managed public transport infrastructure and support the safety and movement of all users travelling through the centre.

DEVELOPMENT CONTROLS

(a) Bus facilities including a public bus stop and bus bay are to be provided in conjunction with the development of the site, along the Old Northern Road frontage of the site. An indicative location for the bus facilities is shown in Figure B. Detailed plans to the satisfaction of Transport for NSW, RMS, Council and the relevant bus operators shall be submitted with any development application for the site.

2.31.7 SERVICING AND LOADING FACILITIES

OBJECTIVES

(i) To ensure development presents attractively to the street and maintains the amenity of adjoining and surrounding properties.

DEVELOPMENT CONTROLS

(a) All servicing, loading, and waste collection and storage facilities are to be located wholly within the site and underground.

2.31.8 LANDSCAPING

OBJECTIVES

(i) To provide connectivity between the site and the landscape setting of the adjacent Dooral Dooral Creek.

DEVELOPMENT CONTROLS

(a) Existing vegetation should be protected and enhanced through the provision of groundcovers, shrubs and canopy species endemic to the Sydney Sandstone Gully Forest. Landscaping outside of turfed areas will achieve a minimum 70% native plants from Sydney Sandstone Gully Forest (by area) across the site.

2.31.9 SETBACKS AND LANDSCAPED AREA

OBJECTIVES

(i) To ensure appropriate levels of privacy and amenity for occupiers of medium density housing on the site

(ii) To establish appropriate setbacks and interface treatments between the mixed use/retail commercial components of future development and medium density residential housing.

DEVELOPMENT CONTROLS

(a) A minimum setback of 8m inclusive of 2m of deep soil planting is to be provided to any interface area between commercial, retail, residential flat building or mixed use development components on the site and medium density housing.

2.32. SITE AT RMB104, RMB104A, RMB105 WINDSOR ROAD AND PART 1-3 WILKINS AVENUE, BEAUMONT HILLS

This section of the Development Control Plan applies to the land at RMB104, RMB104A, RMB105 Windsor Road and part 1-3 Wilkins Avenue, Beaumont Hills identified in Figure A below.



Figure A – The Site

The controls within this section apply in addition to other relevant controls in this DCP, however where there is any inconsistency, the provisions of this section shall apply.

The following objectives and controls aim to guide development of land as a landscape material supply and/or garden centre whilst maintaining the amenity of adjoining residential uses. Objectives and controls contained in this subsection establish the setbacks, traffic and access, odour, dust, visual and noise mitigation requirements, fencing and landscaping for the site.

OBJECTIVES

(i) To facilitate the development of a landscaping material supplies and/or garden centre which promotes a functional retail/commercial and sustainable built form.
(ii) To provide controls to minimise the impact of air, noise, traffic, odour, water and visual pollution;
(iii) To ensure that the traffic generated by the development does not adversely affect the safety and efficiency of the road network by limiting vehicle movements and access.
(iv) To ensure that landscaping material supplies and/or garden centre does not have an adverse impact on the natural environment or amenity of the surrounding residential areas.
(v) To ensure the provision of on-site facilities which accommodate off-street loading/unloading manoeuvring and parking.
(vi) To ensure the storage of bulk goods such as sand, soil and similar landscaping products are appropriately located and contained.
(vii) To ensure the development of the site promotes an appealing streetscape.

DEVELOPMENT CONTROLS:

Landscaping Material Supplies and Garden Centres

2.32.1 BUILDING DESIGN

OBJECTIVES

1. *To facilitate development that minimises negative impacts on the amenity of the adjoining residential or commercial development.*
2. *To provide for the orderly development of the site.*
3. *To encourage the comprehensive approach to planning, design and assessment of development.*

DEVELOPMENT CONTROLS

(a) Buildings shall be designed to ensure compatibility with surrounding land uses in terms of bulk and scale and architectural form and shall have regard to the qualities and character of the surrounding land uses. The scale and appearance of the building shall be compatible with the surrounding development.
(b) Site planning must provide adequate areas for:

- Landscaping buffers;
- Dams/ponds or rainwater tanks;
- Wastewater treatment/ Gross pollutant trap;
- Water quality treatment; and
- Driveways and parking areas; and
- Amenities for staff and customers.

2.32.2 SETBACKS

OBJECTIVES

1. *To provide an attractive streetscape and areas for landscaping and screen planting.*
2. *To ensure adequate sight distance is available for vehicles entering and leaving the site.*

3. *To minimise overshadowing of adjoining properties.*
4. *To protect privacy and amenity of any adjoining land uses.*
5. *To provide a desirable and aesthetically pleasing working environment.*

DEVELOPMENT CONTROLS

(a) Development shall be set back as indicated in the diagram below:

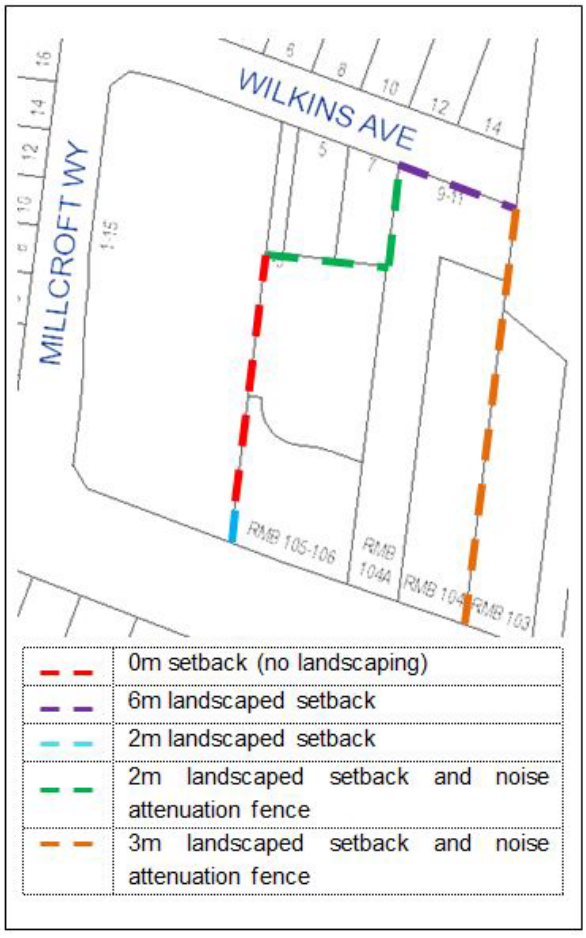


Figure B – Setback

(a) A zero lot setback is permissible to the western boundary but only for the distance adjoining the blank wall on the property known as Lot 1-3 SP82566 and subject to the owners of the property raising no objection.

2.32.3 HOURS OF OPERATION

OBJECTIVES

1. *To ensure the activities on the site do not unduly impact upon the amenity of the adjoining properties.*

DEVELOPMENT CONTROLS

(a) The proposed hours of operation are restricted to 7:00am - 5:00pm Monday to Friday, 7:00am - 4:00pm Saturday and 8:30am - 4:00pm Sunday and public holidays. The hours of operation must take into account the operation of loading areas, waste collection services and the use of cleaning and maintenance vehicles.

(b) Notwithstanding (a) above, where it can be demonstrated that operations will not interfere with the amenity of surrounding development, consideration may be given to allowing the dispatch of pre-loaded goods and material from the site via Windsor Road entry/exit outside normal hours of operation.

(c) A statement of compliance from an acoustic consultant may be required to demonstrate that the noise generated by the development generally does not exceed 5dB(A) above the background noise levels, where measured at any boundary adjoining or adjacent to a residential property.

(d) A schedule of truck movements, types and times, shall be submitted.

2.32.4 LIGHTING

OBJECTIVES

1. *To ensure that all lighting is adequate for the safety of the site without interfering with nearby residents or traffic.*

DEVELOPMENT CONTROLS

a) All lighting is to be erected to ensure that lights do not interfere with traffic movement both on site and on nearby roads.

b) No floodlighting will be installed on the development site.

c) No lights are to interfere with the enjoyment of nearby properties.

2.32.5 ANCILLARY USES

OBJECTIVES

1. *To provide a satisfactory relationship between aspects of the development including buildings, landscaped areas and adjoining developments.*
2. *To ensure that the development is compatible with land capability.*

DEVELOPMENT CONTROLS

(a) A maximum of 20% of the site area is to be used for ancillary uses such as plan retailing and cafe/restaurant combined.

2.32.6 DUST

OBJECTIVES

1. *To minimise the impact of dust associated with the operation of the development through appropriate planning and by using best management practices available.*

DEVELOPMENT CONTROLS

(a) Dust control procedures shall be implemented such as:

- Erection of dust screens around the perimeter of the site;
- Securely covering all loads entering and exiting the site;
- Use of water sprays across the site to suppress dust; and/or
- Covering of stockpiles of soil, manure, mulch, fertiliser etc. to reduce dust impact.

2.32.7 ODOUR

OBJECTIVES

1. *To ensure that the odour impacts associated with the development does not unreasonably compromise the enjoyment of the amenity of the neighbouring residents.*

DEVELOPMENT CONTROLS

(a) Only composted manure shall be stocked on-site.

(b) Odour control measures shall be implemented such as:

- Use of appropriate covering techniques such as plastic sheeting to cover sources of odour;
- Use of fine mist sprays; and/or
- Appropriately locating materials with potential sources of odour away from nearby residences.

2.32.8 STORMWATER MANAGEMENT

OBJECTIVES

1. *To ensure that on-site stormwater is disposed into the existing stormwater system in an efficient and environmentally sensitive manner.*
2. *To ensure that the water used for the normal operation of the garden centres does not enter the stormwater system.*
3. *To ensure that the development does not increase downstream flooding.*

DEVELOPMENT CONTROLS

(a) A strategy shall be submitted with the Development Application indicating the proposed method of collection and recycling of water to prevent the release of fertilisers and run-off into the local drainage stormwater system or adjacent properties and to protect groundwater from contamination by "nutrient-enriched waters."

(b) The development must use an efficient irrigation system that minimises run-off.

(c) Any water used in the irrigation of plants must be treated for nutrients before being released into the local water catchment.

Submission Requirements

- The development must include a Site Water Management Plan submitted to Council for approval. The Site Water Management Plan

must include methods for removal of silt and suspended solids from stormwater discharge.

2.32.9 STORAGE FACILITIES

OBJECTIVES

1. *To ensure that all stored goods are contained on site and do not cause nuisance to adjoining owners.*

DEVELOPMENT CONTROLS

(a) All stored goods are to be contained within the designated areas for storage.

(b) All stored goods are to be kept in a tidy manner at all times.

(c) Materials stored within the display area between adjoining residential properties and the driveway are not to exceed two (2) metres in height, and materials stored within the display area between the internal driveways are not to exceed four (4) metres in height.

(d) External storage areas, including bulk bin storage may be required to be:

- Located following careful consideration of the proximity of the adjoining residences and the possible noise and/or dust impact on them;
- Set back a minimum of 10 metres from side and rear boundaries except from the property on the western boundary where a zero lot setback is permitted (refer Section 2.31.2 control b); and
- Landscaped and integrated with significant foliage to screen storage items and structures to limit their visual intrusion.

(e) Provision must be made for all bulk bins to be covered when not in use.

(f) The storage, distribution and use of fuels, chemicals etc. shall only be permitted in designated areas which are designed based on NSW Environment Protection Authority (EPA) guidelines for bunding and spill management.

(g) Pesticide use, storage and handling and disposal should be conducted in accordance with the relevant Australian standards.

(h) Protective measures must be used to avoid attracting nuisance insects and disease transfer when handling garden and horticultural produces.

2.32.10 NOISE

OBJECTIVES

1. *To ensure that the level of noise emitted from the development does not significantly impact on the adjoining residents.*

DEVELOPMENT CONTROLS

(a) The location of noise generating activities (such as loading areas) shall consider the proximity of adjoining residences and potential impacts.

(b) If the use of machinery such as generators, pumps, or heating appliances is proposed, the applicant must demonstrate that adequate measures will be taken to reduce potential for land use conflict and lessen the impact of noise on adjoining properties.

(c) Measures such as insulation of machinery, vegetation buffers or limited or scheduled use may be implemented.

(d) Where a noise impact may occur the applicant shall submit an acoustic report from an appropriately qualified acoustic engineer identifying noise amelioration measures to be implemented.

(e) A statement of compliance from an acoustic consultant may be required to demonstrate that the noise generated by the development generally does not exceed 5dB(A) above the background noise levels, where measured at any boundary adjoining or adjacent to a residential property.

2.32.11 TRAFFIC, PARKING AND ACCESS

OBJECTIVES

1. *To ensure that adequate parking is provided on-site;*
2. *To ensure that the provision of parking on site does not detract from*

the amenity of adjoining properties; and

3. *To ensure the proposed parking area operates in a safe and convenient manner.*

DEVELOPMENT CONTROLS

(a) Access to the site for customer vehicles is to be restricted to Wilkins Avenue and be appropriately signposted.

(b) Access to the site is to be restricted to left in/ left out for heavy vehicles only from Windsor Road and be appropriately signposted.

(c) Traffic signals at the intersection at Windsor Road and Millcroft Way to facilitate right hand turn movements from Millcroft Way into Windsor Road are to be provided as part of the development.

(d) Provision of a deceleration lane leading into the Windsor Road entrance designed in accordance with AUSTROADS and other Australian Codes of Practice.

(e) The number of car parking spaces provided should be consistent with the rate required in Part C Section 1 – Parking.

(f) The development must provide a car parking area designed and constructed in accordance with the provisions of Part C Section 1 – Parking.

(g) The development must provide a designated area for employee car parking contained wholly within the site and indicate the location of a dedicated area for loading/unloading.

(h) Parking shall be provided for cars towing trailers. Trailer parking spaces shall have a minimum length of 10.8 metres. A minimum of two (2) car trailer spaces shall be provided.

(i) Disabled parking spaces are to be provided.

(j) Adequate area shall be provided on-site to facilitate loading/unloading of goods. Such area shall be sufficient to enable a large rigid truck to complete a three-point turn. Service vehicle movements should not restrict access to or manoeuvring areas for normal patron parking.

(k) Access to car parking areas shall be in a visible location to discourage on-street parking.

(l) The location of parking areas shall have regard to the site constraints and the relationship to neighbouring residential areas. Parking areas shall closely relate to the location of pedestrian entranceways.

(m) All vehicles must enter and leave in a forward direction.

(n) Access driveways shall be located to obtain maximum sight distances and shall be situated so that only vehicles entering or exiting the site can be readily seen by the driver of an approaching vehicle or a pedestrian.

(o) The location of entry-exit driveways to be appropriately signposted. Schedule involving one-way circulation patterns to be delineated by signposting and line marking.

(p) Driveway widths shall be in accordance with Roads and Maritime Services requirements and Council's Engineering Specifications based upon the number of on-site parking spaces and the frontage classification.

(q) Driveway edges adjacent to landscaped areas shall be delineated with a kerb.

(r) The following design principles should be considered when locating entrances and exits:

- Entrances and exits shall be provided in visually prominent and convenient locations;
- Entrances should not be obscured by landscaping or other obstacle and shall have clear sight lines;
- Pedestrian access points and paths should be clearly defined; and
- Location and design of pedestrian entrances traversing vehicular ingress/egress points should provide measures to ensure safe pedestrian access and no conflict with driveways.

2.32.12 SIGNAGE

OBJECTIVES

1. *To ensure that all signs are considered as part of the development of the site.*
2. *To ensure that all signs are safely erected and not interfere with sight*

distances on Windsor Road or the amenity of the neighbours.

3. *To ensure that all signs comply with Part C Section 2 – Signage.*

DEVELOPMENT CONTROLS

(a) No signs are to be erected without the consent of Council.

(b) All signs are to comply with Part C Section 2 – Signage.

(c) No signs are to be located outside the boundaries of the subject land.

2.32.13 FENCING, LANDSCAPING AND TREE PRESERVATION

OBJECTIVES

1. *To reduce the visual impact of the development upon adjoining residents.*
2. *To ensure existing landscaping and vegetation is retained and integrated into the design of the development.*
3. *To ensure that the landscaped area*
4. *To ensure that vegetation removed as part of the land development process is replaced by suitable endemic species.*
5. *To ensure that fencing does not detract from the overall visual amenity and character of retail and commercial areas.*

DEVELOPMENT CONTROLS

(a) Landscape material supplies and/or garden centres shall be designed to ensure the retention of existing trees on-site to act as a feature within display areas.

(b) Adjacent to the boundaries of the site, planting shall be used to provide visual buffer for adjoining residents. Planting shall be chosen having regard to its screening qualities and its suitability to the local area whilst retaining solar access on adjoining properties.

(c) Landscaping is to be provided in accordance with the provisions set out in Part C Section 3 – Landscaping.

(d) Provision of appropriate landscaping at the following locations indicated on the map below:

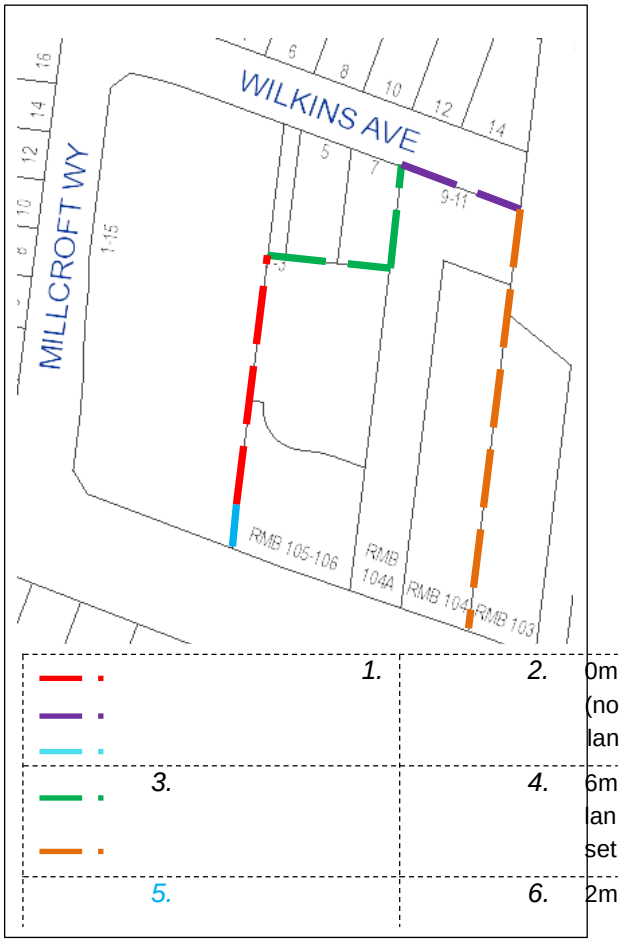


Figure C - Landscaping and fencing requirements

(e) Provision of noise attenuation fencing along the boundaries between the site and RMB 103 and Lot 32 Windsor Road, between the site and two adjoining dwellings (Lot 102 DP 1124350 and Lot 103 DP 1124350). The final height and position will be determined by a suitably qualified person based on the results of an acoustic assessment.

2.33. 11-13 SOLENT CIRCUIT, BAULKHAM HILLS

This section of the Development Control Plan applies to the redevelopment of land known as 11-

13 Solent Circuit, Baulkham Hills (lot 5074 DP 1003042) (Figure A).



Figure A – The Site

The controls within this section apply in addition to other relevant controls in this DCP, however where there is any inconsistency the provisions of this Section shall apply.

2.33.1 BUILT FORM

OBJECTIVES

(i) To promote an attractive mixed use development on the site that responds appropriately to its context in terms of built form and scale.

(ii) To contribute to building diversity and the regeneration of Norwest.

DEVELOPMENT CONTROLS

(d) Development shall consist of a four (4) to five (5) storey podium containing restaurants, commercial uses and car parking. Slender, twin residential towers shall be placed in an offset position atop the podium.

(e) The bulk and scale of the development is to be minimised through the use of setbacks, materials and colours that emphasise the podium levels rather than upper levels when viewed from the surrounding area.

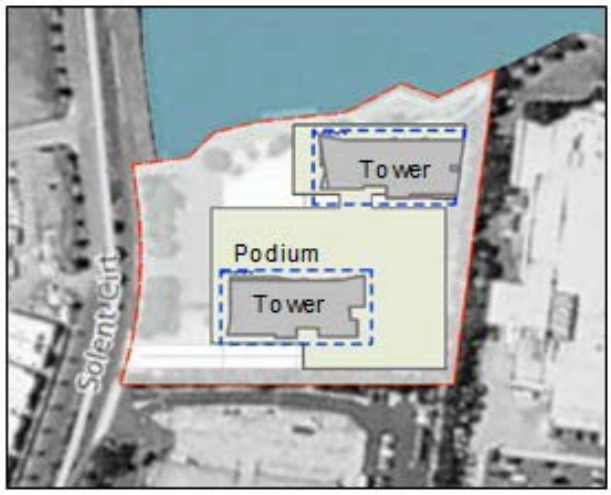


Figure B - Offset residential towers atop podium



Figure C - Photomontage of possible future development

2.33.2 VIEWS

OBJECTIVES

(i) To minimise impacts on views to and from Bella Vista Farm Park.

DEVELOPMENT CONTROLS

(f) Development shall be designed to reduce the appearance of bulk and scale of the building, particularly when perceived from ground level, nearby residential development and with consideration of view corridors to and from Bella Vista Farm Park.

2.33.3 SETBACKS

OBJECTIVES

(i) To protect privacy and amenity of adjoining land uses and to reduce bulk and scale.

DEVELOPMENT CONTROLS

(g) Development shall be set back from the Solent Circuit property boundary by:

- a minimum of 23 metres to the podium levels; and
- a minimum of 29 metres and 65 metres to each residential tower.

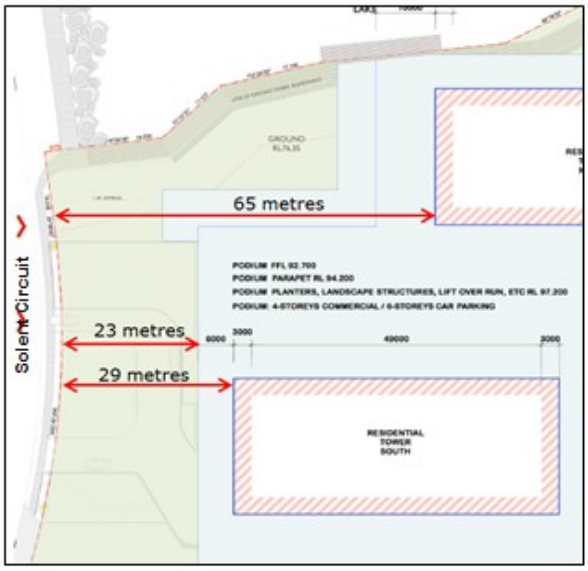


Figure D - Illustration of setbacks to podium and residential components towers from Solent Circuit

2.33.4 PARKING

OBJECTIVES

(i) To minimise the impact of above ground parking on the amenity of adjoining properties and the streetscape.

DEVELOPMENT CONTROLS

(h) Above ground parking levels shall be sleeved by residential or commercial uses or otherwise appropriately screened from public areas using decorative screening, green walls or similar.

(i) Parking for the residential and commercial components of the development must be clearly delineated.

2.33.5 PUBLIC DOMAIN

OBJECTIVES

1. *To provide a high quality pedestrian environment.*

DEVELOPMENT CONTROLS

(j) A functional, open and high quality landscaped setting including seating and shading shall be provided at ground level.

(k) A timber boardwalk of at least 3 metres in width must be maintained or replaced along the lake frontage of the site.

(l) Pedestrian access shall be provided through the site in accordance with the easement for public access shown on Deposited Plan 1003042. This easement is to remain free of any restaurant seating or commercial use.

2.33.6 COMMUNITY FACILITIES

OBJECTIVES

2. *To provide sufficient recreational opportunities for all residents of the development.*

DEVELOPMENT CONTROLS

(a) The development must incorporate podium level recreational spaces for residents including facilities such as a children's playground, pool and terrace, gymnasium, gardens / passive areas, tennis court and a club room or similar that can accommodate private resident functions.

2.34. CENTRE-BASED CHILD CARE FACILITIES – ADDITIONAL CONTROLS

This DCP should be read in conjunction with State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 and associated Child Care Planning Guideline.

OBJECTIVES

1. *To ensure that adequate area is provided to permit high-quality landscape planting for the development.*
2. *To ensure that external play areas are located to provide a safe environment for children.*

3. *To ensure a high standard of environmental quality in child care centre developments and to maintain the overall visual amenity and character of the neighbourhood.*
4. *To provide a satisfactory relationship between buildings, landscaped areas and adjoining developments.*
5. *To ensure that food is handled in a safe and healthy manner.*

DEVELOPMENT CONTROLS

(a) Other relevant Sections of the DCP (i.e. Part B Section 2 – Residential) should be consulted with regards to setbacks, depending on the nature and location of the development.

(b) Child care centres in rural areas are to have a minimum side building setback of 5 metres to minimise noise and privacy impacts to adjoining properties.

(c) Where a development site has a slope such that the minimum setbacks required by (a) above do not achieve the objectives in respect of overshadowing, privacy, and amenity for adjoining land uses, the setbacks will be increased to the point where the objectives are achieved.

(d) Consideration is to be given to the Building Code of Australia with regards to the fire resistance of walls of the child care centre (and the openings on the walls) facing side and rear boundaries.

(e) Setbacks for child care centre car parking areas:

Zone	Minimum Car Park Setback Required
Residential zones	Minimum 5 metre setback from the front property boundary.
Industrial, Business and Recreation zones	To be in accordance with the relevant Section of the DCP Plan for that zone.
Rural zones	Minimum 10 metre setback from the front property boundary.

(f) The front setback areas are to include landscaping with a minimum width of two metres to screen vehicles from view from the street and surrounding properties.

(g) Side boundary setbacks to car parking areas are to be in accordance with Part C Section 1-Parking and the relevant Sections of the Development Control Plan as outlined in (a) above.

(h) The location of external child play areas in the front setback area is not permitted.

(i) For child care centres located on classified roads in rural zones, play areas are to be

located a minimum of 30 metres from the front property boundary.

(j) Landscaping along the primary and secondary frontages is to include a combination of ground covers, large trees, shrubs, and grass planting and is to provide high-quality landscaping for the development. Landscaping shall be established prior to the occupation of the building.

(k) Trees and shrubs shall be provided alongside and rear boundaries to screen outdoor play areas.

(l) Food preparation areas in a child care centre must comply with:

a. Food Act 2003;
b. Children's Services Regulation 2004;
c. Food Safety Standards; and
d. Australian Standard 4674-2004 – Design, Construction and Fit-out of Food Premises.
e. Premises are required to register with: NSW Food Authority and The Hills Shire Council.

3. INFORMATION REQUIRED FOR A DEVELOPMENT APPLICATION

3.1. OCCUPATION / CHANGE OF USE FOR INTERNAL ALTERATIONS

COMPLETED APPLICATION FORM

You must have the written consent of all current owners.

CONSTRUCTION CERTIFICATE APPLICATION FORM – Required where any building works or fit out including erection of partitions, fixtures & signs are proposed as part of the development.

SITE PLANS (8 copies)
Clearly indicating: -

- The building to be occupied.
- Car parking spaces allocated to that building.
- Location of any signs to be erected.

ARCHITECTURAL PLANS (8 copies)

- Internal layout of shop/building (existing and proposed).
- Elevations.

STATEMENT OF ENVIRONMENTAL EFFECTS (8 copies)
The statement must include the following: -

- Statement outlining the exact nature of the proposed business;
- The proposed hours of operation;
- The number of employees;
- Information regarding deliveries (the number of expected deliveries each week, the types of vehicles/truck expected, approximate times they would be expected);
- The number of car spaces allocated to the unit with reference to Part C Section 2 – Parking in this DCP; and
- Compliance with any other relevant objective and/or development control of this Section of the DCP.

Note. Some 'change of use' and 'internal alteration' applications may be eligible for consideration as 'Complying Development' under the State Environmental Planning Policy (Exempt & Complying Development) Code 2008.

3.2. NEW DEVELOPMENTS, EXTENSIONS OR REDEVELOPMENT OF EXISTING SITES

The following plans and details are required for development or redevelopments of business development sites as part of the formal submission with the relevant application form(s):

SITE PLANS
Including an assessment of potential noise impacts on adjoining developments

SITE ANALYSIS

ARCHITECTURAL PLANS

LANDSCAPE PLAN

EARTHWORKS PLAN

- Existing and proposed levels/contours.

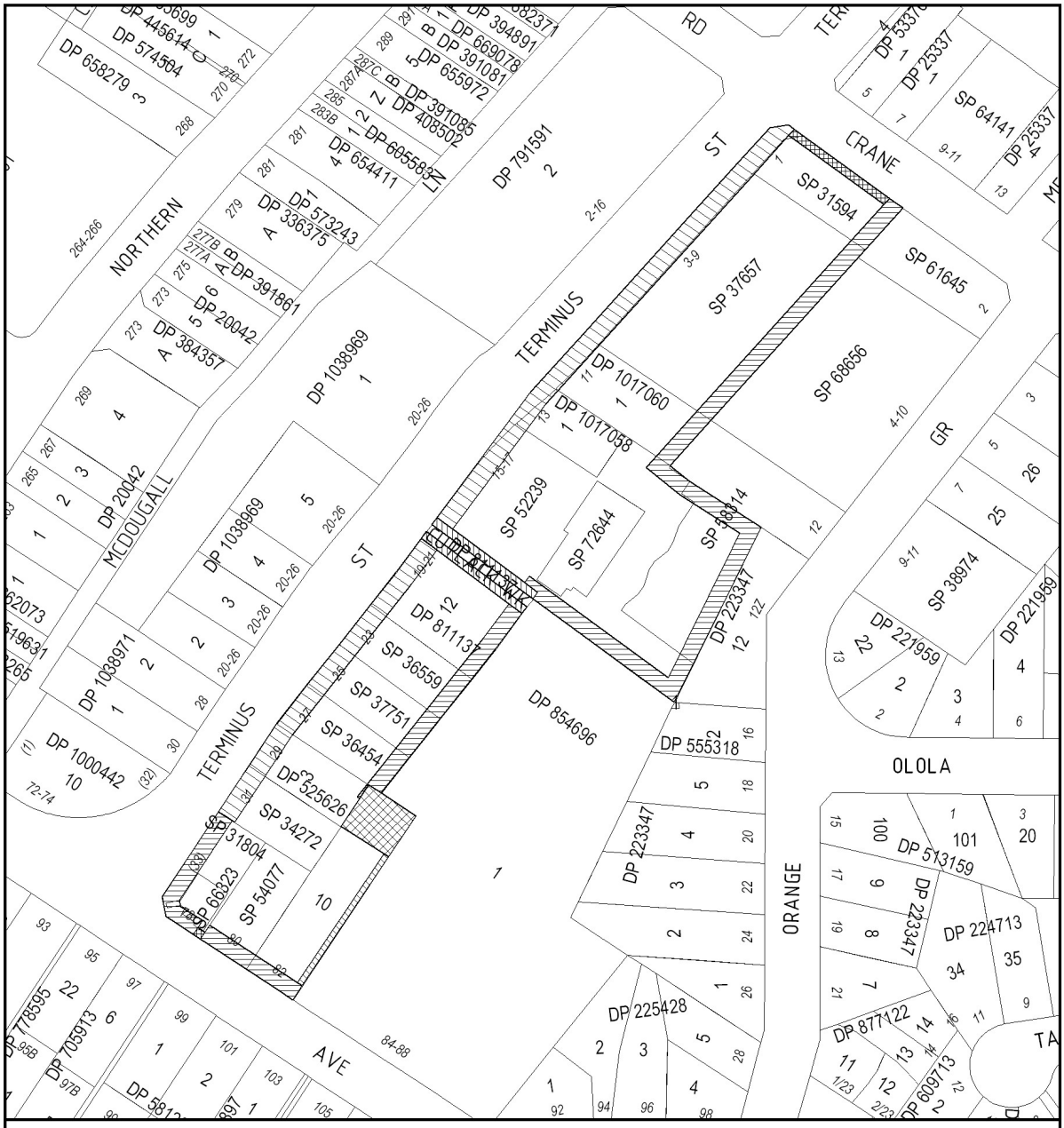
SIGNAGE PLAN
See Part C Section 2 – Signage in this DCP and Advertising Signs Fact Sheet.

STREETSCAPE PERSPECTIVE

STATEMENT OF ENVIRONMENTAL EFFECTS

Note. Refer to Part A – Introduction section 4.0 for general lodgement requirements and detailed requirements to be included in each of the above documentation.

APPENDIX A - PRECINCT PLAN MAPS



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THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 6 Sheet 1 of 15 - Business

DRAWN BY	B. CLISSOLD	DATE 31/05/2007	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 31/05/2007	
PLANNING OFFICER	R. SHERRY	DATE 31/05/2007	Date of Adoption: 12/03/2013 Minute No. 122 Came into Force: 26/03/2013
FILE No.	FP 171		

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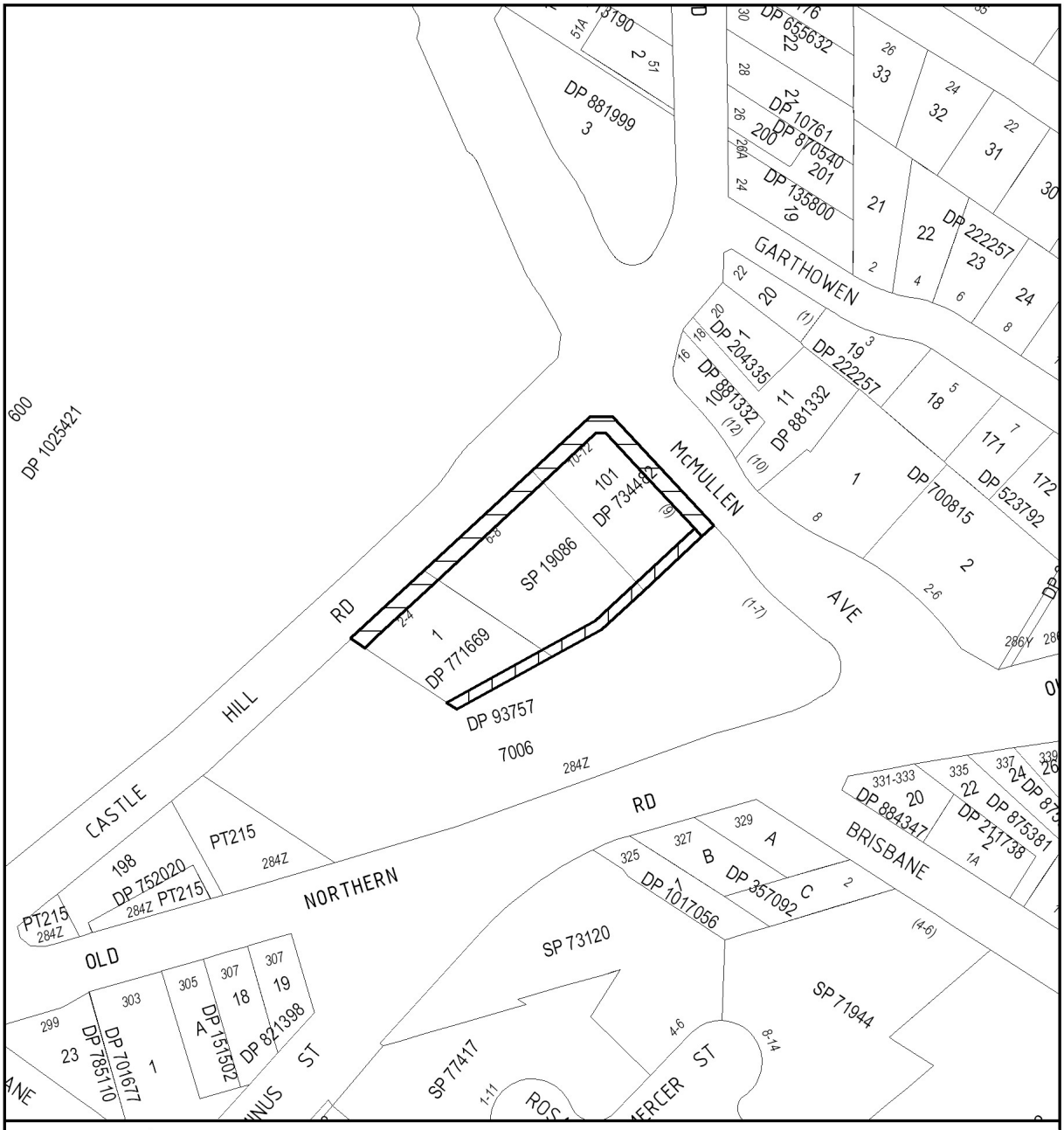

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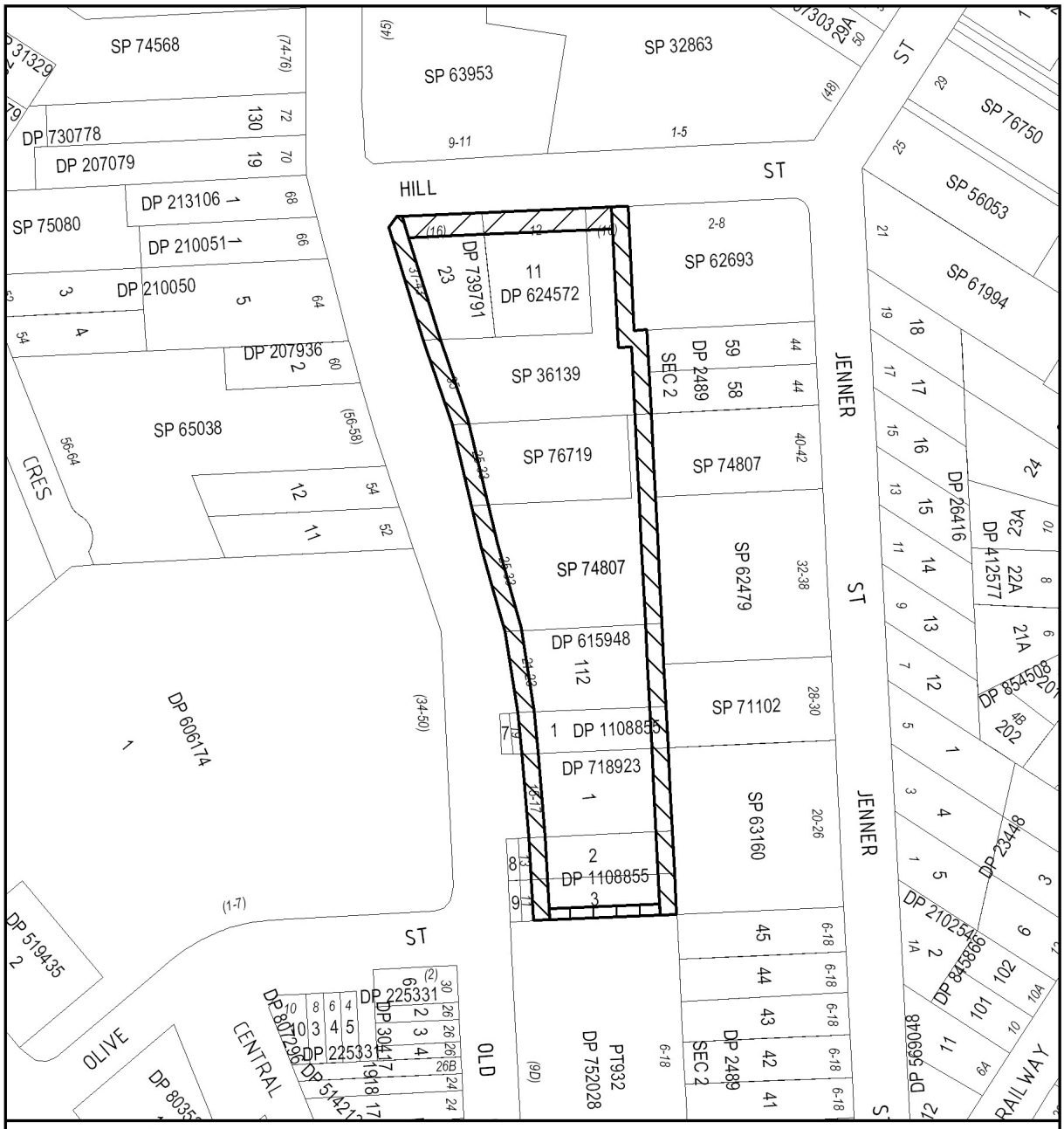

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Part B Section 6 Sheet 3 of 15 - Business

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PLANNING OFFICER	R. SHERRY	DATE 31/05/2007	Date of Adoption: 12/03/2013 Minute No. 122 Came into Force: 26/03/2013
FILE No.	FP 171		

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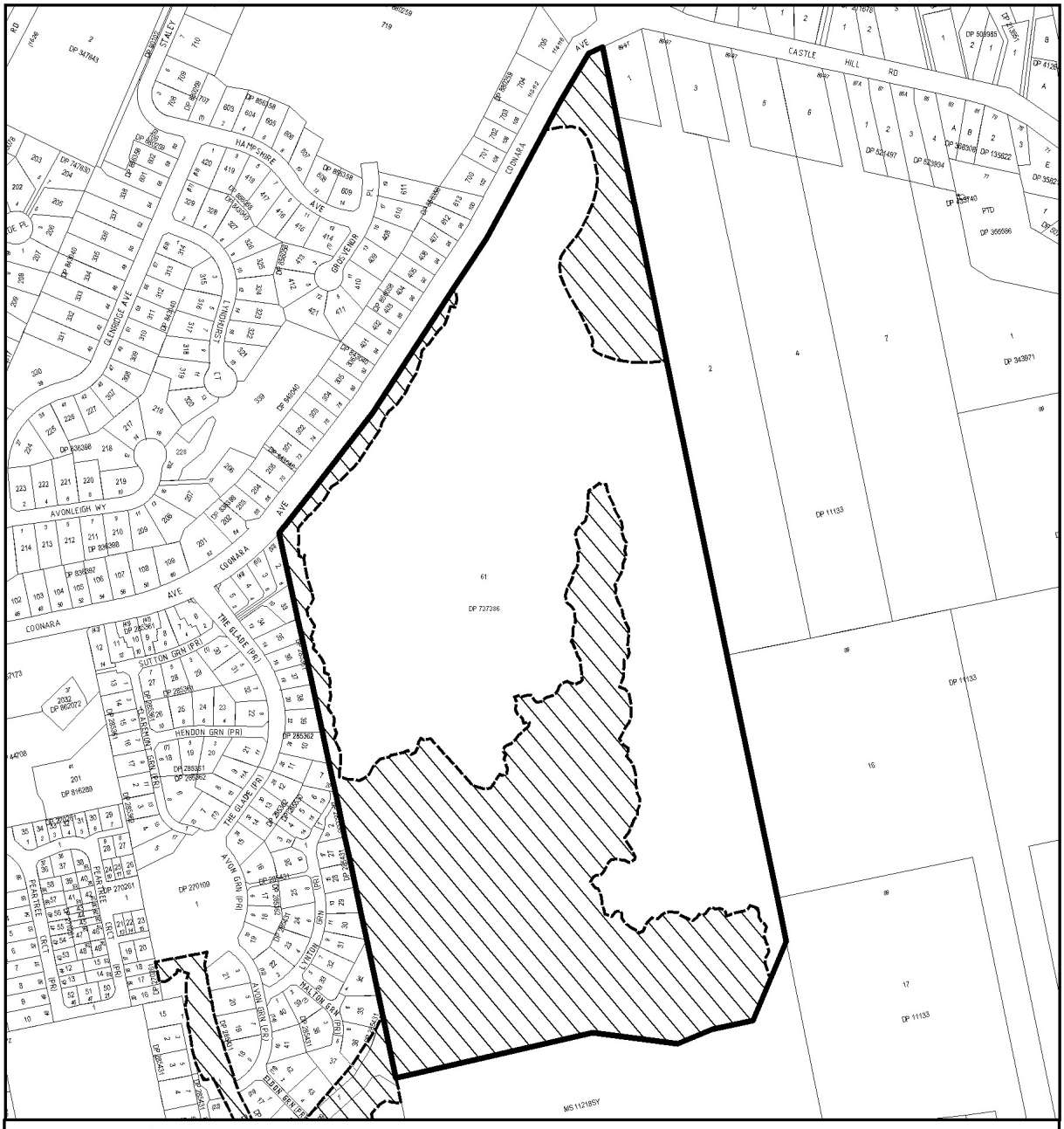
CASTLE HILL RD
HAMPSHIRE AVE
GROSVENOR
GLENHOUSE AVE
LYNDHURST CT
AVONLEIGH WY
COONARA AVE
SUTTON GRN (PR)
THE GLADE (PR)
HENDON GRN (PR)
AVON GRN (PR)
ELDON GRN (PR)
PEARTREE
DP 737386
DP 11133
DP 343671
DP 270261
DP 285362
DP 285363
DP 285364
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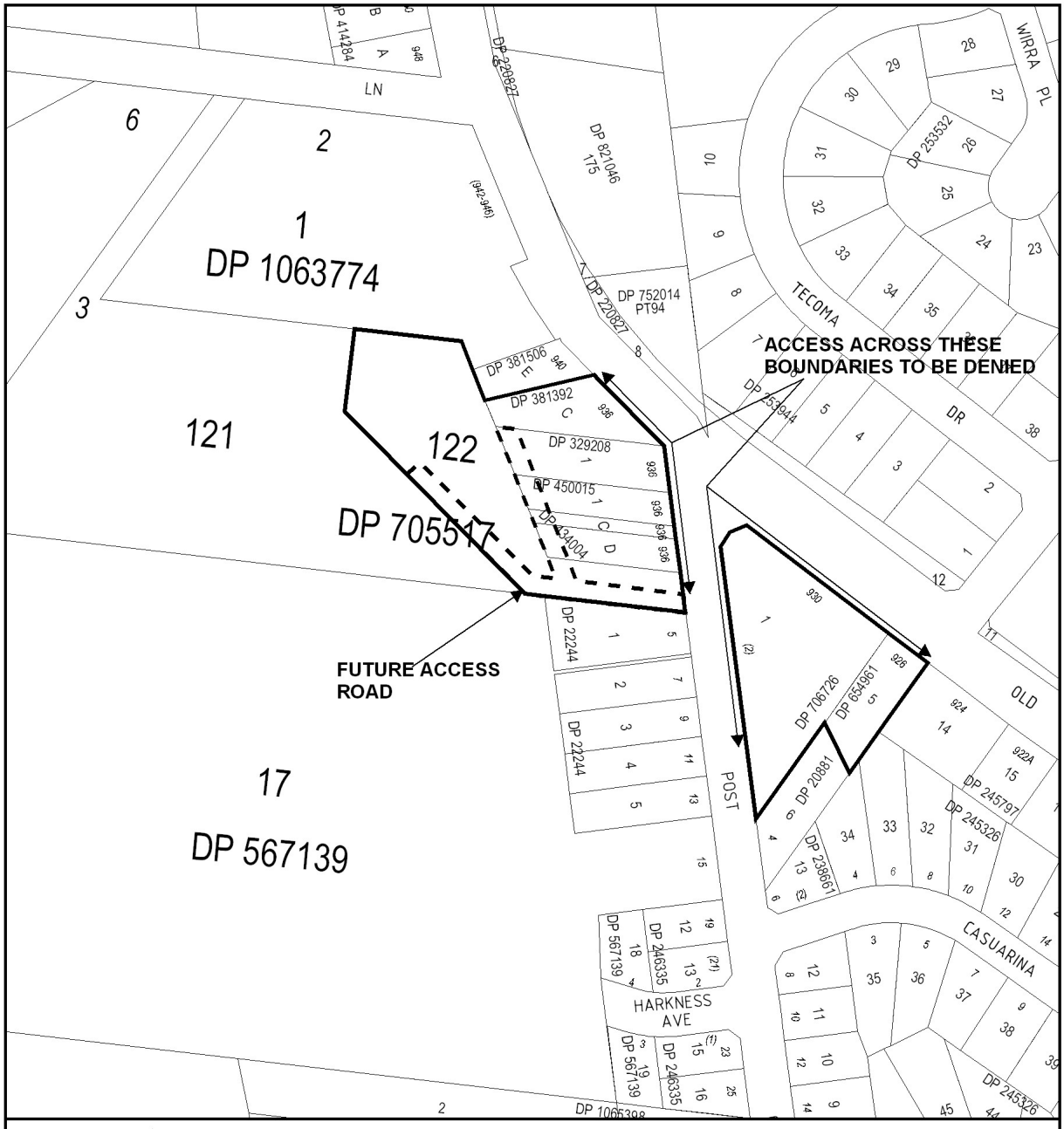

N

SCALE: 1:2,500

25 12.5 0 25 50 75

Metres

LOCALITY: GLENORIE

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Part B Section 6 Sheet 5 of 15 - Business

DRAWN BY	B. CLISSOLD	DATE 31/05/2007	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012
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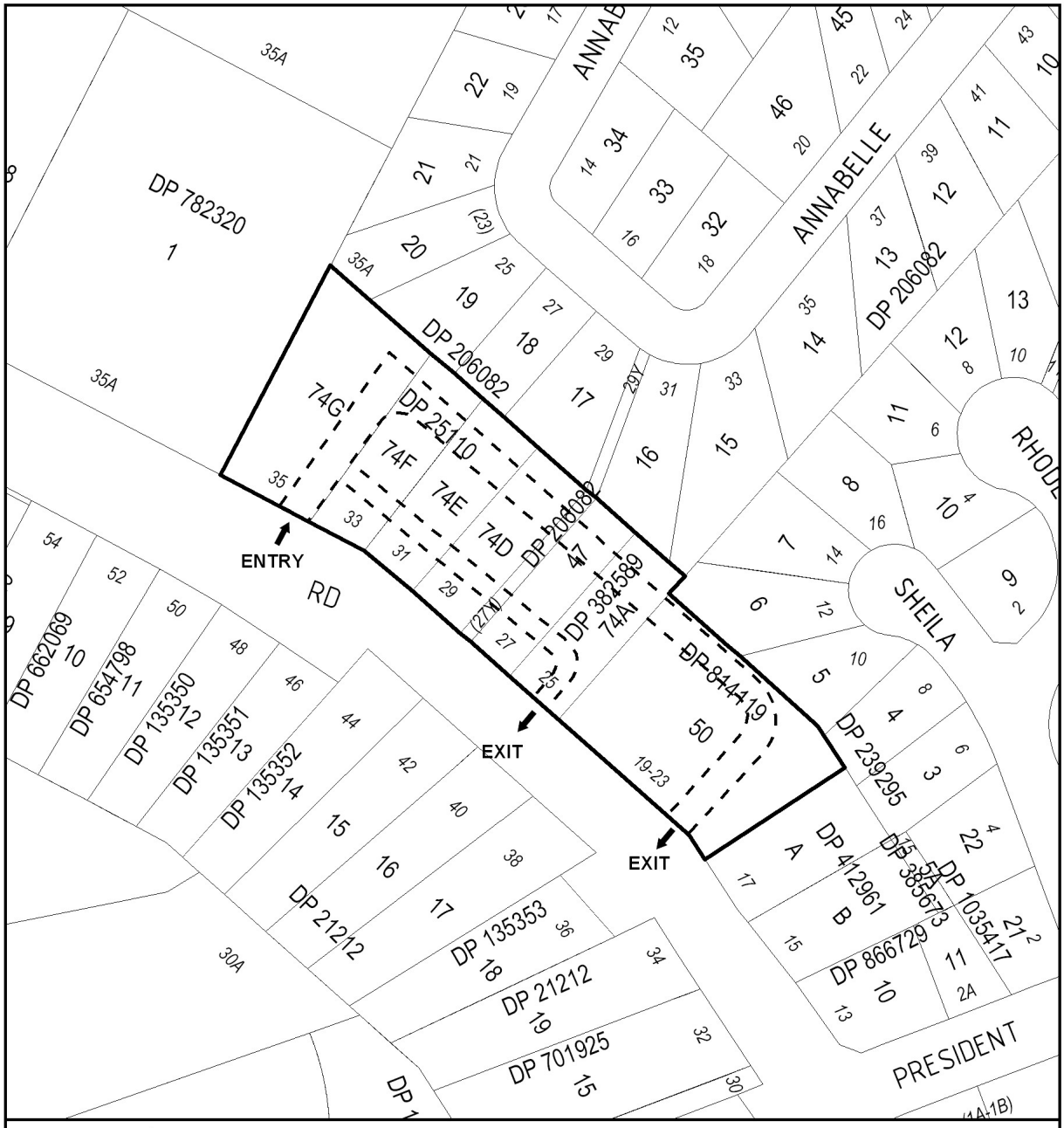

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DRAWN BY	B. CLISSOLD	DATE 31/05/2007	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012
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FILE No.	FP 171		

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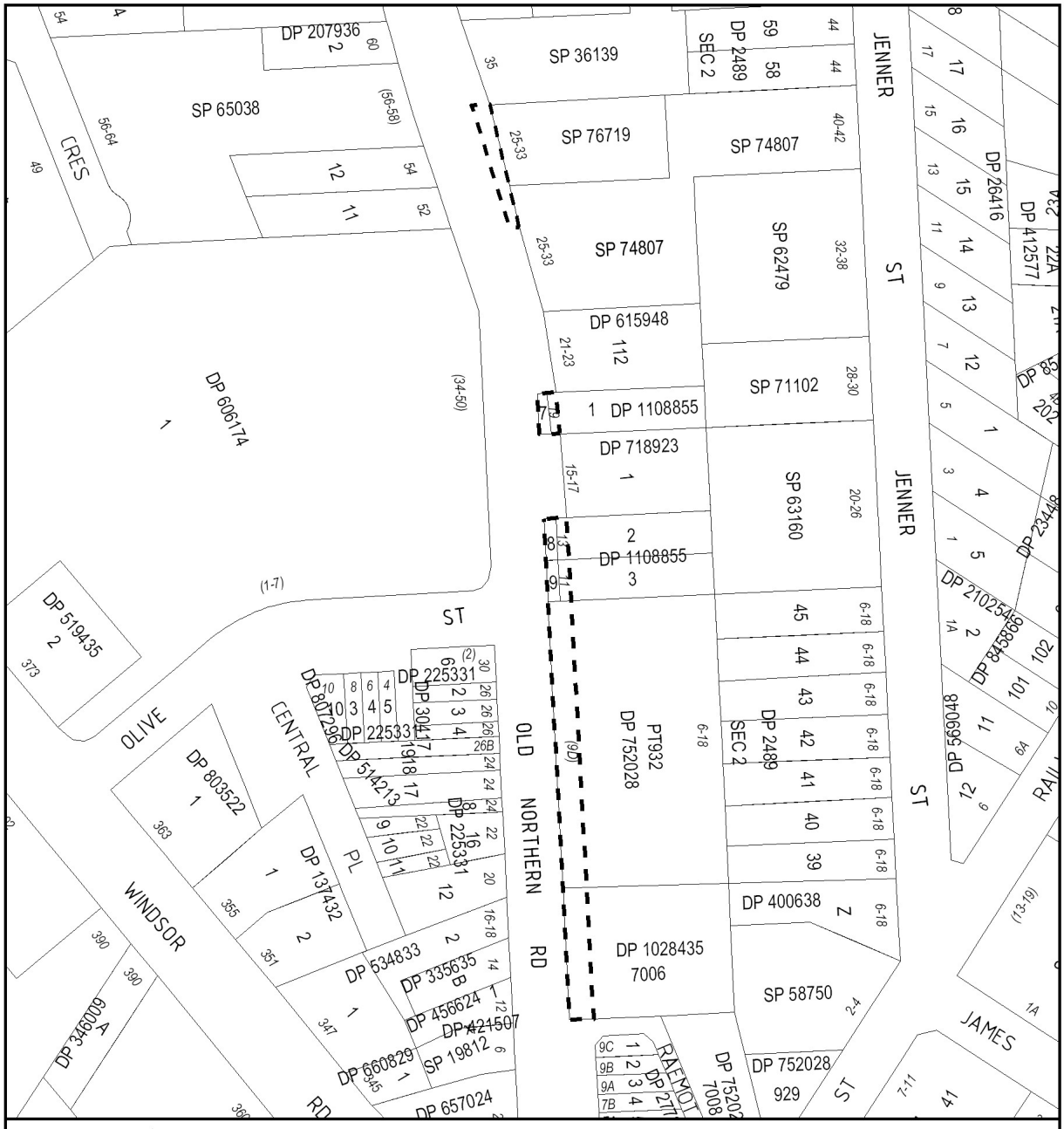

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Part B Section 6 Sheet 7 of 15 - Business

DRAWN BY	B. CLISSOLD	DATE 31/05/2007	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012
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PLANNING OFFICER	R. SHERRY	DATE 31/05/2007	Date of Adoption: 12/03/2013 Minute No. 122 Came into Force: 26/03/2013
FILE No.	FP 171		

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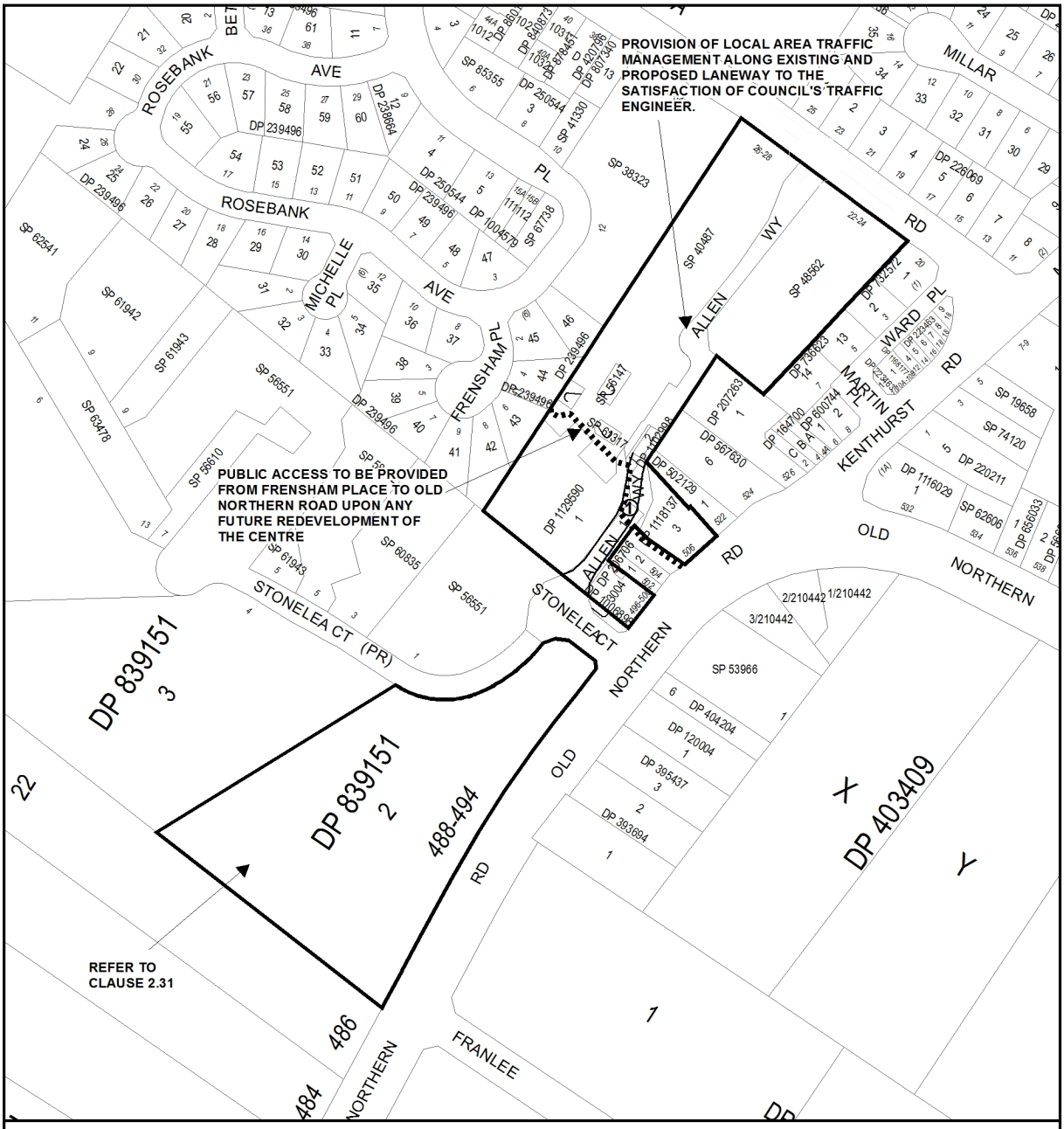

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Part B Section 6 Sheet 8 of 15 - Business

DRAWN BY	B. CLISSOLD	DATE 21/07/2014	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 21/07/2014	
PLANNING OFFICER	A. JENKINS	DATE 21/07/2014	Date of Adoption: Minute No. Came into Force:
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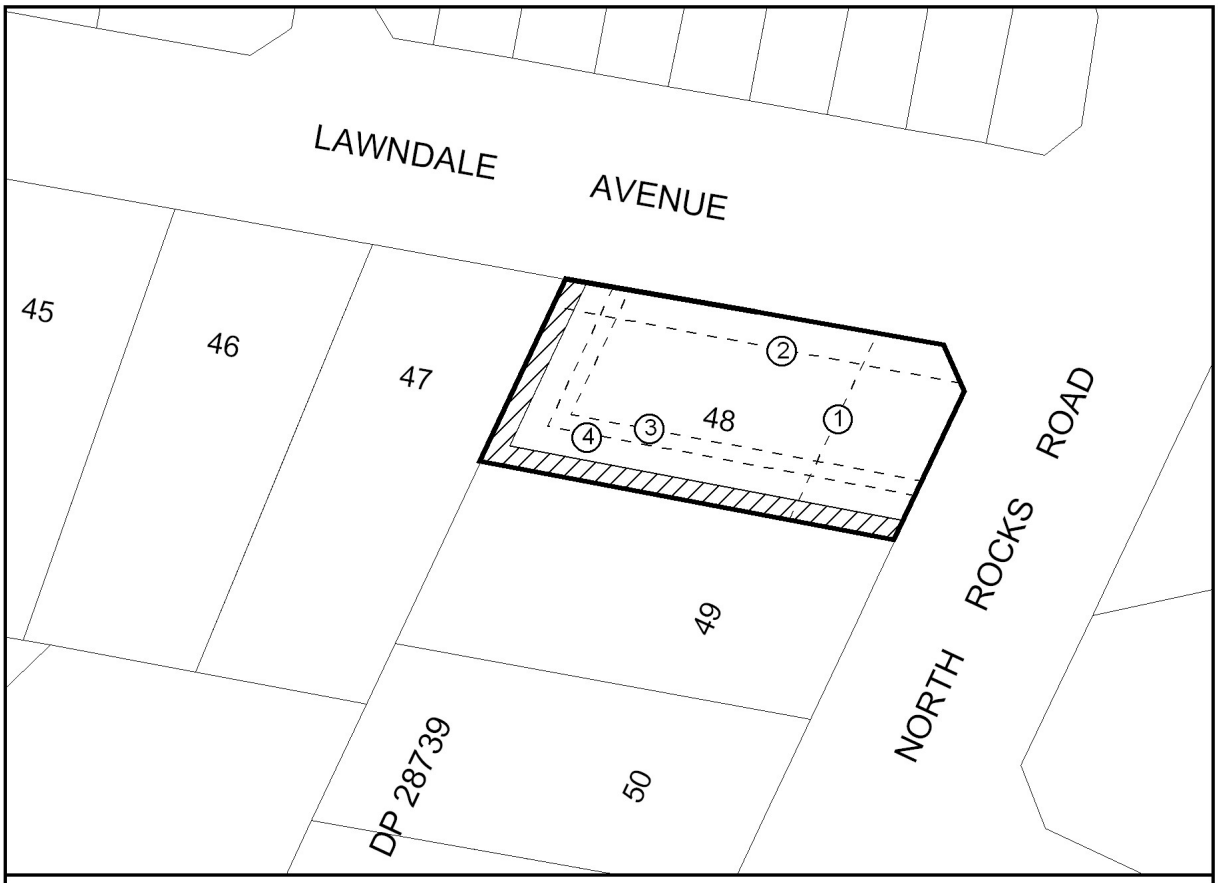

Notes:

The ratio of the gross floor space of any building to the total site area shall not exceed 0.4:1

Future redevelopment of the site must maintain existing ingress and egress points.

Building height shall not exceed 2 storeys or 8 metres above natural ground level.

Landscape Screening

Minimum 2 metre wide landscape strip and be used for the purpose of screening so as to protect the amenity of adjoining residential development. This area will consist of tall shrub planting (1.5m to 2.0m centres) and or continous line of evergreen trees at an average 7.0m centres.

Setbacks

1	North Rocks Road	10 metres
2	Lawndale Avenue	3 metres

Western and Southern Boundaries

3	Two storey development	6 .0 metres
4	Single storey development	4.5 metres

N

SCALE: 1:600

10 5 0 10 20 Metres

LOCALITY: NORTH ROCKS

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THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 6 Sheet 9 of 15 - Business

DRAWN BY	B. CLISSOLD	DATE 31/05/2007
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PLANNING OFFICER	R. SHERRY	DATE 31/05/2007
FILE No.	FP 171	

STATEMENT OF RELATIONSHIP WITH OTHER PLANS
This plan is to be read in conjunction with
The Hills DCP statement and The Hills LEP 2012

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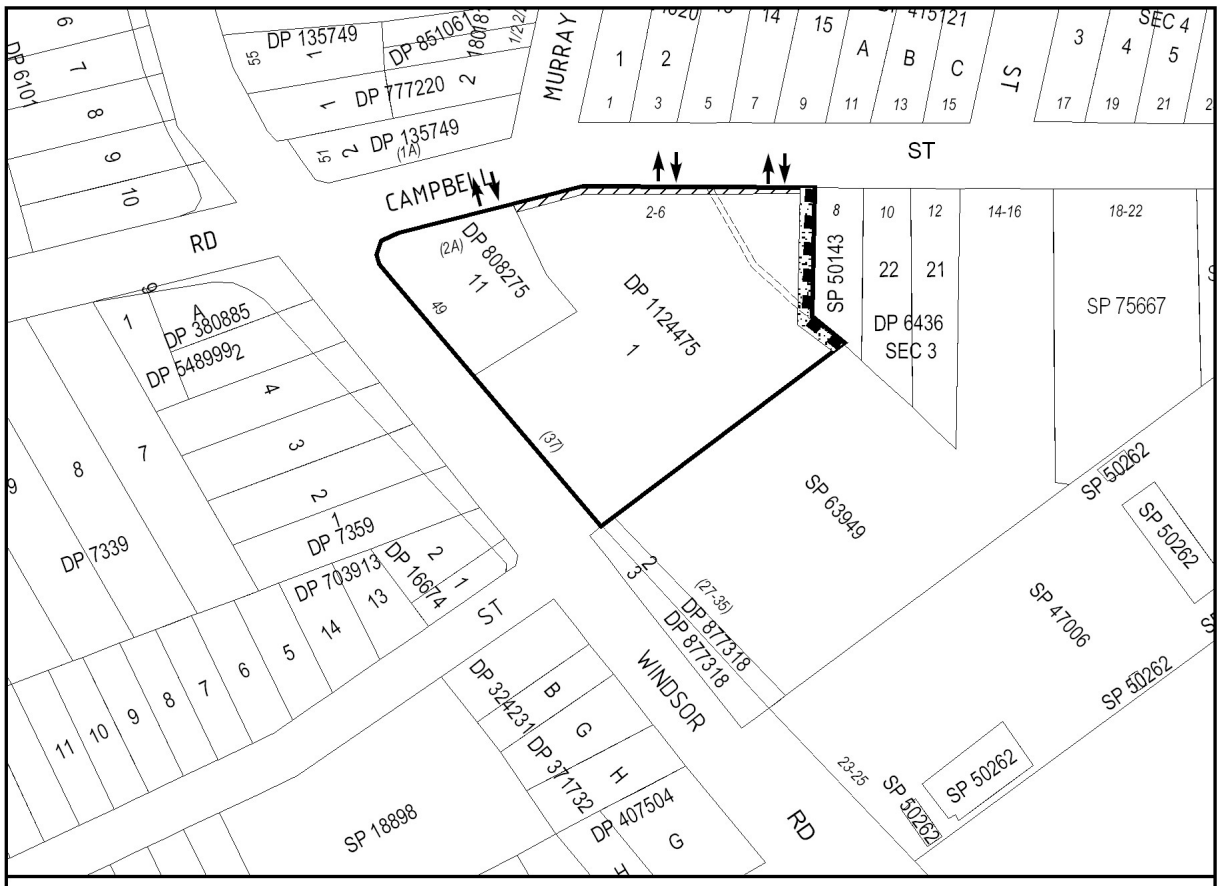

Notes:

Land to which the plan applies

Boundary height shall not exceed 2 storeys above natural ground level.

Landscape screening:

Minimum 4 metres wide landscape strip to be used for the purpose of screening so as to protect the amenity of the adjoining residential properties. This area will consist of tall shrub planting (1.5m to 2.0m centres) and a continuous line of evergreen trees at 7.0 metre centres.

Minimum 2 metre wide landscape strip. With respect to Lot 47 DP 635468, this is to be provided upon any future redevelopment of the existing carpark.

Noise Attenuation:

A wooden lapped and capped fence to be placed along the eastern boundary of the property, of a height no less then 1.8 metres.

Pedestrian Access:

A separate pedestrian/wheelchair access is to be provided from the public footpath on Campbell Street to the site

Vehicle Access:

Vehicle Access to the site is to be limited to the points identified.

Drainage:

Any future development of the site is to have regards for existing easements or drainage facilities.

N

SCALE: 1:2,000

25 12.5 0 25 50 75 Metres

LOCALITY: NORTHMEAD

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Part B Section 6 Sheet 10 of 15 - Business

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PLANNING OFFICER	R. SHERRY	DATE 31/05/2007	Date of Adoption: 12/03/2013 Minute No. 122 Came into Force: 26/03/2013
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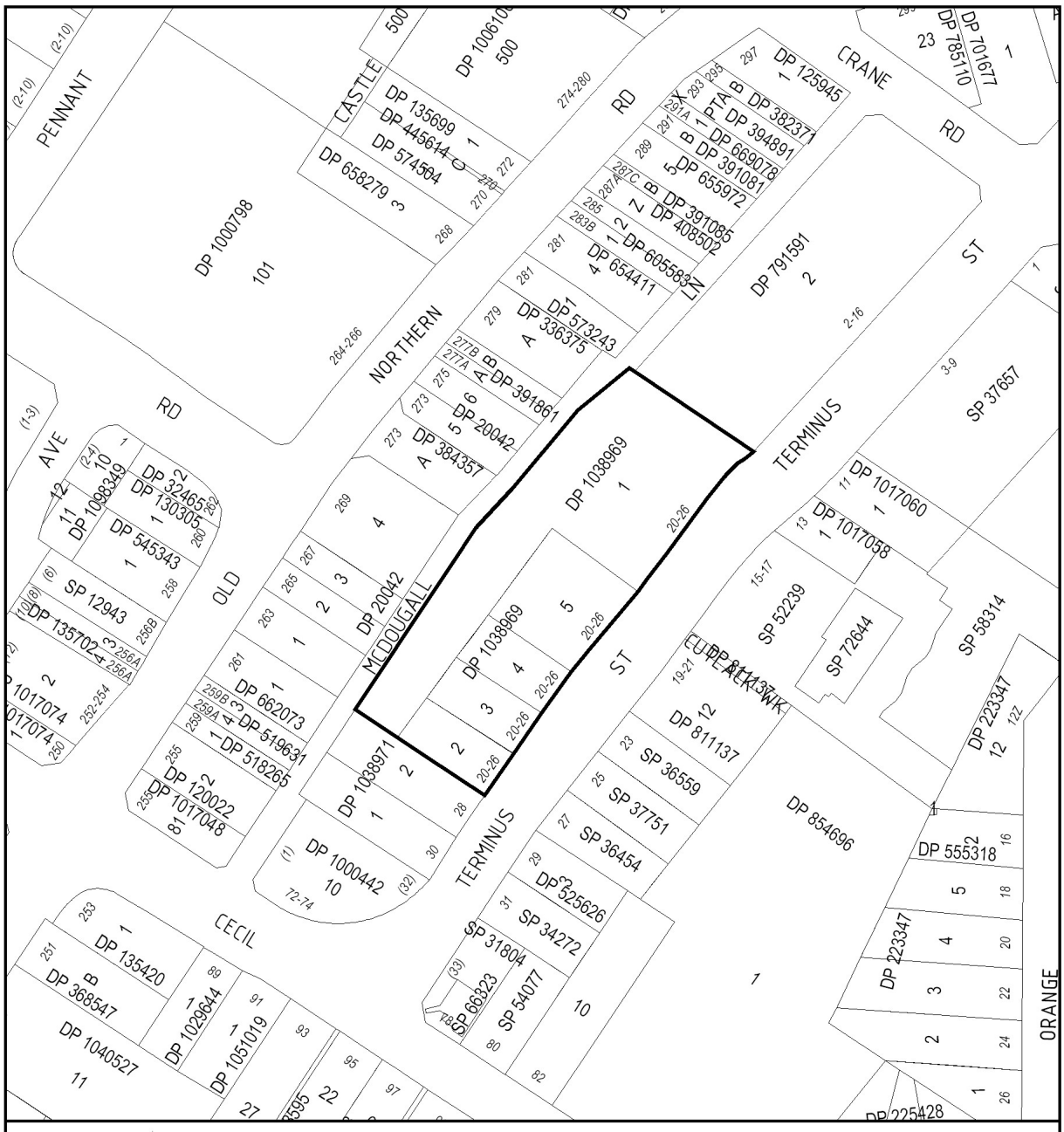

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Part B Section 6 Sheet 11 of 15 - Business

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SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 31/05/2007	
PLANNING OFFICER	R. SHERRY	DATE 31/05/2007	Date of Adoption: 12/03/2013 Minute No. 122 Came into Force: 26/03/2013
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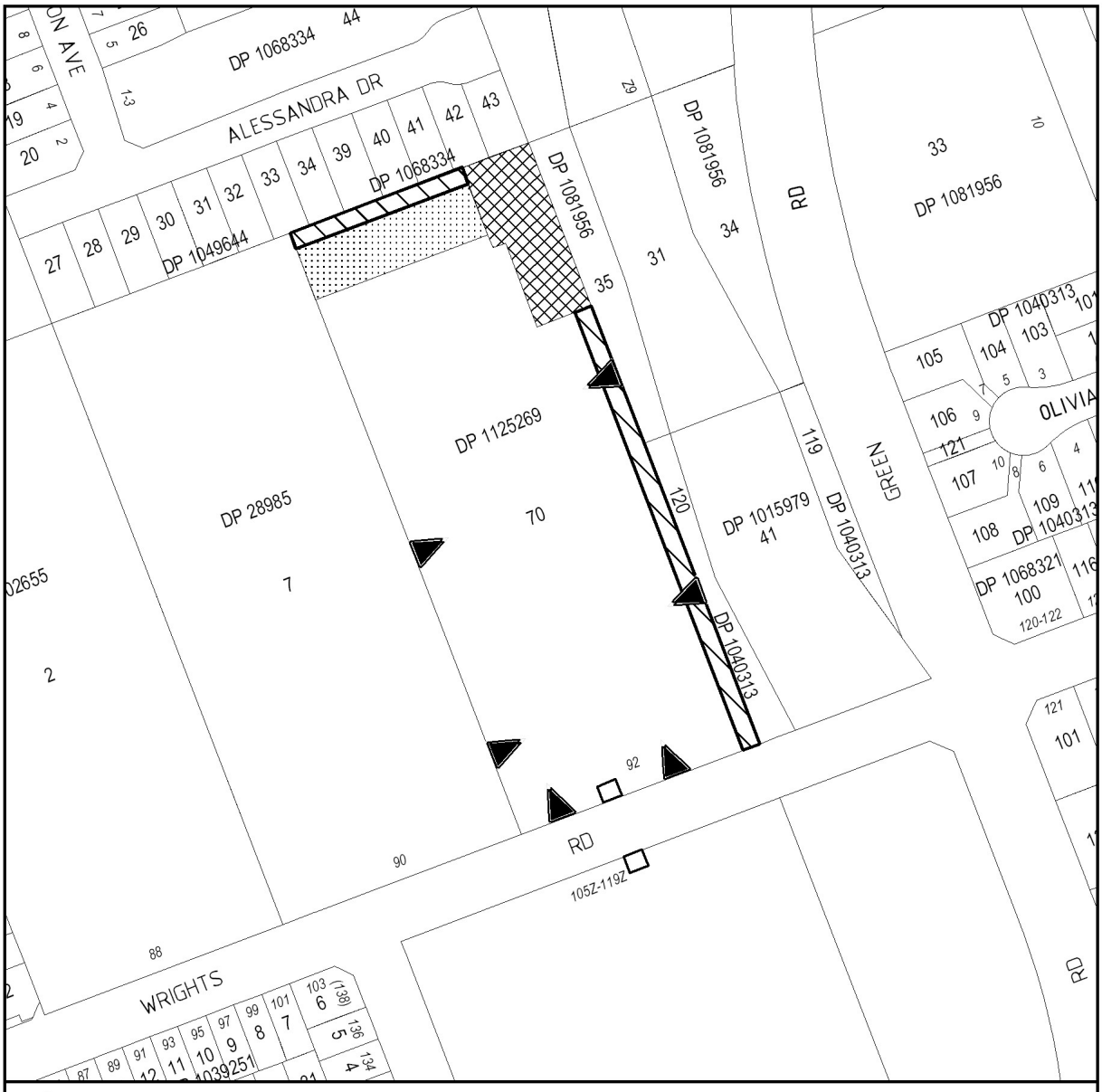

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THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 6 Sheet No. 12 of 15 - Business

DRAWN BY	W.WRIGHT	DATE 31/05/2007
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 31/05/2007
PLANNING OFFICER	R. SHERRY	DATE 31/05/2007
FILE No.	FP 171	

STATEMENT OF RELATIONSHIP WITH OTHER PLANS
This plan is to be read in conjunction with
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THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 6 Map Sheet 13 of 15 - Business

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PLANNING OFFICER	V. D'EMANUELE	DATE 31/05/2007	Date of Adoption: 12/03/2013 Minute No. 122 Came into Force: 26/03/2013
FILE No.	FP 171		

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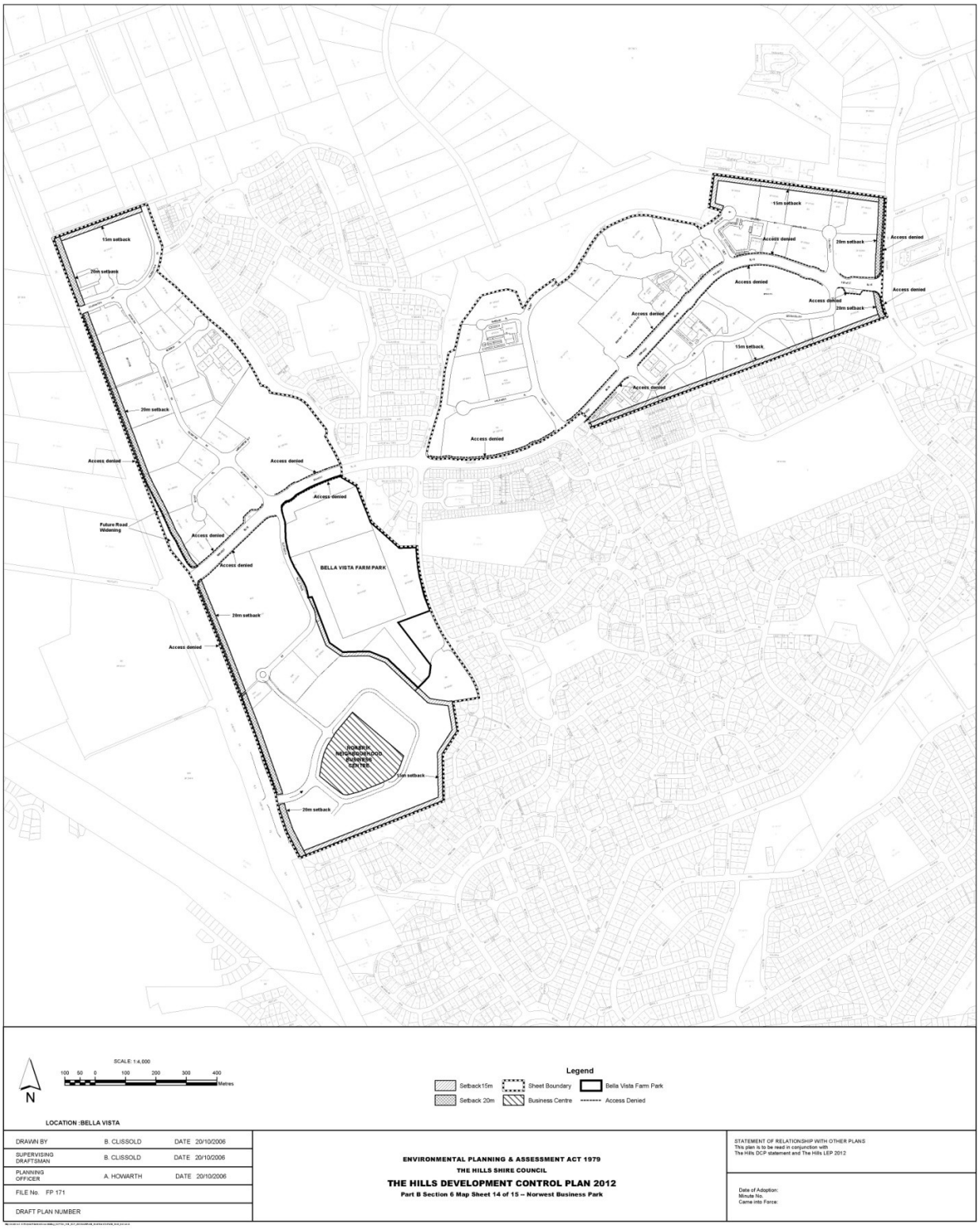
APPENDIX B - NORWEST BUSINESS PARK


15m setback
20m setback
Access denied
Future Road Widening
BELLA VISTA FARM PARK
NORTHERN NEIGHBOURHOOD BUSINESS CENTRE
SCALE: 1:4,000
100 50 0 100 200 300 400 Metres
N
Legend
Setback 15m
Setback 20m
Sheet Boundary
Business Centre
Bella Vista Farm Park
Access Denied
LOCATION :BELLA VISTA
DRAWN BY B. CLISSOLD DATE 20/10/2006
SUPERVISING DRAFTSMAN B. CLISSOLD DATE 20/10/2006
PLANNING OFFICER A. HOWARTH DATE 20/10/2006
FILE No. FP 171
DRAFT PLAN NUMBER
ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979
THE HILLS SHIRE COUNCIL
THE HILLS DEVELOPMENT CONTROL PLAN 2012
Part B Section 6 Map Sheet 14 of 15 -- Norwest Business Park
STATEMENT OF RELATIONSHIP WITH OTHER PLANS
This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012
Date of Adoption:
Minute No.
Came into Force:

The Hills Development Control Plan (DCP) 2012

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THE HILLS Sydney's Garden Shire





Part B Section 7
Industrial

B7

In Force 21 May 2019

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1. INTRODUCTION

This Section of the DCP must be read in conjunction with Part A – Introduction of this DCP.

1.1. LAND TO WHICH THIS SECTION OF THE PLAN APPLIES

This Section of the Development Control Plan applies to employment lands within The Hills Shire where industrial land uses are permissible under The Hills Local Environmental Plan (LEP) 2012.

1.2. ACCESS AND MOBILITY

This Section of the DCP seeks to ensure equitable access to suitable housing is provided for all people and should be read in conjunction with the following policies and legislation where applicable:

Disability Discrimination Act 1992 and Disability (Access to Premises - Buildings) Standards

The Disability Discrimination Act 1992 aims to eliminate discrimination against people on the grounds of disability and includes provisions which make it unlawful to discriminate against a person with disability in relation to access to, or use of, premises.

The Disability (Access to Premises - Buildings) Standards prescribes a set of design and construction standards covering access to new buildings or an extension to/modification of an existing building. Compliance with the Premises Standards ensures compliance with the requirements of the Disability Discrimination Act.

National Construction Code and Australian Standards

The National Construction Code (NCC) is a uniform set of technical provisions for the design and construction of buildings and other structures throughout Australia. The NCC includes provisions that mirror the Premises Standards to ensure reasonable access to buildings for people with a disability.

Australian Standards referred to in this DCP:

Standard No.	Description
AS1428.1	Design for access and mobility – general requirements for access – New building work
AS2890.6	Parking facilities Off-street parking for people with disabilities

1.3. AIMS AND OBJECTIVES OF THIS SECTION

The aim of this Section of the DCP is to establish objectives and development controls for the development of industrial land within The Hills Shire.

OBJECTIVES

(i) Encourage a high standard of aesthetically pleasing and functional industrial developments that sympathetically relate to adjoining and nearby developments.

(ii) Ensure that development will not detrimentally affect the environment of any adjoining lands and ensure that satisfactory measures are incorporated to ameliorate any impacts arising from the proposed development.

(iii) Encourage innovative and imaginative designs with particular emphasis on the integration of buildings and landscaped areas that add to the character of the industrial neighbourhood.

(iv) Provide safe and high quality working environments for employees.

(v) Ensure that employment premises incorporate the principles of Ecologically Sustainable Development.

2. OBJECTIVES AND DEVELOPMENT CONTROLS

Objectives and development controls for industrial developments are set out in the following sections.

In addition to these policies, guidelines and documents specified in section 1.4 of Part A - Introduction, this Section is to be read in conjunction with other relevant Sections including:

- Part C Section 1 – Parking
- Part C Section 2 – Signage

- Part C Section 3 – Landscaping
- Part C Section 4 – Heritage

2.1. PRECINCT PLANS

OBJECTIVE

(i) To ensure the development of specific industrial areas is consistent with the precinct Development Control Plans adopted by Council as part of this Section of the DCP.

DEVELOPMENT CONTROLS

(a) The overall development scheme for the Castle Hill Industrial Area is detailed in Appendix A – Precinct Based Development Control Plans (Sheet 1) of this Section of the DCP.

(b) The overall development scheme for the Annangrove Road Industrial Area is detailed in Appendix A – Precinct Based Development Control Plans (Sheet 6) of this Section of the DCP.

(c) Sheets 2-5 detailing precinct specific development controls for the other light industrial areas in the Shire are also included in Appendix A – Precinct Based Development Control Plans of this Section of the DCP.

2.2. SITE ANALYSIS

OBJECTIVES

(i) To encourage a comprehensive approach to site planning, design and assessment of development.

(ii) To facilitate assessment of how future buildings relate to their immediate surroundings and to each other.

(iii) To facilitate development of a design that minimises the negative impacts on the amenity of adjoining commercial or residential development in accordance with Council's ESD objective 7.

(iv) To facilitate development of a design that is energy efficient and permits adoption of renewable energy sources in accordance with Council's ESD objective 5.

(v) To ensure development is compatible with land capability.

(vi) To minimise adverse impacts on the environment in accordance with Council's ESD objective 7.

(vii) To ensure during consideration of the site layout and design that disturbance to the natural environment is minimised in accordance with Council's ESD objective 4.

DEVELOPMENT CONTROLS

(a) Development should be designed to respect site constraints such as topography, drainage, soil landscapes, flora, fauna and bushfire hazard.

(b) Disturbance to existing natural vegetation, landforms, creeks, wetlands and overland flow paths should be minimised.

(c) Development on land adjoining bushland reserves should incorporate measures (such as setbacks and buffers) to prevent any impact on those reserves.

(d) Development should be sited on the area of land having the least topographic constraints.

(e) Development should be sited away from steep slopes (particularly those containing natural vegetation) so that, where possible, these features can be kept in a natural state.

(f) Land with a slope greater than 20% is not suitable for development.

(g) Development applications for proposals on land with a slope of between 10-20% must be accompanied by a geotechnical assessment.

(h) Development within the Annangrove Road Light Industrial Area should be sited, designed and landscaped to minimise visual impact upon Rouse Hill House Estate and avoid development of topographically prominent knolls and ridgelines easily viewed from the Estate.

SUBMISSION REQUIREMENT

- Site Analysis.

2.3. DEVELOPMENT SITES

OBJECTIVES

(i) To ensure development sites have sufficient areas to provide adequate access, parking, landscaping and building separation.

(ii) To provide for the orderly development of land through subdivision or the consolidation of lots.

(iii) To ensure development on a particular site has due regard to adjoining developments.

DEVELOPMENT CONTROLS

(a) The proposed development retains any significant mature vegetation, and provides a suitably landscaped setback to the street frontage in keeping with that of an industrial 'park-like' environment. Plantings shall reduce the visual bulk of the building and screen car parking areas.

(b) The development complies with the setback provisions of this development control plan, and is generally consistent with adjoining structures in terms of its elevation to the street and building height.

(c) The proposed development is sited to avoid disturbance of natural site features including existing significant mature vegetation, creeks, steep slope and other significant landforms. The building platform shall be sited in an accessible and practical location on relatively flat terrain with stable soil and geology.

(d) The development provides a direct, legible, safe and stable means of access for both vehicles and pedestrians from a public road to the proposed building platform. Adequate area is to be provided for the entry, exit and manoeuvring of heavy vehicle or service vehicles within the development site.

(e) With the exception of the Edwards Road Precinct, the minimum road frontage requirement is 60 metres.

(f) Development shall not isolate an adjoining area of land that does not meet the minimum lot size identified in The Hills LEP 2012.

SUBMISSION REQUIREMENTS

- Site Plan
- Location and general description of any adjoining developments.
- Earthworks plan showing existing and proposed levels/contours.
- Existing easements, access and infrastructure location.

2.4. SAFETY BY DESIGN

OBJECTIVE

(i) To ensure the design and layout takes into account the safety of occupants and visitors to the site.

(ii) To ensure the design permits surveillance of the site to discourage vandalism and criminal activity in industrial areas.

DEVELOPMENT CONTROLS

(a) Design of the buildings and landscaping should ensure natural surveillance of pathways and open space setback areas around buildings, is possible from within the building, and/or from adjoining roads and open space areas;

(b) Building design should ensure building entrances are visible and discourage entrapment;

(c) Appropriate lighting and signage is to be provided to identify and promote use of safe access routes.

2.5. FLOOR SPACE

OBJECTIVES

(i) To ensure that the scale and bulk of industrial developments complements the character of the area.

(ii) To ensure that the bulk and scale of industrial developments does not reduce the amenity of adjacent residential or other land uses.

(iii) To ensure that industrial development does not exceed the service and infrastructure capacity of the area.

(iv) To ensure that individual industrial units are of a size suitable to meet the needs of local industry and service providers.

DEVELOPMENT CONTROLS

(a) Refer to Clause 4.4 *Floor Space Ratio* of The Hills LEP 2012.

(b) Up to 50% of buildings/units may have a floor area between 100 square metres and 150 square metres. All other units/buildings must have a minimum floor area of 150 square metres.

(c) The maximum floor space permitted to be constructed / utilised for ancillary office purposes is 50% of the unit floor area.

To attract industries that do not necessarily require expansive areas for warehousing or manufacture (such as those in the areas of advanced technology, computer facilities, and communications) the above control does not apply to development within the Castle Hill Industrial area. However any floor space constructed / utilised for office purposes may only be used;

- for a purpose that is permissible, or
- for a purpose that is ancillary to and an integral part of a purpose that is permissible within the IN2 Light Industrial zone under The Hills LEP 2012.

SUBMISSION REQUIREMENTS

- Site Plan showing the location and size of the proposed buildings/structures with supporting floor space ratio calculations (excluding uncovered parking areas, internal loading bays and driveways).
- Dimensioned development application plans including a schedule of areas for each separate occupancy unit proposed.

2.6. SETBACKS

OBJECTIVES

(i) To provide an open streetscape with substantial areas for landscaping and screen planting.

(ii) To provide an effective buffer to preserve the natural features and creeks in accordance with Council's ESD objective 4.

(iii) To minimise overshadowing of adjoining properties.

(iv) To protect privacy and amenity of any adjoining land uses.

(v) To provide a desirable and aesthetically pleasing working environment.

DEVELOPMENT CONTROLS

(a) The building setbacks to roads, open space, trunk drainage and other lands, are shown in Appendix A – Precinct Based Development Control Plans of this Section of the DCP, Sheets 1-6.

(b) A minimum building setback of 5 metres for buildings and 2 metres for ground level car parking will be required to all other site boundaries not indicated on Sheets 1-6.

(c) Council will require written concurrence from Integral Energy for developments proposed within an electricity easement.

(d) The setback to a creek is to be no less than 40 metres from the top bank of the creek or otherwise to the requirements of the Office of Water.

(e) All building setbacks are to be landscaped in accordance with section of 2.15 of this Section of the DCP and with the provisions of Part C Section 3 – Landscaping.

(f) Other than within the Castle Hill Industrial Area where a building setback is 20 metres or more, car parking may be sited 10 metres closer than the building to that boundary.

(g) The following building setbacks shall be applied within the Castle Hill Industrial Area only (including land zoned B5 – Business Development within the Castle Hill Industrial Area): -

Internal Roads

- 15 metres with no car parking forward of the building.
- 23 metres where car parking is situated forward of the building.

Arterial Roads

- 20 metres with no car parking forward of the building.
- 30 metres where car parking is situated forward of the building.

(h) Car parking may be permitted within the front building setback provided it is setback 10 metres from a local road frontage and 20 metres from an arterial road frontage. The car park area is to be screened from view and the setback adequately landscaped in accordance with the provisions of this Section of the DCP.

(i) Where a proposed acquisition for road widening affects a development site, the minimum setback will be measured from the proposed new alignment of the road.

(j) The following setbacks apply to Lot 4 DP 616348, 912-914 Old Northern Road, Glenorie:

- 10 metre landscaped setback to Whites Road (containing no car parking);
- 23 metre building setback to Old Northern Road;
- 5 metre landscaped setback to all other boundaries.

SUBMISSION REQUIREMENTS

- Building setback dimensions are to be shown on development application plans.

2.7. BUILDING HEIGHTS

OBJECTIVES

(i) To ensure that building heights respond to the existing landform of the neighbourhood, including ridgelines and drainage depressions.

(ii) To protect privacy and amenity of surrounding allotments and residential development.

(iii) To minimise overshadowing of adjoining allotments.

DEVELOPMENT CONTROLS

(a) Refer to Clause 4.3 *Height of Buildings*, Clause 5.6 *Architectural roof features* and Height of Building Maps in The Hills Local Environmental Plan 2012.

(b) In all industrial zones other than the Castle Hill Industrial area the maximum building height of any structure or building shall be no more than 15 metres above ground level except:-

- where the building is within 30 metres of a residential property boundary where the height will be a maximum of 10 metres; or
- the area is the subject of Appendix A – Precinct Based Development Control Plans Sheet 6 where the building height envelope specified on Sheet 6 applies.

(c) For the Castle Hill Industrial area the maximum building height of any structure or building shall be no more than 20 metres above ground level except where the building is within 30 metres of a residential property boundary where the height will be a maximum of 10 metres.

SUBMISSION REQUIREMENTS

- Shadow Diagrams where development adjoins residential development.

2.8. BUILDING MATERIALS

OBJECTIVES

(i) To promote integrated, visually harmonious and attractive buildings in industrial areas.

(ii) To promote the use of materials that involve minimal impact on the environment in accordance with Council's ESD objective 5.

DEVELOPMENT CONTROLS

(a) All building construction must comply with the Environmental Planning & Assessment Act 1979 and Building Code of Australia.

(b) The following factors must be considered when selecting materials:

- suitability for the purpose;
- durability;
- long term appearance;
- local environmental impacts;
- broader and longer term environmental impacts;
- the quantity of material required; and

- life cycle assessment.

(c) Avoid oversupply and waste of materials by careful assessment of quantities needed.

(d) Avoid materials that are likely to contribute to poor internal air quality such as those generating formaldehyde (new carpets) or those that may create a breathing hazard in the case of fire (eg polyurethane).

(e) Select materials that will minimise the long-term environmental impact over the whole life of the development.

(f) Preference should be given to materials derived from renewable sources or those that are sustainable and generate a lower environmental cost, recycled material or materials with low embodied energy, better lifecycle costs and durability. For example, use plantation rather than old growth timbers.

(g) Choice of materials should be based on consideration of both their environmental and economic costs.

(h) All external walls of buildings used for office/showroom purposes should generally be totally of brick, pre-cast panel or glass construction. However use of new materials that generate a lower environmental cost will be considered on their merits.

(i) All walls visible from the street, or land adjoining or near the subject property must be treated (at a minimum they must be painted) to ensure the visual amenity of adjoining business is protected.

(j) Material should incorporate graffiti proof surfaces wherever possible.

(k) Roofs of buildings shall be pre-colour coated masonry, tile or metal. Galvanised iron, zinaclume, any fibrous sheeting (asbestos cement etc) or any other uncoloured metal deck surface is unacceptable. However use of new materials that generate a lower environmental cost will be considered on their merits.

(l) Natural ventilation is preferred. However where mechanical ventilation is necessary any roof ventilators, exhaust towers, hoppers and the like are to be located so that they are not visible from public places or residential areas. These elements are to be incorporated into the design of the buildings.

SUBMISSION REQUIREMENTS

- Schedule of External Materials
- Streetscape Perspective including landscaping.

2.9. SIGNAGE

OBJECTIVES

(i) To provide businesses the opportunity of identifying their location and activity.

(ii) To ensure that signage does not detract from the visual appeal of buildings within the employment area by prohibiting superfluous and unsuitable signs.

DEVELOPMENT CONTROLS

(a) The details of the development controls applying to advertising signs and structures within the Shire are contained in Part C Section 2 – Signage.

SUBMISSION REQUIREMENTS

- Signage Plan

2.10. FENCING

OBJECTIVE

(i) To ensure that fencing does not detract from the overall visual amenity and character of the area.

DEVELOPMENT CONTROLS

(a) No fencing, other than of a low, ornamental type may be erected within the building setback area to any road.

(b) Fencing along rear boundaries adjacent to a trunk drainage zoning shall be integrated with any landscape buffer zone or building setback.

(c) All chain-wire fencing is to be black or dark green in colour.

(d) Pre-painted solid, metal fencing (i.e. Colorbond fencing) is not acceptable because of its poor visual appearance.

SUBMISSION REQUIREMENTS

- Fencing details for the site, clearly showing the location, height and type of fencing, is to be submitted as part of the Development Application.

2.11. HOURS OF OPERATION

OBJECTIVES

(i) To ensure that industrial developments operate in a manner compatible with adjoining land uses.

DEVELOPMENT CONTROLS

(a) Hours of operation within industrial areas (except for Bulky Goods Premises) are restricted to 7.00am to 6.00pm Monday to Saturday with no work or activity to be carried out on Sundays or public holidays, except as provided below;

(b) Hours of operation for Bulky Goods Premises are to be restricted to between 7.00a.m. and 6.00p.m. each day except for Thursday when the activity can continue past 6.00p.m. to 9.00p.m. but only if the site does not adjoin or is not adjacent to a residential zone.

(c) Notwithstanding a) and b) above:

- occupants of sites that are not adjoining or adjacent to a residential property may request that the site be considered as a "Low Noise Generating use".
- Low noise generating uses may be permitted extended days and hours (up to 24 hours) of operation beyond those specified in a) and b) above.
- In order to be considered as a Low Noise Generating use the planning application submitted must be accompanied by a report from an acoustic consultant that demonstrates that the proposed use will not generate noise in excess of 5dB(A) above the background noise levels, where measured at any boundary adjoining or adjacent to a residential property. This report must include all activities including any vehicle (especially heavy vehicle) movements to and from the site.

SUBMISSION REQUIREMENTS

- Details of days and hours of operation to be provided in the Development Application.
- A statement of compliance from an acoustical consultant may be required to demonstrate that the noise generated by development generally does not exceed 5dB(A) above the background noise levels, where measured at any boundary adjoining or adjacent to a residential property.
- The statement of compliance will also include an assessment and schedule of truck movements, type and times.

2.12. ENERGY EFFICIENCY

Energy-efficient design and construction will assist in creating ecologically sustainable environments, reducing the use of fossil fuels and encouraging the use of renewable energy.

OBJECTIVES

(i) To facilitate the design and construction of energy efficient buildings.

(ii) To require building designs that will minimise energy needs and that will utilise passive solar design principles.

DEVELOPMENT CONTROLS

(a) The design of the buildings shall demonstrate passive solar design principles i.e.,

- window placement;
- building orientation;
- shading;
- insulation;
- thermal mass;
- ventilation; and
- incorporation of suitable landscaping.

(b) In designing the building, consideration must be given to utilising the large areas of roof space for generating electricity via solar panels or other relevant technology.

Issues that need to be considered are:-

- The orientation and pitch of the roof. The portions of the roof suitable for solar panels must be oriented north to maximise sunlight on these areas;

- The capability of the roof to accommodate, or to be easily reinforced so it can accommodate, solar panels and/or other relevant equipment.

(c) All buildings with an office component greater than 100m^2 shall achieve as a minimum, a 4-star Building Greenhouse rating in respect to energy efficiency for the office component of the development. Details of the rating for each relevant building are to be provided with the Development Application.

(d) In the case where an existing office is extended any constraints arising from the design of the existing building will be taken into consideration if the 4-star requirement is not achieved.

Note. Advice on the Building Greenhouse rating can be obtained from the Australian Building Greenhouse Rating website www.abgr.com.au.

(e) Where a hot water service is provided to any sole-occupancy building or unit a hot-water system with a greenhouse gas emission score of 3.5 or greater is to be installed to suit the needs of that building or unit.

2.13. BIODIVERSITY

OBJECTIVE

(i) To conserve and protect the biodiversity of the Shire including habitats of threatened flora and fauna species and communities.

DEVELOPMENT CONTROLS

(a) Significant flora and fauna species, ecological communities and their habitats are to be preserved.

(b) Development should be designed to retain existing bushland and fauna habitats, including identifiable corridors and linkages.

SUBMISSION REQUIREMENTS

- Fauna and Flora Assessment.
- If the assessment finds that there is likely to be a significant effect on threatened species, populations or ecological communities, or their habitats, applicants will be required to submit a Species Impact Statement (SIS). Reference should be made to the requirements of the Environmental Planning & Assessment Act 1979, and the Threatened Species Conservation Act 1995.

2.14. EROSION AND SEDIMENT CONTROL

Land degradation associated with urban development can be avoided or mitigated, largely through appropriate planning before commencement of earthworks and by using best management practices available.

OBJECTIVES

(i) Minimise land degradation, water pollution and damage to infrastructure from erosion and accumulated sediment.

(ii) To provide development controls for all stages of development and to ensure a consistent approach to erosion and sediment control.

DEVELOPMENT CONTROLS

(a) Applications for all development, including subdivision, are to be accompanied by an Erosion and Sediment Control Plan (ESCP) that will describe the measures to be taken at development sites to minimise land disturbance and erosion and to control sediment pollution of creeks. ESCPs are to clearly identify the erosion and sediment control measures to be used.

(b) Erosion and Sediment Control Plans shall be prepared in accordance with “Managing Urban Stormwater – Soils and Construction”, produced by Landcom.

SUBMISSION REQUIREMENTS

- Erosion and Sediment Control Plan

2.15. LANDSCAPING AND TREE PRESERVATION

OBJECTIVES

(i) To ensure a high standard of environmental quality of individual developments and of the overall visual amenity and character of the area.

(ii) To ensure that existing landscaping is retained and integrated into the design of the development in accordance with Council's ESD objective 4.

(iii) To ensure landscaped areas can be appropriately maintained.

(iv) To ensure that existing trees are given every opportunity to be retained and incorporated into the final development in accordance with Council's ESD objective 4.

(v) To ensure that vegetation removed as a part of the land development process is replaced by suitable endemic species in accordance with Council's ESD objective 4.

DEVELOPMENT CONTROLS

(a) Existing trees and surrounding shrubs, groundcovers and grasses should be preserved.

(b) All setback and car parking areas are to be regenerated and maintained to a high standard utilising endemic species. Where buildings are visible from adjoining residential or rural land the setback areas must include planting to screen views into the development and minimise the visual prominence of the buildings. In this regard setbacks must include:-

- taller trees that create a canopy, which will screen the upper sections of the building. The mature canopy height should be between 6 metres and the top of the building;
- supported by lower shrubs with a mature height of 2 to 4 metres to break up views of car parking areas and lower parts of the building.

(c) Native species are to be used to maintain a strong natural theme for the neighbourhood owing to their low maintenance characteristics, relative fast growth, aesthetic appeal and suitability to the natural habitat.

(d) Landscape treatments are to harmonise with building designs and should consist of trees, shrubs, groundcovers and grass. Introduced species, such as Kikuyu, which are intensive users of water and which are invasive and result in degradation of natural areas will not be permitted.

(e) Landscaping measures are to be used that assist in conserving water such as:-

- installing an electronically controlled and rain switched irrigation system;
- use of indigenous species best suited to the local climate and soil conditions;
- use of mulches and groundcovers to retain soil moisture; and
- minimising lawn and using native grasses for lawn and maximising gardens.

(f) Landscaping is to be provided in accordance with the provisions set out in Part C Section 3 – Landscaping.

(g) Grassed embankments are not to exceed an 1:6 slope.

(h) Earth mounding is desirable within setback areas to reduce noise-associated impacts.

(i) All landscaped areas are to have a minimum width of 2 metres.

SUBMISSION REQUIREMENT

- Landscape plan.

2.16. CARPARKING

OBJECTIVES

(i) To ensure the safety of all road users in industrial areas.

(ii) To ensure that all car parking demands generated by the development are accommodated on the development site.

(iii) To protect the free flow of traffic into and out of the industrial allotments and the surrounding street network.

(iv) To ensure that the provision of off-street parking facilities does not detract from the overall visual amenity and character of the neighbourhood in relation to streetscape.

DEVELOPMENT CONTROLS

(a) Car parking is to be in accordance with Part C Section 1 – Parking.

(b) Other than within the Edwards Road Precinct, Buildings/units with a floor area between 100 square metres and 150 square metres require a minimum of three car parking spaces.

(c) Visitor car parking is to be provided at a rate of 1 space for every 2 units constructed.

(d) All car parking required by Council shall be provided on-site.

(e) Minimum parking dimensions and construction standards are detailed in Part C Section 1 – Parking.

(f) A two metre wide landscape strip is to be provided after every tenth parking space.

(g) Car parking areas that adjoin public roads or spaces are to be visually screened by landscaping.

(h) Disabled parking provision is to be provided in accordance with Australian Standard 2890.6.

SUBMISSION REQUIREMENTS

- Site Plan showing the number of car parking spaces and calculations.

2.17. VEHICULAR ACCESS

OBJECTIVES

(i) To ensure the safety of all road users in industrial areas.

(ii) To ensure that vehicles can enter and exit premises in industrial areas in a safe and efficient manner.

(iii) To maintain the performance of roads that provides an arterial or sub-arterial function.

DEVELOPMENT CONTROLS

(a) Adequate vehicular entry and exit from the development is to be provided and shall be designed to provide a safe environment for both pedestrians and vehicles using the site and surrounding road networks.

(b) All internal roadways are to have a minimum width suitable to the proposed industrial activities of the site. Road widths will be assessed on the individual merits of the road design and layout and are subject to approval by Council.

(c) Vehicular access to and from developments across frontages marked "ACCESS DENIED" on the DCP sheet map is prohibited. Access is limited to designated locations as shown on the DCP sheet map.

(d) Vehicular ingress and egress to the site must be in a forward direction at all times.

(e) Driveways from public roads will be:

- perpendicular to the road within the building setback;
- separated or divided at the property boundary for ingress and egress movements; and
- sight distance are to be in accordance with Part C Section 1 – Parking and Council's Design Guidelines for Subdivisions/ Developments.

(f) All roads intended to be dedicated to Council, as public roads shall be constructed to Council's requirements.

(g) All road frontages to a development site (other than those identified within Council's Contribution Plan) are required to be constructed prior to the issue of any occupation certificate.

For the redevelopment of Lot 4 DP 616348, 912-914 Old Northern Road, Glenorie:

(h) Kerb and gutter is to be provided to the Old Northern Road and Whites Road frontages of the site.

(i) A 3.5 metre footpath reservation must be provided to both frontages in addition to widening of the pavement (road carriageway) in Whites Road so that a 13 metre wide pavement can be achieved.

(j) Pavement widening will also be required in Old Northern Road from the new kerb to the existing edge of bitumen in accordance with Roads and Maritime Services requirements.

SUBMISSION REQUIREMENT

- Applicants are required to submit plans and details with the Development Application of proposed vehicular access and circulation.

Details must specifically relate to vehicular movement, layout and turning circles.

2.18. BICYCLE PARKING

Cycling is a healthy, low cost, environmentally friendly form of transport that offers a flexible and low-impact alternative to the use of private motor vehicles.

OBJECTIVES

(i) To make it easier and more convenient for people to travel to and from places using bicycles.

(ii) To reduce the rate at which the demand for car travel increases in the future, thereby helping to improve air quality.

DEVELOPMENT CONTROLS

(a) Bicycle parking facilities are required for all new industrial developments. At a minimum these facilities are required to be provided for:-

- any new development, which exceeds 4,000m^2 in floor area; and
- any developments which will have the effect of increasing the size of the total development to greater than 4,000m^2.

(b) Bicycle parking spaces for the above developments are to be provided at a minimum rate of 2 spaces plus 5% of the total number of car parking spaces required for the development. Consideration should be given to the provision of undercover facilities.

(c) Bicycle parking should be located in close proximity to the building entrances and clustered in lots not exceeding 16 spaces.

(d) Bicycle parking facilities shall support bicycles in a stable position without damage to wheels, frames or other components.

(e) Bicycle parking facilities should be located in highly visible, illuminated areas to minimise theft and vandalism.

(f) Bicycle parking facilities shall be securely anchored to the site surface so they cannot easily be removed and shall be of sufficient strength to resist vandalism and theft.

(g) Bicycle parking facilities shall not impede pedestrian or vehicular circulation and should be in harmony with their environment and design. Parking facilities should be incorporated wherever possible into building or street furniture.

(h) Racks must not be placed so close to any wall or other obstruction so as to make use difficult.

(i) Bicycle parking facilities within car parking areas shall be separated by a physical barrier to protect bicycles from damage by cars, such as curbs, wheel stops or other similar features.

(j) Each bicycle parking space shall be not less than 1.8 metres in length and 600mm in width and shall have a bicycle rack system.

(k) Consideration should be given to providing staff change rooms and washing facilities.

2.19. LOADING FACILITIES

OBJECTIVES

(i) To ensure that loading facilities required in association with developments do not detract from the amenity of nearby public spaces and residential land uses.

(ii) To ensure that adequate areas are set aside on site to allow for the safe and efficient manoeuvring of delivery and service vehicles.

DEVELOPMENT CONTROLS

(a) Loading docks shall be located so as they are not visible from adjoining residential areas and do not transmit excessive noise to adjoining residential areas.

(b) Where practical, loading docks or vehicular entries to industrial buildings shall not be provided on any street elevation. Where such facilities can only be provided to street frontages, they must be screened with landscaping.

(c) Turning provisions are to be provided within the site for the manoeuvring of vehicles using the loading and unloading facilities in accordance with AUSTROADS Design Vehicular and Turning Templates.

(d) Loading dock facilities are to be able to serve the types of trucks likely to service the development.

SUBMISSION REQUIREMENTS

- Plans and details of proposed vehicular access and circulation detailing vehicular movement, layout and turning circles.
- Plans and details that demonstrate that the loading dock facilities are adequate to serve the development.

2.20. ACCESS AND MOVEMENT

OBJECTIVES

(i) To ensure that developers comply with the provisions of the Disability (Access to Premises – Buildings) Standards and Australian Standard AS1428.1, in regard to appropriate and improved access and facilities for all persons.

(ii) To require designers/developers to provide for the needs of people who are mobility impaired and to provide greater than minimum requirements for access and road safety.

(iii) To ensure that building design does not prevent access by people with disabilities and incorporate measures appropriate for people with disabilities.

DEVELOPMENT CONTROLS

(a) All new buildings and alterations and additions to existing buildings must comply with the requirements of the Disability (Access to Premises – Buildings) Standards.

(b) Accessible car parking spaces should be designed to comply with Australian Standard AS2890.6.

(c) All internal and external pathways and ramps should conform to the minimum dimensional requirements set out in AS1428.1 Design for Access and Mobility.

(d) Where newly created floor space or additional floor space (which exceeds 25% of the total existing floor space) is being proposed, a concrete footpath must be constructed in the road verge along any boundary that fronts a public road. The pathway must be completed prior to occupation and is to be constructed in accordance with Council's specifications.

(e) Clearly defined pedestrian pathways are to be provided between proposed developments and proposed footpaths along sub-arterial roads.

SUBMISSION REQUIREMENTS

- Documentation to demonstrate how the objectives and development controls have been satisfied.
- Any application for new buildings **or** alterations and additions where the floor area of the building is increased by 50% or more; must be accompanied by an access report prepared by a suitably qualified person, demonstrating the proposed developments ability to comply with the Disability (Access to Premises – Buildings) Standards.

2.21. SERVICES

OBJECTIVES

(i) To ensure that the physical services necessary to support industrial development are available.

(ii) To ensure that all uses are compatible with the workings and operations of the Integral Energy Electricity Easement.

(iii) To ensure public safety is not compromised.

(iv) To provide a suitable buffer for noise and emissions from any Sewage Treatment Plant (STP).

DEVELOPMENT CONTROLS

(a) Development consent will not be granted until arrangements satisfactory to the relevant authorities are made for the provision of services.

(b) Development restrictions apply within electricity easements and developers and landowners are required to gain approval from Integral Energy for all activities and works carried out within the easement in addition to complying with Council requirements. An indication of activities that require approval and activities that are prohibited are listed in Figure 1 below.

(c) All developments within the Rouse Hill STP buffer zone must have regard for the former

DUAP Circular No. E3. The buffer zone is bounded by:-

- Annangrove Road to the northwest;
- Withers Road to the southwest;
- Mile End Road to the southeast; and
- a line extending from the junction of Annangrove Road and Edwards Road the junction of Second Ponds Creek and the unformed Hillview Road;

(d) All services shall be underground and installation of services should occur in a co-operative manner for efficiency and to minimise ground disturbance.

(e) Sites within the Rouse Hill Release Area must be connected to the Sydney Water Recycled Water System.

Figure 1 – Integral Energy Requirements

The requirements below are relevant for sites that contain electricity easements. There are a number of large easements in the Annangrove Road Industrial Area

Some of the activities that require Trans Grid approval include:

- burning off or the lighting of fires;
- the operation of mobile plant or equipment having a height when fully extended in excess of 4.3 metres;
- the installation of utility services such as low voltage electricity, telephone and water lines, whether overhead, underground or on the surface;
- the construction of outbuildings including sheds, stables, garages and carports, where there is no suitable site clear of the easement area (encroachments beyond 3 metres will not be permitted);
- the construction of unroofed verandahs and pergolas attached to dwellings;
- the development of subdivisions for residential and industrial purposes;
- the construction of roads;
- the construction of in-ground or above ground swimming pools;
- the construction of tennis courts;
- excavation and major earth works/regrading; and
- the erection of fencing.

However, there are several activities, which are prohibited and include the following:

- the construction of, whole or parts of, dwellings, buildings or other substantial structures;
- the installation of fixed plant or equipment;
- the storage of flammable liquids or explosives;
- the placing of garbage, refuse or fallen timber;
- the planting or cultivation of trees or shrubs which grow to a height exceeding 4 metres; and
- the placing of obstructions of any type within 15 metres of any transmission line structure or supporting guy.

SUBMISSION REQUIREMENTS

- Evidence of suitable arrangements with the following are required to be submitted with Development Applications:
  - Sydney Water for potable and recycled water, sewage and drainage;
  - Telecommunications carrier for telephones and associated equipment;
  - Integral Energy for underground electricity;
  - AGL for gas supplies; and
  - NSW Fire Brigades.
- Documentation to demonstrate how the objectives and development controls are satisfied.
- Any land or part thereof, covered by the buffer zone must demonstrate how the objectives and development controls are satisfied.

2.22. STORMWATER MANAGEMENT

OBJECTIVES

(i) To ensure that industrial development does not impact on the water quality of adjacent properties or creeks.

(ii) To provide for the disposal of stormwater from the site in efficient, equitable and environmentally sensible ways.

(iii) To encourage the re-use of stormwater for the irrigation of landscaped areas, particularly during establishment periods.

DEVELOPMENT CONTROLS

(a) Water Sensitive Urban Design (WSUD) measures shall be employed in the management of the site's/development's stormwater in terms of water retention, reuse and cleansing.

In all development, two or more of the following water sensitive urban design measures must be implemented in the development:-

M1 Low Impact Building Design

M2 Low Impact Landscape Design

M3 Porous Paving

M4 Rainwater Utilisation – toilet, hot water

M5 On-Site Infiltration System

M6 Stormwater Treatment System

M7 Infiltration or Retention Basin

M8 Stormwater Utilisation – irrigation

Development in the Kellyville Rouse Hill Release Area must connect to the Sydney Water Recycled Water System. This connection will be accepted as one of the two WSUD measures required instead of any rainwater re-use system.

Details on the actions required to implement each of these measures is included in Appendix B – Water Sensitive Urban Design of The Hills DCP.

(b) Installation of rainwater tanks requires consent from Sydney Water. A condition will be imposed on any approval requiring this consent be obtained.

(c) No adverse effects are to be experienced by downstream landowners from discharges from sites that slope down from the fronting street.

(d) Discharge points are to be accessible for water quality testing.

(e) Discharge points are to be controlled and treated to prevent soil erosion, and may require energy dissipating devices on steeper topography, to Council's requirements.

(f) On-site detention may be required to Council's satisfaction to counteract an increase in stormwater runoff.

(g) In order to protect the natural and built environment, all water leaving the site is to be treated for the removal of all sediments, heavy metals, pollutants and other contaminants that may be produced by the industrial and associated activities on site.

(h) The design of drainage systems is to be in accordance with Council's Design Guidelines for Subdivisions/ Developments.

(i) The requirements of the Office of Water must be satisfied.

Note. For any development proposed within the Annangrove Road Light Industrial Area as shown on Appendix A – Precinct Based Development Control Plans Sheet No.6 to this Section of the DCP, an applicant is required to consult with Council's Health & Environment Department to determine if the proposed development is in an area identified as having known salinity hazard.

If the proposed development is identified in an area of known salinity hazard, reference should be made to the Western Sydney Salinity Code of Practice, March 2003, for guidelines for recommended site investigations, appropriate salinity management responses and preparation of a site specific salinity management plan.

Whilst the majority of WSUD techniques identified in this Section of the DCP emphasise infiltration as a means of managing stormwater quality and quantity, there are several alternative methods available which are not in conflict with salinity issues and still focus on reducing overall water usage. Such techniques should still be incorporated within the design of new development.

SUBMISSION REQUIREMENTS

- Preliminary Engineering Drainage Drawings indicating the proposed drainage infrastructure.
- Method of pollutant removal during and after development.
- If required, easements are to be created over downstream properties prior to the Council granting an operative development consent.

2.23. WATER EFFICIENCY

OBJECTIVES

(i) To reduce the water consumption of apartment building developments.

(ii) To recycle and re-use water in developments in accordance with Council's ESD objective 3.

DEVELOPMENT CONTROLS

(a) Showerheads and taps must have reduced water flow devices. Taps may also be aerated.

(b) Toilet cisterns must have a "AAA" (dual flush 3/6 litre) rating.

(c) All other appliances and fittings must be water efficient, preferably with a "AAA" water rating.

(d) Water cooled air conditioning systems are discouraged. If a water cooled system is to be used bleed rates should be linked to TDS meters.

(e) Installation of a metering system that measures mains water used in different areas of the site enables monitoring and detection of excess water usage.

SUBMISSION REQUIREMENTS

- Details of appliances, fittings and tanks to be used in the development.

2.24. POLLUTION CONTROL

OBJECTIVES

(i) To ensure that pollution sources are contained on site and not transmitted to non-compatible land uses.

(ii) To ensure the environmental and social qualities of the surrounding areas are maintained.

DEVELOPMENT CONTROLS

(a) All developments are restricted to sewered sites.

(b) The emission of air impurities, as defined under the Protection of the Environment Operations Act 1997, is to be controlled to the satisfaction of Council at all times.

(c) Certain uses may be required to be licensed under the Protection of the Environment Operations Act 1997.

(d) Any machinery or activity considered to create a noise nuisance must be adequately soundproofed in accordance with the provisions of the Protection of the Environment Operations Act 1997.

(e) The use of mechanical plant and equipment may be restricted where sites are located near existing and proposed residential areas.

(f) Incinerators are not permitted for waste disposal.

SUBMISSION REQUIREMENT

- Documentation to demonstrate how the objectives and development controls are satisfied.

2.25. WASTE MANAGEMENT – STORAGE AND FACILITIES

OBJECTIVES

(i) To minimise the overall environmental impacts of waste.

(ii) To maximise, through design, the opportunities to deal with industrial waste according to the waste hierarchy as given in Council's ESD objective 6 – reduce, reuse, recycle.

(iii) To reduce the demand for waste disposal by providing detailed criteria for the consideration of design and management of recycling, composting and waste storage and collection facilities within developments.

(iv) To provide industrial waste management systems that allow for ease of use by occupants and ease of service by collection contractors.

(v) To encourage building designs and construction techniques that will minimise waste generation.

(vi) To assist in achieving Federal and State Government waste minimisation targets.

(vii) To promote development design that is appropriate and provides convenient waste storage, recycling and collection facilities on site.

DEVELOPMENT CONTROLS

(a) Adequate storage for waste materials must be provided on site. Ideally waste storage containers should be kept inside units and under no circumstances should waste storage containers be stored in locations that restrict access to any of the car parking spaces provided on site.

(b) All waste must be removed at regular intervals and not less frequently than once per week.

(c) All waste storage areas must be screened from view from any adjoining residential property or public place.

(d) Waste storage areas must be kept clean, tidy and free from offensive odours at all times.

(e) Applications for development are to be accompanied by a Waste Management Plan (WMP). The WMP accompanying the application must demonstrate appropriate design of facilities and on-going management techniques that

minimise waste and the WMP will include the following details:

- Type of future use for the development;
- Types of waste to be generated;
- Estimated volume of waste to be generated per week;
- Show on plans and describe on-site storage and/or treatment facilities for waste; and
- State the destination for waste produced.

A Trade Waste Licence is required for the disposal of wastewater from any proposed industrial development, prior to the issue of a Construction Certificate. A Trade Waste Licence must be obtained from Sydney Water before discharge into the sewer can commence. A Trade Waste application can be obtained from Sydney Water at the Section 73 Certificate application stage.

Appendix A of The Hills DCP contains a Waste Management Plan Template that can assist in the preparation of a Waste Management Plan.

2.26. WASTE MANAGEMENT PLANNING

OBJECTIVES

(i) To promote improved project management and to reduce the demand for waste disposal during demolition and construction.

(ii) To maximise reuse and recycling of building/construction materials.

(iii) To encourage building designs and construction techniques that will minimise waste generation.

(iv) Minimise waste generation to landfill via the waste hierarchy.

(v) To assist in achieving Federal and State Government waste minimisation targets.

2.26.1. DEMOLITION

DEVELOPMENT CONTROLS

(a) Site operations should provide for planned work staging, at source separation, re-use and recycling of materials and ensure appropriate storage and collection of waste.

(b) Straight demolition should be replaced by a process of selective deconstruction and reuse of materials. Careful planning is also required for the correct removal and disposal of hazardous materials such as asbestos and is to be carried out by persons accredited from Workcover in accordance with Office of Environment and Heritage requirements.

(c) Project management must seek firstly to re-use and then secondly to recycle solid waste materials either on or off site. Waste disposal to landfill must be minimised to those materials that are not re-useable or recyclable.

(d) When separated, materials are to be kept uncontaminated to guarantee the highest possible reuse value.

(e) Details of waste sorting areas and vehicular access are to be provided on plan drawings.

(f) Prior to any demolition works commencing on the site, the applicant is to notify all adjoining and adjacent neighbours and Council, five (5) working days prior to work commencing.

(g) All Asbestos, hazardous and/or intractable wastes are to be disposed of in accordance with Work Cover Authority and Office of Environment and Heritage requirements.

2.26.2. CONSTRUCTION

DEVELOPMENT CONTROLS

(a) Avoid oversupply and waste of materials by careful assessment of quantities needed.

(b) The use of prefabricated components may reduce waste.

(c) Re-use of materials and use of recycled material is desirable where possible.

(d) Site operations should provide for planned work staging, at source separation, re-use and recycling of materials and ensure appropriate storage and collection of waste.

(e) All asbestos, hazardous and/or intractable wastes are to be disposed of in accordance with Work Cover Authority and Office of Environment and Heritage requirements.

SUBMISSION REQUIREMENTS

- Waste Management Plan

2.27. HERITAGE

OBJECTIVES

(i) To ensure that the development of land does not isolate a heritage item from its setting or context, thereby retaining the heritage item's significance.

(ii) To ensure that the development of land in the vicinity of a heritage item is undertaken in a manner that has regard to the significance of the heritage item, particularly its setting and context.

(iii) To ensure that any development within the Annangrove Road light industrial area does not have an adverse impact on the setting and views and panoramas to and from Rouse Hill House Estate.

DEVELOPMENT CONTROLS

(a) In considering Development Applications, Council shall have regard for the visual impact of the development when viewed from the surrounding area.

(b) All developments must address the provisions of Part C Section 4 – Heritage.

(c) State Regional Environmental Plan No. 19 – Rouse Hill Development Area contains specific controls for the Second Ponds Creek Light Industry Area with regard to the visual amenity when viewed from Rouse Hill Regional Park.

(d) Any development within the light industrial area south of Annangrove Road as shown in Map Sheet 7 of this Section of the DCP is to mitigate the impact of the development upon Rouse Hill House Estate via the following measures:

- Where the building will be visible from the Rouse Hill House Estate, a combination of native trees and shrubs endemic to the area are to be used to screen views of the building and all associated hard paved areas (such as car parks, loading areas and driveways);
- All buildings are to be low profile in design so as to reduce the apparent or visual bulk of the structure;
- All external building materials are to be non-reflective and of a colour consistent with the surrounding natural environment and vegetation;
- Roofing material in particular should be of a dark, non-reflective colour (such as dark green or grey) which recedes visually within the surrounding natural landscape; and
- The maximum height of any freestanding signage is 3 metres. Consideration will be given to an increase in the maximum height, provided:
  - The applicant can demonstrate it will not be visible from Rouse Hill House Estate; or
  - The structure is of a design, colour and utilises materials which are considered by Council to mitigate the visual prominence of the signage when viewed from Rouse Hill House Estate.
- Where possible existing remnant mature trees should be retained particularly along existing road reserves and building setbacks should include supplementary plantings of native trees to ensure that buildings are seen within a canopy of trees when viewed from the Estate.
- Any tall structures such as light towers or flagpoles should be of a dark, non-reflective colour (such as dark grey or green) and should be sited carefully so as not to obstruct critical sightlines to and from Rouse Hill House Estate.

SUBMISSION REQUIREMENTS

- Submit applicable documentation in the Development Application to demonstrate how the objectives and development controls are satisfied.
- Any application for development within the light industrial area south of Annangrove Road as shown in Map Sheet No.6 of this Section of the DCP must provide details of proposed external colours, materials, finishes and landscaping and any other supporting documentation in order to demonstrate how the development will minimise visual impact upon Rouse Hill House.

2.28. DEVELOPER CONTRIBUTIONS

Applicants should refer to Council's Section 94 Contributions Plan No. 11 - Annangrove Light Industrial Area.

2.29. SEX SERVICES PREMISES

Refer to Appendix B for development controls specific to sex services premises.

2.30. EDWARDS ROAD PRECINCT

Refer to Appendix C for development controls specific to development within the Edwards Road Precinct.

Appendix C applies to the land identified as the Edwards Road Precinct within Sheet 6 of Appendix A – Precinct Plan Maps identified.

In the event of an inconsistency between the development controls contained within Appendix C and another control within this Plan or any other Development Control Plan, the development controls contained within Appendix C will prevail.

3. INFORMATION REQUIRED FOR A DEVELOPMENT APPLICATION

3.1. OCCUPATION / CHANGE OF USE OR INTERNAL ALTERATIONS

COMPLETED DEVELOPMENT APPLICATION FORM

You must have the written consent of all current owners.

CONSTRUCTION CERTIFICATE APPLICATION FORM

Required where any building works or fit-out including erection of partitions, fixtures & signs is proposed as part of the development.

SITE PLAN

Clearly indicating:
- The building to be occupied
- Car-parking spaces allocated to that building
- Location of any signs to be erected

ARCHITECTURAL PLANS

FLOOR PLAN (existing and proposed)

- Elevations

STATEMENT OF ENVIRONMENTAL EFFECTS

The statement must include the following:-

- Statement outlining the exact nature of the proposed business;
- The proposed hours of operation;
- The number of employees;
- Information regarding deliveries (the number of expected deliveries each week, the types of vehicles/truck expected, approximate times they would be expected);
- The number of car spaces allocated to the unit with reference to Part C Section 1 – Parking; and
- Compliance with any other relevant objectives and/or development control of this section of the DCP.

Note. Refer to Part A – Introduction section 4.0 for general lodgement requirements and detailed requirements to be included in each of the above documentation.

Bulky Goods Premises

All applications for Bulky Goods Premises including new development, redevelopment of existing sites or extensions to existing developments, are required to include an Economic Impact Assessment prepared by a suitably qualified consultant. Assessments should describe the extent of the trade area, the impact on the adopted hierarchy of centres and economic justification for the proposal.

3.2. NEW DEVELOPMENTS, EXTENSIONS OR REDEVELOPMENT OF EXISTING SITES

The following plans and details are required for development or redevelopments of light industrial sites as part of the formal submission with the relevant application form(s):

COMPLETED APPLICATION FORM

You must have the written consent of all current owners.

SITE PLAN

In addition to those requirements in Part A 'Site Plan', the following additional features are to be indicated on the site plan:

- Types of materials with samples;

- An assessment of potential noise impacts on adjoining developments.

SITE ANALYSIS

ARCHITECTURAL PLANS

- Floor Plan (existing and proposed)
- Elevations

LANDSCAPE PLAN

- These plans are to be in accordance with Part C Section 3 - Landscaping.

EARTHWORKS PLAN

- Existing and proposed levels/contours.

SIGNAGE PLAN

- Signs to be erected/replaced.
- See Part C Section 2 – Signage and the Fact Sheet for Advertising Signs.

STREETSCAPE PERSPECTIVE

- A colour perspective of proposed building(s) is required.

STATEMENT OF ENVIRONMENTAL EFFECTS (SEE)

Note. Refer to Part A – Introduction section 4.0 for general lodgement requirements and detailed requirements to be included in each of the above documentation.

Bulky Goods Premises

All applications for Bulky Goods Premises including new development, redevelopment of existing sites or extensions to existing developments, are required to include an Economic Impact Assessment prepared by a suitably qualified consultant. Assessments should describe the extent of the trade area, the impact on the adopted hierarchy of centres and economic justification for the proposal.

4. REFERENCES

Baulkham Hills Shire Council, 1993 Kellyville/Rouse Hill Landscape and Urban Design Strategy.

Baulkham Hills Shire Council, 1993 Kellyville/Rouse Hill Open Space Plan.

Blacktown Council, 1992 Development Control Plan PART E - Development in the Industrial Zones.

Department of Environment and Planning, 1981 Technical Bulletin 14: Guidelines for Site Landscaping of Commercial and Industrial Development.

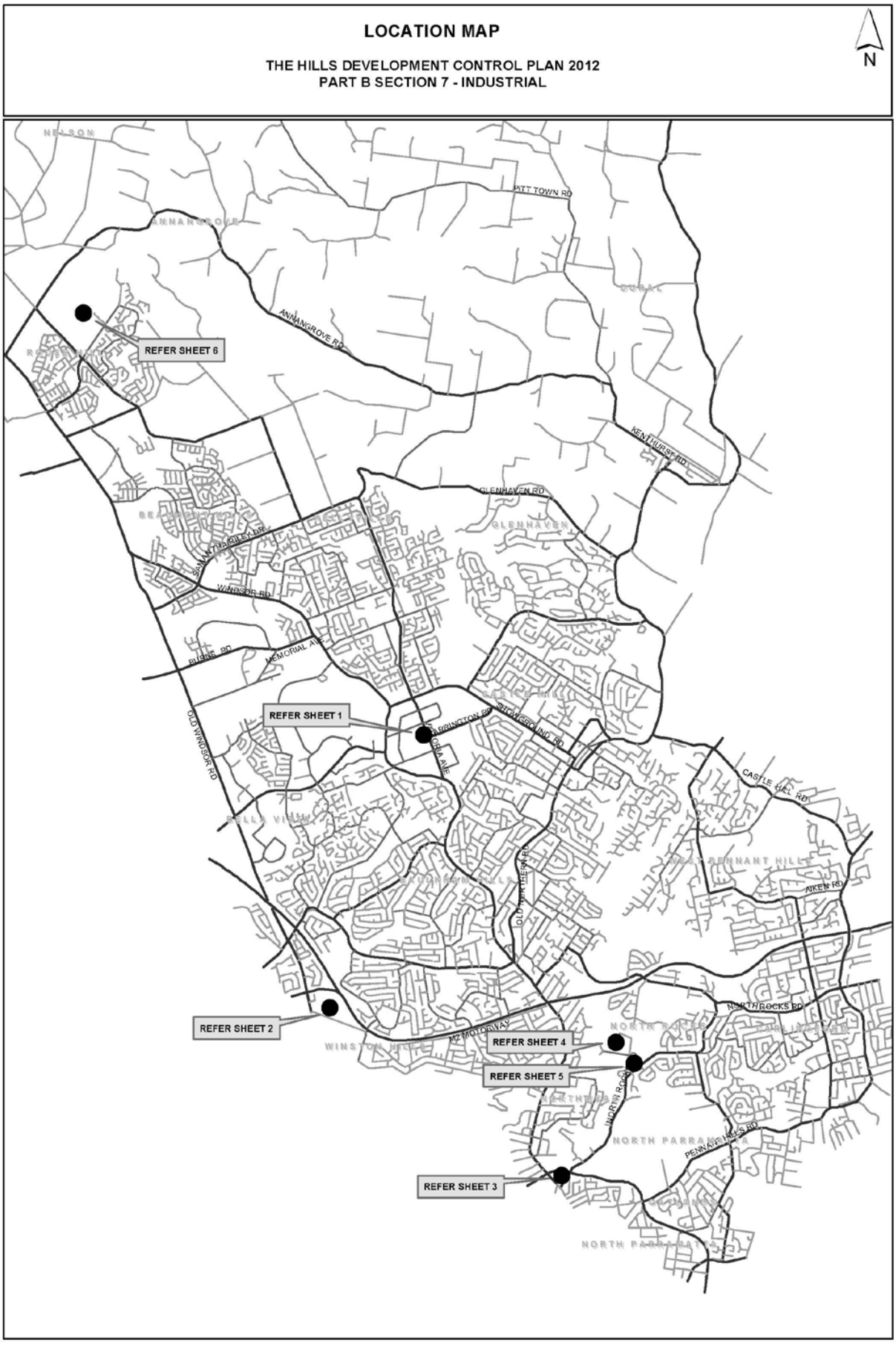
Department of Urban Affairs and Planning, 1988 Rural Land Evaluation: A Manual for Conducting a Rural Land Evaluation Exercise at the Local Planning Level. Department of Urban Affairs and Planning, Sydney.

Department of Urban Affairs and Planning DUAP Circular No E3 Author.

Donovan I, Cameron C, and Coombes P (1999). Water Sensitive Urban Development: Model Planning Provisions. Lake Macquarie City Council, Speers Point, on behalf of the Lower Hunter and Central Coast Environmental Management Strategy.

Sinclair Knight Merz, 1996 Kellyville Traffic and Parking Study. Prepared for Baulkham Hills Shire Council. Author.

APPENDIX A – PRECINCT BASED DEVELOPMENT CONTROL PLAN


LOCATION MAP
THE HILLS DEVELOPMENT CONTROL PLAN 2012
PART B SECTION 7 - INDUSTRIAL
N
NELSON
ANNANGROVE
PITT TOWN RD
ANNANGROVE RD
GLENHAVEN
KENTHURST RD
GLENHAVEN RD
WINDSOR RD
MEMORIAL AVE
BUSBYS RD
OLD WINDSOR RD
ALBRINGTON RD
SHOWGROUND RD
GLOBE LANE
CASTLE HILL RD
AIKEN RD
OLD NORTHERN RD
NORTHROCKS RD
M2 MOTORWAY
INGRAM RD
PENNANT HILLS RD
REFER SHEET 1
REFER SHEET 2
REFER SHEET 3
REFER SHEET 4
REFER SHEET 5
REFER SHEET 6
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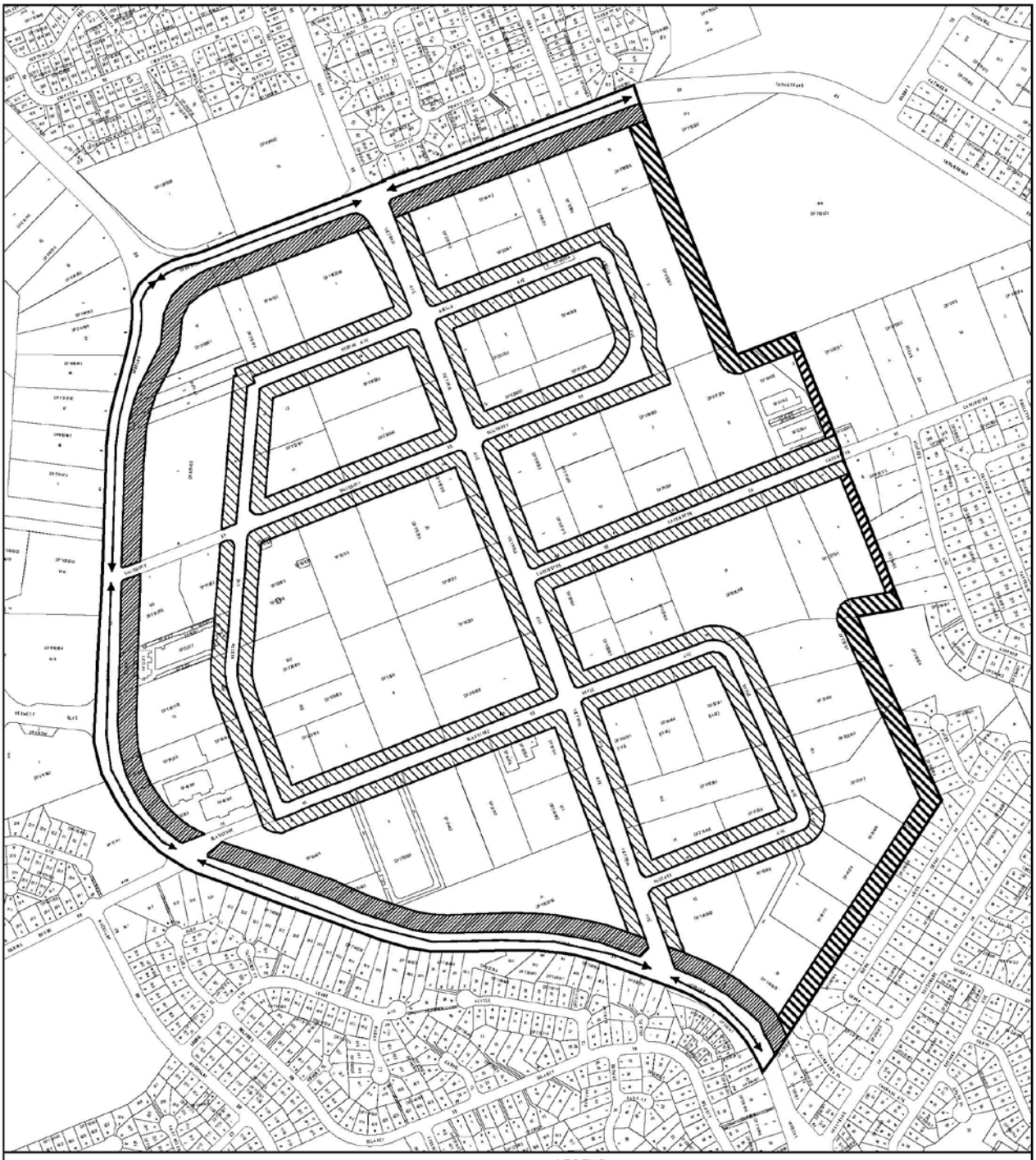

LEGEND

ARTERIAL ROADS

30 METRES BUILDING SETBACK WHERE CAR PARKING IS SITUATED FORWARD OF THE BUILDING OR 20 METRES BUILDING SETBACK WITH NO CAR PARKING FORWARD OF THE BUILDING

SHEET BOUNDARY

INTERNAL ROADS

23 METRES BUILDING SETBACK WHERE CAR PARKING IS SITUATED FORWARD OF THE BUILDING OR 15 METRES BUILDING SETBACK WITH NO CAR PARKING FORWARD OF THE BUILDING

ACCESS DENIED

30 METRES BUILDING SETBACK

15 METRES BUILDING SETBACK

N

SCALE: 1:6,000

50 25 0 50 100 150 200 Metres

LOCALITY: CASTLE HILL INDUSTRIAL AREA

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 7 Map Sheet 1 of 6 - Industrial

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SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2006	
PLANNING OFFICER	A. HOWARTH	DATE 20/10/2006	Date of Adoption: Minute No. Came into Force:
FILE No.	FP 171		

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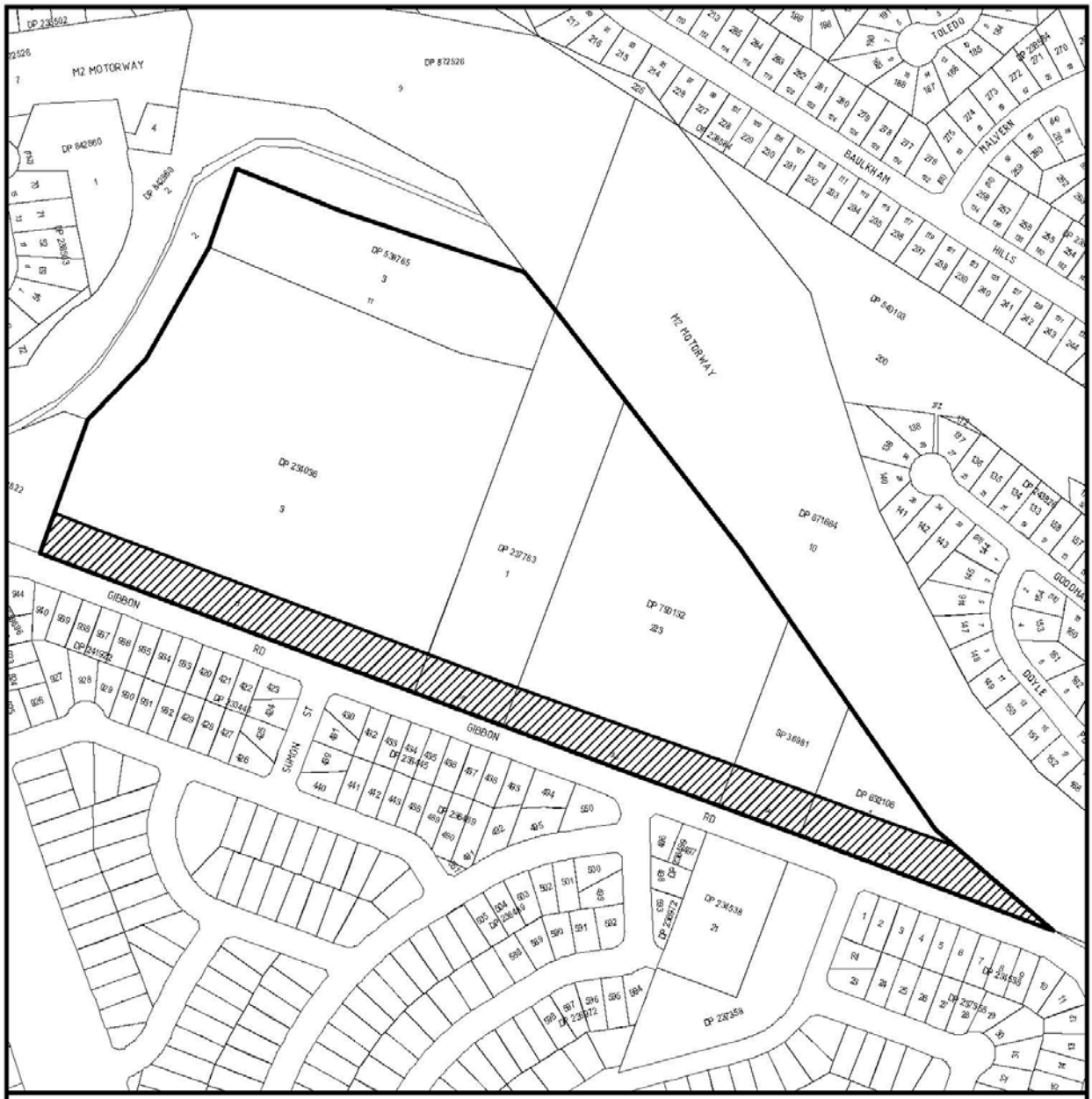

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 7 Map Sheet 2 of 6 - Industrial

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STATEMENT OF RELATIONSHIP WITH OTHER PLANS
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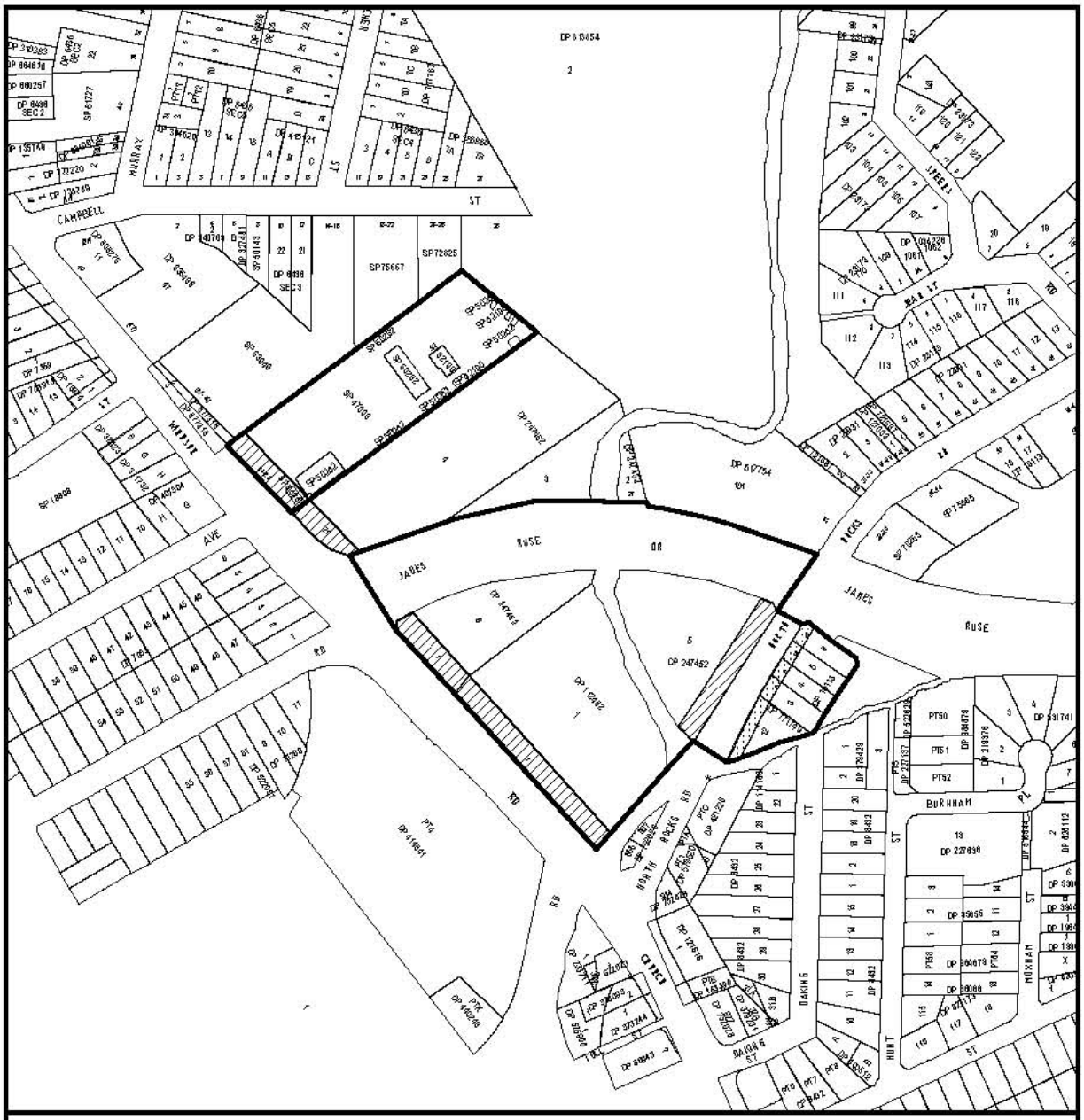

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 7 Map Sheet 3 of 6 - Industrial

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PLANNING OFFICER	A. HOWARTH	DATE 20/10/2006	Date of Adoption: Minute No. Came into Force:
FILE No.	FP 171		

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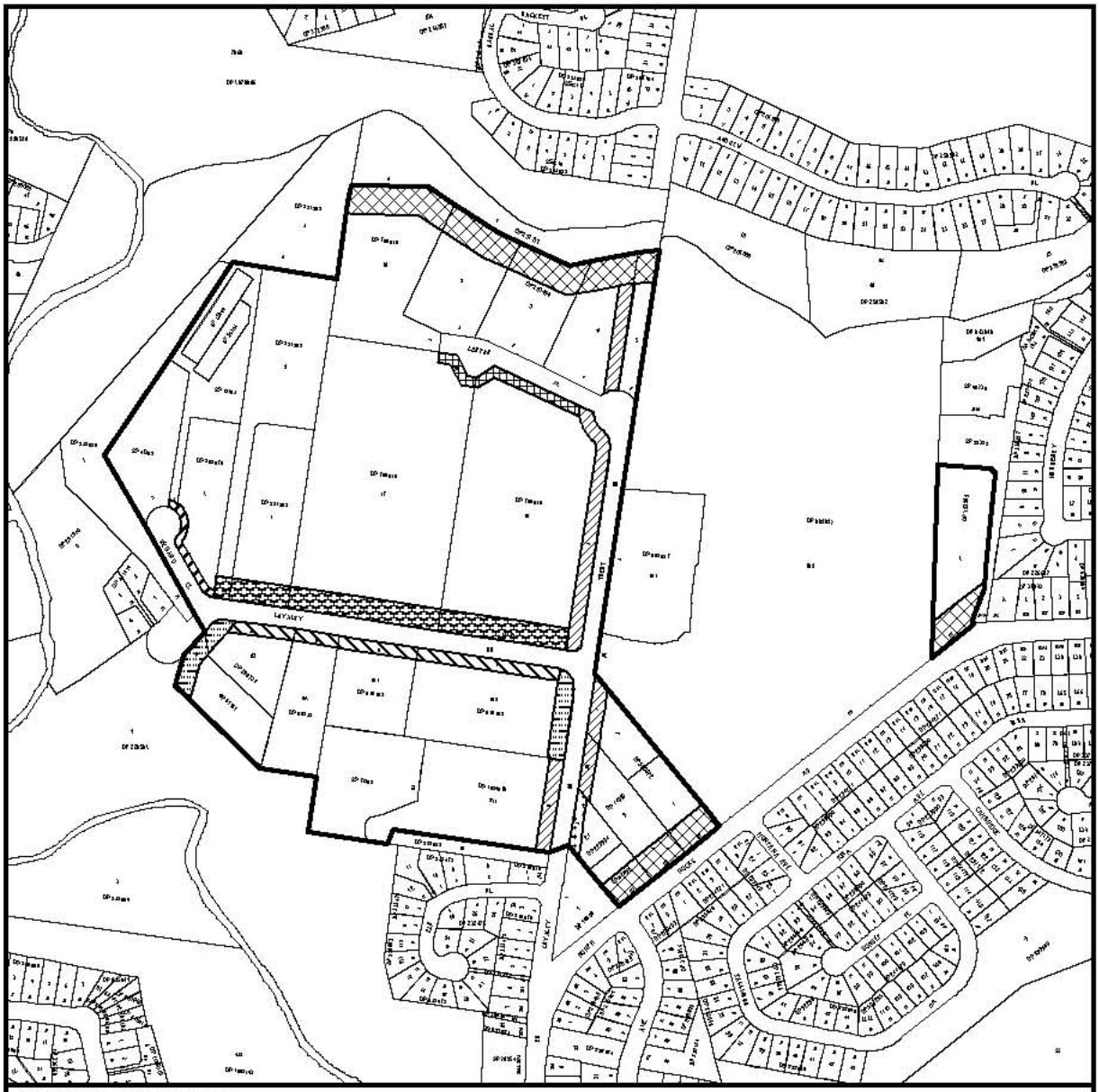

* 10 METRES SETBACK SUBJECT TO COUNCIL CONSENT, THE SETBACK MAY BE REDUCED TO 5m ON INDIVIDUAL SITES.

N

SCALE: 1:6,000

50 25 0 50 100 150 Metres

LEGEND

- SHEET BOUNDARY
- 7.5 METRES SETBACK
- 10 METRES SETBACK *
- 11.5 METRES SETBACK
- 13 METRES SETBACK
- 15 METRES SETBACK
- 18 METRES SETBACK
- 23 METRES SETBACK
- 30 METRES SETBACK

LOCALITY: NORTHROCKS INDUSTRIAL AREA

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 7 Map Sheet 4 of 6 - Industrial

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FILE No.	FP 171	

STATEMENT OF RELATIONSHIP WITH OTHER PLANS
This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012

Date of Adoption:
Minute No.
Came into Force:

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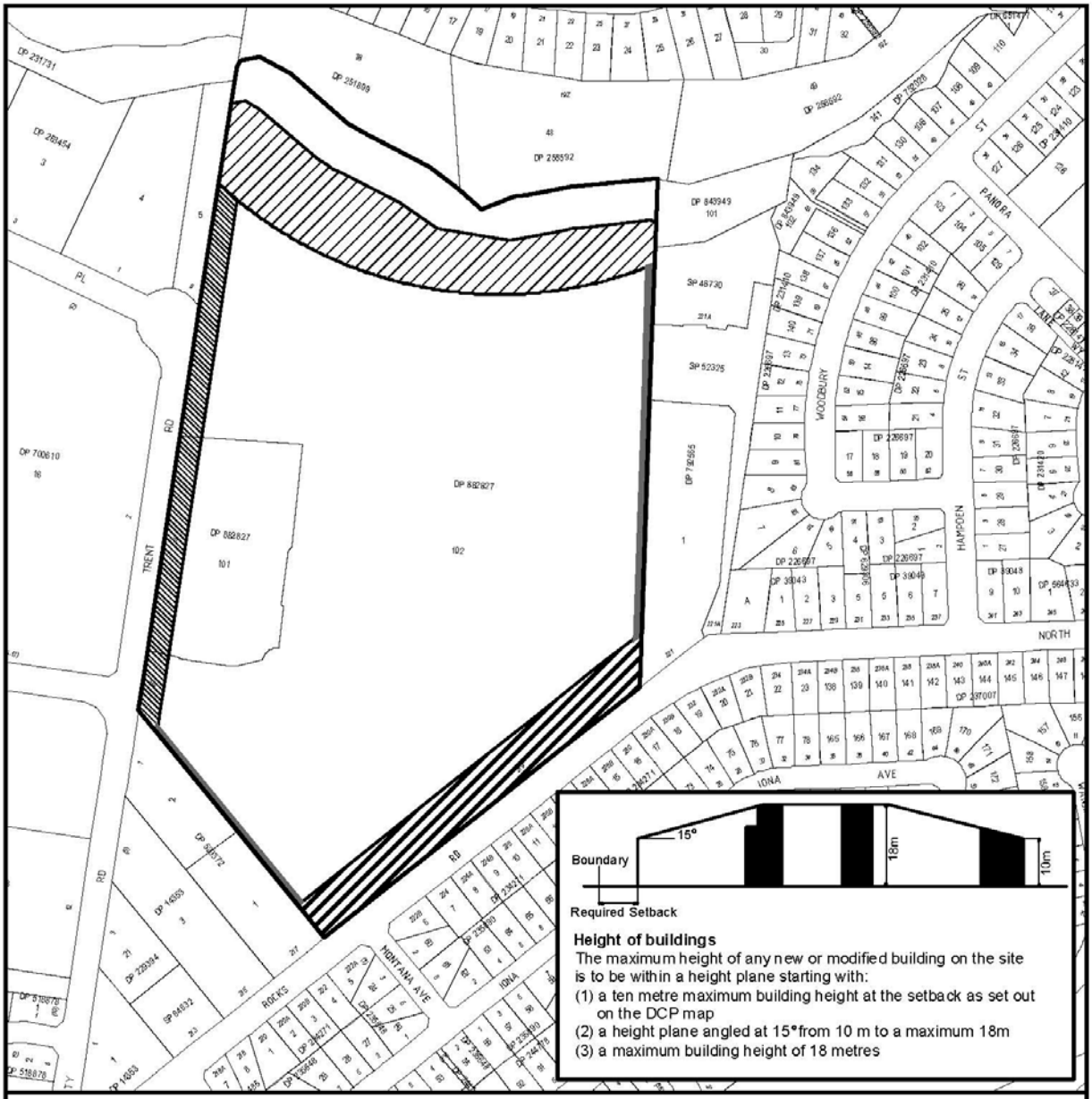

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THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part B Section 7 Map Sheet 5 of 6 - Industrial

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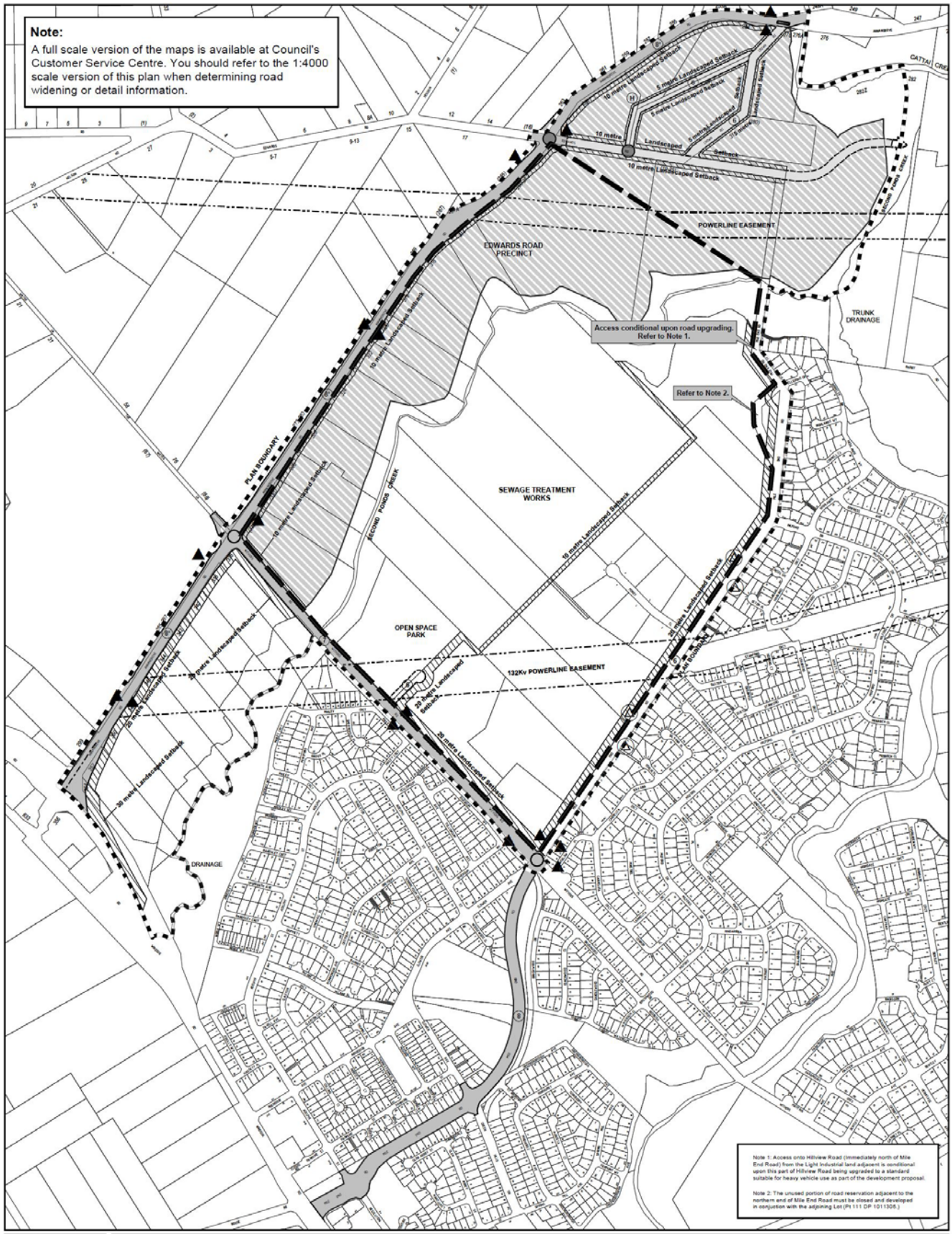
FILE No.	FP 171		

Map Document: S:\Projects\PlanServ\Consolidating_DCP\The_Hills_DCP_2012\Draft\PartB_Sec7\Sheet5\PartB_Sec7_Sh5.mxd


Note:
A full scale version of the maps is available at Council's Customer Service Centre. You should refer to the 1:4000 scale version of this plan when determining road widening or detail information.
EDWARDS ROAD PRECINCT
POWERLINE EASEMENT
TRUNK DRAINAGE
Access conditional upon road upgrading. Refer to Note 1.
Refer to Note 2.
SEWAGE TREATMENT WORKS
OPEN SPACE PARK
132Kv POWERLINE EASEMENT
DRAINAGE
PLAN BOUNDARY
10 metre Landscaped Setback
20 metre Landscaped Setback
Note 1: Access onto Hillview Road (immediately north of Mile End Road) from the Light Industrial land adjacent is conditional upon this part of Hillview Road being upgraded to a standard suitable for heavy vehicle use as part of the development proposal.
Note 2: The unused portion of road reservation adjacent to the northern end of Mile End Road must be closed and developed in conjuction with the adjoining Lot (Pt 111 DP 1011305.)
Part B Section 7 (SHEET 6)
SCALE 1:8,000
0 25 50 100 150 200 Metres
LOCALITY: ROUSE HILL
Road Classification
6 3.5 - 13 - 3.5m
7 5.5 - 12 - 5.5 m
8 2 - 3.5 - 16.2 - 3.5 - 2m
8P 3.5 - 16.2 - 3.5m
Proposed Local Road
Sub-Arterial Road
Arterial Road
Proposed Road
Roundabout
Traffic Signals
Bus Stops (Shelter & Bay, Bay Only)
LEGEND
(H) Heritage Item
STP Buffer Zone
Landscaped Setback (Width as shown on plan)
DCP Sheet Boundary
Edwards Road Precinct
T - Intersection Treatment (Left in Left out)
DRAWN BY B CLISSOLD DATE 28/05/2013
SUPERVISING DRAFTSPERSON B CLISSOLD DATE 28/05/2013
PLANNING OFFICER B WOODHAMS DATE 28/05/2013
FILE No. FP 171
ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979
THE HILLS SHIRE COUNCIL
THE HILLS DEVELOPMENT CONTROL PLAN 2012
Part B Section 7 Map Sheet 6 of 6 - Industrial
STATEMENT OF RELATIONSHIP WITH OTHER PLANS
This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012
Date of Adoption:
Minute No.
Came into Force:

APPENDIX B – DEVELOPMENT CONTROLS FOR SEX SERVICES PREMISES

B1 INTRODUCTION

This Appendix must be read in conjunction with Part A – Introduction of this DCP.

B1.1 LAND TO WHICH THIS APPENDIX APPLIES

This Appendix applies to the location of sex services premises where permissible under The Hills Local Environmental Plan 2012.

B1.2 AIMS AND OBJECTIVES OF THIS APPENDIX

The aim of this Appendix is to identify Council's objectives for the establishment of sex services premises within The Hills Shire and identify controls to ensure the objectives are achieved.

The principal objectives of this Appendix are:

(i) To ensure sex services premises are appropriately located where they do not impact adversely on the character or amenity of the area, and in particular upon residences or other sensitive uses.

(ii) To ensure that sex services premises are discretely situated and not prominent within an area.

(iii) To avoid the concentration of sex services premises or potential creation of 'red light districts'.

(iv) To optimise the safety and security of sex services premises.

B1.3 DEFINITIONS

Refer to the definition of sex services premises in The Hills Shire Local Environmental Plan 2012.

B2 OBJECTIVES AND DEVELOPMENT CONTROLS

The objectives and development controls are set out in the following sections.

In addition to the policies, guidelines and documents specified in section 1.4 of Part A - Introduction, this Section is to be read in conjunction with other relevant Sections including:

- Part C Section 1 - Parking
- Part C Section 2 - Signage
- Part C Section 3 - Landscaping

B2.1 LOCATION

OBJECTIVES

(i) To ensure sex services premises are located where they do not impact adversely on the character and amenity of the area, and in particular upon residences or other sensitive uses.

(ii) To ensure that sex services premises are not concentrated in areas to the extent that their presence is a dominant feature of any streetscape.

DEVELOPMENT CONTROLS

(a) No sex services premises is to be located within a 300 metre radius from the boundary of the nearest property containing any existing, proposed, or approved activity listed below:

Place of public worship, educational establishment, restaurant or cafe, community facility, child care centre, hospital, health—consulting rooms, medical centre, railway station, bus stop, taxi stand, recreation area (such as a public park or children's playground, sporting field, swimming pool, athletics oval, sporting arena, showground), recreation facility (such as a gymnasium, indoor sporting facility), entertainment facility or premises providing youth services such as a scout hall, youth club, residential property, licensed premises, any use which in the opinion of Council is likely to be frequented by children or adolescents, other sex services premises.

Where any of the above uses are located in a unit within an industrial complex, the required

300m distance shall be measured from the individual unit.

The 300m shall be measured as a linear measurement from any boundary of the property on which the premises are located.

(b) No sex services premises is permitted to have frontage to or be located within 100m of a classified road.

SUBMISSION REQUIREMENTS

- Location Analysis including a map demonstrating the required distance from all of the classified roads and uses listed above both within The Hills Shire and any adjoining Local Government Area.
- Social Impact Assessment undertaken by a professional with expertise in social impact assessments. Refer to Part A – Introduction of the DCP for the full details required to be submitted.

B2.2 OPERATION AND MANAGEMENT

OBJECTIVE

(i) To ensure that sex services premises operate in a manner that is compatible with adjoining and surrounding land uses.

DEVELOPMENT CONTROLS

(a) Sex services premises must be operated in a discreet manner, so as not to cause disturbance from noise, lighting, advertising or the activities of employees or customers.

(b) The interior of the premises must not be visible from any place in the public domain.

(c) All activities and displays associated with the operation of the sex services premises shall be contained wholly within the building.

(d) Window displays are not permitted and under no circumstances shall the workers display themselves in the windows or doorways of the subject premises.

(e) No merchandising relating to the sex services premises is to be displayed at any entry or access corridor including stairwell to the premises.

(f) Spruikers (staff at the door or outside the premises who encourage patrons to enter) are not permitted in the operation of any sex services premises.

(g) A reception/waiting area shall be provided for clients within the front of the premises and this area shall be kept transparent at all times.

(h) Adequate security measures are to be in place, to ensure the safety and well-being of staff and clients whilst the premises is operational.

(i) All sex services premises shall comply with the relevant provisions of the "Health and Safety Guidelines for Brothels" published by WorkCover NSW.

(j) A public address system or sound amplifying equipment shall not be installed in or on the premises.

(k) The preparation and serving of food and drinks to clients is not permitted.

SUBMISSION REQUIREMENTS

- Detailed Plan of Management. The Plan of Management should cover the operation of the sex services premises in terms of such matters as:
  - Security and lighting, waste management, cleaning, dealing with antisocial behaviour, worker and client health education, laundry and parking arrangements.
  - Name and contact details of the operator(s) and manager(s);
  - ABN, registered business name, trading name and insurance.
  - Record keeping procedures for employees;
  - The procedure for recording and dealing with complaints regarding the operation of the premises or the behaviour of visitors arriving or leaving the premises;
  - All of the above information, approvals for the establishment of the premises, the Plan of Management are to be made

available to the public and be kept on the premises at all times. Confidential information on employee details is not expected to be released to the public.

Note. The consent authority must be advised of any changes in ownership.

B2.3 SAFETY AND SECURITY

OBJECTIVES

(i) To maximise the safety and security of patrons, clients and workers at all times.

(ii) To reduce the likelihood that sex services premises will be associated with criminal activities.

DEVELOPMENT CONTROLS

(a) Security surveillance equipment shall be installed throughout the premises with cameras located in every major area of public activity, particularly public entries, hallways, stairs and car parking areas. The equipment shall be monitored from a central location within the sex services premises by the manager.

(b) Surveillance footage shall be recorded, labelled with times and dates and kept for a minimum of one (1) month, and shall be made available to the Police and Council on request.

(c) Any room used or capable of being used for prostitution shall be provided with an alarm or intercom which connects back to a central base that is to be monitored.

(d) The premises and car parking area is to be well-lit.

SUBMISSION REQUIREMENTS

- Detailed Plan of Management.

B2.4 HOURS OF OPERATION

OBJECTIVES

(i) To ensure that the operation of sex services premises is compatible with adjoining land uses.

DEVELOPMENT CONTROLS

(a) The hours of operation are restricted to 7am – 11pm, Monday to Saturday, with no operation on Sunday or Public Holidays.

In all circumstances, any consent issued for sex services premises will be limited to a twelve-month trial period. At the expiration of this trial period, a further Development Application will be required to be submitted to Council.

Council will assess if the sex services premises has been operating in a satisfactory manner. Should investigations prove that the sex services premises has had a negative impact on the adjoining and surrounding properties, a further consent will not be issued.

SUBMISSION REQUIREMENTS

- Statement of Environmental Effects.
- Prior to the expiration of the 12 month trial period an annual report shall be submitted to Council advising Council that the operation has achieved full compliance with conditions of consent. This report shall also include comments from the NSW Police Local Area Command on the sex services premises' operation.

Note. All applications for new and existing sex services premises shall be referred to the NSW Police Local Area Command for comments.

B2.5 SIGNAGE

Refer to Section 2.5 of Part C Section 2 – Signage.

B2.6 HEALTH

OBJECTIVES

(i) To ensure sex services premises comply with the relevant health and building regulations.

(ii) To protect the health of workers and clients.

DEVELOPMENT CONTROLS

(a) All sex services premises shall comply with the relevant provisions of the "Health and Safety Guidelines for Brothels" published by WorkCover NSW.

(b) All sex services premises must be fitted with the necessary services and facilities required under the Building Code of Australia.

(c) A separate rest area with toilet facilities and amenities shall be provided for staff use only. This area shall not be used for the purpose of prostitution.

(d) Each room to be used or capable of being used for the purposes of prostitution shall contain all sanitary facilities consisting of a toilet, hand wash basin with warm potable water, and shower.

(e) The premises are to be ventilated in accordance with the requirements of the Building Code of Australia.

SUBMISSION REQUIREMENTS

- Statement of Environmental Effects and Floor Plans.

B2.7 CAR PARKING

All parking must be in accordance with Part C Section 1 – Parking.

B2.8 ACCESS AND MOBILITY

OBJECTIVES

(i) To ensure adequate and appropriate access to the premises and its facilities is provided to a person with a disability.

DEVELOPMENT CONTROLS

(a) Access and facilities for people with a disability must be provided in accordance with the *Disability (Access to Premises – Buildings) Standards* and National Construction Code (NCC).

SUBMISSION REQUIREMENTS

- Any application for new buildings **or** alterations and additions where the floor area of the building is increased by 50% or more; must be accompanied by an access report prepared by a suitably qualified person, demonstrating the proposed developments ability to comply with the Disability (Access to Premises – Buildings) Standards.

B2.9 WASTE

OBJECTIVES

(i) To ensure the safe and adequate storage, handling and disposal of waste.

DEVELOPMENT CONTROLS

(a) Contaminated waste must be collected and disposed of by persons holding the appropriate licence from the Office of Environment and Heritage. Used condoms must be double bagged and placed in specific and clearly marked waste receptacles on the premises. All sharps must be placed in non-reusable sharps containers which comply with AS4031-1992. These containers must be clearly marked and placed in all work rooms and rooms containing sanitary facilities.

(b) All premises must comply with any guidelines issued by the Department of Health and WorkCover Authority.

SUBMISSION REQUIREMENTS

- Statement of Environmental Effects and details of waste collection.

B2.10 NOISE

OBJECTIVE

(i) To ensure that sex services premises operate in a manner compatible with adjoining land uses.

DEVELOPMENT CONTROLS

(a) No transmission of vibration to a place of different occupancy;

(b) Limitation on sound levels to be no greater than background levels (AS 1055 – Acoustics);

(c) No offensive noise as defined under the Noise Control Act.

SUBMISSION REQUIREMENTS

- Statement of Environmental Effects

APPENDIX C – DEVELOPMENT CONTROLS FOR THE EDWARDS ROAD PRECINCT

C1 INTRODUCTION

This Appendix must be read in conjunction with Part A – Introduction of this DCP.

C1.1 LAND TO WHICH THIS APPENDIX APPLIES

This appendix applies to land identified as the Edwards Road Precinct within Appendix A – Precinct Based Development Control Plans (Sheet 6) of this Section of the DCP. The Precinct is zoned B6 Enterprise Corridor under *The Hills Local Environmental Plan 2012* wherein development for the purpose of office and business is also permitted.

An aerial photograph of the Edwards Road Precinct is included below.

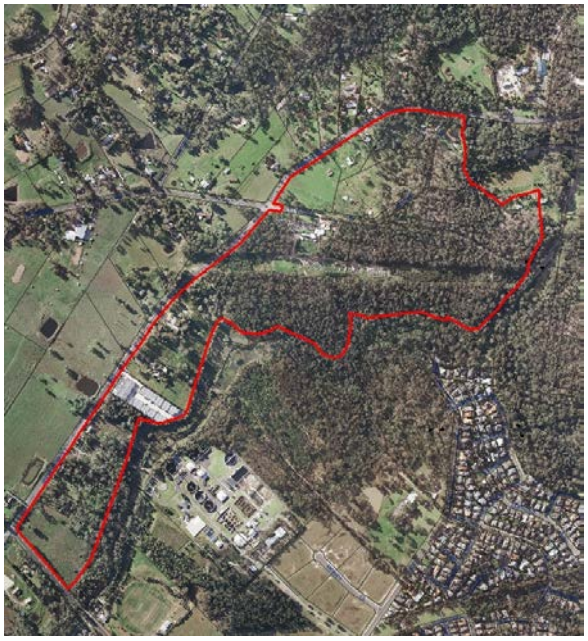


Figure 1
Aerial Photograph -Edwards Road Precinct

The Edwards Road Precinct is known to contain areas of Cumberland Plain Woodland and Shale Sandstone Transition Forest. Cumberland Plain Woodland is listed as a critically endangered ecological community under both the NSW *Threatened Species Conservation Act 1995* (TSC Act) and Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), while Shale Sandstone Transition Forest is listed as an endangered ecological community under both the TSC and EPBC Acts.

As part of any future development on land containing significant vegetation communities, the assessment framework under the *Environmental Planning and Assessment Act 1979*, *Threatened Species Conservation Act 1995* (TSC Act) and the *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) will need to be addressed.*

C1.2 OBJECTIVES OF THIS APPENDIX

The principal objectives of this Appendix are:

(i) Improve the visual connection between development and the public realm by encouraging a visually attractive streetscape.

(ii) To promote safe and efficient vehicular movement within the Edwards road Precinct.

(iii) Facilitate safe and convenient pedestrian movement.

C2 OBJECTIVES AND DEVELOPMENT CONTROLS

C2.1 DEVELOPMENT SITES

OBJECTIVES

(i) To ensure development sites have sufficient areas to provide adequate access, parking, landscaping and building separation.

(ii) To provide for the orderly development of land through subdivision or the consolidation of lots.

(iii) To ensure development on a particular site has due regard to adjoining developments.

DEVELOPMENT CONTROLS

(a) Minimum frontage to all roads is 40 metres.
(b) Battle-axe shaped lots will be discouraged within the Precinct, however may be considered on merit based on site constraints.
(c) The site area of battle axed shaped lots must comply with the Lot Size Map within LEP

2012. The area of the access handle must not be included in the measurement of the site area.

C2.2 SETBACKS

OBJECTIVES

(i) To create a visually attractive and consistent streetscape.

(ii) To provide an effective buffer to preserve the natural features and creeks in accordance with Council's ESD objective 4.

(iii) To protect privacy and amenity of any adjoining land uses.

(iv) To provide a desirable and aesthetically pleasing working environment.

DEVELOPMENT CONTROLS

(a) The front setbacks should be as follows:

Primary street frontage	Setback
Annangrove Road north of Withers Road	10m
Withers Road (north side of Withers Road between Annangrove Road and Second Ponds Creek)	10m
Edwards Road	10m
Other Roads	5m

(b) The side and rear setback should be as follows:

Side and rear boundaries	Setback
Setback to the rear boundary and one side boundary	0m
Setback to any other side boundaries	5m
Setback to a side or rear boundary adjoining Annangrove Road, Withers Road and Edwards Road	10m
Setback to a side or rear boundary that adjoins a road other that Annangrove Road, Withers Road or Edwards Road.	5m

(c) The setback to a creek is to be no less than 40 metres from the top bank of the creek or otherwise to the requirements of the Office of Water.

C2.3 BUILDING MATERIALS

OBJECTIVES

i) To promote integrated, visually harmonious and attractive buildings in industrial areas.

ii) To promote the use of materials that involve minimal impact on the environment in accordance with Council's ESD objective 5.

DEVELOPMENT CONTROLS

(a) A minimum 30% of the front elevation of the building façade should be of glass or other transparent materials.

(b) Where long, continuous building lines (façades) over 10m are present along a street frontage, visual relief shall be provided by any one or more of the following:

- varying the façade alignment; and
- using varying external finishes (texture and colour), providing glass curtain walls.

(c) Locate office facilities along the facade.

(d) Roller shutters, loading docks and work areas shall not be visible from a public place.

(e) Open storage areas should be located within the developable area excluding Asset Protection Zones, at the rear of buildings and not in public view. Landscaping or other screening measures should be incorporated into the site design to reduce visual impact of storage areas from adjoining sites.

(f) Building entries shall be clearly visible from the street.

C2.4 FENCING

OBJECTIVES

(i) To ensure that fencing does not detract from the overall visual amenity and character of the area.

DEVELOPMENT CONTROLS

(a) Fencing shall only enclose the developable area of a site.

(b) Fencing of any kind shall not be located within any conservation areas established by a vegetation management plan.
(c) Fencing shall not obstruct the view of landscaping from the street or a driver's view (from the driveway) of the road.
(d) Fencing must be open-style metal fencing (e.g. black wire mesh fencing).

C2.7 VEHICULAR ACCESS

OBJECTIVES

(i) To ensure the safety of all road users in industrial areas.

(ii) To ensure that vehicles can enter and exit premises in industrial areas in a safe and efficient manner.

(iii) To maintain the performance of roads that provides an arterial or sub-arterial function.

DEVELOPMENT CONTROLS

(a) Entry/egress points (access roads) to developments shall be shared so as to minimise access points to public roads.
(b) Proposed roads must be consistent with the indicative road layout.
(c) When locating access points consideration must be given to:
- The potential isolation of any adjoining lots,
- The safety of the proposed access point for pedestrians and vehicles, in terms of vehicular speeds, sight lines, proximity to other existing and proposed access points.

C2.8 FLOODING

OBJECTIVES

(i) to manage the risk to human life and damage to property caused by incidence of flooding within the precinct.

DEVELOPMENT CONTROLS

(a) This control applies to all land within the Edwards Road Precinct which:
- adjoins land zoned SP2 Infrastructure (Stormwater Management System), or
- Is affected by an overland flowpath.

(b) A flood study, prepared by a professional engineer who specialises in hydraulic engineering and a professional engineer who specialises in civil engineering, must be submitted with any development application on land to which this control applies. The flood study must be prepared in accordance with the **Floodplain Development Manual** published by the NSW Government in April 2005.
(c) Development on land to which this control applies must:
- Have any habitable floor levels equal to or greater than the Flood Planning Level;
- Have the part of the development at or below the Flood Planning Level, constructed of flood compatible material, suitable for retaining structural integrity during and following long periods of continuous under water immersion;
- Be able to withstand the forces of floodwater, debris and buoyancy up to the Flood Planning Level, and
- not increase flood affectation elsewhere in the floodplain;
- have reliable flood free access for pedestrians and vehicles from the development, at a minimum level equal to the Flood Planning Level;
- have driveways between car parking spaces and the connecting public roadway that will not be inundated by a depth of water greater than 0.3m during a 100 year ARI (average recurrent interval) flood event.
- All service conduits located below the Flood Planning Level would need to be made fully flood compatible and suitable for continuous under water immersion. Conduits would need to be self-draining if subjected to flooding.
- Any dangerous and hazardous materials not to be stored below the Flood Planning Level.

(d) Structural elements of any buildings below the FPL would need to be assessed and certified by a specialist structural engineer experienced in riverine hydraulic processes having regard to the Items in Section 3. Design and certification for required structural elements would need to be assessed against the predicted 100 year ARI flood flow behaviour.

(e) If a word or expression used in this control is defined in the Floodplain Development Manual, the word or expression has the same meaning as it has in that Manual unless it is otherwise defined in this clause.

Habitable floor area means:

a. In a **residential situation**: a living or working area, such as a lounge room, dining room, rumpus room, kitchen, bedroom or workroom;
b. In an **industrial or commercial situation:** an area used for offices or to store valuable possessions susceptible to flood damage in the event of a flood.

Average Recurrence Interval (ARI) is the long-term average number of years between the occurrence of a flood as big as (or larger than) the selected event.

THE HILLS DEVELOPMENT CONTROL PLAN 2012

Draft - Part D Section 7 BALMORAL ROAD RELEASE AREA

N

SCALE: 1:4,000

50 25 0 50 100 150 200 250 300 350
Metres

LEGEND

- Railway Corridor
- Trunk Drainage
- Educational Establishment
- Classified Road
- Open Space (Public or Private)
- New DCP Roads
- Proposed Road
- Electrical Transmission Line
- Development Site
- Railway Alignment
- Cycleway
- Environmental Protection
- Landscape
- Landscape Corridor (10 m)
- Noise Attenuation (50 m)
- Access Denied
- Roundabout
- Pedestrian Bridge
- Traffic Lights
- Traffic Movement
- Road Continues
- BRRA Boundary
- Proposed future access
- Cycleway Crossing
- Pedestrian Link (5 m)

ROAD CLASSIFICATION

	Access Street	15.5m	3.5 - 8.5 - 3.5
(2)	Collector Road	16.5m	3.5 - 9.5 - 3.5
(2*)	Collector Road	16.5m	3.0 -10.5 - 3.0*
(2**)	Collector Road with cyclepath & landscaping	17.5m	3.5 - 9.5 - 4.5**
(2***)	Collector Road	20.1m	6.5*** - 9.5 - 4.1
(3)	Enhanced Collector Road	20.0m	4.5 -12.0 - 3.5
(4)	Employment Area Road	20.0m	4.0 -12.0 - 4.0

* **Note:** Carriageway width to be constructed at 10.5 metres as a continuation of existing pavement width in Gainsford Drive with a transition distance of one lot.

** **Note:** Includes 1 metre wide verge required on one side of carriageway to accommodate 2 metre wide landscaping adjacent to Castle Hill Country Club Golf Course and 2.5 m cyclepath.

*** **Note:** Northern verge width adjacent to Castle Pines & Castle Hill Country Club Golf Course to be constructed at 6.5 metres.

DRAWN BY	B. CLISSOLD	DATE: 11/03/2014
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE: 11/03/2014
PLANNING OFFICER	N. CARLTON	DATE: 11/03/2014
FILE No.	FP 171	

STATEMENT OF RELATIONSHIP WITH OTHER PLANS.

This plan is to be read in conjunction with
The Hills DCP statement and The Hills LEP 2012

Date of Adoption: 28/07/2015
Minute No. 367
Came into Force: 29/04/2016

NOTE
THIS DEVELOPMENT CONTROL PLAN MAY BE SUBJECT TO AMENDMENT BY SUBSEQUENT LOCAL ENVIRONMENTAL PLANS. ANY PERSON USING THIS PLAN SHOULD CONTACT COUNCIL SO AS TO ENSURE THAT ANY INFORMATION SHOWN HAS NOT BEEN SUBJECT TO AMENDMENT.

THE HILLS SHIRE COUNCIL DOES NOT GIVE ANY GUARANTEES CONCERNING THE ACCURACY, COMPLETENESS OR CURRENCY OF THE TEXTUAL INFORMATION HELD IN OR GENERATED FROM ITS DATABASE

BASE CADASTRE COPYRIGHT LAND & PROPERTY INFORMATION NSW (LPI). CADASTRE UPDATE INCLUDING COUNCIL GENERATED DATA IS SUBJECT TO THSC COPYRIGHT.

DATE OF BASE MAPS: 16 October, 2006

Refer to road design / cross section requirements in Part E Section 17 of the DCP for Lot 1 DP 261750.

Additional 1 metre wide verge required for 2 m landscaping provision.

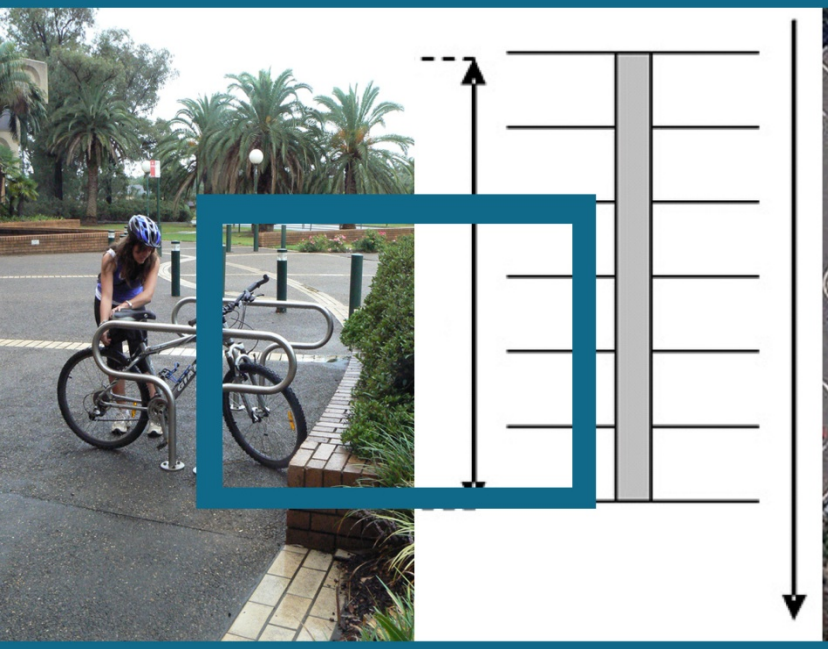
Development to address privacy and overshadowing of Castle Pines Retirement Village.

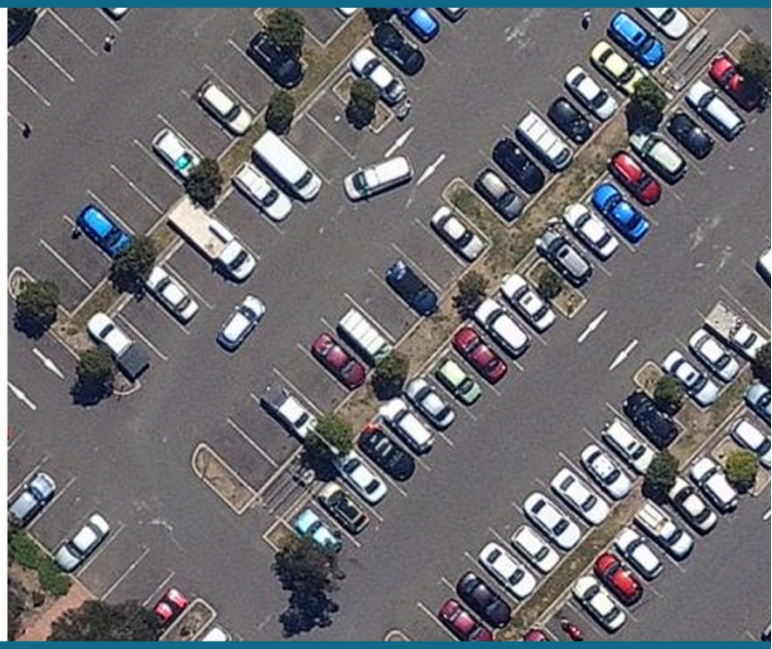
The full upgrade of Spurway Drive between Stone Mason Drive and Fairway Drive including 2.5 metre cyclepath along the full length within the Southern Verge to be at the developer's expense.

The Hills Development Control Plan (DCP) 2012

www.thehills.nsw.gov.au

THE HILLS Sydney's Garden Shire





Part C Section 1
Parking

C1

In Force 12 November 2021

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1. INTRODUCTION

This Section of the DCP must be read in conjunction with Part A – Introduction of this DCP.

1.1. LAND TO WHICH THIS SECTION OF THE PLAN APPLIES

This Section of the DCP applies to all land identified under The Hills Local Environmental Plan (LEP) and to all permissible parking activities as defined in the LEP. Where the provision of parking is ancillary to the overall development, further specific controls are included in separate relevant Sections of this DCP.

1.2. AIMS AND OBJECTIVES OF THIS SECTION OF THE DCP

The aim of this Section of the DCP is to establish Council's specific objectives and development controls for the provision of parking within the Shire.

OBJECTIVES

Council's overarching objectives for parking developments are:

(i) To provide guidelines aimed at improving overall traffic management and safety.

(ii) To ensure satisfactory access, parking provisions, circulation and goods loading and delivery facilities are provided within developments.

(iii) To ensure the efficient flow of traffic through car parks to minimise the potential for pedestrian and vehicle conflict.

(iv) To set out Council's planning and engineering standards for parking in the Shire.

(v) To encourage the use of more ecologically sustainable forms of transport such as bicycles.

(vi) To ensure that all parking provided by development relates to the site's environmental conditions.

2. OBJECTIVES AND DEVELOPMENT CONTROLS

The objectives and development controls for parking are set out in the following sections.

This Section is to be read in conjunction with other relevant Sections of this DCP, including but not limited to:

- Part C Section 3 – Landscaping

2.1. GENERAL PARKING REQUIREMENTS

OBJECTIVE

(i) To provide sufficient parking that is convenient for the use of residents, employees and visitors of the development.

DEVELOPMENT CONTROLS

2.1.1. GENERAL

(a) Number of required parking spaces and associated conditions must be provided in accordance with Table 1. Any part spaces must be rounded up to the nearest whole number.

(b) All car parking spaces must be provided on-site.

(c) The minimum provision of spaces for restaurants or café as required in Table 1 applies to indoor and outdoor seating.

(d) The provision of boat trailer and boat wash down areas are required for caravan parks and/or holiday cabin developments in the vicinity of the Hawkesbury River.

(e) Car parking for child care centres must be situated in a convenient location, allowing for safe movement of children to and from the centre.

(f) Parking spaces for an exhibition home may be permitted to be located within the front setback, provided the parking area is reinstated to lawn upon the expiry of the exhibition home consent. In the case of exhibition home villages a centralised parking area should be provided.

(g) Any changes to parking provisions occurring after development consent or implementation of development consent must be subject to an application under Section 96 of the Environmental Planning and Assessment Act 1979.

(h) Where justified, a proportion of car parking may be subject to time restrictions upon

application, consideration and approval by Council. All employees parking are to be provided on-site.

(i) Stack parking will not be included in the assessment of the number of car parking spaces for retail, commercial, medium density residential and industrial development and the like.

(j) Access arrangements in bush fire prone areas shall be in accordance with Planning for Bushfire Protection 2006.

2.1.2. MIXED USE PARKING

(a) Where the component uses are operated concurrently, parking will be assessed as the sum of the requirements for each component. Component parking requirements are to be based on requirements in Table 1. Calculations shall include an appropriate proportion of any shared common or administrative area.

2.1.3. DUAL USE PARKING

(a) Where the component uses are not operated concurrently, parking provisions will be based on whichever of the components generates the greatest car parking requirement. The onus will be on the applicant to satisfy Council that the uses are not operated concurrently.

(b) Where the main usage periods of the component uses do not coincide, Council may consider a reduction in the car parking requirements provided that the total car parking is not less than that needed for the component that generates the greatest requirement. The onus will be on the applicant to satisfy Council that the main usage periods do not coincide.

2.1.4. REMODELLING OR ALTERATIONS TO EXISTING PREMISES

(a) If the development does not result in increased floor space and the use of the building is not significantly changed, then additional parking provisions may not be required.

(b) If the remodelling results in increased floor area, then additional parking will be required for the increase.

(c) If the use of the development is changed, this will be taken into account in assessing the parking requirement according to the new use as well as any increase in floor space.

SUBMISSION REQUIREMENTS

- Parking calculations – number of spaces provided for the proposed development using Table 1. Any part spaces must be rounded up to the nearest whole number.
- A Traffic Impact Report should be provided:
  - Where development is likely to generate significant traffic, or
  - Where it is a requirement of another section of the DCP.
- A Parking Study – will be required where proposed parking provisions need to be substantiated. This occurs when:
  - An activity or land use is not included in Table 1, or
  - Dual use or mixed use car parking arrangements may be proposed.

Table 1 Required Minimum Car Parking Provisions

GFA = Gross Floor Area
GLFA = Gross Leasable Floor Area

Land Use Class	Land Use	Required Minimum Provision
Residential	Dwelling	1 space per dwelling
	Residential Flat Buildings, Shop Top Housing and Multi Dwelling Housing	1 space per 1 bedroom unit 2 spaces per 2 or 3 bedroom unit 2 visitor spaces per 5 units
	Residential Flat Buildings within the Castle Hill, Baulkham Hills and Rouse Hill Centres (See note 1 below)	1 space per 1 bedroom unit 1.5 spaces per 2 bedroom unit 2 spaces per 3 bedroom unit 2 visitor spaces per 5 units
	Residential flat buildings and, dwellings in shop top housing and mixed use developments within the Sydney Metro Northwest Corridor	1 space per unit 1 visitor space per 5 units <u>The following maximum parking rates apply to development seeking the Incentive Floor Space Ratio (and Key Site Bonus) under The Hills LEP within the Castle Hill North Precinct (Map Sheet 5):</u> Studio or 1 bedroom – Max 0.5 spaces per unit. 2 bedroom – Max 0.8 spaces per unit. 3+ bedroom – Max 1.3 spaces per unit. Visitor spaces – Max 1 space per 5 units.
	Dual Occupancy	1 undercover space per dwelling below 125m^2 of floor space 2 spaces (1 undercover) per dwelling above 125m^2 of floor space
	Home Business or Home Industry	Car parking rate will be determined on a merit based assessment but must be provided at a rate that will ensure that the proposal does not result in a significant increase in traffic in accordance with The Hills LEP.
	Manor House	1 space per 1 bedroom unit 2 spaces per 2 or 3 bedroom unit 1 visitor space

Land Use Class	Land Use	Required Minimum Provision
Commercial	Commercial premises (including business premises, office premises)*	1 space per 25m^2 GFA
	Centre Commercial	1 space per 40m² GFA
	Commercial premises as part of a mixed use development with residential flat buildings – Castle Hill North Precinct	Max 1 space per 200m^2 GFA (see note 5)
Retail	Shops * # (including shopping centres and general business retail)	1 space per 18.5m^2 GLFA
	Service Station & Convenience Store	6 spaces per work bay, plus with Convenience Store - 1 space per 20m^2 GFA, plus with Restaurant - 15 spaces per 100m^2 GFA of restaurant or 1 space per 3 seats whichever is the greater, plus 1 space per restaurant employee
	Vehicle repair station	3 spaces per 100m^2 of GFA or 3 spaces per work bay, whichever is the greater
	Vehicle sales or hire premises	0.75 spaces per 100m^2 of site area, plus 6 spaces per work bay where vehicle servicing is provided on site.
	Garden Centre, Plant Nurseries, Landscaping Material Supplies	1 space per employee, plus 1 space per 18.5m^2 GLFA of ancillary retail floor space. Additional parking spaces to be determined by Council in respect of each application to ensure that parking demand generated by the activity is contained within the subject site. Traffic and parking study is required to accompany the application.
	Roadside Stall	Minimum of 4 spaces located within the property boundaries.
	Market	2.5 spaces per stall (customers only)
	Bulky Goods Premises	1 space per 40m^2 of GFA

Land Use Class	Land Use	Required Minimum Provision
Industry – component uses	Industrial	1 space per 50m^2 of GFA, or 1 space per 2 employees, whichever is greater.
	Industrial – Edwards Road Precinct (See note 2 below)	1 space per 75m^2 of GFA
	Warehouse	1 space per 50m^2 of GFA
	Warehouse – Edwards Road Precinct(See note 2 below)	1 space per 75m^2 of GFA
	Vehicle body repair workshop	1 space per 2 employees, plus 6 spaces per work bay
	Sex Services Premises	1 space per room used or capable of being used for sex services plus 1 space per employee. All car parking areas shall be well lit, easy to locate and monitored by surveillance.
	Visitor Parking	1 space for every 2 units constructed
Entertainment	Pubs/, Registered Clubs	1 space per 1.85m^2 of service area in bar and lounge plus 1 space per 2 employees
	Entertainment Facilities*#	1 space per 5 seats or 1 space per 10m^2 of non-fixed seating floor space
	<u>Food and Drink Premises</u>	
	Take-away food and drink premises* (No seating)	1 space per 18.5m^2 GFA.
	Restaurant or café*	1 per 5 seats, plus 12 spaces per 100m^2 of GFA, plus 10 car spaces for queuing where a drive through facility is proposed.
	Function Centre	1 space per 3 seats, or 15 spaces per 100m^2 GFA, whichever is the greater. These rates apply to both indoor and outdoor seating.
	Restaurant or cafe within a commercial office building and Main Street Precinct, Castle Hill (see note 3)	1 space per 25m^2 of GFA.
	Restaurant or cafe within a retail shopping complex	1 space per 18.5m^2 of GLFA.

Land Use Class	Land Use	Required Minimum Provision
	Restaurant or café within Main Street Precinct, Castle Hill outdoor dining component (see note 3)	No car parking required.
Recreational Facilities	Gymnasiums/Fitness Centre*	1 space per 25m^2 of GFA
	Squash Courts & Tennis Courts*	3 spaces per court plus 1 space per 5 seats where spectator seating/galleries are provided
	Bowling Green	30 spaces for the first green, plus 15 spaces per each additional green
	Bowling Alley	3 spaces per alley
	Indoor Cricket or Soccer Centre*	15 spaces per pitch
	Equestrian Centre, Other Recreational Facility	Submit parking study to substantiate proposed car parking provisions.
Health	Hospital Nursing and Convalescent Homes	1 space per 2 beds for visitors plus 1 space per 1.5 employees plus 1 space per 2.5 visiting medical officers Unless otherwise specified by Seniors Living SEPP.
	Medical Centres, Health consulting rooms	3 spaces per consulting room plus 1 space per support employee
Education	Child Care Centre[#] (including Kindergartens, Crèches)	1 space per employee plus 1 space per 6 children enrolled for visitors and/or parent parking Also see section 2.1.1(e)
	Educational Establishment (School)[#]	1 space per employee plus 1 space per 8 year 12 students, plus 1 space per 30 students enrolled for visitors and/or parent parking
	Educational Establishment (Tertiary Institution)[#]	1 space per 2 students enrolled
Accommodation	Bed & Breakfast Accommodation	1 space per guest room in addition to residential requirement
	Caravan Park/Holiday Cabins	1 space per caravan or camping site plus Also see section 2.1.1(d)

Land Use Class	Land Use	Required Minimum Provision
	Hotel or Motel Accommodation #	1 space per 1 guest room plus 1 space per 2 employees in addition to any space generated by a public bar or restaurant.
	Marina	0.6 spaces per wet berth 0.2 spaces per dry storage berth 0.2 spaces per swing mooring 0.5 spaces per marina employee Development applications are to be accompanied by a traffic and parking study to ensure that parking demand generated by the activity is contained within the subject site.
Other	Veterinary Hospital	3 spaces per consulting room plus 1 space/10 cats or dogs accommodated overnight
	Animal Boarding or Training Establishment.	Development applications are to be accompanied by a traffic and parking study to ensure that parking demand generated by the activity is contained within the subject site.
Other	Place of public worship	1 space per 5 seats
	Funeral home/chapel	1 space per 4 seats plus 1 space per funeral service area
	Exhibition Home	4 spaces per exhibition home Also see section 2.1.1(f)

Note. *Bicycle parking is also required – refer to Table 3 for provisions.

Set down areas are to be provided for these land uses – refer to section 2.6.

Notes.

1. Centre parking rates apply to Castle Hill Major Centre, Baulkham Hills Town Centre,-Rouse Hill Major Centre and Circa Commercial Precinct as identified in Sheet 1, 2, 3 and 4 in Appendix A – Centre Maps to this Section.
2. Land within the Edwards Road Precinct is identified within Appendix B – Edwards Road Precinct to this Section.
3. Main Street Precinct, Castle Hill includes properties fronting Old Northern Road and part of Showground Road, Castle Hill and is identified in Sheet 1 in Appendix A – Centre Maps to this Section.

Land within the Castle Hill North Precinct is identified within Appendix C – Castle Hill North Precinct to this Section. To encourage provision of employment uses there is no minimum requirement for car parking for ‘commercial premises’ where provided as a mixed use development with ‘residential flat buildings’.

2.2. PARKING FOR DISABLED PERSONS AND PARENTS WITH PRAMS

OBJECTIVES

(i) To ensure appropriate on-site provision and design of parking for disabled persons and parents with prams.

(ii) To ensure that designated spaces provided are easily accessible to points of entry to building or facility.

(iii) To ensure amenity and safety in the design and construction and operation of the development in accordance with Council's ESD Objective 7.

DEVELOPMENT CONTROLS

(a) A proportion of the total parking spaces required shall be provided for disabled persons in accordance with Table 2.

(b) A continuous, accessible path of travel in accordance with AS 1428.1 shall be provided between each parking space and an accessible entrance to the building or to a wheelchair accessible lift.

(c) A proportion of the total parking spaces required shall be provided for parents with prams at the rate of 1 space per 100 spaces at:-

- shopping centres;
- transport terminals;
- hospitals; and
- other large public facilities.

(d) Parking spaces for disabled persons and parents with prams should:-

- have minimum 3.2 metres x 5.4 metres dimensions for each designated parking space;
- be provided adjacent to an accessible entrance or a wheelchair accessible lift;
- be signposted and identified for the nominated parking use;
- have a clearance height of 2.5 metres from floor level; and
- provide a level area with a gradient less than 1:40.

(e) Directional signage to designated parking spaces should be provided from the entry of the parking facility.

(f) Set down areas should be level with a gradient less than 1:40, have adequate circulation space and be located away from traffic flow. Adjacent kerb ramps should be provided to allow access to a footpath, building entrance or a wheelchair accessible lift.

(g) Refer to Council's "Making Access for All: guidelines ensuring criteria for all public facilities" for further parking and access designs. This document is available at the Customer Service Centre at Council's Administration Building or at Council's website.

SUBMISSION REQUIREMENTS

- Site plan indicating:
  - parking layout and locations of designated spaces for disabled persons and parents with prams; and
  - locality of adjacent wheelchair accessible entrances and lifts.
- Parking calculations.

Table 2 Disabled Persons Parking Provisions

Source: AS 2890.1 1993 – Part 1 Parking Facilities – Off Street Car Parking

Land Use	Required Provision (percentage of total car parking)
Retail/Commercial A shopping centre with or without commercial premises (banks, credit union, restaurants or cafes, offices etc), or an office area. Includes strip shopping centres or CBD areas, shopping complexes, supermarkets, and variety stores. May include post office, entertainment, community, recreation venues and the like.	2%
Transport Railway stations, bus/rail interchanges	3%
Community Civic centres, town halls, community centres, senior citizen's clubs, and health care. Recreation Leisure centres, gymnasiums, swimming pools, parks, gardens, foreshore, and sporting venue.	3% 3%
Education Schools Tertiary institutions	3% 2%
Entertainment Theatres, libraries, art galleries, sports centres, entertainment centres	4%
Medical Hospitals Medical Centres (including community health centres, radiology units, rehabilitation units)	4% 3%
Places of Public Worship Individual churches or religious centres	3%

Notes.

1. Percentages in Table 2 apply to the total number of parking spaces to be provided.
2. Small car parks must provide a minimum of 1 space for disabled persons.

2.3. BICYCLE PARKING

OBJECTIVES

(i) To provide convenient and accessible on-site bicycle parking and appropriate associated facilities.

(ii) To encourage the use of bicycles in order to help reduce the dependence on motor vehicles in accordance with Council's ESD Objective 9.

DEVELOPMENT CONTROLS

(a) The provision of bicycle parking must in accordance with Table 3.

(b) Bicycle parking should be located in close proximity to building entrances and clustered in lots not exceeding 16 spaces.

(c) Bicycle parking facilities should not impede pedestrian or vehicular circulation.

(d) Bicycle parking facilities should be located in highly visible, illuminated areas to minimise theft and vandalism.

(e) Provision of shower and change facilities for bicycle riders should be provided in accordance with Table 3.

(f) Installation and dimensions of bicycle parking facilities and storage should be in accordance with:

- AS 2890.3-1993 – Parking Facilities – Bicycle parking facilities; and
- Guide to Traffic Engineering Practice BICYCLES - Part 14 - Austroads (Standards Australia).

SUBMISSION REQUIREMENTS

- Parking calculations
- Site plan indicating location of:
  - designated bicycle spaces/storage facilities; and
  - shower and change facilities.
- Statement of Environmental Effects
  Indicating:
  - security details for bicycle parking areas; and
  - provision of shower and change facilities.

Table 3 Provision of Bicycle Parking According To Land Use

Source: Guide to Traffic Engineering Practice "BICYCLES - Part 14 – Austroads" (Standards Australia).

Land Use	Minimum Bicycle Parking Provisions	Change and Shower Facilities
Commercial Premises (including business premises and office premises)	2 spaces plus 5% of the total number of car spaces required where – New development exceeds 5,000m^2 in GFA or Additions to existing developments that increase the size of the total development to greater than 5,000m^2 GFA.	Yes
Gymnasium/Fitness Centre or Squash/Tennis courts or Indoor Cricket/Soccer	1 per 4 employees plus 1 per 200m^2 GFA	Yes
Industry – Warehousing, Factories	2 spaces plus 5% of the total number of car spaces required where – New development exceeds 4,000m^2 in GFA or Additions to existing developments that increase the size of the total development to greater than 4,000m^2 GFA.	Yes
Retail/Shops	2 spaces plus 5% of the total number of car spaces required where – New retail developments exceed GFLA of 5,000m^2 or Additions to existing developments that increase the size of the total development to greater than 5,000m^2 GFLA.	Yes
Bulky Goods Premises	2 spaces plus 5% of the total number of car spaces required where – New development exceeds 4,000m^2 in GFA or Additions to existing developments that increase the size of the total development to greater than 4,000m^2 GFA.	Yes
Schools	1 space per 5 pupils over year 4	Yes

Land Use	Minimum Bicycle Parking Provisions	Change and Shower Facilities
Tertiary Institution	1 space per 50 full-time students	Yes

2.4. MOTORCYCLE PARKING

OBJECTIVES

(i) To have equitable provision of parking for motorcyclists.

DEVELOPMENT CONTROLS

(a) Motorcycle parking is to be provided for all developments with on-site parking of more than 50 car parking spaces, at a rate of 1 motorcycle parking space for every 50 car parking spaces or part thereof.

(b) Motorbike spaces should be 1.2 metres wide and 2.5 metres long when spaces are 90 degrees to the angle of parking. (See Figure 1 - Motorcycle Parking Dimensions).

SUBMISSION REQUIREMENTS

- Parking calculations.
- Site plan - indicating location of designated motorcycle parking spaces.

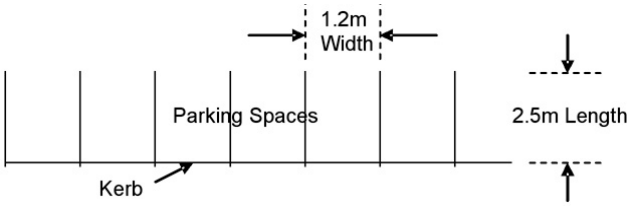


Figure 1 Motorcycle Parking Dimensions At 90 Degree Angle

Source: AS 2890.1 1993 – Parking Facilities-Part1: Off Street Car Parking

2.5. CARWASH BAYS

OBJECTIVES

(i) To provide on-site car wash facilities within residential multi-unit developments.

(ii) To ensure during the design, construction and operation of car wash bays, that water is utilised efficiently and that water leaving the site is of a quality and quantity comparable to that which is received in accordance with Council's ESD Objective 3.

DEVELOPMENT CONTROLS

(a) The carwash bay can be either a designated car space separate to that of total car spaces as calculated, or can be a visitor space when not utilised by visitors.

(b) A minimum provision of one designated carwash bay space per residential multi-unit development.

(c) Car wash bays are not to be used to carry out engine degreasing or mechanical repairs and must be signposted to reflect this prohibition.

(d) Wastewater must be treated so as to remove grease, oil and silt and must be either reused for car washing or used for irrigation of landscaped areas on site. To treat wastewater in this way application for a licence must be applied for from the Office of Environment and Heritage. Approval can be sought from www.environment.nsw.gov.au/licensing/.

(e) Alternatively wastewater can be discharged to the sewer, This is only where (b) is not feasible according to a report provided by a hydraulic engineer, the Council or the Office of Environment and Heritage. Approval from Sydney Water must be sought by applying for "Permission to Discharge Trade Wastewater". Refer to the fact sheet on Sydney Water's web site www.sydneywater.nsw.gov.au. - "Disposal of Trade Wastewater from Residential Car Wash Bays".

(f) Wastewater option (e) requires the construction of a roof over the designated car wash space and must be bunded to exclude rainwater as per Sydney Water's requirements.

(g) Approval must be obtained either from the Office of Environment and Heritage or Sydney Water prior to construction of the development.

SUBMISSION REQUIREMENTS

- Site plan indicating locations of designated car wash spaces.
- Statement of Environmental Effects indicating:
  - Details of method wastewater removal.

2.6. SET DOWN AREAS

OBJECTIVES

(i) To provide designated set down areas in close proximity to busy centres.

(ii) To provide safe and convenient designated set down areas for passengers to arrive close to their destination.

DEVELOPMENT CONTROLS

(a) Set down areas must not conflict with the movement of other traffic, pedestrians and other vehicle parking.

(b) There must be a safe continuous accessible path of travel from set down area/s to a wheelchair accessible entrance or lift.

(c) The following forms of development should provide set down areas for cars:

- Educational establishments.
- Shopping centres.
- Community centres.
- Libraries.
- Entertainment facilities.
- Child Care Centres.
- Recreational facilities.
- Transport terminals and interchanges.

(d) The following forms of development should provide set down areas for coaches and community buses:

- Hotel or Motel Accommodation.
- Community Centres.
- Registered Clubs.
- Tourist Destinations and Centres.
- Transport Terminals and Interchanges.

(e) The number of set down areas must be in accordance to the developments needs.

(f) Set down areas for cars must be separate to set down areas used for coaches and community buses.

(g) Set down areas, except those used for coaches and community buses, must be used only to drop off passengers and must not be used for passenger collection.

(h) Set down areas must be signposted to indicate that their use is time limited.

SUBMISSION REQUIREMENTS

- Site plan indicating location and design of designated set down areas.
- Statement of Environmental Effects - Details of types of vehicles expected to set down passengers and the likely frequency of use.

2.7. CAR PARK DESIGN AND LAYOUT

OBJECTIVES

(i) To provide safe, convenient and accessible design and layout of parking areas.

(ii) To provide suitable dimensions for all types of parking spaces.

(iii) To provide appropriate parking design and layout that complements building design and function.

(iv) To ensure pedestrian amenity is enhanced.

DEVELOPMENT CONTROLS

2.7.1. GENERAL

(a) The layout of the car park should facilitate ease of access and egress of vehicles through the parking area at all times without congestion.

(b) For all development other than single dwelling houses and dual occupancies, vehicles must enter and exit the site in a forward direction.

(c) Adequate queuing distance should be provided where the parking area fronts an arterial road as justified by relevant data or a study carried out by a suitably qualified person.

(d) Any changes to parking layout and design occurring after development consent or implementation of a development consent must

be subject to an application under Section 96 of the Environmental Planning and Assessment Act 1979.

(e) Provisions within this section are in accordance with AS 2590.1 –1993 Parking Facilities – Part 1 Off Street Car Parking. For further design requirements for car park design and layout please refer to the Australian Standard.

2.7.2. PARKING DIMENSIONS

(a) The minimum car parking dimensions required for right angle parking shall be provided in accordance with Table 4.

(b) Two-way aisles are not recommended for angle parking other than for parking at right angles (90 degrees).

(c) The preferred parking angle should be at 90 degrees to the aisle. Where site area is limited other angles of parking will be considered. For angle parking design requirements other than at 90 degrees refer to AS 2890.1-1993 – Parking Facilities – Part 1: Off Street Parking.

(d) All parking spaces shall be designed to ensure they can be accessed by a maximum 3 point combined manoeuvre, i.e. 1 movement to enter the space and 2 movements to leave, or 2 movements to enter and 1 to leave. (See Figure 2 for manoeuvres).

(e) Parallel parking is to be avoided unless it can be demonstrated that it does not disrupt traffic circulation or create a hazard.

(f) At blind aisles the end spaces should be made one metre wider than the adjacent spaces. (See Figure 3). Otherwise, provision should be made for cars to turn round at the end of aisles and allow vehicles to exit in a forward direction.

(g) Spaces adjacent to obstructions must be 300mm wider on the side of the obstruction.

(h) The width of car spaces in multi-storey or basement parking areas is to be exclusive of any building columns.

(i) Basement parking areas should be setback the same distance as the building above.

2.7.3. PEDESTRIAN CIRCULATION AND SAFETY

(a) Parking areas should be designed so that pedestrian entrances and exits are separate from vehicle entrances and exits.

(b) Safe crossing points through to or leading to entrances must have adequate sight distance and must be provided with appropriate directional signs and indicative pavement markings.

(c) Lifts and stair lobbies, and access to buildings should be clearly marked.

(d) Where possible, parking aisles should be orientated parallel with expected pedestrian travel paths. (See Figure 4).

2.7.4. DRAINAGE

(a) All car parking areas are to provide adequate drainage of surface water to prevent flooding of adjoining properties.

2.7.5. LIGHTING AND VENTILATION

(a) Covered or enclosed car parks must have adequate lighting and ventilation, preferably by natural means.

(b) Where car parks might be utilised in the evening, adequate artificial lighting should be provided for the whole car park area.

2.7.6. PARKING DIRECTIONS

(a) All car parking spaces should be clearly line marked.

(b) Where designated parking spaces are provided such as customer, visitor, parents with prams and disabled persons parking, signposting must clearly indicate the location of these spaces.

(c) Arrow markings on the surface of aisles and driveways should be used to demonstrate circulation pattern, whether in one-way or two-way directions.

(d) Entries and exits must be appropriately signposted.

SUBMISSION REQUIREMENTS

- Site Plan indicating car park layout including:
  - Traffic circulation details;
  - Location of parking spaces;
  - Location of directional and parking signs;
  - Pedestrian access and circulation through parking areas;
  - Contours demonstrating existing spot levels and proposed finished levels;

  - Vehicle turning path detail overlaid on the plans demonstrating that entry and exit is achieved in a forward direction; and
  - Location and height of any retaining walls.
- Cross Section indicating:
  - Extent of cut and fill;
  - Location and height any of retaining walls;
  - Headroom clearance to overhead obstructions (eg. Fire sprinklers, servicing ducts, piping etc.); and
  - Longitudinal section of the driveway from the centreline of the public roadway from where access is proposed to the rear of the parking area. Transition grades to prevent vehicle scraping are to be detailed.
- Statement of Environmental Effects detailing:
  - Method of drainage; and
  - Lighting and ventilation methods.

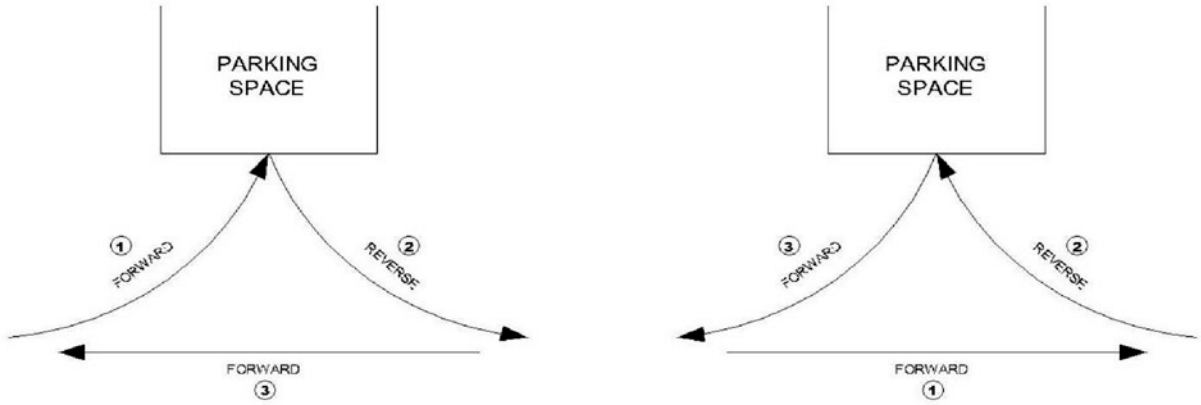


Figure 2 Vehicle Movements In And Out Of Parking Spaces

Table 4 Minimum Parking Bay Dimension For Right-Angled Car Parking

Source: AS 2890.1 1993 – Parking Facilities – Part 1: Off Street Parking

Land Uses	User Class No.	Required Door Opening	Space Width (metres)	Space Length (metres)	Aisle Width (metres) One Way	Aisle Width (metres) Two Way
Tenant, employee and commuter parking, universities (generally parking all day)	1	Front Door, first stop	2.4	5.4	6.2	7.0
Long-term town centre parking, sports facilities, entertainment centres, hotels, motels (generally medium-term parking)	2	Front Door, second stop	2.5	5.4	5.8	7.0
Short-term town centre parking, shopping centres, supermarkets, hospitals & medical centres (generally short-term parking and where children & goods can be expected to be loaded into the vehicles).	3	Rear Door, full opening	2.6	5.4	5.4	7.0
Parking for people with disabilities	4	Front door, full opening plus wheelchair manoeuvre space	3.2	5.4	5.0	7.0

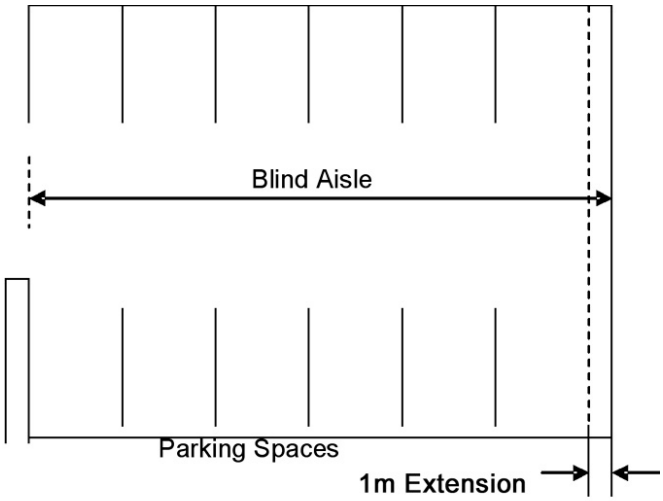


Figure 3 Blind Aisle Extension

Note. The maximum length of blind aisle is equal to six 90 degree car spaces.

Source: AS 2890.1 1993-Parking Facilities-Part 1: Off Street Car Parking

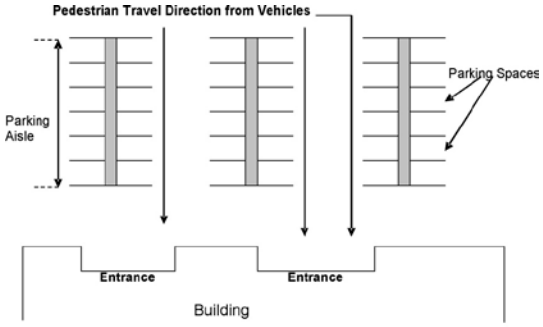


Figure 4 Example Of Direct Pedestrian Access To Entrance

2.8. LANDSCAPING

OBJECTIVES

(i) To provide appropriate landscaping for external and uncovered car parks so that they do not detract from the surrounding area.

(ii) To provide shade and improve amenity of loading, service and parking areas and to provide a buffer to neighbouring properties.

(iii) To utilise landscaping to provide amenity to neighbouring properties in accordance with Council's ESD objective 7.

DEVELOPMENT CONTROLS

(a) Outdoor parking areas are to be provided with two metre wide landscaping strips:
- Between rows served by different aisles.
- Between spaces at a rate of one in every ten car parking spaces.

(b) Outdoor parking areas are to be screened by a minimum of two metre wide landscaping strips. Such landscaping is to be of a mature and dense nature and be designed according to Part C Section 3 – Landscaping of this DCP.

(c) Driveways are to be screened by a minimum of two metre wide landscaping strip on either side.

(d) Where soils permit infiltration the landscaping strips should be used to promote reuse of drainage water.

(e) Landscaping species selected should not:
- block signs;
- impede entry and access points;
- overgrow paths;
- cause restrictions to pedestrian and vehicle movements; and
- compromise safety aspects such as sight distances.

(f) Shade trees are to be provided within landscaping strips.

(g) Plant and tree species selected for the purpose of providing shade should not be of a kind that will cause damage to vehicles because of their nature of dropping fruit, cones or nuts.

(h) In addition reference should be made to Part C Section 3 - Landscaping of this DCP when selecting appropriate species.

SUBMISSION REQUIREMENTS

- Landscape Plan

2.9. LOADING AND DELIVERY REQUIREMENTS

OBJECTIVES

(i) To provide suitable access on-site for service vehicles, for the purpose of loading and/or delivering goods.

(ii) To ensure that types of loading and delivery areas are suited to the needs of the development.

(iii) To ensure that adequate numbers of loading and delivery areas are allocated for appropriate types of service vehicles.

(iv) To protect neighbourhood amenity and safety in the design and construction and operation of loading and service areas in accordance with Council's ESD objective 7.

DEVELOPMENT CONTROLS

(a) All loading and delivery areas are to be provided on-site.

(b) Loading and delivery facilities are to be designed in accordance with AS 2890.2-1989, Off Street Parking - Part 2: Commercial vehicles facilities.

(c) The use of loading and delivery areas must not conflict with the safe efficient circulation of pedestrians and other vehicles on-site.

(d) In larger developments loading and delivery areas should operate independently of other parking areas.

(e) Service vehicles are to be able to efficiently manoeuvre to and from loading and delivery areas in accordance with AUSTROADS Design Vehicular and Turning Templates.

(f) Loading and delivery areas must not affect the amenity of adjoining residential properties.

(g) Loading bays are not to be used for the storage of goods that may impede the use of the bay for the delivery or loading of goods.

(h) The number of loading bays for supermarkets, department stores, mixed small shops and offices are required in accordance with Table 5.

(i) Council may consider variations to the standards required by Table 5 in circumstances where the applicant is able to demonstrate compliance with the objectives of this Section of the DCP by alternate means.

(j) For those land uses not referred to in Table 5 the applicant will be required to demonstrate the development proposal satisfies the objectives of this Section of the DCP. In this regard the following information is to be submitted:

- The types of vehicles expected to load and deliver on-site.
- The frequency with which these vehicles will visit the site.
- The largest vehicles expected to visit the site. These areas must be able to be utilised by all smaller loading and delivery vehicles also.

Table 5 Minimum Number Of Loading Bays Required

GLFA = Gross Leasable Floor Area
GFA = Gross Floor Area

Development	Number of Loading Bays
Supermarket (GLFA)	2 for the first 930m^2 2 for the next 930m^2 1 for each extra 930m^2
Department Store (GLFA)	2 for the first 4,645m^2 2 for the next 4,645m^2 1 for each extra 4,645m^2
Mixed Small Shops (GFLA)	2 for the first 465m^2 2 for the next 465m^2 1 for each extra 530m^2
Offices (GFA)	1 for the first 1,860m^2 1 for next 3,720m^2 1 for the next 3,720m^2 1 for each extra 9,250m^2

SUBMISSION REQUIREMENTS

- Site Plan must indicate:
  - the relevant locations and dimensions of loading and delivery areas; and
  - the swept path of the design service vehicle to be overlaid on the site plan to demonstrate all turning movements of service vehicles from the public road to the delivery/loading dock.
- Loading Bay Calculations – in accordance with Table 5.
- Statement of Environmental Effects **–** where Table 5 is not applicable the statement of environmental effects must indicate the following to substantiate that the design and number of loading and delivery areas are appropriate for the proposed development:
  - The type/s of service vehicles expected to delivery to and load from the site;
  - The frequency with which these vehicles will visit the site, indicating times during the day/night and approximate number of visits per week or month; and
  - Illustration that the dimensions of the loading and delivery areas are suited to the types of vehicles visiting the site. (Refer to AS 2890.2-1989 – Part 2: Commercial vehicle facilities for dimension requirements).

2.10. ACCESS DRIVEWAYS

OBJECTIVES

(i) To provide driveways with safe access and egress to and from properties.

(ii) To reduce conflicts between entering and exiting street traffic and car park traffic.

(iii) To ensure safety in the design, construction and operation of access driveways in accordance with Council's ESD objective 7.

DEVELOPMENT CONTROLS

(a) Access driveway widths are to comply with AS 2890.1-1993 Parking Facilities – Part 1: Off Street Car Parking.

(b) Driveways are to be provided in locations that have adequate sight distance.

(c) Driveways will be prohibited in the locations shown in Figures 5 and 6.

(d) Access driveways are to be constructed in accordance with Council's "Specification for the Construction of Footpath & Gutter Crossings" (2001).

(e) Access driveways are to be located a minimum of one metre from drainage structures and other service facilities located on the nature strip.

(f) Except for residential properties, driveway entrances and exits should be signposted appropriately.

(g) Access driveways should not be entered from or exited onto intersections where one or more of the intersecting roads are a collector, sub-arterial or arterial road.

(h) Indirect access must be sought in preference to direct access where the proposed development fronts a high-volume road. Where direct access is proposed, a study by a suitably qualified person must be conducted to indicate potential impacts. This study will also be assessed by the RMS.

(i) Driveways for multi dwelling housing, residential flat buildings and Seniors Living SEPP developments must be able to be accessed by service vehicles such as fire tankers, ambulances and bushfire tankers.

(j) In addition, application of controls for driveways in other applicable Sections of the DCP should be applied.

SUBMISSION REQUIREMENTS

- Site Plan including:
  - Indication of driveway locations in relation to the existing roadway and the kerb alignment; and
  - All tangent points on the kerb return must be identified.

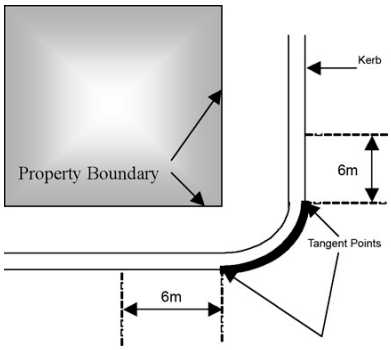


Figure 5 Driveways Prohibited Within 6 Metres From Tangent Points Of Kerb

Source: AS 2890.1 – 1993 Parking Facilities – Part 1: Off-Street Car Parking

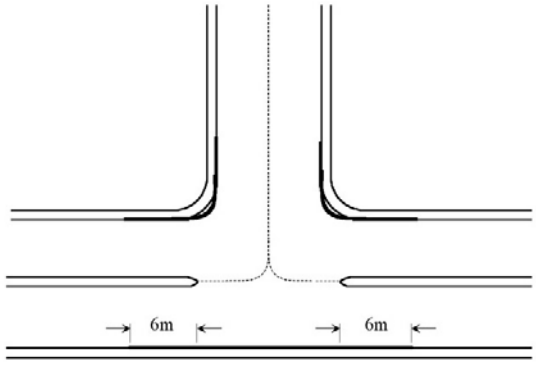


Figure 6 Driveways Prohibited On The Opposite Side Of The Road Or Within 6m Of Median Opening

3. REFERENCES

Australian Standard – AS 2890.1 – 1993 – Part 1 Parking Facilities – Off Street car parking.

Australian Standard – AS 2890.2 – 1989 – Off Street parking – Part 2: Commercial vehicle facilities.

Australian Standard – AS 2890.3 – 1993 – Parking Facilities – Bicycle parking - facilities.

Baulkham Hills Shire Council, 1993 Kellyville/Rouse Hill Landscape and Urban Design Strategy.

Department of Environment and Planning, 1981 Technical Bulletin 14: Guidelines for Site Landscaping of Commercial and Industrial Development.

Department of Urban Affairs & Planning, 1988 Rural Land Evaluation: A Manual for Conducting a Rural Land Evaluation Exercise at the Local Planning Level. Department of Urban Affairs and Planning, Sydney.

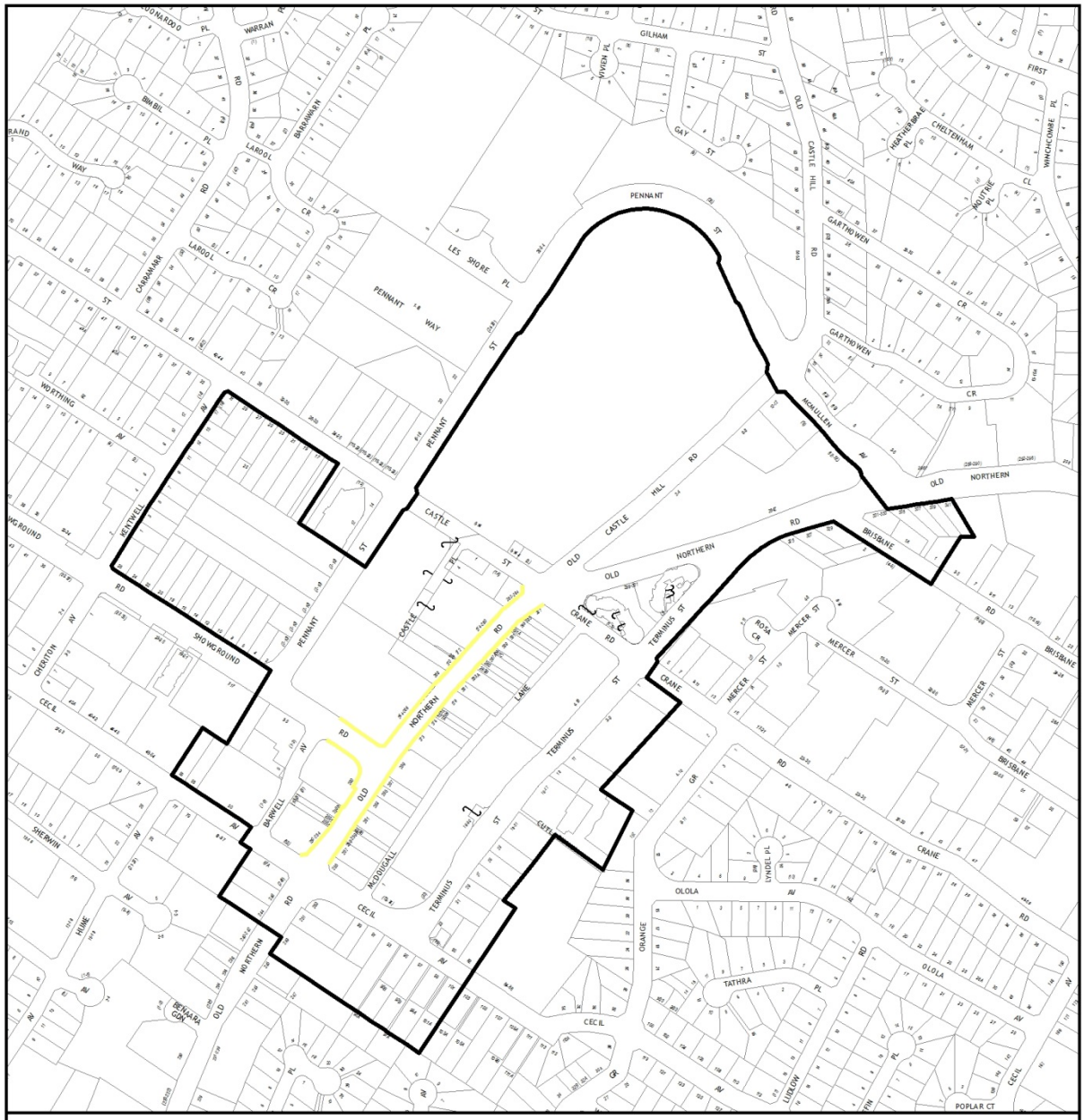
Department of Urban Affairs and Planning DUAP Circular No E3 Author.

Roads & Traffic Authority 1995, The Guide to Traffic Generating Developments.

Sinclair Knight Merz, 1996 Kellyville traffic and Parking Study. Prepared for Baulkham Hills Shire Council.

Standards Australia - Guide to Traffic Engineering Practice BICYCLES - Part 14 – Austroads.

APPENDIX A – CENTRE MAPS



ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

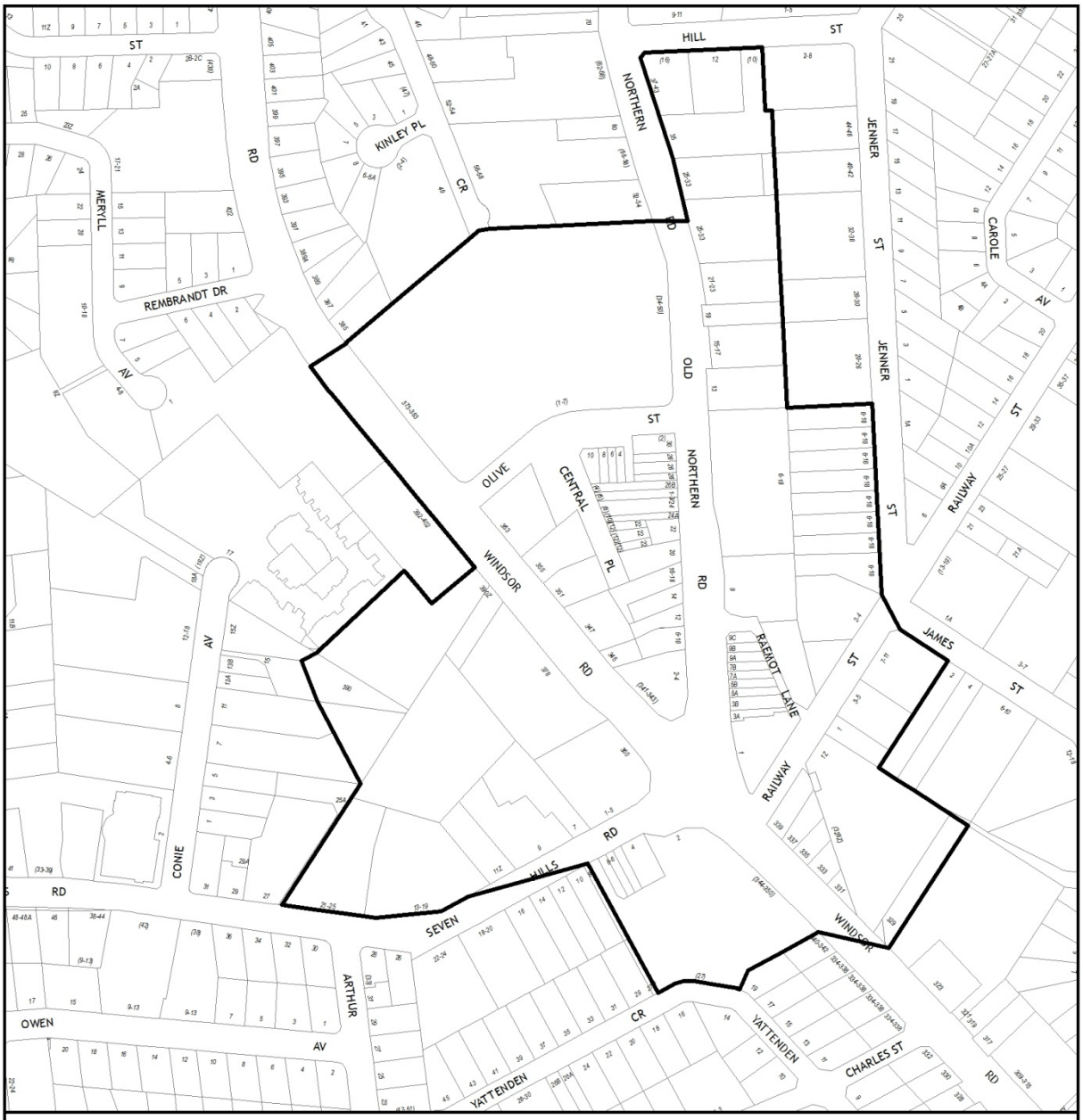
THE HILLS SHIRE COUNCIL

DRAFT THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part C Section 1 Map Sheet 1 - Parking

DRAWN BY	BRIAN CLISSOLD	DATE 6/11/2018	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012
SUPERVISING DRAFTSPERSON	BRIAN CLISSOLD	DATE 6/11/2018	
PLANNING OFFICER	A. IORI	DATE 6/11/2018	Date of Adoption: Minute No. Came into Force:
FILE No.	FP 171		

Map Document: S:\Projects\PlanServ\Consolidating_DCP\The_Hills_DCP_2012\DRAFT\PartC_Sec1\Draft_All_Sheets_1-5\PartC_Sec1_Sh1.mxd



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SCALE: 1:4,000

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Legend

Sheet 2 Boundary

LOCALITY: BAULKHAM HILLS TOWN CENTRE

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

DRAFT THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part C Section 1 Map Sheet 2 - Parking

DRAWN BY	BRIAN CLISSOLD	DATE 6/11/2018	STATEMENT OF RELATIONSHIP WITH OTHER PLANS
SUPERVISING DRAFTSPERSON	BRIAN CLISSOLD	DATE 6/11/2018	This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012
PLANNING OFFICER	A. IORI	DATE 6/11/2018	Date of Adoption: Minute No. Came into Force:
FILE No.	FP 171		

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SCALE: 1:7,000

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Metres

Legend

Sheet 3 Boundary

LOCALITY: ROUSE HILL MAJOR CENTRE

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

DRAFT THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part C Section 1 Map Sheet 3 - Parking

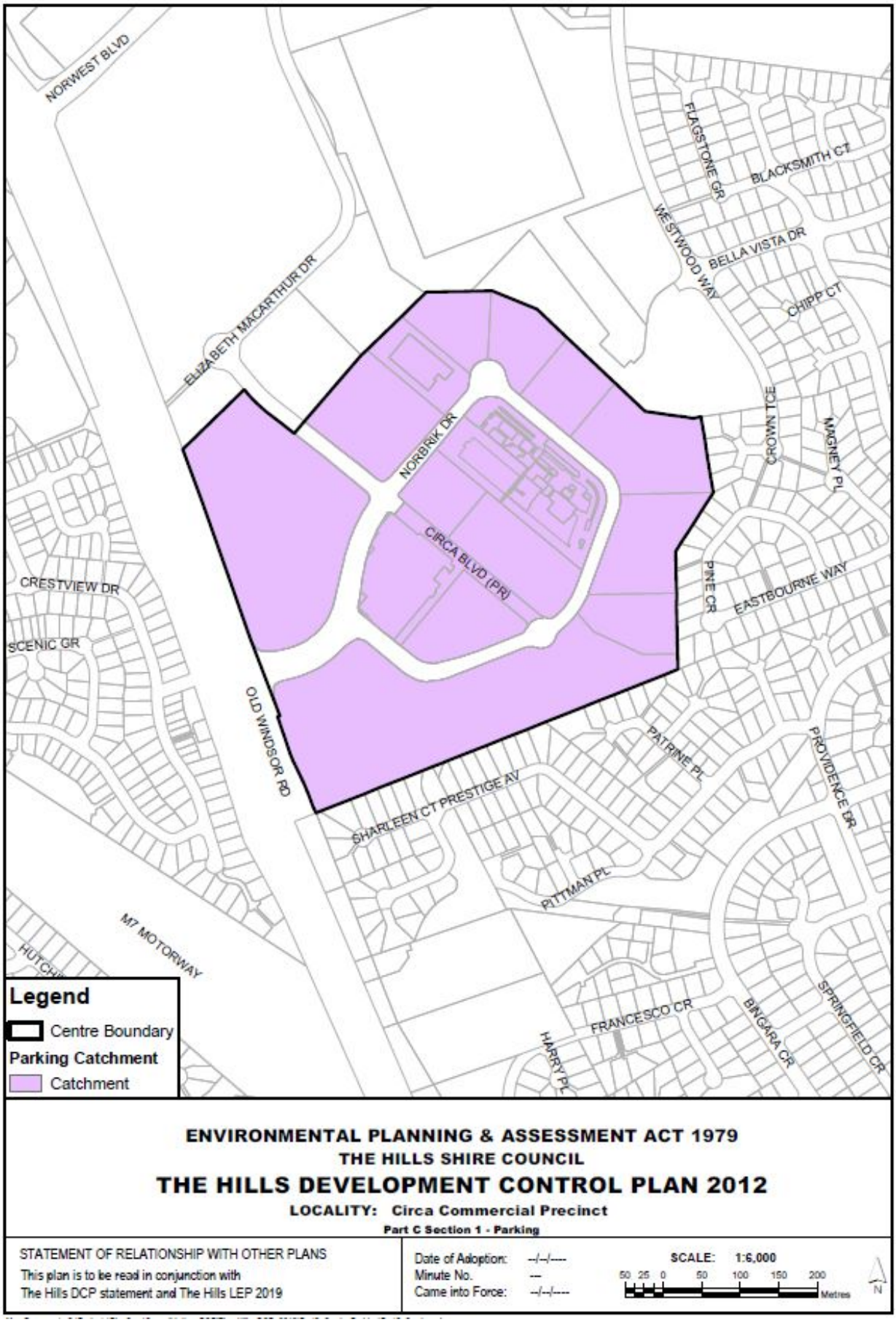
DRAWN BY	BRIAN CLISSOLD	DATE 6/11/2018
SUPERVISING DRAFTSPERSON	BRIAN CLISSOLD	DATE 6/11/2018
PLANNING OFFICER	A. IORI	DATE 6/11/2018
FILE No.	FP 171	

STATEMENT OF RELATIONSHIP WITH OTHER PLANS

This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012

Date of Adoption:
Minute No.
Came into Force:

Map Document: S:\Projects\PlanServ\Consolidating_DCP\The_Hills_DCP_2012\DRAFT\PartC_Sec1\Draft_All_Sheets_1-5\PartC_Sec1_Sh3.mxd



ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

THE HILLS DEVELOPMENT CONTROL PLAN 2012

LOCALITY: Circa Commercial Precinct

Part C Section 1 - Parking

STATEMENT OF RELATIONSHIP WITH OTHER PLANS
This plan is to be read in conjunction with
The Hills DCP statement and The Hills LEP 2019

Date of Adoption: --/--/----
Minute No. ---
Came into Force: --/--/----

SCALE: 1:6,000
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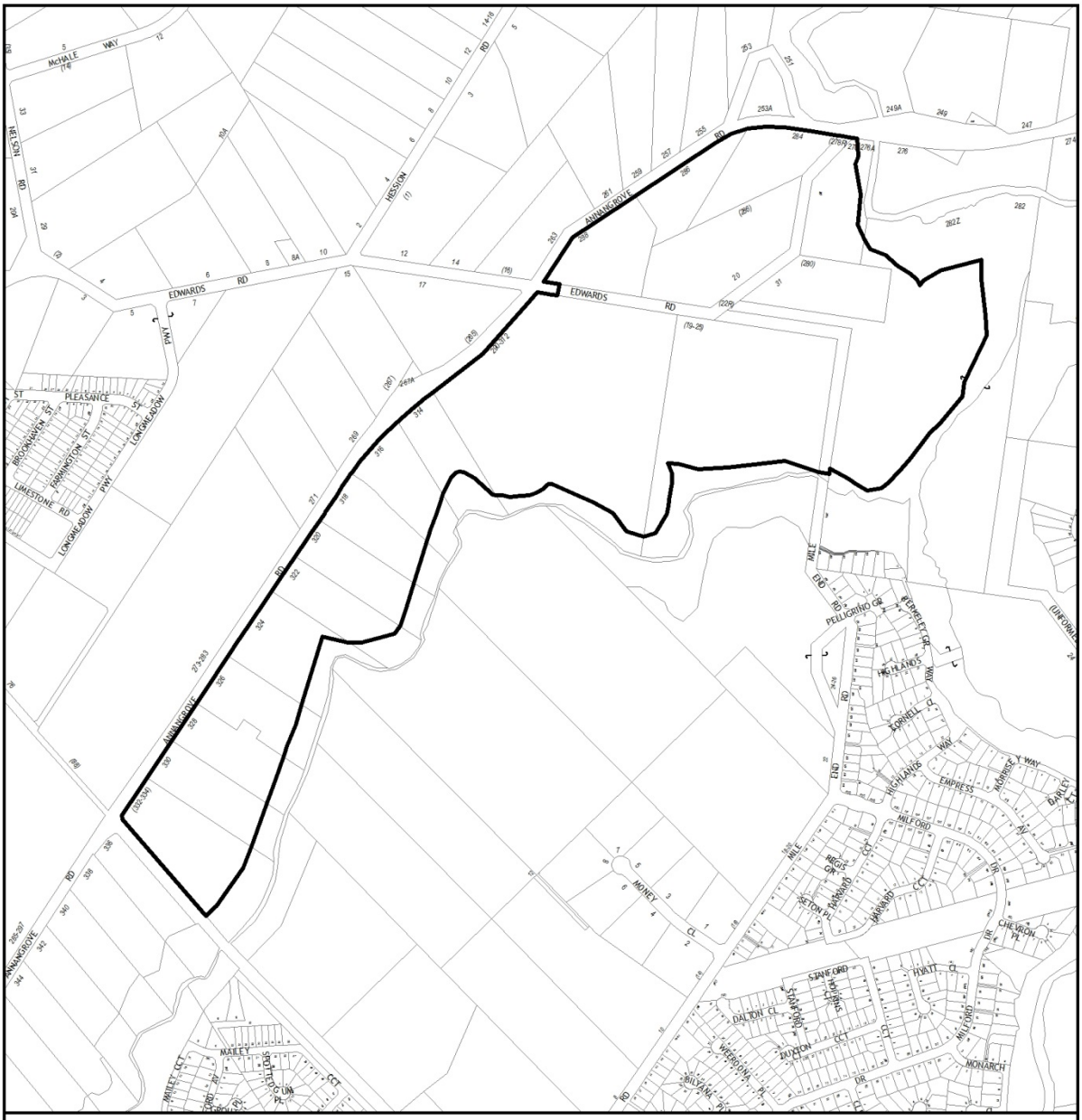
APPENDIX B – EDWARDS ROAD PRECINCT



ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

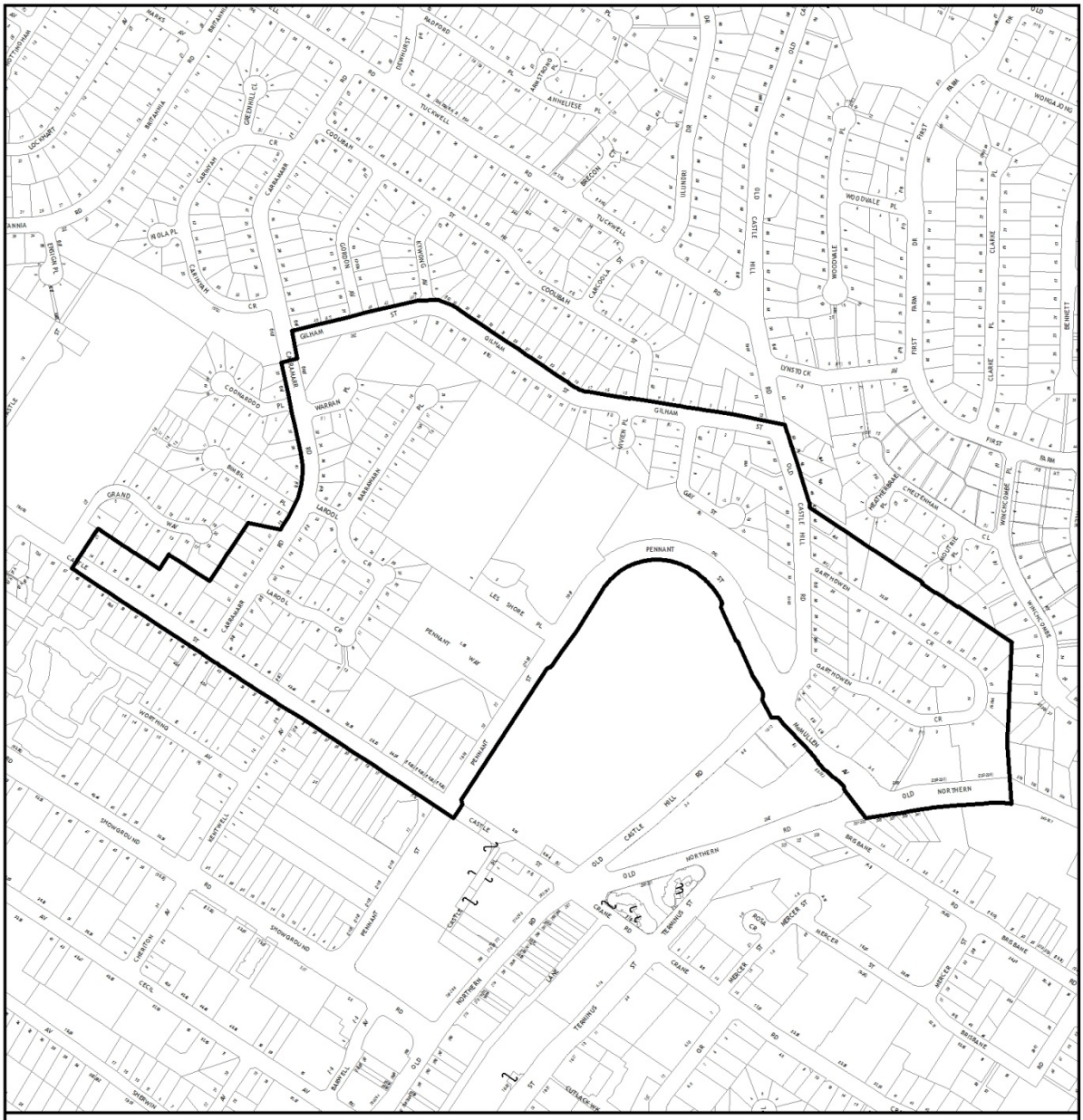
DRAFT THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part C Section 1 Map Sheet 4 - Parking

DRAWN BY	BRIAN CLISSOLD	DATE 6/11/2018	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012
SUPERVISING DRAFTSPERSON	BRIAN CLISSOLD	DATE 6/11/2018	
PLANNING OFFICER	A. IORI	DATE 6/11/2018	Date of Adoption: Minute No. Came into Force:
FILE No.	FP 171		

Map Document: S:\Projects\PlanServ\Consolidating_DCP\The_Hills_DCP_2012\DRAFT\PartC_Sec1\Draft_All_Sheets_1-5\PartC_Sec1_Sh4.mxd

APPENDIX C – CASTLE HILL NORTH PRECINCT



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SCALE: 1:7,000

50 25 0 50 100 150 200 250

Metres

Legend

Sheet 5 Boundary

LOCALITY: CASTLE HILL NORTH PRECINCT

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

THE HILLS SHIRE COUNCIL

DRAFT THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part C Section 1 Map Sheet 5 - Parking

DRAWN BY	BRIAN CLISSOLD	DATE 6/11/2018	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012
SUPERVISING DRAFTSPERSON	BRIAN CLISSOLD	DATE 6/11/2018	
PLANNING OFFICER	A. IORI	DATE 6/11/2018	Date of Adoption: Minute No. Came into Force:
FILE No.	FP 171		

Map Document: S:\Projects\PlanServ\Consolidating_DCP\The_Hills_DCP_2012\DRAFT\PartC_Sec1\Draft_All_Sheets_1-5\PartC_Sec1_Sh5.mxd

The Hills Development Control Plan (DCP) 2012

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Part C Section 2
Signage

C2

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1. INTRODUCTION

This Section of the DCP must be read in conjunction with Part A – Introduction of this DCP.

1.1. LAND TO WHICH THIS SECTON OF THE PLAN APPLIES

This Section of the DCP applies to land to which The Hills Local Environmental Plan (LEP) 2012 applies.

1.2. AIMS AND OBJECTIVES OF THIS SECTION OF THE DCP

The aim of this Section of the DCP is to establish Council's specific objectives and development controls for the provision of advertising and signage within the Shire.

OBJECTIVES

(i) Encourage a high standard of business and building identification signs and structures within the Shire having regard to the existing amenity and scenic quality of the area.

(ii) Ensure through design, construction and use of materials, that business and building identification signs and structures are in sympathy with development in the vicinity.

(iii) Provide any person with the opportunity to adequately advertise an approved use of any premises.

2. OBJECTIVES AND DEVELOPMENT CONTROLS

Objectives and Development Controls for signage and advertising are set out in the following sections.

In addition to those policies, guidelines and documents specified in Section 1.4 of Part A – Introduction, this signage Section is to be read in conjunction with State Environmental Planning Policy (SEPP) No.64 Advertising and Signage.

Business or building identification signs may only be erected or displayed if it is designed for one or more of the following purposes:

- to identify the premises upon which it is situated;
- to indicate the name of the occupier and the nature of activity conducted thereon;
- to identify the nature and type of goods and services available therein; or
- to direct persons to development in the immediate locality.

A description of sign types is provided in Appendix A to this Section.

2.1. DESIGN CONSIDERATIONS

OBJECTIVE

(i) To provide broad design parameters for business and building identification signs.

DEVELOPMENT CONTROLS

(a) Business and building identification signs shall not incorporate flashing lights or animated or movable components.

(b) Business and building identification signs shall be permanently fixed to the premises.

(c) Business and building identification signs shall not be located or constructed in such a manner as to obstruct any other approved sign.

(d) Permanent business and building identification signs shall not be located or constructed in such a manner as to obstruct the view of traffic lights or street signs, nor detrimentally obstruct motorists' or pedestrians' vision at an intersection or on any public road.

(e) Business and building identification signs shall not be constructed of canvas, calico or any like material.

(f) A free-standing pylon sign shall not exceed ten metres in height, measured from the existing ground level to the top of the structure, provided that the height of any pole sign shall have regard to the nature

and height of development in the immediate vicinity.

(g) Projecting wall business and building identification signs and flush wall signs shall not extend above the wall to which they are attached.

(h) All proposed signage is to be consistent with the objectives of State Environmental Planning Policy No.64 – Advertising and Signage as specified in clause 3(1)(a) of the SEPP.

(i) Applications for signage must demonstrate how the proposed signage satisfies the assessment criteria specified in Schedule 1 of SEPP No.64.

(j) No structure will be erected within 3 metres of the kerb or carriageway. Any structure within 5 metres of the kerb or carriageway will be of frangible design.

(k) All business and building identification signage should be designed in accordance with the Council's 'Designing Safer Communities Guidelines.' Signage should be legible and identify safe access routes.

2.2. SIGNS IN RURAL ZONES

OBJECTIVES

(i) To permit an approved use the opportunity to adequately advertise the activity being undertaken while maintaining the scenic and rural quality of the area.

(ii) To ensure that any advertising sign is sympathetic to the environment and to the scale and design of development in the vicinity.

DEVELOPMENT CONTROLS

(a) Business or building identification signs may only be erected if it is to display an advertisement relating to an approved use of the land on which it is situated.

(b) The maximum area of any sign shall be $4m^2$ with maximum dimensions of 2 metres x 2 metres.

(c) The maximum height to the top of a sign is to be 3 metres from the natural ground level.

(d) A maximum of one sign shall be erected per property except where a property has two street frontages. Where a property has two street frontages, one sign may be erected per street frontage.

(e) Where a property has two street frontages and one sign is proposed per frontage, the combined area of all signage shall be $4m^2$.

(f) Council may erect advertising structures for the purposes of directing the travelling public to tourist areas or displaying a private advertisement for tourist business.

(g) The advertising area of a business identification sign relating to an approved use for the purposes of a home occupation, home business, home industry or bed and breakfast accommodation shall not exceed 0.72 square metres and that would fit within a rectangle 1.2 metres x 0.6 metres.

2.3. SIGNS IN RESIDENTIAL ZONES

OBJECTIVES

(i) To permit an approved use to adequately identify their premises while maintaining the residential character of the area.

(ii) To ensure that business and building identification signs are appropriate to the size and scale of the activity conducted on the property.

(iii) To ensure that business and building identification signs do not detract from any residential area by requiring the size, shape, materials and location of the signage to complement the visual character of the surrounding area.

DEVELOPMENT CONTROLS

(a) The maximum area of any sign shall be $2.25m^2$ with maximum dimensions of 1.5 metres x 1.5 metres.

(b) The maximum height to the top of a sign shall be 2.5 metres from the natural ground level.

(c) The advertising area of an identification sign relating to an approved use for the purposes of a home activity or home business shall not exceed 0.72m^2 and that would fit within a rectangle 1.2 metres x 0.6 metres.

(d) Building identification and business identification signage within residential zones shall not be illuminated other than an illuminated cube light to identify health care premises.

2.4. SIGNS IN BUSINESS ZONES EXCLUDING B7 BUSINESS PARK ZONE

OBJECTIVES

(i) To provide the opportunity for an approved use to adequately identify the nature of the business conducted on the premises.

(ii) To ensure through design controls that the signage proposed is in sympathy with the design and architectural treatment of the building.

(iii) To limit the total advertising area of signage in proportion to the building design.

DEVELOPMENT CONTROLS

(a) The combined sign area of all business and building identification signs located on the frontage of a building or premises will be determined on the basis of 0.5m^2 of sign per one metre lineal frontage of the building.

(b) Where the building has more than one frontage the maximum sign area for a sign on any side elevation (in addition to signage specified in clause (a) above), shall not exceed 0.25m^2 of sign per one metre of lineal frontage of the building.

(c) Only one under awning sign shall be permitted for each approved shop, office or suite situated on land within a business zone except in the case where a shop has a frontage to two streets. In this case only one under awning sign shall be permitted to each street frontage.

(d) Under awning signs shall not exceed the dimensions of 2400mm x 500mm. Any signs extending over the footpath shall retain a minimum distance of 2600mm between the underside of the sign and the level of the footpath.

(e) An above awning sign shall not exceed the dimensions of 2400mm x 750mm.

(f) In the case of multiple occupancies, only one under awning sign for each occupancy shall be permitted subject to the distance between under awning signs being a minimum of three metres.

(g) Where a premises or building contains multiple occupancies, the maximum area of signage allowed on the façade of each occupancy shall be determined on the basis of 0.5m^2 per one metre lineal frontage of the subject unit or suite.

(h) Free-standing pylon signs will not be permitted in business/commercial zones on sites which utilize a zero setback. Free-standing pylon signs on all other sites in business/commercial zones will be assessed on merit taking into consideration the site locality and design.

Note. Displays located behind windows are not included within the above calculations, with the exception of illuminated signs and permanent signage for the purposes of advertising a business.

See Typical Sign Treatment for Commercial Zones – Appendix B to this Section.

2.5. SIGNS IN INDUSTRIAL AND B7 BUSINESS PARK ZONES

OBJECTIVES

(i) To provide the opportunity for an approved use to adequately identify the nature of the business conducted on the premises.

(ii) To ensure through design controls that the signage proposed is in sympathy with the building design and architectural treatment of the building.

(iii) To limit the total advertising area of signage in proportion to the building design.

(iv) To ensure brothel and sex services premises signage is discreet and does not draw attention to the use.

(v) To ensure that signage does not detract from the visual appeal of buildings within the industrial area.

DEVELOPMENT CONTROLS

(a) One sign is permitted per sex services premises with maximum dimensions of 1.0m x 0.5m. The sign must only identify the registered name of the business, address (clearly so as to prevent nuisance to adjoining uses) and contact number.

(b) Signage shall not display words or images which, in the opinion of Council are sexually explicit, lewd or otherwise offensive.

(c) Illumination of signage for sex services premises (with the exception of flashing or neon lighting) may be considered where the applicant has demonstrated that it will have no adverse impact on any other use within view.

(d) Only one free-standing pylon sign shall be permitted on any parcel of land zoned Industrial or B7 Business Park, and shall meet the following requirements:-

- The height of any free-standing pylon sign shall not exceed ten metres measured from the existing ground level to the top of the structure and shall have regard to the nature and height of development in the immediate vicinity;
- The maximum width of the entire structure shall be two metres;
- The maximum advertising display area within the structure shall be no greater than 12.0m^2 with maximum advertising dimensions 1.5 metres in width and 8.0 metres in height. No advertising shall be permissible within the bottom 2.0 metres of the structure;
- The free-standing pylon sign may identify the names of the occupant(s) of individual unit/suite in the premises and may include a logo or symbol that identifies the business, but does not include general advertising of products, goods or services; and
- The free-standing pylon sign may be erected in the landscaped setback area.

(e) Only one free-standing tenancy listing board shall be permissible per parcel of land zoned Industrial or B7 Business Park meeting the following requirements:-

- The maximum size of the tenancy listing board shall not exceed 6.0m^2;
- The height shall not exceed two metres measured from the existing ground level to the top of the structure and the width of the structure shall not exceed 3 metres;
- The structure is to be located at the entry to the site and may be incorporated with an area containing mail boxes for individual units;
- The tenancy listing board shall include the property address and identify the names of the occupant(s) of each unit/suite in the premises, but does not include general advertising of products, goods or services. Colour and font used on the tenancy listing board is to be consistent; and
- The structure may be erected in the landscaped setback area.

(f) The combined sign area of all business and building identification signs on the facade of a building will be permitted on the basis of 0.5m^2 of sign per one metre of length of the building façade which addresses the primary frontage of the site.

(g) Where the building has more than one frontage, the maximum advertising area for a sign on any side elevation (in addition to signage specified in clause (c) above) shall not exceed 0.25m^2 of sign per one metre of length of the façade of the building.

(h) Where a premises or building contains multiple occupancies, the maximum area of signage allowed on the façade of each occupancy shall be determined on the basis of 0.5m^2 per one metre of length of façade of the subject unit or suite.

(i) Notwithstanding Development Control (a) above, one (1) pylon sign per street frontage shall be permitted.

(j) Notwithstanding Development Control (b) above, one (1) freestanding tenancy listing board per vehicular entry point to the site shall be permitted. Where the applicant proposes a tenancy listing board at each entry to the site, the name of the occupant of the unit in the premises is to be displayed only on the tenancy board installed at the entry that provides the most direct access to the unit.

(k) Only one (1) directional sign per vehicular entry/exit point to the site shall be permitted, and shall meet the following requirements:-

- The sign is only to be used for directional purposes (e.g. 'Exit Only');
- The sign is only to be located at vehicular entry to the site;
- The maximum height of the sign shall not exceed 0.6m; and
- The maximum size of the sign shall not be greater than 0.5m^2.

Note. Displays located behind windows are not included within the above calculations, with the exception of illuminated business and building identification signs and permanent signage for the purposes of advertising a business.

See Typical Sign Treatment for Industrial Zones – Appendix C to this Section.

2.6. SIGNS IN OTHER ZONES

OBJECTIVES

(i) To ensure that signage reflects the nature of the activity conducted on the property and any special signage provisions relating to that zone.

(ii) To ensure that signage is not out of character with development in surrounding areas.

DEVELOPMENT CONTROL

(a) Business and building identification signs shall not be erected on premises within a Special Purpose, Recreation or Environmental Protection zone unless the applicant can justify the need for such a structure or sign.

2.7. SIGNS FOR EXHIBITION HOMES

OBJECTIVE

(i) To allow adequate identification of an approved exhibition home for a temporary period provided the signage does not adversely affect the amenity of any adjoining rural residential area or open space.

DEVELOPMENT CONTROL

(a) Where Council has approved a dwelling for exhibition purposes only one sign having an advertising area not exceeding 1m^2 shall be permitted for each exhibition home. Consent for such a sign shall remain in force only as long as the consent for the use of the dwelling for exhibition purposes.

2.8. SIGNS FOR EXISTING-USES

OBJECTIVE

(i) To permit adequate identification of an approved business provided the signage is in scale with the development and does not adversely affect the amenity of the surrounding area.

(ii) To ensure that the signage is in keeping with the development and the nature of the land use.

DEVELOPMENT CONTROL

(a) Applications for the erection of signs on premises which enjoy existing use rights under the provisions of the Environmental Planning and Assessment Act 1979 shall be determined on merit, having regard to the nature of the land use and the location of the proposed signs, type, colour, size and effect on the amenity of the area.

2.9. SIGNS FOR VEHICLE SALES OR HIRE PREMISES

See signage controls contained in the subsection 2.5 of this Section of the DCP relating to business and building identification signs in IN1, IN2 and B7 zones.

2.10. TEMPORARY ADVERTISEMENT SIGNAGE

OBJECTIVES

(i) To control the visual impact of advertising development signs on the environment, maintaining uniform and orderly standards for signs and controlling the number and type of advertisements while providing adequate opportunities for the nature of the advertisement.

(ii) To ensure that advertising signs do not detract from the area by requiring the size, shape, materials and location of the signage to complement the visual character of the surrounding area.

(iii) To maintain a balance between the established built form and character of the streetscape and commercial need to advertise.

(iv) To prevent visual clutter through the proliferation of advertisements and advertising structures by restricting the number of signs per street frontage to promote more effective advertising signs.

(v) To ensure that advertisements and advertising signs do not disrupt vehicular or pedestrian flows.

DEVELOPMENT CONTROLS

(a) The advertisement in respect of the place or premises to which it is affixed contains only a notice that the place/premises is/are for sale together with particulars of the sale.

(b) No illumination of any type for the advertising signage is permitted.

(c) The supporting structure is to be of a dark and recessive colour. Timber frame supports are to be painted black or a dark colour.

(d) Advertising signage shall be limited to one sign per street frontage.

(e) The advertising signage shall only be permitted to be erected for the duration of the event or as otherwise approved by Council consent.

(f) The signage shall have a maximum dimension within the following areas as follows:

Rural	$2.5m^2$
Residential	$2.5m^2$ for the sale of single residential properties.
	$4.5m^2$ for unit/dwellings sites containing two or more proposed dwellings for sale
Business	$20m^2$
Industrial	$10m^2$

2.11. ILLUMINATION OF SIGNS

OBJECTIVE

(i) To ensure that illuminated signage does not adversely impact on adjacent property owners or the amenity of the area.

DEVELOPMENT CONTROLS

(a) Any illuminated signage shall not adversely impact upon adjoining properties and shall be designed to ensure that no light spills onto adjoining or adjacent properties.

(b) Any illumination of signage shall be switched off upon the closure of business each day. Should the business operate during normal business hours only, illumination shall be switched off by 9pm daily.

(c) Illuminated signage is prohibited within residential zones other than an illuminated cube light to identify health consulting rooms.

(d) Illuminated business and building identification signs are not to be used on the land upon which a heritage item is located.

2.12. INAPPROPRIATE SIGNS

DEVELOPMENT CONTROLS

(a) The following types of business and building identification signs shall not be erected or displayed:

- Roof-top signs;
- Air borne signs (blimps); and
- A-frame board signs or moveable placards.

2.13. SIGNAGE REQUIREMENTS FOR HERITAGE ITEMS

OBJECTIVES

(i) To ensure that any advertising signs and structures are erected so as not to impinge upon the historic, cultural, social or aesthetic value of a heritage item.

(ii) To provide an opportunity for authorised occupants of heritage items to identify themselves and their activities that are commercial in their nature.

DEVELOPMENT CONTROLS

(a) The location of signs shall not detract from the significance of the heritage item.

(b) No sign or advertising material is to be attached to the heritage item.

(c) Signage is to be limited to one sign of a maximum of 0.5 square metres per street frontage of the property.

(d) The content or wording of the sign is to be limited to the name and authorised occupation of the occupant of the premises.

(e) The colours and lettering of any sign or advertising material are to complement the architectural style and colours of the heritage item.

(f) No signs or advertising material is to be erected or displayed in windows or door openings of the heritage item.

(g) General advertising, bunting, or streamers, and the like are not to be used on the land on which a heritage item is located.

(h) Illuminated signs are not to be used on the land upon which a heritage item is located.

SUBMISSION REQUIREMENTS

- The application should detail the location, height, size, colour and materials to be used in any signage associated with a heritage site.

3. INFORMATION REQUIRED FOR A SIGNAGE DEVELOPMENT APPLICATION

Applications for consent to erect and use a building or business identification sign shall be made on Council's Development Application form and should comprise the following information:-

SIGNAGE PLAN

STATEMENT OF ENVIRONMENTAL EFFECTS INCLUDING:-

- Approval details for the use of the premises;
- Location/(s) of all existing advertising signs and reference to any approval previously granted by Council;
- Justification/need for the signage;
- Confirmation of any illumination of signage;
- Compliance with the objectives and controls of this Section of the DCP; and
- Written confirmation that the sign will be fully contained within the site boundary.

Note. Refer to Part A – Introduction section 4.0 for general lodgement requirements.

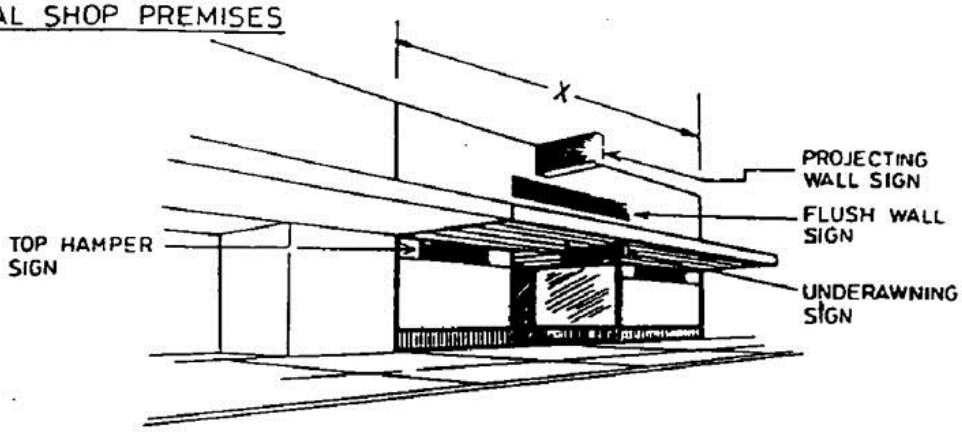
APPENDIX A – ADVERTISING SIGNS AND STRUCTURES

Policy On Advertising Signs and Structures	
CLASS OF ADVERTISING STRUCUTRE	DESCRIPTION OF ADVERTISING STRUCUTRE
Fascia sign	Attached to the fascia or return end of an awning.
Awning sign	Attached to an awning (other than the fascia or return end).
Fin sign	Erected on or above the canopy of the building.
Roof sign	Erected on or above the roof or parapet of a building.
Top hamper sign	Attached to the transom of a doorway or display window of a building.
Flush wall sign	Attached to the wall of a building (other than the transom of a doorway or display window) and not projecting horizontally more than 0.3 metres from the wall.
Projecting wall sign	Attached to the wall of a building (other than the transom of a doorway or display window) and projecting horizontally more than 0.3 metres from the wall.
Flashing wall sign	Illuminated (as to any part of the advertising area) at frequent intervals by an internal source of artificial light and whether or not included in any other class of advertising structure.
Floodlight sign	Illuminated (as to any part of the advertising area) by an external source of artificial light and whether or not included in any of the class of advertising structure.
Pole or pylon sign	Erected on a pole or pylon independent of any building or other structure and shall not exceed ten metres in height.
Moving sign	Attached to a building and capable (as to any part of the advertisement or advertising structure) of movement by any source of power (whether or not included in any other class of advertising structure).
Advertising panel	Any other advertising structure which is unilluminated, including a hoarding or bulletin board.
Directional sign	A sign erected at vehicular entry point to the site and shall not exceed 0.6m in height and 0.5m^2 in area.

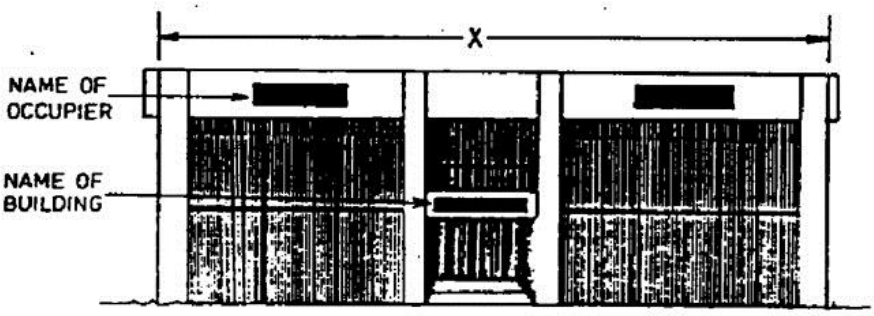
APPENDIX B – TYPICAL SIGN TREATMENT FOR COMMERCIAL ZONES

TYPICAL SIGN TREATMENT FOR COMMERCIAL ZONES

TYPICAL SHOP PREMISES



TYPICAL OFFICE BUILDING WITH MULTIPLE OCCUPANCY

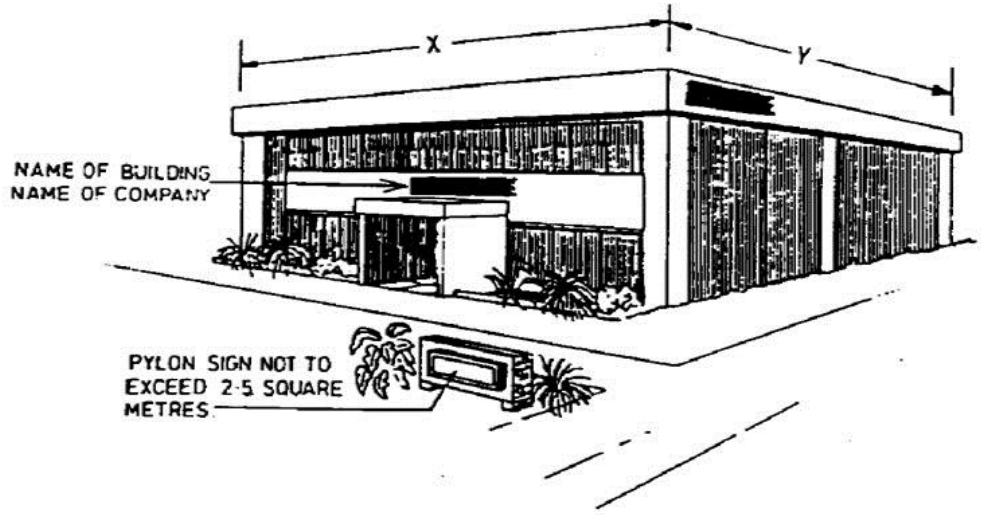


- Combined area of signs allowed for front elevation = Xm x 0·5m²
- Combined area of signs allowed for side elevation = Ym x 0·25m²

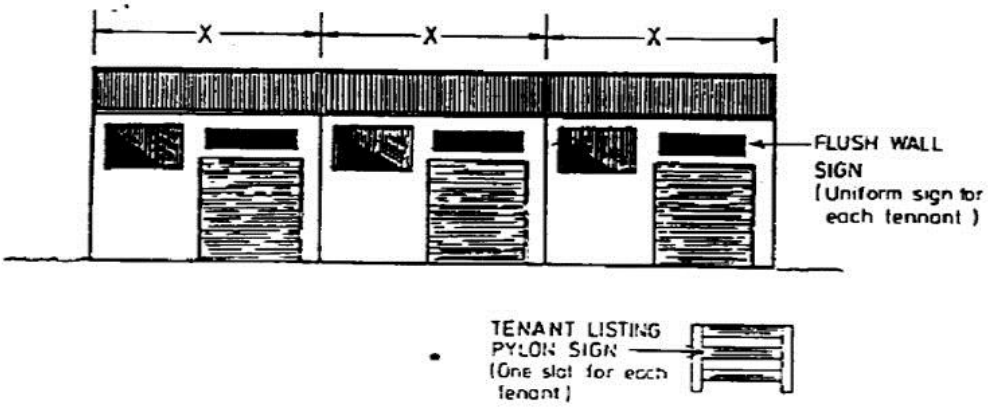
APPENDIX C – TYPICAL SIGN TREATMENT FOR INDUSTRIAL ZONES

TYPICAL SIGN TREATMENT FOR INDUSTRIAL ZONES

TYPICAL ONE OCCUPIER BUILDING



TYPICAL MULTIPLE UNIT BUILDING



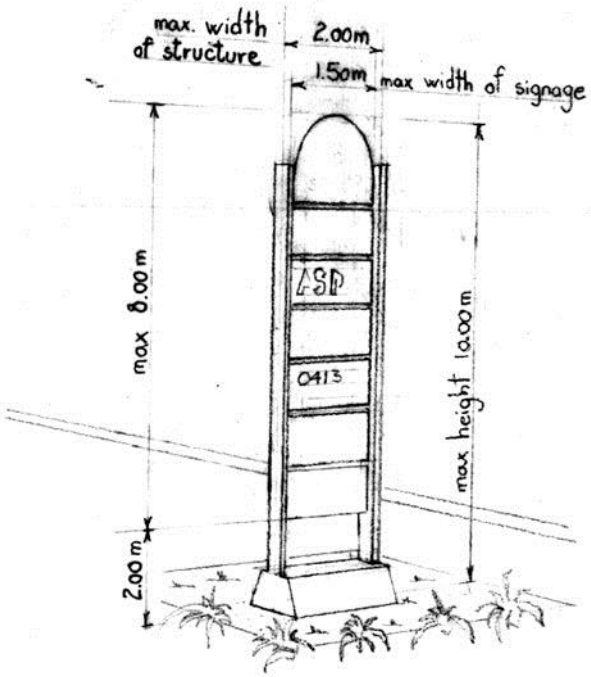
- The combined area of all signs to be a maximum area of :

  X = Length of front elevation (metres).

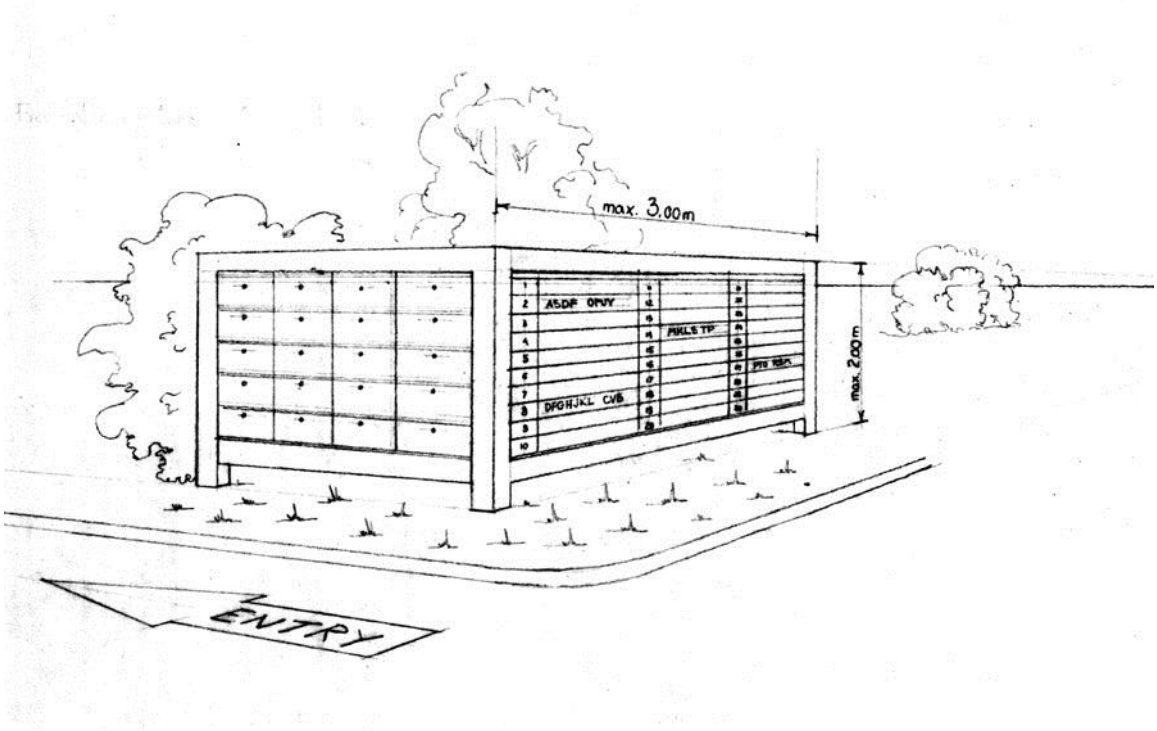
  Y = Length of side elevation (metres)

- Combined area of signs allowed for front elevation = Xm x 0·5m²

- Combined area of signs allowed for side elevation = Ym x 0·25m²



TYPICAL FREE-STANDING PYLON SIGN



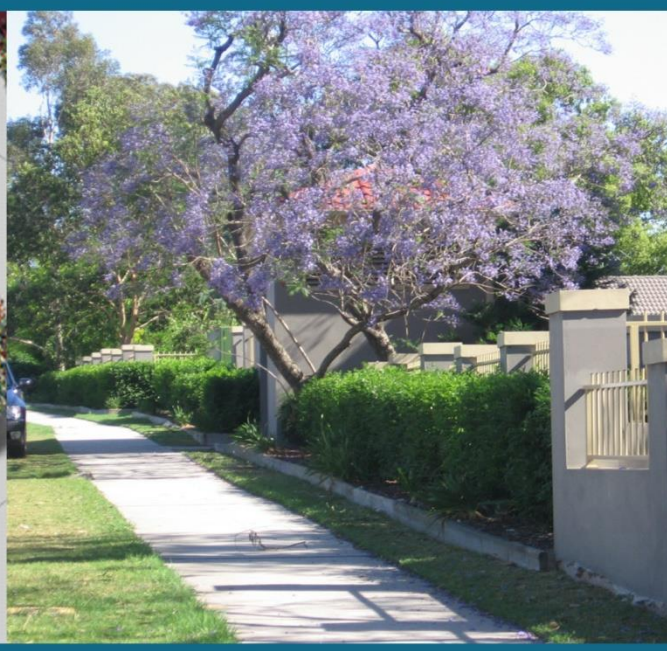
TYPICAL FREE-STANDING TENANCY LISTING BOARD

The Hills Development Control Plan (DCP) 2012

www.thehills.nsw.gov.au

THE HILLS Sydney's Garden Shire





Part C Section 3
Landscaping

C3

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1. INTRODUCTION

This Section of the DCP must be read in conjunction with Part A – Introduction of this DCP.

1.1. LAND TO WHICH THIS SECTION OF THE PLAN APPLIES

This Section of the DCP applies to land to which The Hills Local Environmental Plan (LEP) 2012 applies.

1.2. AIMS AND OBJECTIVES OF THIS SECTION OF THE DCP

The aim of this Section of the DCP is to identify Council's objectives for landscaping in the Shire and identify controls to ensure the objectives are achieved.

OBJECTIVES

(i) To ensure that landscaping preserves and contributes to the Shire's environmental and visual character and the existing and past cultural landscape.

(ii) To promote the principles of ecologically sustainable development.

(iii) To encourage the landscape treatment of sites which takes into account their context - the subdivision design, the streetscape design, the design of neighbouring buildings.

(iv) To encourage landscaping that can be effectively maintained.

(v) To encourage innovative landscape design.

(vi) To define and outline the provisions necessary for lodgement of landscape proposals.

2. BACKGROUND INFORMATION

2.1. WHY ARE LANDSCAPE PLANS NECESSARY?

Vegetation and natural landscapes rather than the built form dominate the character of the Hills Shire. As such it is Council's intention to retain the predominantly natural landscapes by ensuring that new development does not have a negative impact on established streetscapes and natural environments.

In order to achieve this, The Hills Shire Council requires with most development applications, the submission of a landscape plan that has been prepared in accordance with the development controls outlined in this Section of the DCP. Applications are assessed on their individual merit.

In recognition of the processes involved in the preparation of landscape proposals, Council requires landscape plans to be prepared by a suitably qualified Landscape Architect or experienced horticulturalist.

Applicants may discuss any proposal covered by this Section of the DCP with Council Officers prior to the lodgement of any formal development application.

2.2. THREATENED SPECIES

Where a development site has remnant indigenous species, applicants must take into consideration the provisions of the Threatened Species Conservation Act 1995.

Should the site contain threatened flora or fauna, refer to the Environmental Planning and Assessment Act 1979. The Environmental Planning and Assessment Act 1979 will prescribe whether a Species Impact Statement prepared in accordance with the Threatened Species Conservation Act 1995 is required to accompany the development application.

2.3. NOXIOUS SPECIES

The Noxious Weeds Act 1993, specifies the control of noxious weeds in New South Wales.

The responsibility for eradication of noxious plants on private land is that of the owner. Private landholders are responsible for:

- Removing and / or controlling noxious weeds on their own land according to the specified control category;
- Notifying relevant authorities of any occurrence of W1 weeds.

2.4. TREE MANAGEMENT PROVISIONS

Clause 5.9 *Preservation of trees or vegetation* of *The Hills LEP 2012* applies to all trees within The Hills Shire.

A **'tree'** is a perennial plant with a self-supporting woody stem that has a spread of more than 3 metres or a height of more than 6 metres or has a trunk diameter of more than 300mm measured at the base (see Figure 1).

The following trees may be removed without Council approval:

- Alnus jorrullensis (Evergreen Alder)
- Populus nigra "Italica" (Lombardy Poplar)
- Pittosporum undulatum (Sweet Pittosporum)
- Schefflera actinophylla (Umbrella Tree)
- Ficus elastica (Indian Rubber Tree)
- Acer negundo (Box Elder)
- Salix babylonica (Weeping Willow)
- Gleditsia triacanthos (Honey Locust)
- Ligustrum lucidum (Broad Leaved Privet)
- Ligustrum sinense (Small Leaved Privet)
- Olea europaea var. africana (Wild Olive/African Olive)
- Robinia pseudoacacia (False Acacia/Black Locust)
- Syagrus romanzoffianum (Cocos Palm)
- Toxicodendrum succedaneum (Rhus Tree)
- Cotoneaster spp. (Cotoneaster)
- Ficus benjamina (Weeping Fig)
- Lagunaria patersonia (Norfolk Island Hibiscus)
- Tamarix aphylla (Athel Tree)
- Nerium oleander (Oleander)
- x Cupressocyparis Leylandii (Leyland Cypress)
- Cupressus sempervirens 'Stricta' (Pencil Pine)
- Arcontophoenix alexandrae (Alexandara Palm)
- Arcontophoenix cunninghamiana (Bangalow Palm)
- Celtis australis (Hackberry)
- Ailanthus altissima (Tree of Heaven)
- Citharexylum spinosum (Fiddlewood)
- Harpephyllum caffrum (Kaffir Plum)
- Albizia lophantha (Silk Tree)
- Schinus terebinthifolius (Brazilian Mastic, Broadleaf Pepper Tree)
- a fruit tree or tree grown for the purposes of fruit production, excluding naturally growing native fruiting species

The following trees may be removed without development consent if the height of the tree is less than 10 metres:

- Melia azedarach (White Cedar)
- Liquidambar styraciflua (Liquidambar)
- Cinnamomum camphora (Camphor Laurel)
- Erythrina X sykesii (Coral Tree)
- Araucaria bidwillii (Bunya Bunya Pine)
- Araucaria heterophylla (Norfolk Island Pine)
- Araucaria cunninghamii (Hoop Pine)
- Pinus radiata (Monterey Pine/ Radiata Pine)
- Cupressus marocarpa (Monterey Cypress)

Trees within 3m an Existing Approved Dwelling or Ancillary Structure: Council approval is not required to prune or remove trees within 3m of an existing dwelling or ancillary structure, which has been approved through a development application or complying development certificate, within the same lot as the tree. The distance is to be measured from the face of the tree trunk closest to the dwelling or structure to the external wall or roof line of the dwelling or structure, the definition of which may include a garage, carport, studio, shed, workshop, swimming pool, spa or retaining walls with a height greater than 600mm.

The removal of trees in accordance with this clause must not be inconsistent with any applicable State or Federal legislation relating to the protection of threatened species.

Clause 5.9 of The Hills LEP 2012 applies to all vegetation within The Hills Shire.

'**Vegetation**' means bushland that is either a remainder of the natural vegetation on the land or, if altered, is representative of the structure and/or floristics of the natural vegetation.

Refer to Council's *Tree Management Guidelines for Trees on Private Land* for additional guidelines and assessment criteria.

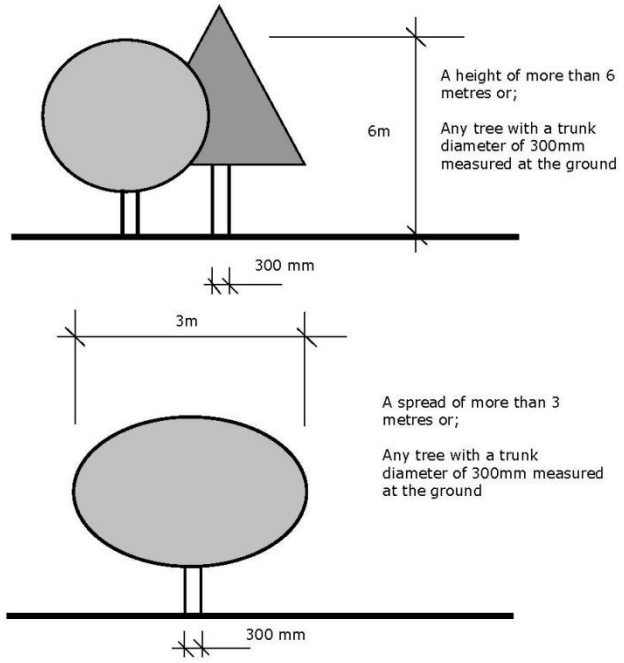


Figure 1 Definition of a tree

3. OBJECTIVES AND DEVELOPMENT CONTROLS

Objectives and development controls for landscaping development are set out in the following sections.

In addition to the policies, guidelines and documents specified in section 1.4 of Part A - Introduction, this Section is to be read in conjunction with other relevant Sections including:

- Part B Section 6 – Business
- Part C Section 1 – Parking
- Part C Section 4 – Heritage

3.1. GENERAL PLANNING AND DESIGN CONTROLS

OBJECTIVES

(i) To provide general design principles to ensure that appropriate landscaping is provided to complement the type of development proposed.

(ii) To ensure that appropriate detail and information is provided on landscape plans.

DEVELOPMENT CONTROLS

(a) The landscaping of any site should have regard to the natural environment of the location and be consistent with landscaping character of the area.

(b) Landscaped areas shall have a minimum width of two metres.

(c) All landscaping is to adhere to the following principles:

- Planting is to be in scale with the proposed buildings;
- Planting to consist of a variety of trees, shrubs and ground covers;
- Landscaping to side and rear boundaries should effectively screen the development;
- Consideration should be made to alternatives to traditional fencing by using vegetation or change in height of the landform as natural barriers;
- Artificial mounding using excavated materials is encouraged to enhance or screen buildings and car parking areas - See Figure 5 – Screening and mounding for noise attenuation
- Planting shall be of advanced species except where it is demonstrated to Council's satisfaction that semi-advanced stock is more suited to soil and / or plant characteristics;
- All electrical substations, water supply valves, hydrants and the like shall be suitably screened, however, due consideration shall be given to the requirements of the appropriate authority, and must not be located through the root ball of any trees being retained;
- Plant selection for all landscape developments will be assessed for its suitability toward existing site conditions such as soils, aspect, drainage and micro-climate;
- Plant selection appropriate to the existing or proposed cultural landscape will also be included in the general assessment of a proposal; and
- Species selection and landscape design should minimise the need for watering.

(c) Trees should be of species unlikely to cause structural damage to buildings, retaining walls, paths, services and other property.

(d) Consideration should be given to the types of footings to be used in a development to reduce the impact on mature trees.

(e) Stormwater drainage lines and other services should be located to minimise the disturbance around existing trees which are to be retained.

(f) Landscaping plans should be consistent with architectural plans and engineering plans, especially with regard to levels, stormwater drainage and on-site detention.

(g) Landscaping in bushfire prone areas shall be in accordance with *Planning for Bush Fire Protection 2006.*

SUBMISSION REQUIREMENTS

- Landscape Plan and other relevant landscape documentation be provided.
- A Landscape Management Statement.

3.2. PROTECTION OF TREES AND UNDERSTOREY

OBJECTIVES

(i) To retain and protect as many mature trees as possible during development.

(ii) To retain the existing natural understorey.

DEVELOPMENT CONTROLS

(a) Where natural vegetation exists, all trees must be preserved in accordance with The Hills LEP 2012.

(b) Where a stand of trees is to be retained, any associated natural understorey must also be retained.

(c) Hard surfaces should be avoided under the drip line of any tree.

(d) Wherever trees are removed (with consent) as a consequence of the development, an equal or greater number of replacement trees must be incorporated into the landscaping of the new development.

(e) Services must not be located in areas that will disturb the root plate of an existing tree.

(f) During construction, an adequate fence or similar structure must be constructed around any remaining trees, at a distance equal to the drip line. This area must not be used by machinery, for stockpiling wastes or for storage of any building materials.

SUBMISSION REQUIREMENTS

- A Tree Management Statement or Arborist Report is to be prepared by a suitably qualified Australian Qualification Framework Level 5 Arborist and contain the following information:
  - Identify all existing trees including species, condition, height and spread;
  - Identify whether trees are to be removed, replanted or retained; and
  - Details of how those trees to be retained will be protected during construction.

3.3. DEVELOPMENT ADJACENT TO BUSHLAND AREAS

OBJECTIVE

(i) To ensure that landscaping does not adversely impact on bushland in adjoining properties.

DEVELOPMENT CONTROLS

(a) Where development is within or adjacent to a bushland preservation area, environmental protection zone or open space zone, the affects on trees within the vicinity of the development needs to be considered.

(b) On sites directly adjacent to bushland, all dominant species are to be indigenous to the local area as recommended in Appendix A of this Section of the DCP. Accent planting of exotic species may occur using ground covers and shrubs.

(c) All non-indigenous plants used are to be non-invasive and unlikely to establish in the adjoining bushland either by seed or vegetative reproduction as recommended in Appendix A.

(d) Bush rock is unsuitable for landscaping purposes, except where it is needed for the authentic restoration of historic gardens or for additions to existing bush rock structures.

SUBMISSION REQUIREMENTS

- A comprehensive assessment of trees or natural vegetation likely to be affected.

3.4. STREET TREES AND STREETSCAPE

OBJECTIVE

(i) To provide functional yet attractive streetscapes that reflects the purpose of the street and enhances the amenity of the surrounding built form.

(ii) To ensure street trees are durable to the street environment and do not conflict with surrounding infrastructure.

DEVELOPMENT CONTROLS

(a) Street tree species must be in accordance with the recommended species list in Attachment B. The use of native species is preferred.

(b) All street trees shall be sourced from a "NATSPEC" accredited nursery.

(c) Street trees, where desirable should seek to provide for:

- Shade;
- Reduction of glare;
- The dissipation of noise and pollution emanating from vehicles; and
- Enhance the visual quality of the streetscape.

(d) It is desirable to promote a streetscape character. This does not necessarily mean a monoculture avenue.

(e) The selection of street trees should have regard to form, shape and colour.

(f) Street trees must not interfere with the movements or sightlines of any pedestrian, cyclist or vehicle.

(g) Street tree location should have regard to areas of potential vehicle / tree collision. Where such areas are identified the use of frangible species is recommended.

(h) Plantings in traffic devices must not be higher than 500mm for shrubs and ground covers, or in the case of trees, have a clear stem with no over hanging branches to a height of at least 20m. Not all traffic devices are suitable for landscaping and consultation with Council staff is necessary.

(i) The location of street trees must have regard to surrounding infrastructure. Guidelines on planting locations for street trees on local roads (excluding collector roads) are provided as Figures 2 and 3.

(j) Where trees are to be proposed to be planted in the vicinity of overhead wires, the mature height of the tree must not exceed four metres.

(k) Street trees require the installation of root barriers at the time of planting, directly adjacent to the kerb to prevent later damage to the kerb, guttering and road surface.

(l) Where street trees are to be planted in areas with a hard surface, suitable grates are to be laid around the tree to protect the roots and allow for water infiltration.

(m) The location of services should be taken into account where street trees are to be provided. Care should be taken to ensure trees are not planted directly over services.

(n) Street trees are not to be planted within 9m of a road corner or within 3m of a driveway.

(o) Street trees are not to be planted within 6m from a street light or within 2m of a drain culvert.

(p) Street trees should be able to tolerate low water conditions and withstand pollution emissions.

(q) Should fruiting trees be planted, the Department of Primary Industry standards in regards to the control of fruit fly, must be applied.

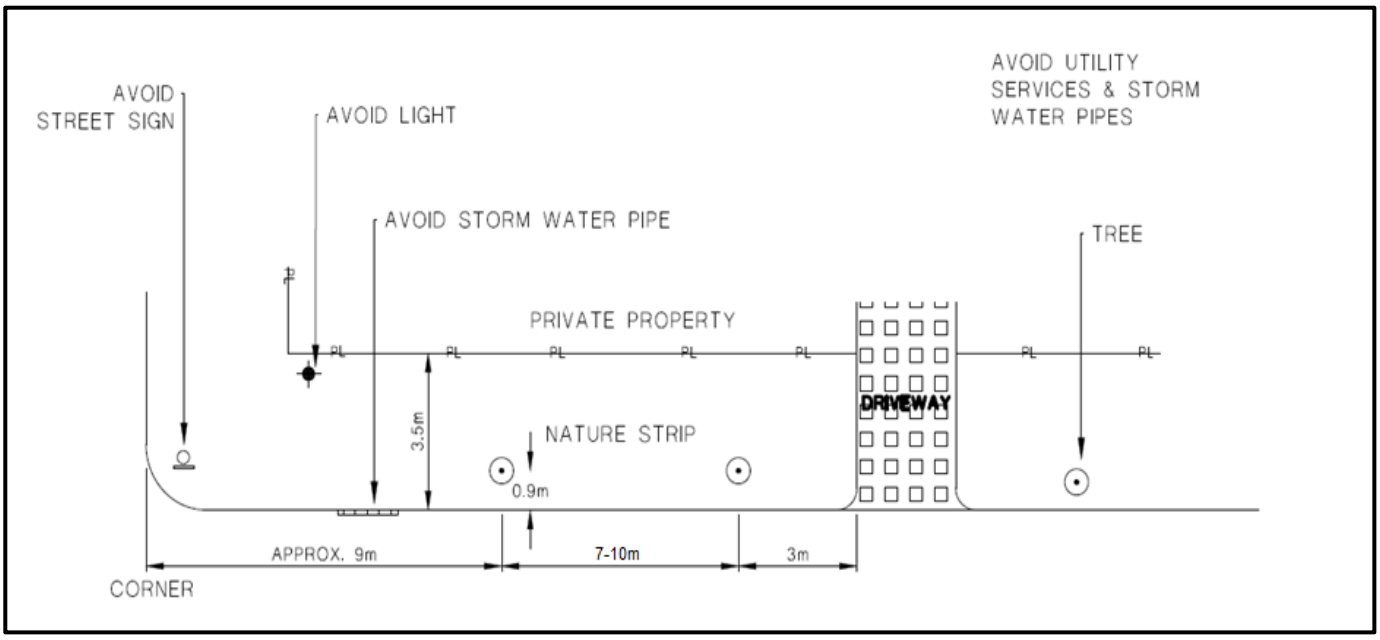


Figure 2 – Planting Guidelines for Street Trees on Local Roads (No Footpath)

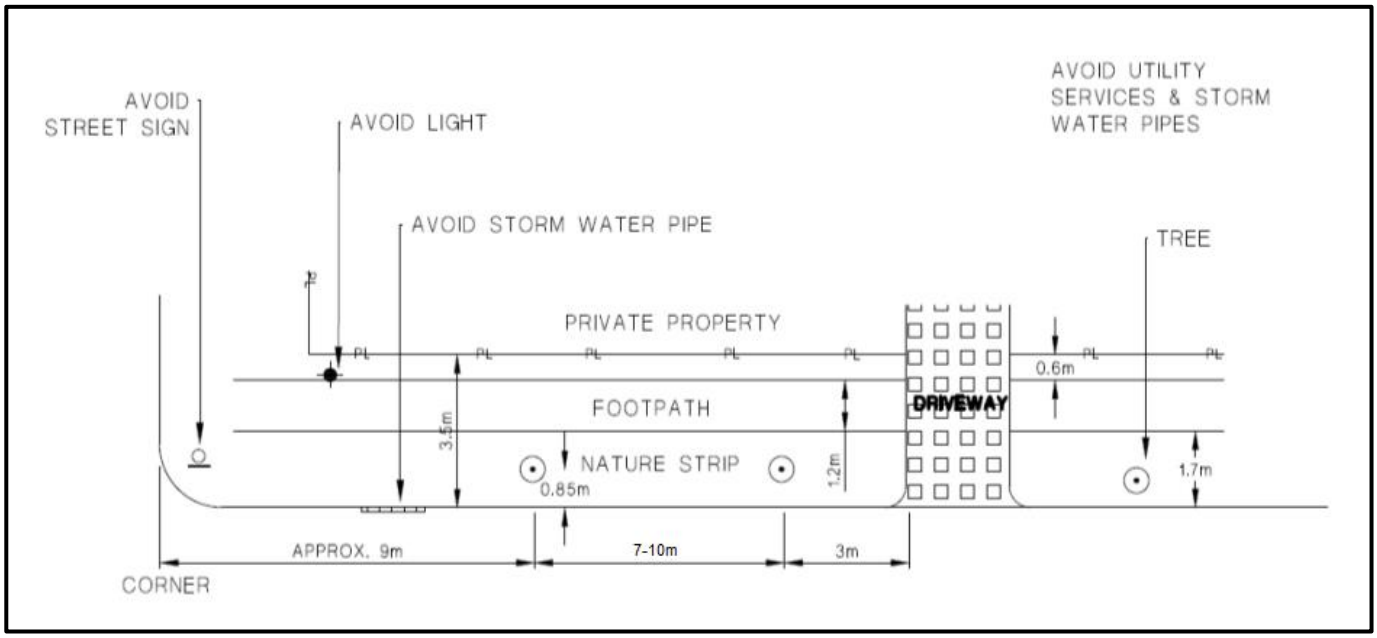


Figure 3 – Planting Guidelines for Street Trees on Local Roads (With Footpath)

SUBMISSION REQUIREMENTS

- Details of the street trees proposed and the relationship with existing buildings and landscaping in the vicinity of the development.

3.5. DRAINAGE AND ON-SITE DETENTION

OBJECTIVES

(i) To improve the visual appearance of above ground on-site detention structures.

(ii) To encourage the integration of detention areas into common open space.

DEVELOPMENT CONTROLS

(a) All landscape works are to include provision for adequate drainage including collection or dispersal of stormwater run-off, prevention of ponding of water on pavements or discharge of run-off onto adjoining properties or public areas.

(b) Above ground detention structures should be suitably landscaped to improve the visual amenity of the development.

(c) Detention structures should be suitably integrated into the landscaping for the whole site, including common open space areas.

(d) Plant species used in these areas must be capable of withstanding periodic inundation and must not impact upon the functioning of the area as a detention structure.

SUBMISSION REQUIREMENTS

- Identification of proposed detention structures on Landscape Plan submitted.
- Details of plant species to be used, including details of the ability to cope with periodic inundation.
- Details of proposed methods to ensure landscaping will not block drains or impact on the functioning of the detention structure.

3.6. LANDSCAPE CONSTRUCTION STANDARDS

OBJECTIVE

(i) To ensure that standards of landscape construction are consistent throughout the Hills Shire.

DEVELOPMENT CONTROLS

(a) All landscape construction is to be carried out by a qualified landscape contractor to ensure that a satisfactory standard of landscaping is achieved.

(b) All garden areas to be filled with a weed free soil mix at minimum 300mm depth.

(c) All turfed areas to have a minimum 150mm of good quality topsoil placed prior to turfing.

(d) Couch or buffalo turf is to be used where lawn areas are proposed. Use of Kikuyu is prohibited except where it can be demonstrated that it is necessary, such as in the case of sports fields.

(e) All trees are to be advanced specimens in 75 litre containers and at least 2 metres in height.

(f) All shrubs are to be advanced specimens in 5 litre containers and at least 500 mm in height.

(g) All ground covers are to be advanced specimens and planted at 5 per square metre.

(h) All trees to be double staked using 40mm square hardwood stakes for marking purposes only. Trees shall not be tied unless support is essential. Where ties are required, trees shall be loosely tied to stakes with a double configuration of Hessian webbing. Ties shall be removed as soon as the plant is able to support itself. Refer to Figure 4 – Tree guard and planting details.

(i) All advanced trees and shrubs to be planted in holes at least 1.5 times the size of the pot, containing good quality soil and humus.

(j) In lawns, holes are required to be backfilled with good quality soil and humus or site soil (if of suitable quality) mixed with suitable soil conditioner.

(k) Minimise on site storage time for plants. Store plants together in an area protected from strong winds and dust - if necessary use a Hessian fence for protection. Soak plants thoroughly once per day during storage, adjusting watering for rainfall.

(l) In lawn areas, grass is to be kept back for a radius of at least 450mm from stems and trunks, a depression formed for the collection of water and the area mulched.

(m) Adequate hose-cocks to be provided at regular intervals to permit maintenance of landscaping.

(n) Suitable retaining structures to be provided where Council's standard site gradients cannot be met or as considered necessary.

(o) Mulch is to be installed to a depth of 75 to 90mm to all mass planted garden areas and around the base of trees in lawn areas. Mulch is to be pine bark, pine flake, decorative gravels or other suitable material. Please note that scoria or other suitable gravels, which will not float, are required in on-site detention areas. Mulch should be kept at least 50mm away from plant stems to reduce the risk of collar rot.

(p) Specifications should include the type of fertilisers to be used. Council requires that organic fertilisers should be used where possible to reduce a build-up of chemical nutrients in soil and waterways. Consideration should also be given to fertilisers, which are suitable to the kind of species being specified.

(q) All garden areas are to be separated from lawn areas by means of a securely affixed concrete, selected brick or creosote treated hardwood.

(r) All landscaped areas to be separated from driveways and car parks by means of a concrete kerb or dwarf wall.

(s) All landscaped embankments having a slope of 1:3 or greater shall be reinforced using an approved stabilisation technique to prevent erosion or slumping. Stabilisation techniques may include, but are not limited to the use of dense ground covers erosion control netting, mesh or rock stabilisation.

(t) All turf embankments are to be a maximum grade of one vertical to five horizontal to facilitate mowing with push-type or ride-on mowers.

(u) Appropriate action is to be carried out to protect and avoid damage to existing trees, subject to provisions in the Hills LEP 2012 strictly in accordance with AS 4970-209 Protection of Trees on Development Sites. Protection must be provided to all site trees during the construction period, by preventing:

- The compaction of roots by vehicles;
- The stockpiling of building materials within the drip line of the tree;
- Permanent change of water table level; and
- Mechanical damage to trunk or limbs.

(v) Maintain soil levels to the area under the canopy. Avoid raising or lowering the soil level within the drip line. If trees are likely to have a significant area under the canopy disturbed by site works, consideration should be given to early removal of the tree and replanting with juvenile plants.

(w) All plants classified as noxious weeds under the Noxious Weeds Act 1993 or known to be invasive in local bushland are to be eradicated from development sites. Council may also advise of additional species to be removed prior to building approval. All weeds or undesirable plants are to be eradicated prior to commencement of the landscape works.

SUBMISSION REQUIREMENTS

- If Kikuyu is proposed the submission of a Management Plan outlining measures to prevent it invading adjoining properties or bushland is required.

3.7. WATER CONSERVATION AND IRRIGATION

OBJECTIVES

(i) To encourage water conservation measures.

(ii) To encourage the implementation of suitable irrigation systems.

(iii) To reduce the ongoing maintenance requirements of landscaped areas.

DEVELOPMENT CONTROLS

(a) The design of irrigation systems for large commercial, industrial and residential flat building developments should be undertaken by a person with appropriate qualifications and take into account the physical features of the site.

(b) The provision of any permanent watering system should give consideration to the requirements of the appropriate authorities (e.g. Sydney Water).

(c) Plants must be appropriate to the soil type and water retention ability of the soil.

(d) Plants should be grouped according to their water requirements.

(e) Lawns that require significant water and fertiliser should be minimised.

(f) Use of mulches and dense ground covers are encouraged to reduce evaporation, and runoff, suppress weed growth and maintain plant growth.

(g) Use of rainwater tanks are encouraged to collect rainwater for the purposes of watering soft landscaped areas.

(h) The adding of organic material or gypsum to the soil prior to undertaking landscaping works, is encouraged.

(i) The irrigation control system must be located in a safe location to avoid vandalism, and pipes and other fittings should be located underground where possible to avoid damage.

(j) The irrigation system should be designed with the varying water needs of the plants within the landscaped area.

(k) Automatic watering systems should be able to detect rainfall and adjust the water regime accordingly.

SUBMISSION REQUIREMENTS

- Details of the proposed irrigation system and compliance with the relevant development controls.

3.8. MAINTENANCE

OBJECTIVE

(i) Ensure that approved landscaping will be maintained in a good condition at all times.

DEVELOPMENT CONTROLS

(a) Maintenance is to be carried out in accordance with accepted horticultural practices and techniques and construction standards.

(b) Watering must be carried out at sufficient intervals to maintain the landscaping.

(c) Weeds and rubbish must be removed at regular intervals.

(d) Vandalism and graffiti should be promptly removed and / or replaced.

(e) Plant species that do not survive must be replaced in accordance with the approved landscape plan.

(f) Grassed areas require watering, weeding, mowing, fertilizing, top dressing and replacement of failed areas of turf.

(g) Dead or dangerous limbs must be promptly removed in accordance with an approved tree removal application.

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

(i) Hard surfaces and landscape structures are to be maintained in an appropriate manner.

SUBMISSION REQUIREMENTS

- Developments with common property are required to provide a Plan of Management for the maintenance of the landscaping as per the landscaping plan submitted with the application.

3.9. SUBDIVISIONS

OBJECTIVES

(i) To ensure that new subdivisions minimise the disturbance to the existing landscape and visual amenity of The Hills Shire.

(ii) To ensure an attractive and functional landscape treatment which provides amenity and sense of place within a new subdivision.

DEVELOPMENT CONTROLS

(a) Manage the major visual impacts of the subdivision by controlling and enhancing views into and out of the subject development.

(b) Reduce high maintenance plantings in the streetscape e.g. Annuals, garden beds and shrubbery.

(c) Planting of high branching trees with a low shrub layer, which does not obstruct views where vehicular sight lines are required to be maintained where security is an issue.

(d) Provide single species plantings to each street to provide a continuity of theme.

(e) Avoid trees which are recognised to cause known maintenance problems such as fruiting, aggressive root systems, invasion of bushland, or are allergenic.

(f) Re-use site topsoil at all times (if not possible, the reasons why are to be provided).

(g) Reduce the effects of altered hydrology on vegetation within and surrounding the site.

(h) Identify whether opportunities for recreation and / or open space areas are to be provided within the subdivision.

(i) Identify if noise buffer mounding and / or shields are required within the subdivision.

(j) Landscaped areas may be used to provide site drainage.

(k) Provide pedestrian and bicycle circulation where possible.

(l) Street furniture elements should be cohesive in appearance and enhance the theme of the subdivision.

(m) Land identified as future open space is to be handed to Council in such a condition that Council is not burdened by additional costs in order to commence development or embellishment of the land, or to ensure the safety of the general public using the land. At the time of purchase, it is to be free of dead plants, weed species, vermin, rubbish and undue soil compaction and must be planted with turf (at a minimum) to prevent erosion.

SUBMISSION REQUIREMENTS

- A detailed plan at a suitable scale showing as a minimum the proposed street layout, including the width of the road reserve, distance of planting from the kerb, turf or planted areas, pathways, lot boundaries, service locations, tree spacing and also indicating:
  - The theme of the planting proposed for each street, including information on the species, height, spread and if relevant the condition of any trees being retained;
  - Landscape treatment proposed for entry and threshold areas, noise buffer mounds, drainage areas, open space areas and walkways;
  - Details of topsoil to be re-used and stockpiled on site, its location and treatment;
  - Treatment for regraded or mounded areas of the site;
  - Areas of open space and plans for their embellishment;
  - Integration of landscaped areas with natural and engineered drainage areas;
  - Layout and construction standards for dedicated paths for pedestrian and bicycle circulation; and
  - Typical standards for the design and layout of street furniture.

3.10. BUSINESS AND INDUSTRIAL DEVELOPMENT

OBJECTIVES

(i) To integrate high quality landscaping into the built environment of the Shire's industrial and business precincts.

(ii) To present an attractive visual character and robust landscaped treatments that are appropriate and functional in industrial and business precincts.

DEVELOPMENT CONTROLS

(a) The scale and the appearance of any landscape planting, furniture, signage and lighting must be in scale with the mass of the building.

(b) Use plantings to break down the visual impact of large structures and to frame and present front facades, offices and display areas.

(c) Locate parking and storage areas to reduce visual impact and use plantings and mounding to screen these areas wherever possible. Refer to Figure 6 – Landscaping and screening for car parking for more detail.

(d) Use paving materials and plantings to provide visual cues to desired pedestrian flows and to the entry of the buildings.

(e) Ensure that plantings do not interfere with pedestrian and vehicular sight lines.

(f) Provide safe and pleasant public and staff areas.

SUBMISSION REQUIREMENTS

- Provide a Landscape Plan for the development showing the following (in addition to those items specified in Section 3.1):-

- Street furniture, signage and lighting;
- Entry and exit points;
- Screen planting and mounding;
- Pedestrian and outdoor staff areas; and
- Low maintenance amenity plantings in scale with the development.

3.11. RESIDENTIAL DEVELOPMENT

OBJECTIVES

(i) To ensure that the landscaping of open space areas, both private and communal is functional and meets user requirements for privacy, solar access, shade and recreation.

(ii) To provide attractive landscapes, which reinforce the function of the street and contribute to the amenity of dwellings.

(iii) To ensure that the landscaping does not unduly impact on adjoining developments.

DEVELOPMENT CONTROLS

(a) Open space should take advantage of the outlook and natural features of the site.

(b) Consideration must be given to the privacy between dwellings, security and surveillance of open space.

(c) Unsealed landscaped areas are to be maximised to facilitate on-site infiltration of storm water runoff, subject to the sites conditions.

(d) Landscaping and vegetation must:

- Use vegetation types and landscaping styles that blend the development into the streetscape and visually reduce the bulk and scale of the development;
- Be located with other plants with similar water requirements;
- Not adversely effect the foundations of any structure or cause damage to underground or overhead servicing;
- Ensure vehicular and pedestrian vision and safety;
- Contribute to the energy efficiency of the building by ensuring compliance with the ESD objectives outlined in Part A of the DCP; and
- Maintain the established planting character of the streetscape and wider area.

(e) When paving or hard surfaces are to be used for driveways, patios, paths and other similar uses, these surfaces should be:

- Semi porous or graded (e.g. gravels) to maximise on site water infiltration (if practical);
- In materials and colours that compliment the development and do not detract from the streetscape; and
- Finished in non slip surfaces;

(f) The location and choice of vegetation should take into account the soil conditions, topography and water conditions of the site.

SUBMISSION REQUIREMENTS

- A landscaping plan shall be submitted, showing the following, (in addition to the items listed in Section 3.1):
  - Location and design of any communal recreation facilities including methods of protecting the privacy of adjoining dwellings; and
  - Clear delineation between public and private open space.

3.12. CAR PARKING

OBJECTIVES

(i) To ensure that adequate consideration is given to landscaping in car parking area designs, to reduce the prominent visual appearance of the facility.

(ii) To provide appropriate landscaping for external and uncovered car parks so that they do not detract from the surrounding area.

(iii) To provide shade and improve amenity of loading, service and car parking areas and to provide a buffer to neighbouring properties.

(iv) To utilise landscaping to provide amenity to neighbouring properties in accordance with Council's Ecological Sustainable Development objective 7.

DEVELOPMENT CONTROLS

(a) Outdoor parking areas are to be provided with two metre wide landscaping strips as depicted in Figure 6 – Landscaping and screening for car parking:

- Between rows served by different aisles; and
- Between spaces at a rate of one in every ten car parking spaces (as determined in Part C Section 1 - Parking).

(b) Car Parking is to be provided in accordance with Part C Section 1 – Parking.

(c) Outdoor parking areas are to be screened by a minimum of two metre wide landscaping strips. Such landscaping is to be of a mature and dense nature.

(e) Driveways are to be screened by a minimum of two metre wide landscaping strip on either side.

(f) Landscaping should not:

- Block signs;
- Impede entry and access points;
- Overgrow paths;
- Cause restrictions to pedestrian and vehicle movements; or
- Compromise safety or sight distances.

(g) Plant and tree species need to be chosen based on their:

- Hardiness;
- Vigorous growth;
- Longevity;
- Ample shade provision; and
- Species should not be prone to dropping limbs, fruit, cones or nuts.

(h) Shade trees are to be provided within landscaping strips.

(i) Shade trees should not be located more than fifteen metres apart in any direction to provide shade at maturity of not less than 40% of the car park area.

(j) To protect plant materials, vehicles must be separated from landscaped areas by means of a concrete curb or dwarf wall.

(k) Trees must be pruned for safety reasons and to maintain vehicle sight lines.

(l) Where soils permit infiltration, the landscaping strips should be used to promote reuse of drainage water.

SUBMISSION REQUIREMENT

- Details of the location and dimensions of landscaped areas and species types to be planted in the car parking area.

3.13. TENNIS COURTS

OBJECTIVES

(i) To ensure that the installation of a tennis court does not have an adverse impact on the existing landscape of the subject property or neighbouring properties.

(ii) To ensure that the visual, aural and lighting impact of a tennis court is reduced.

(iii) To provide privacy for users of the court and adjoining neighbours.

DEVELOPMENT CONTROLS

(a) Tennis courts are to be setback a minimum of two metres, from any side or rear boundary, excluding any area occupied by a retaining structure to allow for sufficient landscaping and visual and acoustic privacy.

(b) Tennis courts shall be situated to ensure that no more than one metre of cut or 600mm of fill is required.

(c) Landscaping should consist of tall vertical evergreen species that will fit within the two metre landscape buffer, while not interfering with the fencing structure.

(d) Access points to any landscaped area are to allow for future maintenance and shall be incorporated into the landscape design.

SUBMISSION REQUIREMENTS

- Provide a landscape plan for the development showing the following (in addition to those items specified Section 3.1):-
  - Access points; and
  - Any retaining structures.
- Elevation indicating the extent of cut and fill.

3.14. HERITAGE

Special requirements may exist for the landscaping of areas of environmental heritage. In this regard the applicant will consult with Council officers and other relevant organisations.

See Part C Section 4 - Heritage for specific provisions.

Figure 4 Tree Guard and Planting Details

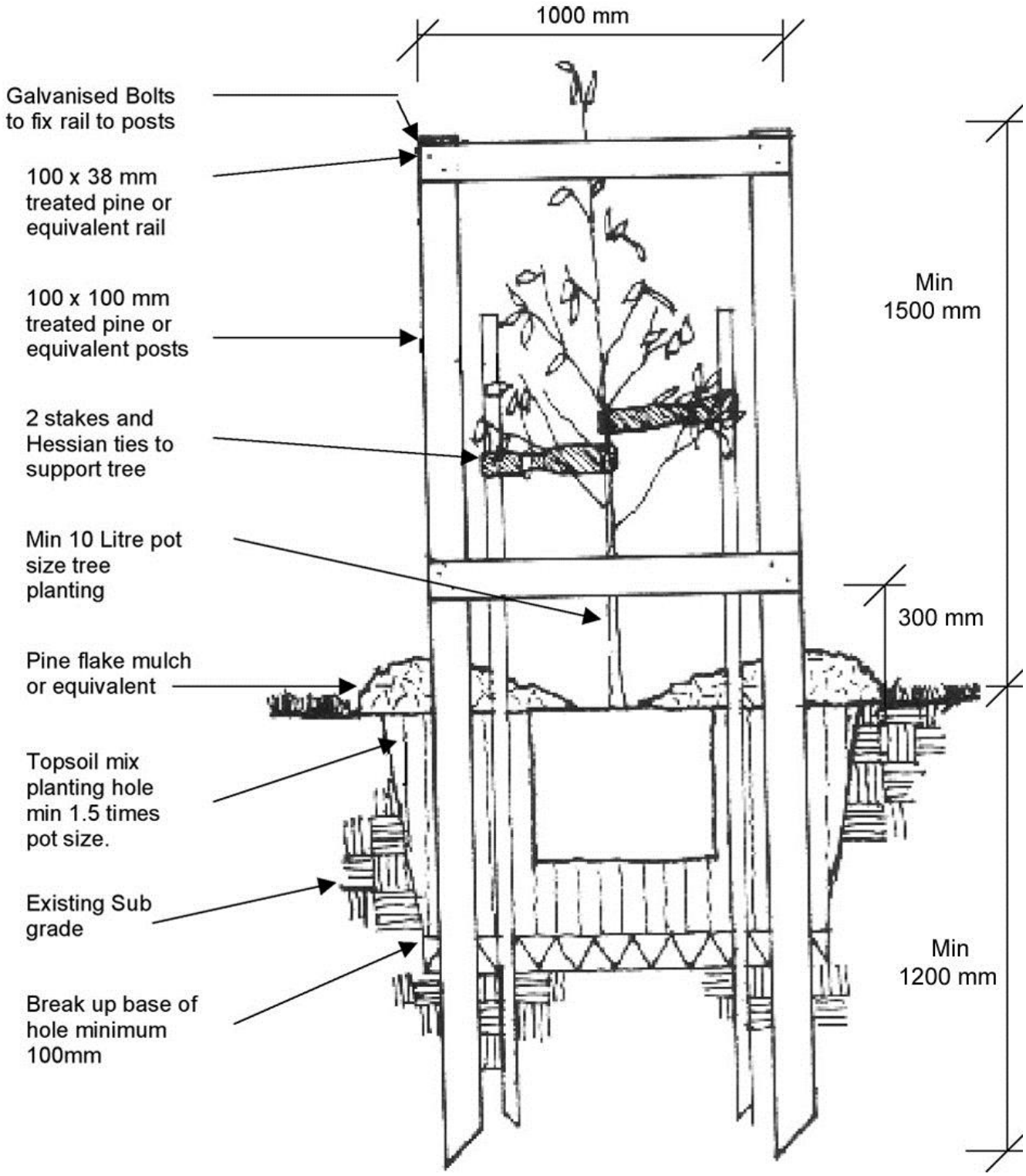


Figure 5 Screening and Mounding for Noise Attenuation

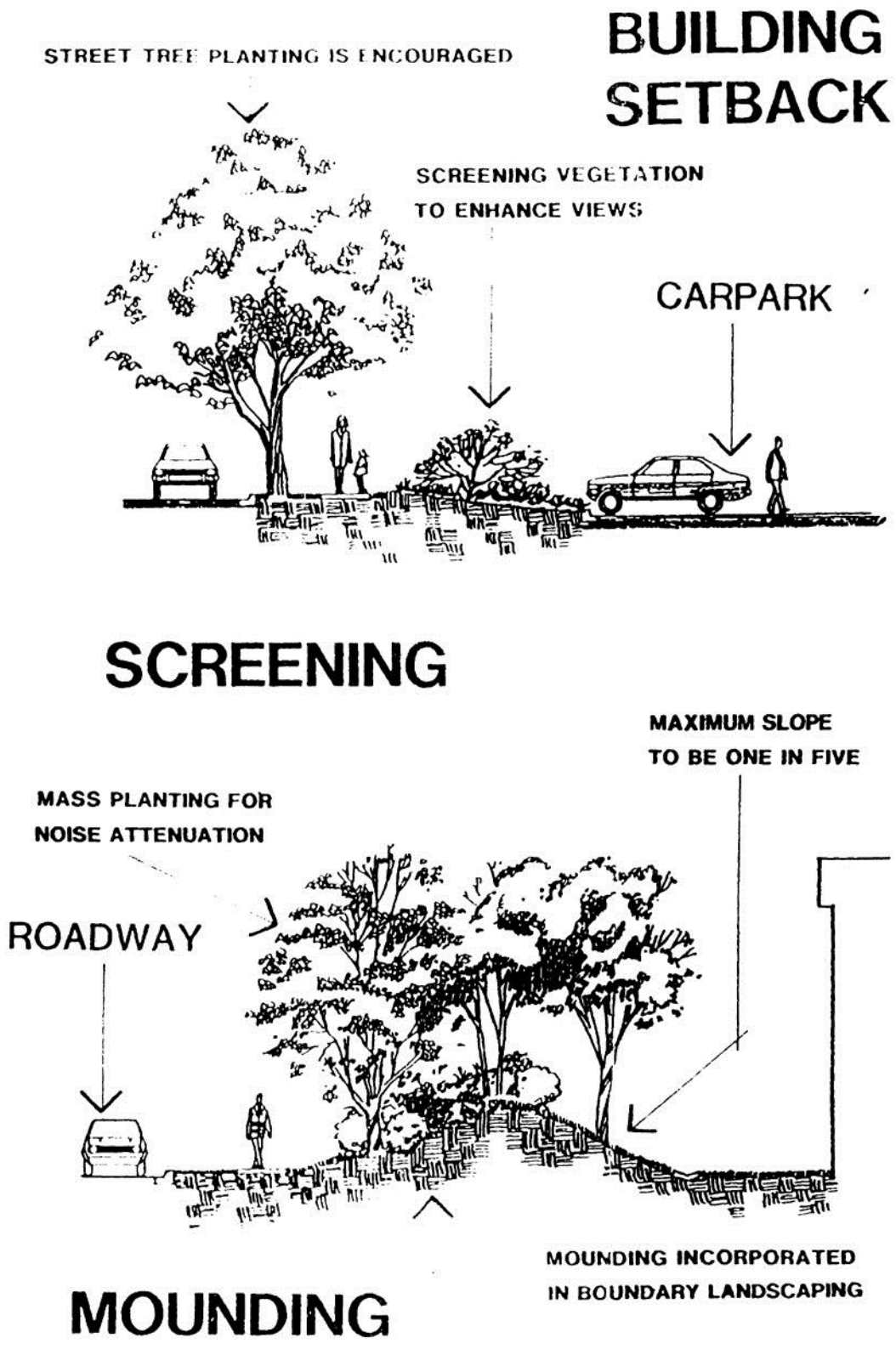
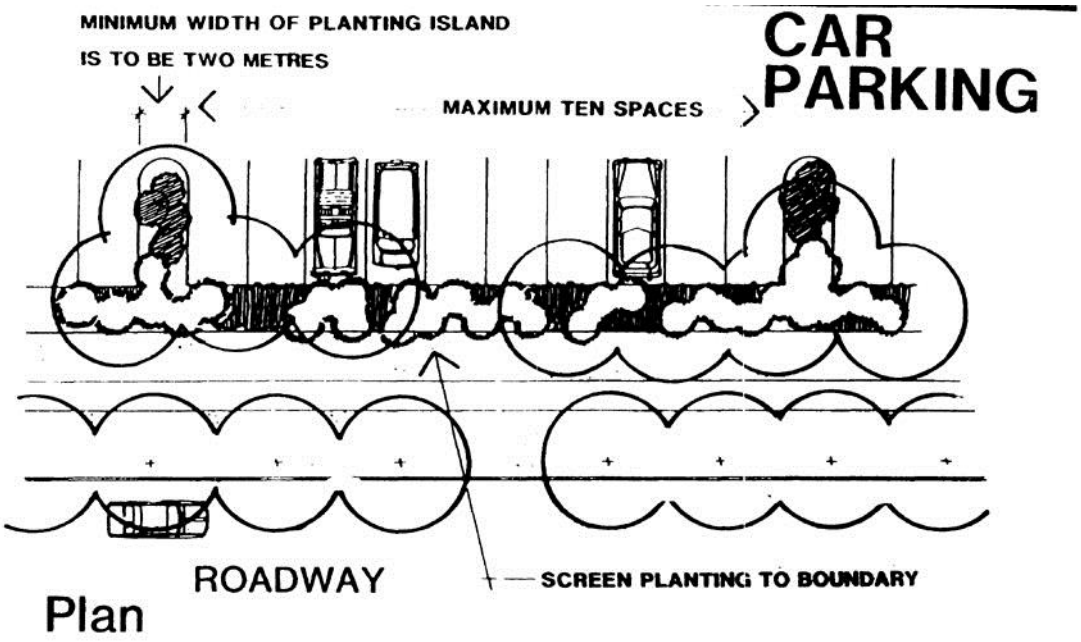
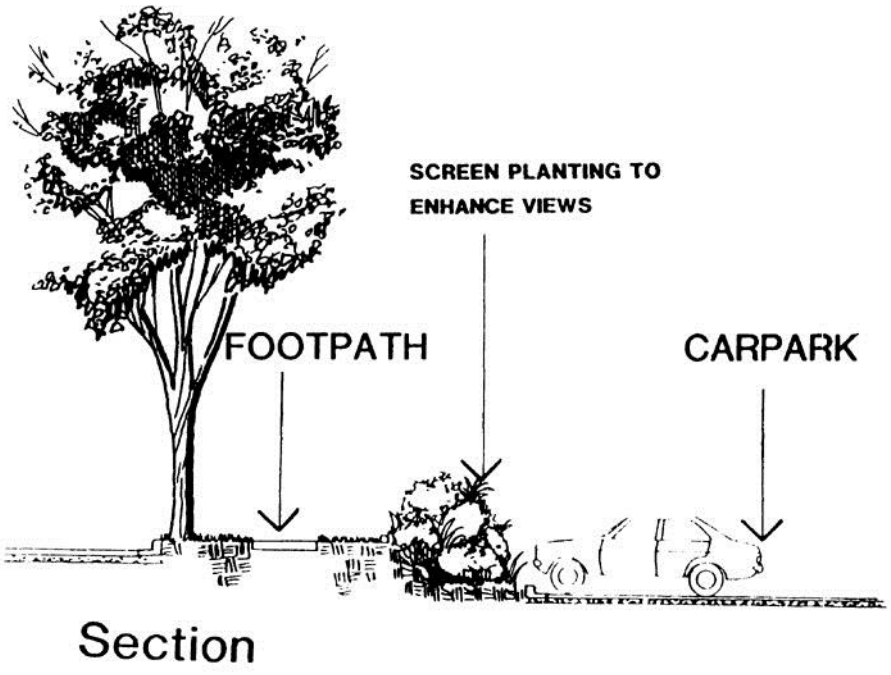


Figure 6 Landscaping and Screening for Car Parking





APPENDIX A - RECOMMENDED SPECIES

Indigenous Species to The Hills Shire						
Botanical Name	Common Name	Plant Community				
		Bird Attracting	Shale Cap Forest	Sandstone Soils	Cumberland Plain Woodland	Transition Forest
Trees						
*Acacia parramattensis	Parramatta green wattle			ø	ø	ø
Allocasuarina littoralis	Black she-oak			ø	ø	ø
Allocasuarina torulosa	Forest oak		ø	ø		ø
*Angophora costata	Sydney red gum	ø		ø		ø
Angophora floribunda	Rough barked apple	ø	ø	ø		ø
Banksia serrata	Old man Banksia	ø		ø		
Banksia integrifolia	Coastal Banksia	ø		ø		ø
Callitris rhomboidea	Port Jackson Cypress			ø		ø
Casuarina cunninghamiana	River she-oak				ø	
Casuarina glauca	Swamp she-oak			ø	ø	
*Ceratopetalum gummiferum	NSW christmas Bush	ø		ø		
Eucalyptus eximia	Yellow Bloodwood	ø		ø		ø
Corymbia gummerifera	Red bloodwood	ø		ø		
*Corymbia maculata	Spotted Gum					ø
*Elaeocarpus reticulatus	Blue Berry ash	ø	ø			
Eucalyptus crebra	Narrow leaved Ironbark	ø			ø	ø
Eucalyptus fibrosa	Broad leaved ironbark	ø			ø	ø
Eucalyptus gummifera	Red blood wood	ø		ø		

Indigenous Species to The Hills Shire						
Botanical Name	Common Name	Plant Community				
		Bird Attracting	Shale Cap Forest	Sandstone Soils	Cumberland Plain Woodland	Transition Forest
*Eucalyptus haemastoma	Scribbly gum	ø		ø		
Eucalyptus moluccana	Grey Box	ø			ø	ø
Eucalyptus paniculata	Grey Ironbark	ø	ø	ø		ø
Eucalyptus pilularis	Blackbutt	ø	ø	ø		
*Eucalyptus punctata	Grey gum	ø		ø		ø
Eucalyptus robusta	Swamp mahogany	ø		ø		
Eucalyptus saligna	Sydney blue gum	ø	ø	ø		
Eucalyptus tereticornis	Forest red gum	ø			ø	ø
Melaleuca decora	White feather Honeymyrtle	ø			ø	
Melaleuca linariifolia	Flax-leaf Paper Bark	ø		ø	ø	
Melaleuca stypheloides	Prickly Paper Bark	ø	ø	ø	ø	ø
*Syncarpia glomulifera	Turpentine	ø	ø	ø		ø
*Tristaniopsis laurina	Water gum	ø		ø		
Shrubs						
*Acacia binervia	Wattle			ø		
Acacia brownii	Heath Wattle			ø		ø
*Acacia decurrens	Sydney green wattle				ø	ø
*Acacia elata	Mountain cedar wattle			ø		
*Acacia floribunda	White sallow wattle			ø	ø	
*Acacia implexa	Hickory		ø	ø	ø	ø
*Acacia longifolia	Sydney golden			ø		

Indigenous Species to The Hills Shire						
Botanical Name	Common Name	Plant Community				
		Bird Attracting	Shale Cap Forest	Sandstone Soils	Cumberland Plain Woodland	Transition Forest
	wattle					
Banksia spinulosa	Hair-pin Banksia	ø		ø		ø
Boronia floribunda	Pink Boronia			ø		
*Callicoma serratifolia	Black wattle			ø		
Callistemon citrinus	Crimson bottlebrush	ø		ø		
Callistemon lineraris	Narrow leafed bottlebrush	ø		ø	ø	
Callistemon pinifolius	Bottlebrush	ø		ø		
Callistemon salignus	Willow bottlebrush	ø		ø		
Davesia ulicifolia	Pea			ø		ø
Dodonea triquetra	Common hop bush			ø	ø	
Dodonea viscosa	Hop bush				ø	
Epacris longiflora	Fuchsia Heath	ø		ø		
*Gravillea mucronulata	Green spider flower	ø		ø		
*Grevillea linearifolia	White spider flower	ø		ø		
*Hakea salicifolia	Willow leaved Hakea	ø		ø		
*Hakea sericea	Bushy needlebush	ø		ø	ø	ø
Hibbertia diffusa	Guinea flower				ø	
*Indigofera australis	Indigofera		ø	ø	ø	ø
Kunzea ambigua	Tick bush	ø		ø		ø
Lambertia formosa	Mountain Devil	ø		ø		

Indigenous Species to The Hills Shire						
Botanical Name	Common Name	Plant Community				
		Bird Attracting	Shale Cap Forest	Sandstone Soils	Cumberland Plain Woodland	Transition Forest
Leptospermum polygalifolium	Lemon sented tea-tree	ø		ø	ø	
Leucopogon juniperus	Bearded Heath		ø			ø
*Lomandra longifolia	Mat rush		ø	ø	ø	ø
Melaleuca armillaris	Giant Honeymyrtle	ø	ø	ø	ø	ø
Melaleuca nodosa	Ball honeymyrtle	ø		ø	ø	
Melaleuca styphellioides	Prickly leaved paperbark	ø		ø	ø	
Melaleuca thymifolia	Honeymyrtle	ø		ø	ø	
Oxylobium ilicifolium	Native holly			ø		
Pimelia linifolia	Rice flower			ø		ø
*Pittosporum revolutum	Sweet pittosporum	ø		ø		
*Polyscias sambucifolia	Elderberry Panax	ø		ø		
Pultanaea villosa	Bush pea				ø	ø
Groundcovers						
Adiantum aethiopicum	Maidenhair Fern		ø	ø		
Danthonia sp.	Wallaby grass			ø	ø	ø
*Dianella caerulea var caerulea	Blue flax lily	ø		ø	ø	ø
*Dianella revoluta	Mauve Flax lily	ø		ø	ø	
Dichelachne crinita	Longhair Plume grass			ø	ø	
Dichelachne micrantha	Shorthair Plume grass			ø	ø	
Gahnia aspera	Saw sedge	ø		ø		

Indigenous Species to The Hills Shire						
Botanical Name	Common Name	Plant Community				
		Bird Attracting	Shale Cap Forest	Sandstone Soils	Cumberland Plain Woodland	Transition Forest
Gahnia clarkei	Saw sedge	ø		ø		
Gahnia melanocarpa	Saw sedge	ø		ø		
Gahnia seiberana	Saw sedge	ø		ø	ø	
Geranium solanderi	Native geranium			ø	ø	
Lepidosperma laterale	Sword sedges			ø		
Microlaena stipioides	weeping meadow grass		ø	ø	ø	ø
Poa	Tussock grass		ø	ø		
Pratia purpurascens	Pratia			ø	ø	
Stipa sp.	Speargrass			ø	ø	
Themeda australis	Kangaroo grass		ø	ø	ø	ø
Viola sp.	Native violet			ø	ø	
Viola hederacea	Native Violet			ø	ø	ø
Wahlenbergia communis	Native bluebell			ø	ø	
Climbers						
*Clematis aristata			ø	ø	ø	
*Clematis glyciniodes	Old mans beard			ø	ø	
Glycine clandestina	Love Creeper		ø			ø
Hardenbergia violacea	False sarsaparilla		ø	ø	ø	ø
Hibbertia scandens	Golden Guinea Flower		ø			
Kennedia rubicunda	Dusky Coral pea			ø	ø	
*Pandorea pandorana	Wonga wonga vine		ø	ø		

Note. Species marked with an asterisk '*' are less fire-prone

Non-Indigenous Species Suitable for Planting in The Hills Shire	
Botanical Name	Common Name
Trees	
Agonis flexuosa	Willow Myrtle
Bauhinia purpurea	Butterfly Tree
Betula penula	Silver Birch
Brachychiton populneus	Kurrajong
Callistemon viminalis	Weeping Bottlebrush
Callitris columellaris	White Cypress Pine
Calodendron capense	Cape Chesnut
Cornus florida	Flowering Dogwood
Cupressus glabra	Arizona Cypress
Cupressus semperviens 'Stricta'	Italian Cypress
Eucalyptus cladocalyx 'Nana'	Dwarf Sugar Gum
Eucalyptus elata	Willow Peppermint
Eucalyptus ficifolia	Scarlet-flowering gum
Eucalyptus leucoxylon	White Ironbark
Eucalyptus melliodora	Yellow Box
Eucalyptus nicholii	Willow-leaf Peppermint
Eucalyptus scoparia	Willow Gum
Fraxinus americana	White Ash
Fraxinus excelsior 'Aurea'	Golden Ash
Fraxinus 'Raywoodii'	Claret Ash
Hakea laurina	Pin-cushion Hakea
Leptospermum petersonii	Lemon-scented Tea Tree
Leptospermum laevigatum	Coastal Tea Tree
Magnolia grandiflora	White Magnolia
Malus floribunda	Flowering Crab Apple
Nyssa sylvatica	Tupelo
Photinia glabra 'Robusta'	Photinia
Photinia glabra 'Rubens'	Red-leaf Photinia
Quercus coccinea	Scarlet Oak
Quercus ilex	Holly Oak

Non-Indigenous Species Suitable for Planting in The Hills Shire	
Botanical Name	Common Name
Quercus palustris	Pin Oak
Schinus molle var ariera	Peppercorn Tree
Ulmus parvifolia	Chinese Elm
Shrubs	
Abelia grandiflora	Glossy Abelia
Aucuba japonica	Japanese laurel
Azalea sp.	Azalea
Bauera ruboides	Native Dog Rose
Berberis thunbergii 'Atropurpurea'	Japanese Berberis
Brunfelsia latifolia	Yesterday, today and tomorrow
Callistemon citrinus	Crimson Bottlebrush
Callistemon speciosus	Albany Bottlebrush
Choisya ternata	Mexican Orange Blossom
Coleonema pulchrum	Pink Diosma
Coprosma repens	Mirror Bush
Correa alba	White Correa
Cyathea cooperii	Rough-barked Tree Fern
Daphne odora	Winter Daphne
Epacris obtusifolia	Bluntleaf Heath
Gardenia sp.	Gardenia
Grevillea hybrids	
Hebe 'Blue Gem'	Veronica
Hibiscus rosa-sinensis	Chinese Hibiscus
Hydrangea macrophylla	Hydrangea
Juniperus chinensis 'Japonica'	Chinese Juniper
Juniperus communis 'Hibernica'	Irish Juniper
Lagerstroemia indica	Crepe Myrtle
Leptospermum scoparium	Manuka
Leptospermum squarrosum	Peach Flowered Tea Tree
Magnolia soulangeana	Japanese Magnolia
Melaleuca bracteata	

Non-Indigenous Species Suitable for Planting in The Hills Shire	
Botanical Name	Common Name
Melaleuca incana	Grey Honey Myrtle
Melaleuca nesophila	
Michelia figo	Port Wine Magnolia
Murraya Paniculata	Orange Jessamine
Rhododendron indicum	Rhododendron
Russelia equisitiformis	Coral Bush
Thuja occidentalis	Common Yew
Viburnum tinus	Laurestinus
Westringia fruiticosa	Coastal Rosemary
Coprosma kirkii	
Grevillea fasciculata	Grevillea
Grevillea 'Gaudichaudi'	Grevillea
Grevillea 'Poorinda Royal Mantle'	Grevillea
Juniperus conferta	Shore Juniper
Parthenocissus quinquefolia	Virginia Creeper
Pyrostegia venusta	Orange Trumpet Creeper
Trachelospermum jasminoides	
Wistaria sinensis	Wistaria

Species Not Suitable for Planting in The Hills Shire	
Botanical Name	Common Name
Trees	
Acer negundo	Box elder
Liquidambar styraciflua	Liquidambar
Shrubs	
Acacia baileyana	Cootamundra Wattle
Acacia glaucescens	Coast Wattle
Cotoneaster glaucophyllus	Cotoneaster
Cotoneaster horizontalis	Dwarf Cotoneaster
Groundcovers and Climbers	

Jasminum polyanthum	Jasmine
Lantana montevidensis	Purple Lantana
Lantana camara	Orange, pink lantana

APPENDIX B - RECOMMENDED STREET TREE SPECIES

Indigenous Species to The Hills Shire				
Tree Species	**Common Name**	**Plant where No Footpath**	**Plant next to Footpaths & Cycleway**	**Soils**
Acmena smithii	Lilly Pilly (Not CVs)		✓	Clay loams adaptable to sand
Angophora floribunda	Thin-Leaved Stringybark	✓		Clay loam and adaptable
Backhousia citriodora	Lemon Myrtle		✓	Clay loam to sandy loam
Backhousia myrtifolia	Grey Myrtle		✓	Alluvial soils and clay loams
Brachychiton populneum	Kurrajong		✓	Sand or sandy loam
Callistemon 'Kings Park Special'	Weeping bottlebrush		✓	Sandy loam
Callistemon salignus	White Bottlebrush		✓	Sandy loam
Callitris collumnaris	White Cypress Pine		✓	Sandy to transitional soils
Callitris rhomboidea	Port Jackson Pine		✓	Sandy to transitional soils
Cupaniopsis anacardiodes	Tuckeroo	✓		Sandy soils adapted to clay loams
Elaeocarpus eumundii	Eumundi Quandong	✓		Well drained loam
Elaeocarpus reticulatus	Blueberry Ash	✓		Adaptable
Eucalyptus crebra	Narrow-Leaved Ironbark	✓		Clay and sandy loams
Eucalyptus elata	River Peppermint	✓		Alluvial soils
Eucalyptus eugenioides	Thin-Leaved Stringybark	✓		Clay loam adaptable to sandstone
Eucalyptus fibrosa	Broad-leaved Ironbark	✓		Clay loam to heavy clay, tolerates sandy soils
Eucalyptus microcorys	Tallow wood	✓		Adaptable
Eucalyptus moluccana	Grey Box	✓		Clay loams
Eucalyptus paniculata	Grey Ironbark	✓		Heavy clay and transitional soils
Eucalyptus punctata	Grey Gum	✓		Transitional
Eucalyptus tereticornis	Forest Red Gum	✓		Adaptable
Glochidion ferdinandii	Cheese Tree		✓	Sandy loam adaptable clay loam
Jacaranda mimosifilia	Jacaranda		✓	
Leptospermum petersonii	Tea Tree		✓	Sandy and clay loams
Leptospermum polygalifolia	Tantoon		✓	Sandy and clay loams
Lophostemon confertus	Queensland Box		✓	Adaptable
Melaleuca bracteata 'Revolution'	Revolution Green	✓		Sandy Loam
Melaleuca decora	Feather Honey Myrtle		✓	Heavy clay

Indigenous Species to The Hills Shire				
Melaleuca lineariifolia	Snow in Summer	✓		Clay loam
Melaleuca styphelioides	Prickly Paperbark		✓	Sandy loam, adaptable to clay loam
Michelia doltsopa	Sweet Michelia	✓		Sandy to clay loam
Syzygium luehmannii	Riberry		✓	Clay loam to Alluvial - Adaptable
Tristaniopsis laurina	Water Gum	✓		Sandy loam adaptable to heavy clay
Tristaniopsis laurina 'Luscious'	Watergum - Luscious		✓	
Waterhousia floribunda	Weeping Lilli Pilli	✓		

Non-Indigenous Species Suitable for Planting in The Hills Shire				
Tree Species	**Common Name**	**Plant where No Footpath**	**Plant next to Footpaths & Cycleways**	**Soils**
Medium Size				
Acer buergeranum			✓	
Acer platanoides 'Crimson Sentry'	Maple		✓	
Acer rubrum 'October Glory'	October Glory	✓		
Acer x freemanii 'Jeffersred'	Maple	✓		
Angophora bakeri			✓	Sandstone soils
Angophora costata	Sydney Red Gum	✓		Sandstone and Transitional soils
Calodendrum capense	Cape Chestnut		✓	
Flindersia australis	Australian Teak	✓		
Franklinia axilaris	Fried egg plant		✓	
Fraxinus pennsylvanica 'Urbdell'-Urbanite™	Ash		✓	
Fraxinus Raywood	Claret Ash	✓		
Lagerstroemia indica	Crepe Myrtle		✓	
Nyssa sylvatica	Tupelo	✓		
Pistacia chinensis	Chinese pistachio	✓		
Prunus campanulata			✓	
Prunus cerasifera 'Oakville Crimson Spire'	Ornamental Plum Fastigate CV		✓	
Prunus x blireana	Flowering plum		✓	
Pyrus calleryana ‘Capital’	Ornamental Pear	✓		
Pyrus salicifolia	Weeping Pear		✓	
Quercus palustris 'Pringreen' Green Pillar®	Fastigate Pin Oak	✓		
Syncarpia glomulifera	Turpentine	✓		Adaptable
Ulmus parvifolia 'Todd'	Chinese Weeping elm	✓		
Zelkova serrata		✓		

The Hills Development Control Plan (DCP) 2012

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THE HILLS Sydney's Garden Shire



Part C Section 4
Heritage

C4

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1. INTRODUCTION

This Section of the DCP must be read in conjunction with Part A – Introduction of this DCP.

1.1. LAND TO WHICH THIS SECTION OF THE PLAN APPLIES

This Section of the DCP applies to land within The Hills Shire that is:

- listed in Schedule 5 of The Hills Local Environmental Plan 2012;
- located in the vicinity (i.e. an adjoining property or within the visual catchment) of a heritage item or conservation area listed in Schedule 5 of The Hills Local Environmental Plan 2012; or
- a building, relic or structure not listed in Schedule 5 that is older than fifty years and is considered by Council to be of heritage significance.

1.2. AIMS AND OBJECTIVES OF THIS SECTION OF THE DCP

The aim of this Section of the DCP is to provide direction for any development associated with a heritage item or heritage conservation area.

The principal objectives of this Section are to:

(i) Facilitate conservation of the Shire's heritage;

(ii) Integrate conservation issues and management into the planning and development control process; and

(iii) Ensure that any development with respect to a heritage site is undertaken in a manner that is sympathetic to, and does not detract from the identified significance of the site.

2. HERITAGE OVERVIEW

2.1. THE ICOMOS BURRA CHARTER

Refer to the principles governing conservation practice in Australia established in The Australia ICOMOS Charter for the Conservation of Places of Cultural Significance, 1999 (the 'Burra Charter').

3. OBJECTIVES AND DEVELOPMENT CONTROLS

Objectives and development controls for heritage sites are set out in the following sections.

In addition to those policies, guidelines and documents specified in section 1.4 of Part A - Introduction, this Heritage Section is to be read in conjunction with the following:

- 'Assessing heritage significance' (NSW Heritage Office, 2001);
- 'How to carry out work on heritage buildings and sites' (NSW Heritage Office, 1998);
- 'Statements of Heritage Impact' (NSW Heritage Office and Department of Urban Affairs and Planning, 1996); and
- 'Conservation Management Documents' (NSW Heritage Office and Department of Urban Affairs and Planning, 1996).

Submission requirements of other Sections of this DCP must also be complied with. For example, where additions or alterations are proposed to an existing dwelling the information to be submitted with a DA is listed in Part B, Section 2 – Residential.

3.1. SITE PLANNING

OBJECTIVE

(i) Any new development should be positioned to ensure that the visual prominence, context, and therefore the significance of the existing heritage building and its setting is maintained.

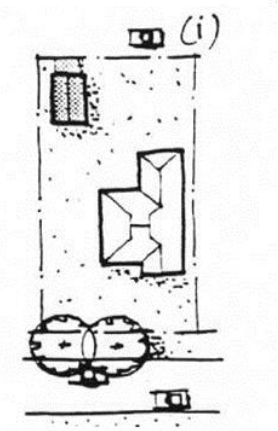
DEVELOPMENT CONTROLS

(a) Additions or new structures should:
   - be located along the least significant elevation or in the least significant part of the setting;
   - not obscure the street elevation of the existing building; and
   - be setback further from the street than the existing building.

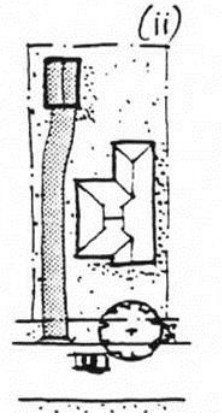
(b) In siting a new addition or building, site features that are considered significant should be retained including the important views/vistas, gardens, fences, outbuildings, mature vegetation or archaeological sites.

(c) Priorities for accommodating car parking or a garage are as follows:

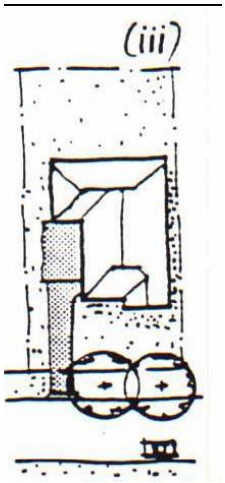
- locate at the rear, with access from a rear lane (if possible);



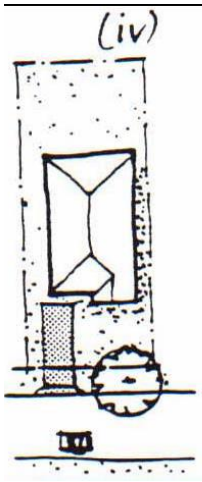
- locate at the rear, with access from the front;



- locate at the side of the house; or



- locate an uncovered paved, gravel or bitumen area at the front.

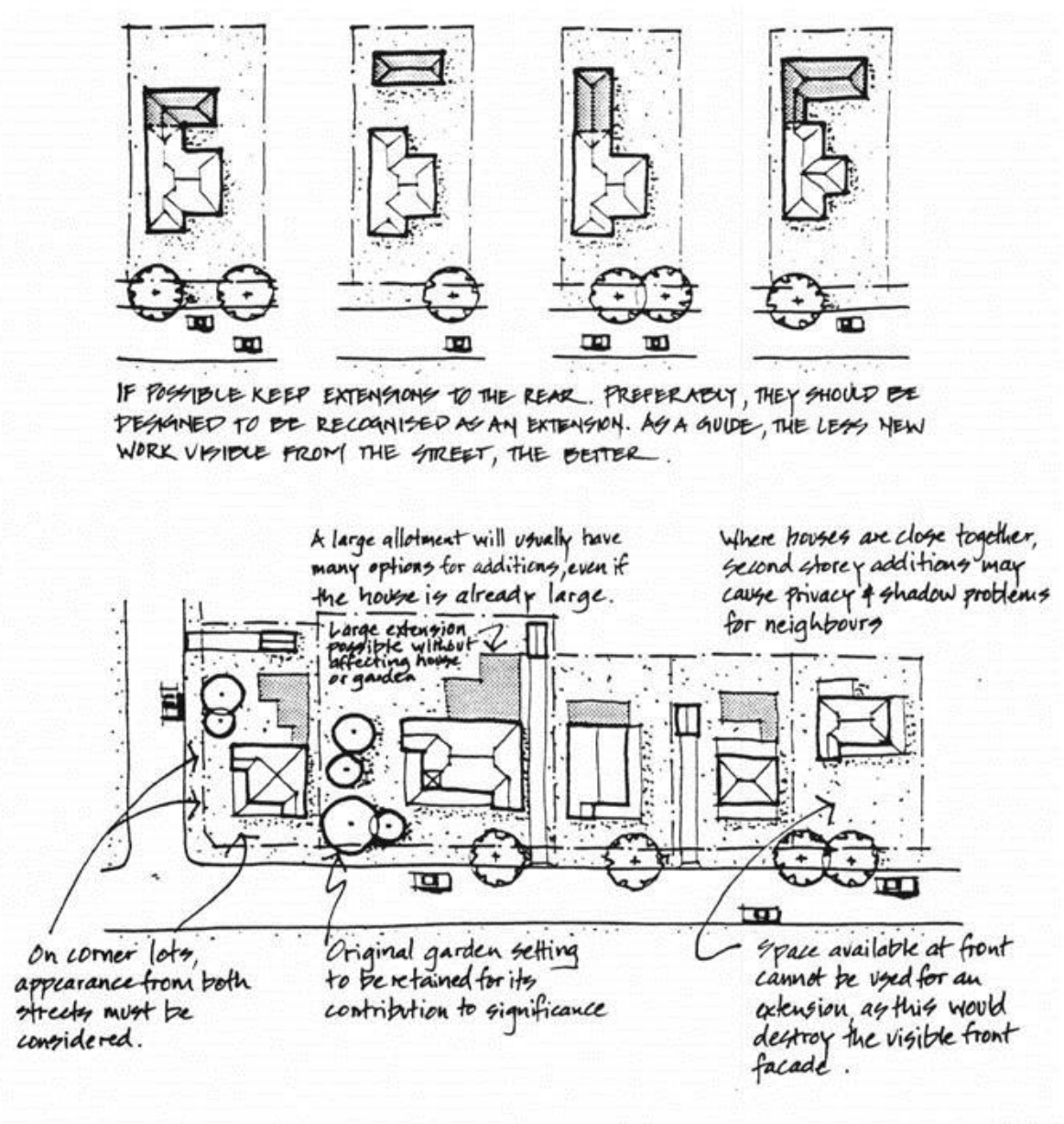


(d) Garages forward of the building line should be avoided as they obscure views of the main building and break up the established setback line.

(e) The siting and design principles referred to in the annotated illustration on the following page should be applied in any development proposal affecting a heritage building.

SUBMISSION REQUIREMENTS

- Site Analysis Plan



3.2. SUBDIVISION

The subdivision of land upon which a heritage building is located has the potential to isolate the building from its setting thereby reducing its cultural or historical relevance. The setting of a heritage building is often referred to as the curtilage and may include the immediate garden, mature trees, original allotment boundaries, paddocks, fencing, outbuildings, archaeological sites, views/vistas or any other feature or space which allows a greater understanding of its historical context. The curtilage is therefore essential for retaining and interpreting the heritage significance of that building.

OBJECTIVE

(i) To ensure that the subdivision of land on which a heritage building is located does not isolate the building from its setting or context, or adversely affect its amenity or privacy.

DEVELOPMENT CONTROLS

(a) Proposals for subdivision should define an appropriate setting or 'curtilage' for the heritage building as part of the heritage impact statement or conservation management plan.

(b) In determining the curtilage of a heritage building consideration is to be given to the following:

- The original form and function of the heritage building: The type of structure that constitutes the heritage building should be reflected in the curtilage. For example it may be appropriate that a larger curtilage be maintained around a former rural homestead than that of a suburban building;
- Outbuildings: A heritage building and its associated outbuildings should be retained on the same allotment;
- Gardens, Trees, Fencing, Gates and Archaeological Sites: Features that are considered valuable in interpreting the history and in maintaining the setting of a building should be identified and where possible, retained within the curtilage;
- Adjoining Development: Consideration should be given to the likely development expected to occur on the lots proposed to be created which will adjoin the heritage site. In assessing applications, Council shall have regard to its setting, overshadowing and the views to and from the heritage site;
- Access Points and Orientation: In order to maintain the historic association of a heritage building with its locality, it is desirable to retain where possible the original access arrangements to the site. The manner in which a heritage building is orientated in respect to public roads contributes to its significance. Creating new street frontages at the rear or side elevations of a heritage building is not desirable;
- Adjoining Lots: Council may impose restrictions upon the title of a proposed lot that adjoins a heritage site, to ensure that the development of the adjoining land does not adversely affect the cultural significance of a heritage site. This may include height limitations, building setbacks, access arrangements, building orientation, and presentation to the streetscape; and
- Visual Links: The significance of many heritage sites includes important visual links from the item to a particular feature such as the street frontage, garden settings, important vegetation, outbuildings, stables, water features, or distant topographical features. These linkages should be retained within the curtilage and should not be obscured by new work.

SUBMISSION REQUIREMENTS

- A curtilage analysis as part of a Heritage Impact Statement or Conservation Management Plan.

3.3. ALTERATIONS

In this Section of the DCP, 'alteration' can be defined as making structural or non-structural changes to the exterior or interior such as to the detail, fabric, finish or appearance. It may involve conservation, maintenance or repair works necessary to ensure the conservation, modernisation (where appropriate) or continued upkeep of a heritage building.

OBJECTIVE

(i) To ensure that any alterations to a heritage building are undertaken in a sympathetic manner that ensures the retention of the existing fabric and character of the building.

DEVELOPMENT CONTROLS

(a) Alterations to a heritage building should be preceded by investigations to enable a greater understanding of its heritage value and what components of the place are significant. It should include an analysis of physical, documentary, oral and other evidence.

(b) As a minimum the following matters are to be addressed prior to undertaking any new work:-

- The approximate age (and therefore architectural period) of the building;
- The type of original materials used and method of construction;
- The identification of those major built elements which contribute to the significance of the place such as the roof form, verandah, garden setting, and any original decorative features;
- Whether any records exist such as plans, photographs, paintings, written or oral evidence which may provide a greater understanding of the place, its original form, inhabitants, function and sequence of construction; and
- The significance of the building or site and the significance of its various components.

(c) Alterations are not to detract from those components of a heritage building that have been identified as being significant.

(d) Alteration of the original fabric of a heritage building is to be minimised and where possible original features are to be repaired, rather than be replaced.

(e) Externally priority should be given to the following:

- The front elevation or façade and associated entry;
- The verandah;
- The roof form; and
- The front or immediate garden setting surrounding the building.

(f) Colour schemes for heritage buildings should closely resemble the original colour scheme, or if this is not known, be compatible with the particular architectural period of the building. Paint scrapings may identify the original colours that were used.

(g) The re-introduction of materials or detail (where justified) should be compatible with the original fabric and architectural period of the heritage building.

(h) New decorative detailing (such as finials, barge boards, or verandah brackets) not belonging to the particular architectural period is to be avoided on a heritage building unless documentary, physical or other forms of evidence indicate it once existed.

(i) Exterior face brick walls are not to be rendered or painted.

(j) Original roofing materials should be retained wherever possible, however if it can be demonstrated that the roofing is in need of replacement then the new roofing material is to match as closely as possible the colours and textures of the original. The use of corrugated, galvanised steel in an unpainted finish or painted grey colour is the preferred replacement for corrugated iron.

3.4. EXTENSIONS AND ADDITIONS

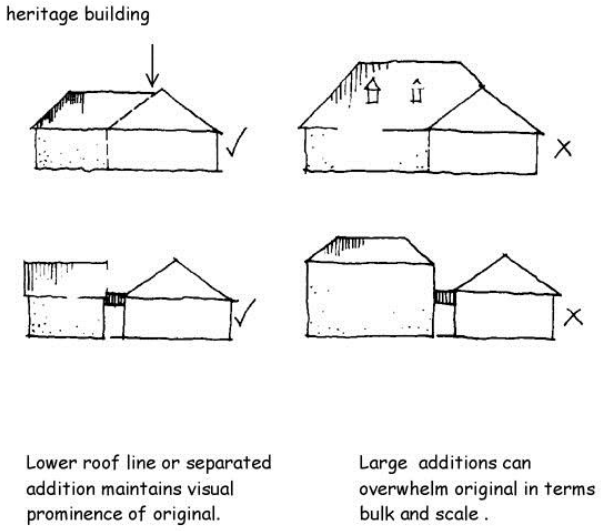
OBJECTIVES

(i) To ensure that extensions or additions to heritage buildings are sympathetic to the style and character of the existing building and its setting.

(ii) To maintain the historical integrity and visual prominence of the existing heritage building.

DEVELOPMENT CONTROLS

(a) Scale – The bulk and scale of the extension should not dominate the existing building, especially when viewed from the most significant elevations. The eave height, roof height, overall width and bay dimensions should not exceed those of the existing item. Where significant extensions are proposed consideration should be given to a separate or pavilion style structure connected by a covered or enclosed walkway.



(b) Form – New extensions should be consistent with the existing building form with respect to roof type and pitch, verandah, façade rhythms, geometry of bay dimensions, and the size, proportions and position of windows and other openings. However it should avoid complete imitation of the original, rather be of a simpler, contemporary design.

(c) Architectural Detail - New extensions should not attempt to replicate the architectural or decorative detail of the original, so as to maintain a distinction between old and new.

(d) New additions or extensions should be visually recessive and easily identified as being later work. Measures to achieve this include:

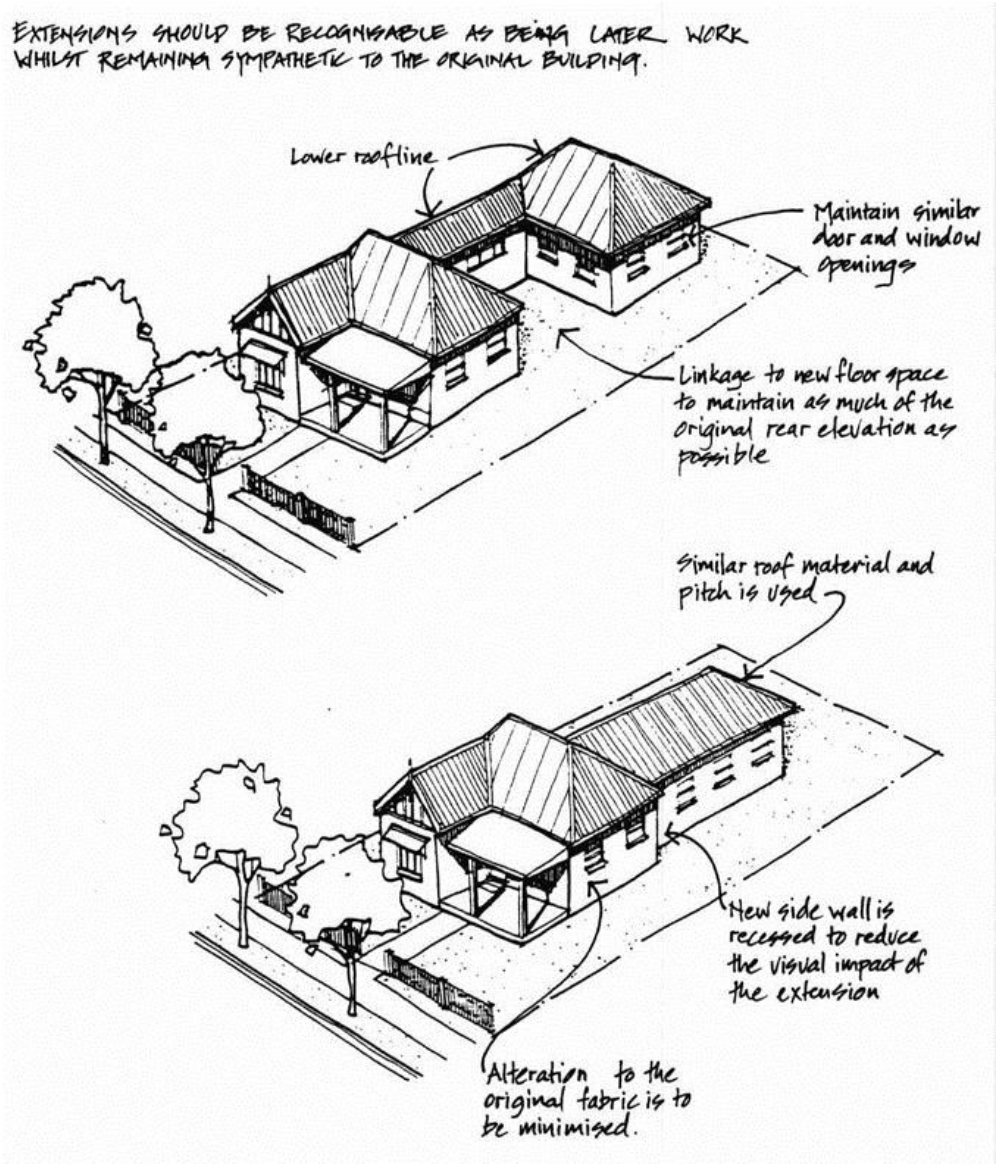
- The side walls of the extension to be setback or recessed;

- To establish a break or rebate between the two;
- Adopt a lower roofline;
- Utilise different but complimentary materials and colours; or
- The extension to be of 'lighter' materials and construction (i.e. timber extension to brick/stone dwelling).

(e) Solar panels, skylights, rainwater tanks, air conditioning units or other like utility installations are to be avoided along the front or street elevation.

(f) The materials, finishes and colours used in new extensions should compliment that of the heritage building, but avoid replication.

(g) Landscaping should be used as a means to screen or 'soften' a new addition or structure especially when viewed from the most significant elevations.



3.5. DEVELOPMENT IN THE VICINITY OF A HERITAGE SITE

For the purposes of this section, 'vicinity' is defined as land adjoining or located within the visual catchment of a heritage site. The visual catchment will vary depending upon the location of the heritage site and the bulk and scale of the proposed development. For example the visual catchment of a heritage site located on a hilltop would cover a larger area than that of an item in a secluded location.

OBJECTIVE

(i) To ensure that the development of land in the vicinity of a heritage site is undertaken in a manner that complements the heritage significance of the site.

DEVELOPMENT CONTROLS

(a) Development on land within the vicinity of a heritage site is not to detract from the identified significance of the place, its setting, nor obstruct important views to and from the site.

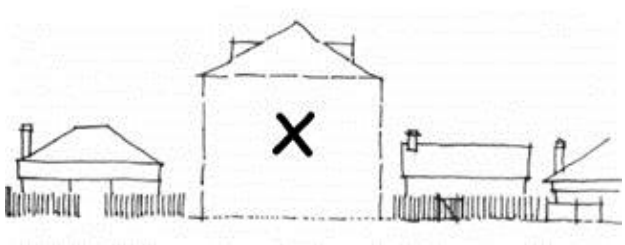
(b) New structures proposed on land adjoining a heritage building should be of similar scale and proportions to the heritage building.

(c) Where development is proposed within the vicinity of a heritage site, the following matters must be taken into consideration:-

- the character, siting, bulk, height and external appearance of the development;
- the visual relationship between the proposed development and the heritage site;
- the potential for overshadowing of the heritage site;
- the colours and textures of materials proposed to be used in the development;
- the landscaping and fencing of the proposed development;
- the location of car parking spaces and access ways into the development;
- the impact of any proposed advertising signs or structures;
- the maintenance of the existing streetscape, where the particular streetscape has particular significance to the heritage site;
- the impact the proposed use would have on the amenity of the heritage site; and
- the effect the construction phase will have on the well being of a heritage building.

SUBMISSION REQUIREMENTS

- A Heritage Impact Statement which includes consideration of all those matters listed in (c) above.



New buildings on land adjoining a heritage building should be sympathetic in terms of siting, scale, proportions, materials and colours

3.6. NEW BUILDINGS

OBJECTIVES

(i) To ensure that new buildings erected on land upon which a heritage building is located are sympathetic to the character of the heritage building and its setting.

(ii) To ensure that new buildings maintain the historical integrity and visual prominence of the existing heritage building.

DEVELOPMENT CONTROLS

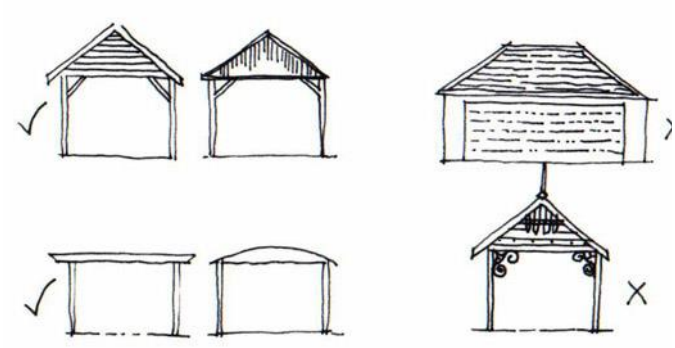
(a) Many of the development controls for 'site planning', 'extensions and additions' and 'development in the vicinity of a heritage site' will also apply to the erection of new buildings. However, the following principles are to be applied: -

- Siting: New buildings should generally be located in the least significant part of the site, normally to the rear of the existing heritage building and should avoid the destruction of any significant elements within its setting such as significant gardens, outbuildings, mature trees, and archaeological features, nor obscure any important visual linkages;
- Scale and Proportions: New buildings should not dominate or overwhelm the existing building, especially when viewed from the street frontage. This is to be achieved by a similar or lower roof height;
- Form: New buildings should be consistent with the existing building form. The most important aspects being roof type and pitch, verandahs, the size and proportion of windows and other openings; and

- Materials, Detail and Colours: The materials, details and colours used in the new building should be complimentary to the existing building. However they should avoid replication of the decorative detail or finishes found on the heritage building, nor re-create 'heritage style' detail. New structures should be more simple and contemporary in design so as to maintain the historical integrity and visual prominence of the heritage building.

(b) New garages or carports should:-

- be separate from the heritage building where possible;
- preferably be of a 'lightweight' construction such as timber with metal roofing;
- avoid replication of decorative detail or finishes found on the heritage building; and
- be more simple and contemporary in design.



3.7. GARDENS, LANDCAPING AND FENCING

OBJECTIVE

(i) To ensure the retention of gardens and other landscape elements that make an important contribution to the significance of a heritage site, the streetscape and the Shire generally.

DEVELOPMENT CONTROLS

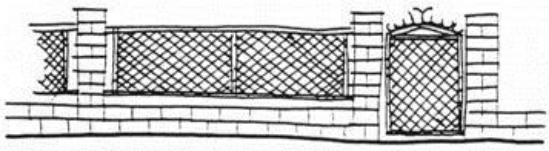
(a) Original garden elements including mature trees, gardens, shrubs, outbuildings, fences, stonework, pathways and other like features are to be identified and retained in any re-development.

(b) The re-landscaping of a heritage site or the introduction of new garden features is to be based upon a thorough understanding of, and be sympathetic to the original garden setting and the significance of existing individual elements.

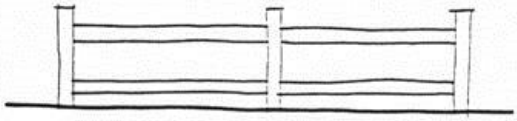
(c) Where possible, existing fences that have been identified as significant or that contribute to the overall setting or character of a heritage site are to be retained or repaired, rather than replaced.

(d) New fences should either match as closely as possible the original fencing, or if the original fence type is not known, it should specifically relate to the architectural character and period of the existing heritage building with respect to design, materials, colour and height. Old photographs or careful inspection of remaining fabric can often reveal the original fence type.

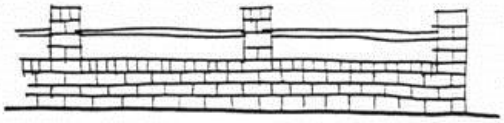
(e) High, solid concrete or masonry fences constructed as sound barriers or for privacy should be avoided. Alternative measures to reduce traffic noise and protect privacy should be investigated, such as double-glazing, internal room layout and landscaping.



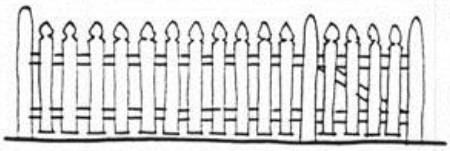
BRICK & WIRE MESH FENCE 1920 - 1940



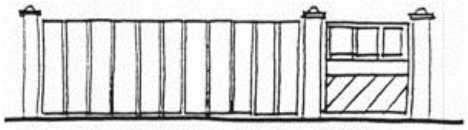
HORIZONTAL RAIL FENCE



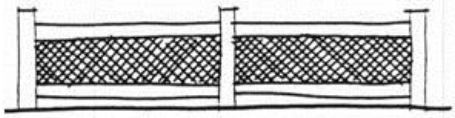
LOW BRICK FENCE WITH PIERS & RAILS 1930 - 1950



PICKET FENCE 1880 - 1920



PALING FENCE 1880 - 1920



TIMBER & WIRE MESH FENCE 1920 - 1950



HIGH, SOLID FENCES SHOULD BE AVOIDED.



NEW FENCES SHOULD BE SIMPLE IN DESIGN AND COMPATIBLE WITH THE CHARACTER AND SCALE OF THE EXISTING BUILDING.

SUBMISSION REQUIREMENTS

- A Landscape Plan, identifying all existing landscape elements which are of significance, elements that are to be retained, and proposed landscaping including details of any new fencing.

3.8. DEVELOPMENT IN HERITAGE CONSERVATION AREAS

OBJECTIVE

(i) To ensure that any development within a conservation area is compatible with the important or significant characteristics of the conservation area as a whole.

DEVELOPMENT CONTROLS

(a) New development within a heritage conservation area is to be sited and designed so as not to adversely impact upon the existing or original landscape and spatial qualities of the area.

(b) New buildings are to complement existing buildings of significance with respect to bulk, scale and façade geometry and be of a simple, contemporary design that avoids 'heritage style' architectural or decorative detail.

(c) Applications for new buildings within a conservation area will need to consider the following as a minimum:-

- the pitch and form of the roof (if any);
- the style, size, proportion and position of the openings for windows and doors (if any); and
- the colour, texture, style, size and type of finish of the materials to be used on the exterior of the building.

SUBMISSION REQUIREMENT

- A Heritage Impact Statement or Conservation Management Plan detailing how the design respects the existing landscape setting of the conservation area, compliments the existing buildings of significance and addressing those matters listed in (c) above.

3.9. CONSERVATION INCENTIVES

Refer to *Clause 5.10 (10) Heritage Conservation of The Hills Local Environmental Plan 2012*, Council may consent to use for any purpose of a heritage site, even though that use would otherwise not be allowed by the plan if:

Council may, for example, grant consent to the commercial use of a heritage building within a residential zone where the applicant can demonstrate that the on-going maintenance and conservation of the building can only be justified economically by the conduct of a higher return usage than a residential use.

Uses that emphasise the historical associations of a heritage site, whether for marketing or philanthropic purposes will be favoured.

OBJECTIVE

(i) To ensure that the conservation incentive provisions are applied only where the conservation of the heritage site is dependent upon the alternate use of the property, and where the amenity of the area or the significance of the heritage site is not adversely affected.

DEVELOPMENT CONTROLS

(a) All development proposals which seek to utilise the heritage incentive clauses are to demonstrate that the costs involved in the conservation and on-going maintenance costs (arising from the historic nature of the building) of the heritage site are such that the proposed use is necessary on economic grounds. A Conservation Management Plan will need to be prepared and submitted with the development application (refer to Part A – Information Required for a Development Application).

(b) An Economic Assessment is required to be prepared and submitted with a development application (Refer to Part A - Introduction).

(c) Council will condition the required conservation works as identified by the Conservation Management Plan to be undertaken prior to the occupation of the heritage building for the approved use or within a set timeframe as determined by Council.

3.10. SIGNAGE

OBJECTIVES

(i) To ensure that any signage is erected so as not to impinge upon the historic, cultural, social or aesthetic value of a heritage item.

(ii) To provide an opportunity for authorised occupants of heritage items to identify themselves and their activities that are commercial in their nature.

DEVELOPMENT CONTROLS

The location of signs shall not detract from the significance of the heritage item.

(a) No signage or advertising is to be attached to the heritage item.

(b) Signage is to be limited to one sign of a maximum of 0.5 square metres per street frontage of the property.

(c) The content or wording of the sign is to be limited to the name and authorised occupation of the occupant of the premises.

(d) The colours and lettering of any sign or advertising material are to compliment the architectural style and colours of the heritage item.

(e) No signs or advertising material is to be erected or displayed in windows or door openings of the heritage item.

(f) General advertising, bunting, or streamers, and the like are not to be used on the land on which a heritage item is located.

(g) Illuminated signs are not to be used on the land upon which a heritage item is located.

SUBMISSION REQUIREMENT

- Signage Plan - the application should detail the location, height, size, colour and materials to be used in any signage associated with a heritage site.

3.11. PROTECTION OF HERITAGE ITEMS DURING CONSTRUCTION

OBJECTIVE

(i) To ensure an archaeological site or heritage building is adequately protected from vandalism and deterioration.

DEVELOPMENT CONTROLS

(a) Heritage buildings or archaeological sites which are to be vacant during construction work are to be protected via the following measures:-

- Built Structures – By fencing comprising a minimum 1.8 metre high chain wire mesh fence with barbed wire capping and for all windows and other accessible entry's to be secured and/or boarded using heavy duty waterproof plywood or similar.
- Archaeological Sites – By fencing comprising a minimum 1.8 metre high chain wire mesh fence with barbed wire capping. Any unstable sites should be stabilised, and any wells, pits or similar should be covered to prevent entry.

3.12. DEMOLITION

OBJECTIVE

(i) To ensure that adequate consideration is given to the significance of a heritage building and any alternative options where the demolition of a heritage building is proposed.

DEVELOPMENT CONTROLS

(a) The demolition of a heritage building is contrary to the intent of heritage listing, is considered a last resort option and will only be considered where:

- All other alternatives have been investigated and ruled out;
- It can be satisfactorily demonstrated that the building does not satisfy the criteria for listing established by the NSW Heritage Office, nor provide physical evidence of one of the historical developmental themes established by the Shire-Wide Heritage Study; or
- The structure is not considered capable of repair.

(b) Where consent is issued for demolition a comprehensive diagrammatic and photographic archival record is to be made of the structure to be demolished. This must be submitted to Council's satisfaction prior to commencement of any demolition works.

SUBMISSION REQUIREMENTS

Where the significance of the heritage building is being argued:

- A Statement of Heritage Significance undertaken in accordance with the NSW Heritage Assessment Criteria (refer to section 2.2) for ascertaining heritage significance and which has regard to the findings of the Shire-Wide Heritage Study. The statement must include any reasons why the building is not considered to meet the abovementioned criteria;
- A statement outlining what other options have been examined in place of demolition and reasons why these options are not viable.

Where the structural integrity of the heritage building is being argued:

- A statement as to the current condition of the building, fabric, including the condition of footings, load-bearing walls, building materials, pest infestation, water damage, sub-soil drainage, damage from natural occurrences, and whether it constitutes a danger to the users or occupiers of the building or the public;
- A statement on the capability of repair, restoration, stabilisation or reconstruction of the heritage building;
- A statement outlining what other options have been examined in place of demolition and reasons why these options are not viable.

The above statements must be prepared by suitably qualified persons such as a conservation architect or structural engineer.

3.13. DEVELOPMENT OF ARCHAEOLOGICAL SITES

OBJECTIVE

(i) To ensure that development is undertaken in a manner that clearly identifies and protects sites of archaeological significance.

DEVELOPMENT CONTROLS

(a) Any application which proposes the disturbance or development of a heritage item listed in Part 3 of Schedule 5 of The Hills Local Environmental Plan 2012 as an 'archaeological site' is to undertake an Archaeological Assessment (refer to Part A - Introduction) and to submit the assessment as part of the Heritage Impact Statement or Conservation Management Plan.

The following development controls apply to development at the corner of Old Windsor Road and Seven Hills Road (precinct map in Part B Section 2 – Residential)

DEVELOPMENT CONTROLS

(a) Further archaeological assessment, recording and monitoring is required in the preparation of a development application for the property and shall have regard to the results and recommendations of the Archaeological Study of the subject site undertaken by Casey & Lowe Associates (April 6, 1995).

In particular, the following is required:

- The disturbance of the identified sites and relics will require an excavation permit from the Heritage Council of NSW under the relics provisions of the Heritage Act 1977. Therefore, none of the identified sites or relics can be disturbed without this permit.
- House sites 1 and 2, as identified in the Archaeological Study, have a low level of cultural significance and therefore they may be removed following the granting of an excavation permit. They do not require recording or archaeological monitoring.
- Following the granting of an excavation permit the brick well and two cisterns may be removed. Their removal should be monitored by a qualified archaeologist.
- Further testing of the archaeological resource within the north-western portion of the land area (known as Taylors house and orchard site) is required by a qualified archaeologist to assess any archaeological potential and make subsequent recommendations. This may require a short period of manual archaeological investigation to excavate and record any considerable remains found prior to development.
- Under the conditions of granting an excavation permit all artefacts recovered and catalogued by the excavation will have to be curated and stored in a repository (refer Archaeological Study for more detail).
- After the completion of the excavation provision should be made within the proposed development for interpretation of the history and archaeology of the site (this could be incorporated with the area of proposed public open space.)
- If the nature of the proposed works in any of the areas changes then the impact on the archaeological resource should be reassessed.
- Liaison should be established with the Heritage Branch, Department of Planning in relation to the archaeological works on site.

The following development controls apply to land adjoining Heritage Park (precinct map in Part B Section 2 – Residential)

DEVELOPMENT CONTROLS

(a) The erection of any built structure or ancillary recreational facility including but not limited to tennis courts, swimming pools and the like will not be permitted in the Heritage buffer zone shown on the map marked Land Adjoining Heritage Park. The buffer is to be landscaped to provide a screen between Heritage Park and any development on the subject land.

(b) Fencing within the Heritage buffer zone as discussed above is limited to low level open rural type fencing.

SUBMISSION REQUIREMENTS

- Any application for development within the subject land must be accompanied by a

Statement of Heritage Impact which addresses the impact of the development on the Heritage Park site and in particular the areas of historic and archaeological significance identified within the Heritage Park Site.

The heritage and archaeological issues are identified in the following studies:-

- Heritage and Visual Analysis of the Environs of Heritage Park Castle Hill, March 1999, Mayne – Wilson & Associates; and
- Archaeological Zoning Plan – corner of Old North Road and Old Castle Hill Road, Castle Hill, May 1999, Casey and Lowe Associates.

Copies of these studies can be viewed at Council's Administration Centre at the Corner of Showground and Carrington Roads, Castle Hill.

It is noted that any excavation works within the area of archaeological potential defined in the studies will require the issue of an excavation permit from the Heritage Office.

- An Aboriginal Archaeological study should be prepared and submitted to Council prior to approval of any development application. Compliance with any of the recommendations of this study may be required as a condition of any development approval.

4. INFORMATION TO BE SUBMITTED WITH A DEVELOPMENT APPLICATION

HERITAGE IMPACT STATEMENT

SITE ANALYSIS

SITE PLAN

ARCHITECTURAL PLANS

- Elevations

ARCHAEOLOGICAL ASSESSMENT

May Require:

- Conservation Management Plan
- Landscape Plan
- Signage Plan

Note. Refer to Part A – Introduction section 4.0 for general lodgement requirements and detailed requirements to be included in each of the above documentation.

4.1. WHO SHOULD PREPARE A HERITAGE IMPACT STATEMENT OR CONSERVATION MANAGEMENT PLAN?

If your building or property is identified as having heritage significance you should consult a qualified heritage practitioner or expert in heritage conservation matters to prepare the statement. For example a conservation architect would be of assistance where works to a heritage building are proposed, while the expertise of an archaeologist would be required where an archaeological site is affected. A list of heritage related consultants is available from the NSW Heritage Office.

5. REFERENCES

The Australia ICOMOS Charter for Places of Cultural Significance, The Burra Charter (1999)

Graham Edds and Associates, Baulkham Hills Heritage Study prepared for Baulkham Hills Shire Council (1995)

Heritage Office and Department of Urban Affairs and Planning, Conservation Management Documents (1996)

Heritage Office and Department of Urban Affairs and Planning, Statements of Heritage Impact (1996)

NSW Heritage Office, Assessing Heritage Significance (2001)

NSW Heritage Office, How to carry out work on heritage buildings and sites (1998)

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Part C Section 5
Telecommunications Facilities

C5

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1. INTRODUCTION

This Section of the Development Control Plan must be read in conjunction with Part A – Introduction of this DCP.

1.1. LAND TO WHICH THIS SECTION OF THE PLAN APPLIES

This Section of the DCP applies to land to which The Hills Local Environmental Plan (LEP) 2012 applies.

1.2. FACILITIES TO WHICH THIS SECTION OF THE PLAN APPLIES

This Section of the plan applies to any fixed transmitter, its supporting infrastructure and ancillary development under the following legislation:

- Telecommunications (Low-impact Facilities) Determination Act 1997 [LIF Determination];
- Telecommunications Act 1997; and
- Radiocommunications Act 1992.

This Section of the DCP provides:

- Controls for the siting, design and installation of telecommunications and radiocommunications facilities that require development consent from Council; and
- Guidelines for telecommunications carriers for the siting, design and installation of other, including "low impact" facilities.

This Section of the DCP does not apply to temporary emergency services.

For guidance on the nature of facilities classified as "Low Impact" see the Telecommunications (Low–impact Facilities) Determination 1997.

1.3. AIMS AND OBJECTIVES OF THIS SECTION OF THE DCP

OBJECTIVES

Social

(i) To apply a precautionary approach to the deployment of radio communications infrastructure.

(ii) To minimise EMR exposure to the public.

(iii) To avoid community sensitive locations.

(iv) To ensure that the general public and local communities have access to telecommunications technology.

(v) To achieve equity for the various stakeholders by endeavouring to balance their various needs.

(vi) To enable members of the public to adequately identify infrastructure and the agencies responsible for them.

(vii) To provide mechanisms by which information can be disseminated to ensure that the community is adequately informed and empowered to participate in the planning/decision-making process.

Environmental

(i) To help implement principles of urban design in respect to telecommunications and radio communications infrastructure.

(ii) To promote good industrial design of infrastructure.

(iii) To provide infrastructure that is visually compatible with surrounding character and locality/visual context with particular regard to heritage buildings/areas and cultural icons.

(iv) To minimise adverse impacts on the natural environment.

(v) To assess whether the proposed infrastructure is consistent with the amenity of the area.

(vi) To restore the site after discontinuation or removal of infrastructure.

Economic

(i) To identify the type of land use areas suitable for infrastructure in a local government area.

(ii) To accommodate the planning requirements of new technology.

(iii) To provide equitable availability of locations to carriers.

(iv) To assess whether the proposed infrastructure is consistent with permitted development in adjacent areas.

(v) To ensure reasonable access to telecommunications technology.

(vi) To provide certainty for stakeholders and a consistent approach to the implementation/

assessment of telecommunications infrastructure.

Administrative

(i) To ensure that Council obtains information about existing and proposed infrastructure to assist with strategic planning.

2. TELECOMMUNICATIONS FACILITIES - PLANNING CONTEXT

This Section of the DCP provides:

- Controls for the siting, design and installation of telecommunications and radio communications facilities that require development consent from Council; and
- Guidelines for telecommunications carriers for the siting, design and installation of "low impact" facilities.

2.1. WHAT IS THE PURPOSE OF THIS SECTION OF THE PLAN

The purpose of this Section of the plan is:

(i) To provide a consistent and integrated planning framework that addresses the community's interests in the effective and efficient provision of telecommunications and radio communications infrastructure so that it achieves environmental, economic and social sustainability in the short, medium and long term.

(ii) To provide a consistency of approach which benefits carriers, community and councils.

(iii) To balance the needs of different stakeholders, including the community/industry/local, state and federal governments.

(iv) To provide guidance to carriers about council's requirements for:

- *Site selection; and*
- *Lodging an application*

3. OBJECTIVES AND DEVELOPMENT CONTROLS

Objectives and development controls for telecommunication facilities are set out in the following sections.

In addition to those policies, guidelines and documents specified in section 1.4 of Part A - Introduction, this Telecommunications Section is to be read in conjunction with the following:

- State Environmental Planning Policy (Infrastructure) 2007;
- Telecommunications Act 1997;
- Radiocommunications Act 1992;
- Telecommunications Code of Practice 1997;
- Telecommunications (Low-impact Facilities) Determination 1997;
- Code for the Deployment of Radiocommunications Infrastructure (ACIF, 2002);
- Planning NSW Draft Telecommunications Guidelines; and
- Other relevant Sections including:
  - Part C Section 3 – Landscaping;
  - Part C Section 4- Heritage
  - Part C Section 6 – Flood Controlled Land

3.1. VISUAL AMENITY

a) Carriers are to design antennae and supporting infrastructure in such a way as to minimise or reduce the visual and cumulative visual impact from the public domain and adjacent areas.

b) Within the local context, the infrastructure design must take account of:
   - Colour;
   - Texture;
   - Form;
   - Bulk and scale.

c) Infrastructure must:
   - Be well-designed;
   - Be integrated with the existing building structure unless otherwise justified in writing to council;
   - Have concealed cables where practical and appropriate;
   - Be unobtrusive where possible; and

- Be consistent with the character of the surrounding area.

A discussion on facility design can be found in Low Impact Facilities for Better Visual Outcomes that can be accessed at www.amta.org.au/mcf

Infrastructure must be removed when no longer being used.

The site must be restored following construction of the infrastructure.

3.2. CO-LOCATION

Co-location is the practice of locating a number of different telecommunication facilities, often owned by different carriers, on one facility or structure.

a) Co-location may not always be a desirable option where:
   - Cumulative emissions are a consideration;
   - It may be visually unacceptable;
   - There are physical and technical limits to the amount of infrastructure that structures are able to support;
   - The required coverage cannot be achieved from the location; and
   - Carriers should demonstrate a precautionary approach and effective measures to minimise the negative impacts of co-location.

3.3. LOCATION

a) Proposals for telecommunications facilities should utilise buildings, structures or other non-residential and non-community based features of the built environment for support of towers, antennae and ground based facilities in the first instance.

b) The applicant should demonstrate that, in selecting a site, it has adopted a precautionary approach in regards to minimising EMR exposures consistent with Section 5.1 of the ACIF Code.

c) Preferred land uses include:
   - Industrial areas;
   - Rural areas;
   - Passive recreation areas; and
   - Commercial centres.

d) The applicant should demonstrate particular consideration of likely sensitive land uses. Sensitive land uses may include areas:
   - Where occupants are located for long periods of time (e.g. residences);
   - That are frequented by children (eg educational facilities, child care centres), and
   - Where there are people with particular health problems (eg hospitals, aged care facilities).

Further information can be found in the ACIF Code at Section 5.1.4.

3.4. HERITAGE AND ENVIRONMENT

a) Infrastructure proposed for areas of environmental significance (as defined in LIF Determination) require:
   - Development consent under the LIF Determination and Council's LEP;
   - The applicant to have regard to avoiding or minimising the visual impact of any proposed facility on the heritage significance of adjacent/adjoining/surrounding heritage items and conservation areas;
   - The applicant is to provide a heritage report/impact statement in accordance with Council's LEP/DCP; and
   - The applicant to have regard to avoiding or minimising the physical impact of any proposed facility on endemic flora and fauna.

3.5. DESIGN OF FACILITY

a) Infrastructure must be of high quality design and construction.

b) Proposals should consider the range of available alternate infrastructure including new technologies, to minimise unnecessary or incidental EMR emissions and exposures, as required under Section 5.2.3 of the ACIF Code.

c) The plan for the facility must include measures to restrict public access to the antenna(e). Approaches to the antenna(e) must contain appropriate signs warning of

EMR and providing contact details for the facility's owner/manager.

d) The minimum requisites that shall apply where relevant are the BCA for purposes of construction and the relevant exposure levels as directed by the Australian Communications Authority (ACA). The applicant must provide Council with certification about the standards with which the facility will comply.

3.6. HEALTH CONTROLS

a) The applicant is to demonstrate the precautions it has taken to minimise EMR exposures to the public.

b) The applicant is to provide documentation to show that the proposed facility complies with the relevant Australian exposure standard as specified by the ACA.

c) The applicant is to provide a mapped analysis of cumulative EMR effect of the proposal.

4. INFORMATON REQUIRED FOR A DEVELOPMENT APPLICATION

The following plans and documentation will be required for all telecommunications facilities applications along with the relevant application form.

SITE AND LOCALITY ANALYSIS

- A site and locality analysis plan is to be submitted with all applications and should indicate in relation to the proposed site for a radius of 300 metres:

SITE PLANS

ELEVATIONS

PHOTO MONTAGE

- Photomontage of the proposed facility in context of the location.

STATEMENT OF ENVIRONMENTAL EFFECTS

- A written statement is to be prepared and must explain how the proposed radiocommunications or telecommunications facility has responded to the site analysis and the objectives of this Section of the DCP.
- This statement is to demonstrate how the precautionary principle has been applied in the siting, design and operation of the proposed facility, included in Sections 5.1, 5.2 and 5.7 of the ACIF Code.

ADDITIONAL DOCUMENTATION

- The rationale for deciding whether the proposal is low or a non-low-impact facility;
- An EMR assessment in accordance with the ARPANSA prediction methodology and report format as described in the ACIF Code;
- A 360° prediction map of exposure levels at 1.5 metres above publicly accessible surfaces within 300 metres and listed as a likely community sensitive location at 5.1(c) in the ACIF Code, or for other sites upon request;
- The information listed in the checklist (see Appendix 1 – Compliance Checklist of this section of the DCP);
- The results of any community consultation process, consistent with requirements in the ACIF Code for a low impact facility;
- Upon request, the applicant is to provide extra documentation such as a Heritage Impact Statement, should the site be identified as located within an area of environmental significance; and
- The Mobile providers must provide compliance evidence that indicates that exposure details contained in the application are true and accurate, and consistent with the ACIF Code. Other radiocommunication infrastructure providers must provide an EMR compliance certificate as to exposure details in the application.

PUBLIC NOTIFICATION/CONSULTATION

- Development applications should comply with Council's requirements on notification and signage;
- For facilities covered by the LIF Determination, the carrier is to consult with affected community, irrespective of Council boundaries, as required by the ACIF Code;
- The applicant is to consult with Council about a consultation strategy;
- Consultation must be commensurate with the anticipated impact of the facility;

- The applicant must make reasonable endeavours to conduct consultation in such a way that local ethnic communities are informed about the proposal and able to comment on it;
- For each facility, a permanent and legible weatherproof sign must be publicly visible in the immediate proximity of the facility and visible to the general public, to identify the name and contact details of the operator or site manager, consistent with the ACIF Code; and
- For each facility, a sign must be erected notifying the intention of the carrier to erect infrastructure on site and providing the name and contact details of the carrier, consistent with the ACIF code.

The applicant must provide council with the results of its community consultation undertaken for facilities covered by the LIF Determination.

Note. Refer to Part A – Introduction section 4.0 for general lodgement requirements.

APPENDIX 1 – COMPLIANCE CHECKLIST

	Required	Supplied
Making an application		
Has the proponent provided council with its information on infrastructure in this council's jurisdiction?		
Is the proposal low impact or not low impact?		
• Has adequate justification been provided for this decision?		
• Has the proponent provided a map of predicted exposure levels at 1.5 metres above publicly accessible surfaces within 300m and listed as a likely community sensitive location at 5.1(c) in the ACIF Code?		
Has the proponent provided cross sectional diagrams?		
Has the proponent provided a photomontage of the facility in context of the location?		
Has the proponent provided a community consultation proposal where required under the ACIF Code?		
Has the proponent provided a heritage report/impact statement in accordance with Council's LEP (if required)?		
Has the proponent provided professional certification that exposure details contained in the application are true and accurate?		
Site analysis		
Has the proponent submitted a scaled site and adjacent locality analysis plan showing: • Existing vegetation; • Site boundaries and dimensions • Topography • location of existing buildings; • views to and from the proposed site; • location of sensitive land uses		
Public notification/consultation		
Has the proponent consulted with affected adjoining councils (where relevant)?		
Has the proponent consulted with council about how best to conduct community consultation?		
Does the application provide for visible permanent signage on site?		
Has the proponent advised relevant community groups?		
Has the proponent placed an advertisement in the local paper (if appropriate)?		
Has the proponent conducted a public meeting (if appropriate)?		
Has the proponent provided council with the results of its community consultation process?		
Has the proponent adequately considered the issue of ethnic language?		
Has the proponent erected a sign on site notifying of its intention to construct that provides its contact details for facilities covered by the LIF Determination?		
Design Controls/Council's requirements		
1. Visual amenity		
Has the facility been designed so as to minimise visual impact from the public domain?		
Does the design minimise or reduce the cumulative visual impact from the public domain?		
Does the design take account of • colour; • texture; • form; • bulk and scale?		
Is the infrastructure: • well designed; • integrated with existing building structure; • incorporating concealed cables; • integrating the shelters with building structure;		

• unobtrusive; • consistent with the character of the surrounding area?		
Does the plan include removal of the infrastructure when it is redundant?		
Does the plan include restoration of the site following construction of the infrastructure?		
2. Co-location		
Does the plan require co-location? If so,		
Does it result in an unacceptable visual impact?		
Does it minimise cumulative emissions for neighbouring residents or other sensitive land uses?		
3. Location		
Has the proponent demonstrated that, in selecting a site, it has adopted a precautionary approach in regards to minimising EMR exposures?		
Is the facility in a preferred land use area?		
If the facility is in a sensitive area has it considered ACIF 5.1.4?		
4. Environment and heritage		
Is the infrastructure in a heritage area/on a heritage building/in the vicinity of heritage items requiring development consent?		
Have measures been implemented to reduce visual impact on the heritage item or conservation area?		
Has the proponent provided a heritage report/impact statement?		
Has the proponent considered minimising physical impact on flora & fauna?		
Are any emissions other than electromagnetic expected?		
5. Facility physical design controls		
Has the carrier demonstrated that the infrastructure is of high quality design and construction?		
Does the plan include measures to restrict public access to the antenna(e)?		
Does the facility comply with the Building Code of Australia (not relevant for facilities covered by the LIF Determination) and other relevant Australian standards?		
6. Facility health controls		
Has the proponent demonstrated the measures it has taken to minimise EMR exposures in the adjacent area?		
Has the proponent provided a statement that the proposed facility complies with the relevant Australian exposure standard?		

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Part C Section 6
Flood Controlled Land

C6

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1. INTRODUCTION

This Section of the DCP must be read in conjunction with Part A – Introduction of this DCP.

1.1. LAND TO WHICH THIS SECTION OF THE PLAN APPLIES

This Section of the DCP applies to all flood controlled land within The Hills Shire Local Government Area.

1.2. AIMS OF THIS SECTION OF THE DCP

The aim of this section of the DCP is to provide development controls to guide the management of flood risks associated with development by:

(i) Increasing public awareness of the hazard and extent of land affected by all potential floods, including floods greater than the 100 year average recurrence interval (ARI) flood and to ensure essential services and land uses are planned in recognition of all potential floods.

(ii) Informing the community of Council's policy for the use and development of flood controlled land.

(iii) Managing the risk to human life and damage to property caused by flooding through controlling development on land affected by potential floods.

(iv) Minimising the potential impact of development and other activity upon the amenity, aesthetic, recreational and ecological value of the waterway corridors and the surrounding environment.

1.3. HOW TO DETERMINE THE DEVELOPMENT CONTROLS THAT APPLY

The following steps should be taken to determine the relevant flood related development controls:

Step 1: Determine if the property is a Flood Control Lot or Flood Controlled Land. (This can be done through the purchase of a Section 149 Certificate from Council or via Council's website.)

Step 2: Determine which of the six land use categories the proposal falls under. (See **Schedule A).**

Step 3: Assess and document how the proposal will satisfy the applicable development controls and their objectives. (See **Sections 2 to 10**).

Step 4: Discuss your final application with Council staff before lodging it for determination.

Advice from a suitably qualified civil engineer may be required.

1.4. LAND USE CATEGORIES

Six major land use categories have been adopted. The specific uses, as defined by the applicable Environmental Planning Instruments, and other specially defined uses, have been grouped within each of these six categories, based on a similar level of potential vulnerability to flood hazards.

1.5. FLOOD COMPATIBLE BUILDING

Flood compatible building components and methods are a combination of measures incorporated in the design and/or construction and alteration of individual buildings or structures subject to flooding, or the use of flood compatible materials for the reduction or elimination of flood damage. Flood compatible materials include those materials used in building that are resistant to damage when inundated.

A list of flood compatible materials and methods is provided in **Schedule B**.

1.6. FLOOD PLANNING LEVELS

A range of flood planning levels (FPL) may apply depending on the type of land use and

the part of the development in consideration. In principle, a higher FPL will apply to land uses considered more sensitive to flood hazards or which may be critical to emergency management operations or the recovery of the community after a flood event.

Different FPLs are also considered appropriate for different parts of development. For example, the non-habitable floor levels of a dwelling can be at a lower level relative to the habitable floor level.

The following table outlines those FPLs to be applied within the development controls outlined later in this section of the DCP.

Table 1 – Flood Planning Levels

Reference	Flood Planning Level
FPL1	20 Year ARI
FPL2	100 Year ARI
FPL3	100 Year ARI + 0.5m Freeboard
FPL4	PMF

Notes:

1. FPL1, FPL2 and FPL 4 have zero freeboard.
2. The design flood levels and FPLs in **Table 1** may be obtained from Council if available or otherwise will be required to be determined by the proponent in accordance with Section 4. These levels will normally be 'rounded up' to the nearest 0.1m and referred to Australian Height Datum (AHD).
   FPL= Flood Planning Level.
   ARI = Average Recurrence Interval.
   PMF = Probable Maximum Flood.

2. OBJECTIVES AND DEVELOPMENT CONTROLS

Objectives and development controls for flood controlled land are set out in the following sections, with the following purpose:

The ***objectives*** represent the outcomes that the Council wishes to achieve from each control.

The ***development controls*** are those which when complied with would be expected to achieve the outcome intended in the majority of cases. While adherence to the prescriptive controls may be important, it is paramount that the objectives are clearly satisfied.

The criteria for development applications for proposals on or adjacent to flood controlled land are structured in recognition that different controls are applicable to different land uses and levels of potential flood behaviours. Controls are provided for development based on the type of land use proposed, as well as specific controls for fencing, filling and to address environmental considerations.

Relevant development controls and submission requirements of other Sections of the DCP must also be complied with. For example, where alterations and additions are proposed to an existing dwelling further controls and information required to be submitted with a Development Application (DA) are listed in Part C Section 3 – Residential.

2.1. GENERAL OBJECTIVES

The following objectives apply to all land use categories:

OBJECTIVES

(i) To ensure the flood risk associated with development, comprising danger to life and damage to property, is minimised and not increased beyond the level acceptable to the community.

(ii) To ensure the proponents of development and the community in general are fully aware of the potential flood hazard and consequent risk associated with the use and development of land within the floodplain;

(iii) To ensure that proposed development does not exacerbate flooding on other properties;

(iv) To minimise the risk to life by ensuring the provision of appropriate evacuation measures are available;

(v) Where permitted, to maximise the potential for buildings to be returned to use as quickly and efficiently as practical, after being affected by flooding; and

(vi) To ensure that the design and siting controls and built form outcomes required to address the flood hazard do not result in unreasonable impacts on the:

- *amenity and character of an area;*
- *streetscape and the relationship of the building to the street; and*
- *the environment and ecology.*

2.2. GENERAL DEVELOPMENT CONTROLS

The following development controls apply to all land use categories:

(a) The flood impact of the development to be considered to ensure that the development will not increase flood effects elsewhere, having regard to:

- loss of flood storage;
- changes in flood levels and velocities caused by alterations to the flood conveyance, including the effects of fencing styles; and
- the cumulative impact of multiple potential developments in the floodplain.

An engineer's report may be required.

(b) If the application involves subdivision, the applicant to demonstrate that potential development as a consequence of a subdivision proposal can be undertaken in accordance with this Plan.

(c) The design materials and construction of the proposed development shall comply with the principles set out in the publication "Reducing Vulnerability of Buildings to Flood Damage – Guidance on Building in Flood Prone Areas", published by the NSW Government.

(http://www.ses.nsw.gov.au/multiversions/9022/FileName/Building_Guidelines.pdf)

For Development within the Hawkesbury River Floodplain

(e) All walls, up to FPL3, are to be constructed of flood resistant building materials, suitable for retaining structural integrity during and following long periods of continuous underwater immersion.

(f) All walls are to have additional strength to resist collapse. The number of engaged piers are to be increased from that typically required under the Building Code of Australia.

2.3. CRITICAL USES AND FACILITIES

(a) Critical uses and facilities are unsuitable land uses on any part of–flood controlled land affected by flooding up to FPL4.

2.4. SENSITIVE USES AND FACILITIES

(a) No development is to occur in or over a floodway area, a flowpath or a high hazard area (as defined in the Floodplain Development Manual (April 2005) (FDM)) generated by flooding up to FPL4.

(b) Habitable floor levels to be no lower than FPL4.

(c) Non-habitable floor levels to be no lower than FPL3 unless justified by a site specific assessment.

(d) All structures to have flood compatible building components below FPL4.

(e) Applicant to demonstrate that any structure can withstand the forces of floodwater, debris and buoyancy up to and including FPL4. An engineer's report may be required.

(f) The minimum surface level of open car parking spaces or carports shall be as high as practical, and not below FPL1.

(g) Garages or enclosed car parking must be protected from inundation by flood waters up to FPL2. Where 20 or more vehicles are potentially at risk, protection shall be provided to FPL3.

(h) Where the level of the driveway providing access between the road and parking space is lower than 0.3m below FPL2, the following condition must be satisfied - when the flood levels reach FPL2, the depth of inundation on the driveway shall not exceed:

- the depth at the road; or
- the depth at the car parking space.

(i) Reliable access for pedestrians or vehicles is required from the building, commencing at a minimum level equal to the lowest habitable floor level to a refuge area above FPL4. In the case of alterations or additions to an existing development, this may require retro-fitting the existing structures if required to support a refuge area above FPL4.

(j) Applicant to demonstrate that area is available to store goods above FPL4.

(k) Materials which may cause pollution or are potentially hazardous during any flood must not be stored externally below FPL4.

(l) A Site Flood Emergency Response Plan is required when elements of the development, including vehicular and pedestrian access are below FPL4.

The Site Flood Emergency Response Plan should relate to the landuse and site conditions in conjunction with flood behaviour up to FPL4 expected to be experienced at the site. The plan should consider the following specific actions:

- Preparing for a flood;
- Responding when a flood is likely;
- Responding during a flood; and
- Recovery after a flood.

The flood plan should be consistent with the relevant NSW SES “FloodSafe” Guide.

2.5. RESIDENTIAL

(a) No development is to occur in a floodway area, a flowpath or a high hazard area (as defined in the FDM) generated by flooding up to FPL2, unless justified by a site specific assessment.

(b) Habitable floor levels to be no lower than FPL3.

(c) Non-habitable floor levels to be equal to or greater than FPL3 where possible, or otherwise no lower than FPL1 unless justified by a site specific assessment.

(d) A restriction is to be placed on the title of the land, pursuant to S.88B of the Conveyancing Act, where the lowest habitable floor area is elevated above finished ground level, confirming that the under croft area is not to be enclosed, where Council considers this may potentially occur.

(e) All structures to have flood compatible building components below FPL3.

(f) Applicant to demonstrate that the structure can withstand the forces of floodwater, debris and buoyancy up to and including FPL3, or FPL4 if required to satisfy evacuation criteria (i.e. use as a refuge area). An engineer's report may be required.

(g) The flood impact of the development to be considered to ensure that the development will not increase flood effects elsewhere, having regard to:

- loss of flood storage;

- changes in flood levels and velocities caused by alterations to the flood conveyance, including the effects of fencing styles; and
- the cumulative impact of multiple potential developments in the floodplain.

An engineer's report may be required.

(h) The minimum surface level of open car parking spaces or carports shall be as high as practical, and not below FPL1.

(i) Garages or enclosed car parking must be protected from inundation by flood waters up to FPL2. Where 20 or more vehicles are potentially at risk, protection shall be provided to FPL3.

(j) Where the level of the driveway providing access between the road and parking space is lower than 0.3m below FPL2, the following condition must be satisfied - when the flood levels reach FPL2, the depth of inundation on the driveway shall not exceed:

- the depth at the road; or
- the depth at the car parking space.

A lesser standard may be accepted for single detached dwelling houses where it can be demonstrated that risk to human life would not be compromised.

(k) All service conduits located below FPL3 are to be made fully flood compatible and suitable for continuous underwater immersion. Conduits are to be self-draining if subject to flooding.

(l) A Site Flood Emergency Response Plan is required when elements of the development, including vehicular and pedestrian access are below FPL3.

The Site Flood Emergency Response Plan should relate to the landuse and site conditions in conjunction with flood behaviour up to FPL2 expected to be experienced at the site. The plan should consider the following specific actions:

- Preparing for a flood;
- Responding when a flood is likely;
- Responding during a flood; and
- Recovery after a flood.

The flood plan should be consistent with the relevant NSW SES “FloodSafe” Guide.

2.6. COMMERCIAL AND INDUSTRIAL

(a) No development is to occur in or over a floodway area, a flowpath or a high hazard area (as defined in the FDM) generated by flooding up to FPL2, unless justified by a site specific assessment.

(b) Habitable floor levels are to be at FPL3 or higher.

(c) Non-habitable floor levels to be equal to or greater than FPL3 where possible, or otherwise no lower than FPL1 unless justified by a site specific assessment.

(d) All structures to have flood compatible building components below FPL3.

(e) Applicant to demonstrate that the structure can withstand the forces of floodwater, debris and buoyancy up to and including FPL3, or FPL4 if required to satisfy evacuation criteria (i.e. use as a refuge area). An engineer's report may be required.

(f) The flood impact of the development to be considered to ensure that the development will not increase flood effects elsewhere, having regard to:

- loss of flood storage;
- changes in flood levels and velocities caused by alterations to the flood conveyance, including the effects of fencing styles; and

- the cumulative impact of multiple potential developments in the floodplain.

An engineer's report may be required.

(g) The minimum surface level of open car parking spaces or carports shall be as high as practical, and not below FPL1.

(h) Garages or enclosed car parking must be protected from inundation by flood waters up to FPL2. Where 20 or more vehicles are potentially at risk, protection shall be provided to FPL3.

(i) Where the level of the driveway providing access between the road and parking space is lower than 0.3m below FPL2, the following condition must be satisfied - when the flood levels reach FPL2, the depth of inundation on the driveway shall not exceed:

- the depth at the road; or
- the depth at the car parking space.

(j) All service conduits located below FPL3 are to be made fully flood compatible and suitable for continuous underwater immersion. Conduits are to be self-draining if subject to flooding.

(k) Applicant to demonstrate that area is available to store goods above FPL3.

(l) No external storage of materials below FPL3 which may cause pollution or be potentially hazardous during any flood.

(m) A Site Flood Emergency Response Plan is required when elements of the development, including vehicular and pedestrian access are below FPL3.

The Site Flood Emergency Response Plan should relate to the landuse and site conditions in conjunction with flood behaviour up to FPL2 expected to be experienced at the site. The plan should consider the following specific actions:

- Preparing for a flood;
- Responding when a flood is likely;
- Responding during a flood; and
- Recovery after a flood.

The flood plan should be consistent with the relevant NSW SES "FloodSafe" Guide.

2.7. RECREATION AND NON-URBAN

(a) No development is to occur in a floodway area, a flowpath or a high hazard area (as defined in the FDM) generated by flooding up to FPL2, unless justified by a site specific assessment.

(b) All floor levels to be no lower than FPL1 unless justified by a site specific assessment.

(c) All structures to have flood compatible building components below FPL3.

(d) Applicant to demonstrate that the structure can withstand the forces of floodwater, debris and buoyancy up to and including FPL3, or FPL4 if required to satisfy evacuation criteria (i.e. use as a refuge area). An engineer's report may be required.

(e) The flood impact of the development to be considered to ensure that the development will not increase flood effects elsewhere, having regard to:

- loss of flood storage;
- changes in flood levels and velocities caused by alterations to the flood conveyance, including the effects of fencing styles; and
- the cumulative impact of multiple potential developments in the floodplain.

An engineer's report may be required.

(f) The minimum surface level of open car parking spaces, carports or garages, shall be as high as practical.

(g) The driveway providing access between the road and parking space shall be as high as practical and generally rising in the egress direction.

(h) All service conduits located below FPL3 are to be made fully flood compatible and suitable for continuous underwater immersion. Conduits are to be self-draining if subject to flooding.

(i) A Site Flood Emergency Response Plan is required when elements of the development, including vehicular and pedestrian access are below FPL3.

The Site Flood Emergency Response Plan should relate to the landuse and site conditions in conjunction with flood behaviour up to FPL2 expected to be experienced at the site. The plan should consider the following specific actions:

- Preparing for a flood;
- Responding when a flood is likely;
- Responding during a flood; and
- Recovery after a flood.

The flood plan should be consistent with the relevant NSW SES "FloodSafe" Guide.

2.8. CONCESSIONAL DEVELOPMENT

(a) No development is to occur in a floodway area, a flowpath or a high hazard area (as defined in the FDM) generated by flooding up to FPL2, unless justified by a site specific assessment.

(b) New habitable floor levels to be no lower than FPL3. Where this is not practical due to compatibility with the height of adjacent buildings, or compatibility with the floor level of existing buildings, or the need for access for persons with disabilities, a lower floor level may be considered. In these circumstances, the floor level is to be as high as practical, and, when undertaking alterations or additions no lower than the existing floor level.

(c) A restriction is to be placed on the title of the land, pursuant to S.88B of the Conveyancing Act, where the lowest habitable floor area is elevated above finished ground level, confirming that the under croft area is not to be enclosed, where Council considers this may potentially occur.

(d) All new structures to have flood compatible building components below FPL3.

(e) Applicant to demonstrate that the new structure can withstand the forces of floodwater, debris and buoyancy up to and including FPL3, or FPL4 if required to satisfy evacuation criteria (i.e. use as a refuge area). An engineer's report may be required.

(f) The flood impact of the development to be considered to ensure that the development will not increase flood effects elsewhere, having regard to:

- loss of flood storage;
- changes in flood levels and velocities caused by alterations to the flood conveyance, including the effects of fencing styles; and
- the cumulative impact of multiple potential developments in the floodplain.

An engineer's report may be required.

(g) Driveway and parking space levels to be no lower than the design floor level or ground level. Where this is not practical, a lower level may be considered. In these circumstances, the level is to be as high as practical, and, when undertaking alterations or additions no lower than the existing level.

(h) All service conduits located below FPL3 are to be made fully flood compatible and suitable for continuous underwater immersion. Conduits are to be self-draining if subject to flooding.

(i) Applicant to demonstrate that area is available to store goods above FPL3.

(j) No external storage of materials below FPL3 which may cause pollution or be potentially hazardous during any flood.

(k) A Site Flood Emergency Response Plan is required when elements of the development, including vehicular and pedestrian access are below FPL3.

The Site Flood Emergency Response Plan should relate to the landuse and site conditions in conjunction with flood behaviour up to FPL2 expected to be experienced at the site. The plan should consider the following specific actions:

- Preparing for a flood;
- Responding when a flood is likely;
- Responding during a flood; and
- Recovery after a flood.

The flood plan should be consistent with the relevant NSW SES "FloodSafe" Guide.

3. OTHER DEVELOPMENT

3.1. FENCING

OBJECTIVES

(i) To ensure that fencing does not result in the obstruction of the free flow of floodwaters;

(ii) To ensure that fencing does not become unsafe during floods and potentially become moving debris which threatens the integrity of structures or the safety of people.

DEVELOPMENT CONTROLS

(a) Fencing within a floodway or a flowpath must be of an open style that that will not impede the flow of floodwaters.

3.2. FILLING

OBJECTIVES

(i) To ensure that proposed filling does not exacerbate flooding on other properties.

DEVELOPMENT CONTROLS

(a) Filling on flood controlled land is not permitted unless a report from a suitably qualified civil engineer is submitted to Council that certifies that the development will not increase flood affectation elsewhere, or Council otherwise determines that a report is not required.

(b) Filling of floodway areas or land that conveys an existing overland flowpath is not permitted.

(c) Filling of individual sites in isolation, without consideration of the cumulative effects is not permitted. A case by case decision making approach cannot take into account the cumulative impact of flooding behaviour, and associated risks, caused by individual developments. Any proposal to fill a site must be accompanied by an analysis of the effect on flood levels of similar filling of developable sites in the area.

This analysis would form part of a flood study prepared in accordance with Council's requirements as outlined at Section 5 of this section of the DCP.

4. INFORMATION REQUIREMENTS

(a) Applications must include information that addresses all relevant controls, in addition to the following matters, as applicable.

(b) Applications for Concessional Development (see Schedule A) to an existing dwelling shall be accompanied by documentation from a registered surveyor confirming existing floor levels to AHD.

(c) Other Applications shall be accompanied by a survey plan showing:

- The position of the existing building(s) and proposed building(s);

- The existing ground levels to AHD around the perimeter of the building and contours of the site; and
- The existing or proposed floor levels to AHD.

(d) Applications for earthworks, filling of land and subdivision shall be accompanied by a survey plan (with a contour interval of 0.5m or similar) showing relative levels to AHD.

(e) For large scale developments, or developments in critical situations, including where an existing catchment based flood study is not available, a flood study using a fully dynamic one or two dimensional computer model may be required. For smaller developments consideration may be given to the use of an existing flood study if available and suitable (e.g. it contains sufficient local detail), or otherwise a flood study prepared in a manner consistent with the latest edition of the publication "Australian Rainfall and Runoff" and the FDM, will be required. From this study, the following information shall be submitted in plan form for the pre-developed and post-developed scenarios:

- Water surface contours;
- Velocity vectors;
- Velocity and depth product contours;
- Delineation of FPLs that may apply to the development; and
- Flood profiles for the full range of events for full development including all structures and works (including revegetation).

(f) Where the controls for a particular development proposal require an assessment of structural soundness during potential floods, the following impacts must be addressed having regard to the likely depths and velocities of flood waters:

- Hydrostatic pressure;
- Hydrodynamic pressure;
- Impact of debris;
- Buoyancy forces;
- Saturated ground conditions;
- Shear stress and scour forces around and downstream of the structure.

Note that foundations need to be included in the structural analysis.

5. SCHEDULES

SCHEDULE A - LAND USE CATEGORIES

Critical Uses and Facilities	Sensitive Uses and Facilities	Residential
Emergency services facilities; public administration building that may provide an important contribution to the notification or evacuation of the community during flood events (e.g. SES Headquarters and Police Stations); hospitals.	Community facility; educational establishments; public utility undertaking (including electricity generating works; sewerage system; telecommunications facility and water treatment facility) which are essential to evacuation during periods of flood or if affected would unreasonably affect the ability of the community to return to normal activities after flood events; heavy industrial storage establishment, residential care facility; school and seniors housing.	Additions or alterations to existing dwellings greater than 40m^2 to the habitable floor area which existed at the date of commencement of this Plan; affordable housing; attached dwelling; backpackers accommodation; bed and breakfast accommodation; boarding house; canal estate development; caravan park (with permanent occupants i.e. other than short term sites)(see Note 1); child care centre; dual occupancy; dwelling house; exhibition home; farm stay accommodation, Garages or outbuildings with a floor area exceeding 40m², group homes; home based child care centre; home business; home industry; home occupancy; home occupation (sex services); hostel; hotel or motel accommodation; moveable dwelling; multi dwelling housing; neighbourhood shop; residential flat building; rural worker's dwelling; secondary dwelling; semi-detached dwelling and serviced apartments.

SCHEDULE A - LAND USE CATEGORIES

Commercial or Industrial	Recreation or Non-urban Uses	Concessional Development
Agricultural produce industry; air transport facility; amusement centre; brothel; bulky goods premises; business premises; car park; cellar door premises; community facility (other than sensitive uses and facilities); correctional centre; crematorium; depot; entertainment facility; exhibition village; feed lot, food and drink premises; freight transport facility; function centre; funeral home; general industry; hazardous industry; hardware and building supplies, health care professional; health consulting rooms; heavy industry; high technology industry; highway service centre; industrial retail outlet; light industry; livestock processing industry; market; medical centre; mixed use development; mortuary; office premises; passenger transport facility; place of public worship; pub; public administration building (other than critical uses and facilities); recreation facility (major); registered club; restaurant; restricted dairy; restricted premises; rural supplies; sawmill or log processing works; self-storage units; service station; sex services premises; shop; shop top housing; storage premises; take away food or drink premises; transport depot; truck depot; vehicle body repair workshop; turf farming; vehicle repair station; vehicle sales or hire premises; veterinary hospital; warehouse or distribution centre; waste disposal facility; waste or resource transfer stations; and wholesale supplies.	Agriculture; airstrip; animal boarding or training establishment; aquaculture; boat launching ramp; boat repair facility; boat shed; Camp site and caravan site – short term sites (see Note 1); caravan park (with non-permanent occupants); cemetery; charter and tourism boating facility; environmental facility; environmental protection works; extensive agriculture; extractive industry; farm building; garden centre; horticulture; helipad (other than those associated with a critical use facility); information and education facility; intensive livestock agriculture; intensive plant agriculture; kiosk; jetty; landscape and material supplies; marina; mining; natural water-based aquaculture; plant nursery; port facilities; recreation area; recreation facility (indoor); recreational facility (outdoor); research station; resource recovery facility; restriction facilities; roadside stall; stock and sale yard; viticulture; water recreation structure; water recycling facility; and water storage facility.	(i) Additions or alterations to an existing dwelling up to 40m^2 to the habitable floor area which existed at the date of commencement of this Plan; or (ii) Garages or outbuildings with a maximum floor area of 40m^2; or (iii) Redevelopment for the purposes of substantially reducing the extent of flood affectation to the existing building.

(1) As defined by the Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 2005

Note: Terms provided in Schedule A have the same meaning as The Hills Local Environmental Plan 2012.

SCHEDULE B – FLOOD COMPATIBLE MATERIALS AND METHODS

BUILDING COMPONENT	FLOOD COMPATIBLE MATERIAL
Flooring and Sub-floor Structure	Concrete slab-on-ground monolith construction. Suspended reinforced concrete slab.
Floor Covering	Clay tiles. Concrete, precast or in situ. Concrete tiles. Epoxy, formed-in-place. Mastic flooring, formed-in-place. Rubber sheets or tiles with chemical-set adhesives. Silicone floors formed-in-place. Vinyl sheets or tiles with chemical-set adhesive. Ceramic tiles, fixed with mortar or chemical-set adhesive. Asphalt tiles, fixed with water resistant adhesive.
Wall Structure	Solid brickwork, blockwork, reinforced, concrete or mass concrete.
Roofing Structure (for situations where the relevant flood level is above the ceiling)	Reinforced concrete construction. Galvanised metal construction.
Doors	Solid panel with water proof adhesives. Flush door with marine ply filled with closed cell foam. Painted metal construction. Aluminium or galvanised steel frame.
Wall and Ceiling Linings	Fibro-cement board. Brick, face or glazed. Clay tile glazed in waterproof mortar. Concrete. Concrete block. Steel with waterproof applications. Stone, natural solid or veneer, waterproof grout. Glass blocks. Glass. Plastic sheeting or wall with waterproof adhesive.
Insulation	Foam (closed cell types).
Windows	Aluminium frame with stainless steel rollers or similar corrosion and water resistant material.
Nails, Bolts, Hinges and Fittings	Brass, nylon or stainless steel. Removable pin hinges. Hot dipped galvanised steel wire nails or similar.

Heating and Air Conditioning Systems

Heating and air conditioning systems should, to the maximum extent possible, be installed in areas and spaces of the house above the relevant FPL. When this is not feasible every precaution should be taken to minimise the damage caused by submersion according to the following guidelines.

- Fuel

Heating systems using gas or oil as a fuel should have a manually operated valve located in the fuel supply line to enable fuel cut-off.

- Installation

The heating equipment and fuel storage tanks should be mounted on and securely anchored to a foundation pad of sufficient mass to overcome buoyancy and prevent movement that could damage the fuel supply line. All storage tanks should be vented to an elevation of 600 millimetres above the relevant FPL.

- Ducting

All ductwork located below the relevant FPL should be provided with openings for drainage and cleaning. Self-draining may be achieved by constructing the ductwork on a suitable grade. Where ductwork must pass through a water-tight wall or floor below the relevant FPL, the ductwork should be protected by a closure assembly operated from above relevant FPL.

Flood Compatible Building Methods

In addition to conforming to the BCA and other relevant standards, Council may require builders to utilise best practice building methods to minimise the susceptibility of structures to damage when inundated by floodwaters. Details of these methods are documented in the following document:

Reducing Vulnerability of Buildings to Flood Damage – Guidance on Building in Flood Prone Areas. Hawkesbury-Nepean Floodplain Management Steering Committee (HNFMSC), June 2006. (Copies available from the NSW Office of Environment and Heritage); and within other supplementary information available from Council.

The Hills Development Control Plan (DCP) 2012

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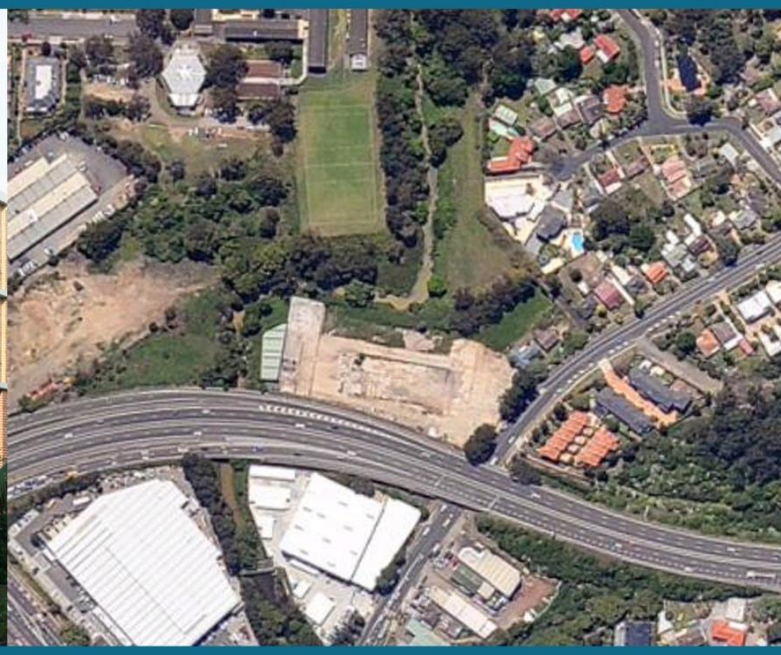
THE HILLS Sydney's Garden Shire





Part D Section 1
27-33 North Rocks Road
North Rocks

D1

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1. INTRODUCTION

This section of the DCP must be read in conjunction with Part A - Introduction of this DCP.

This section of the DCP has been prepared to guide future residential development at Target Site, 27-33 North Rocks Road, North Rocks (subject site) in The Hills Shire.

1.1. LAND TO WHICH THIS SECTION APPLIES

This section applies to all land commonly referred to as the “Target Site" within this chapter, comprising of those lots identified in Figure 1 below and legally identified as:

- Lot 1 DP 127003;
- Lots 2 and 3 in DP 22931;
- Lot 2 DP 721567;
- Lot 101 DP 617754; and
- Lots 2 DP 1158967.

This site has a total area of 13,139.6 square metres.

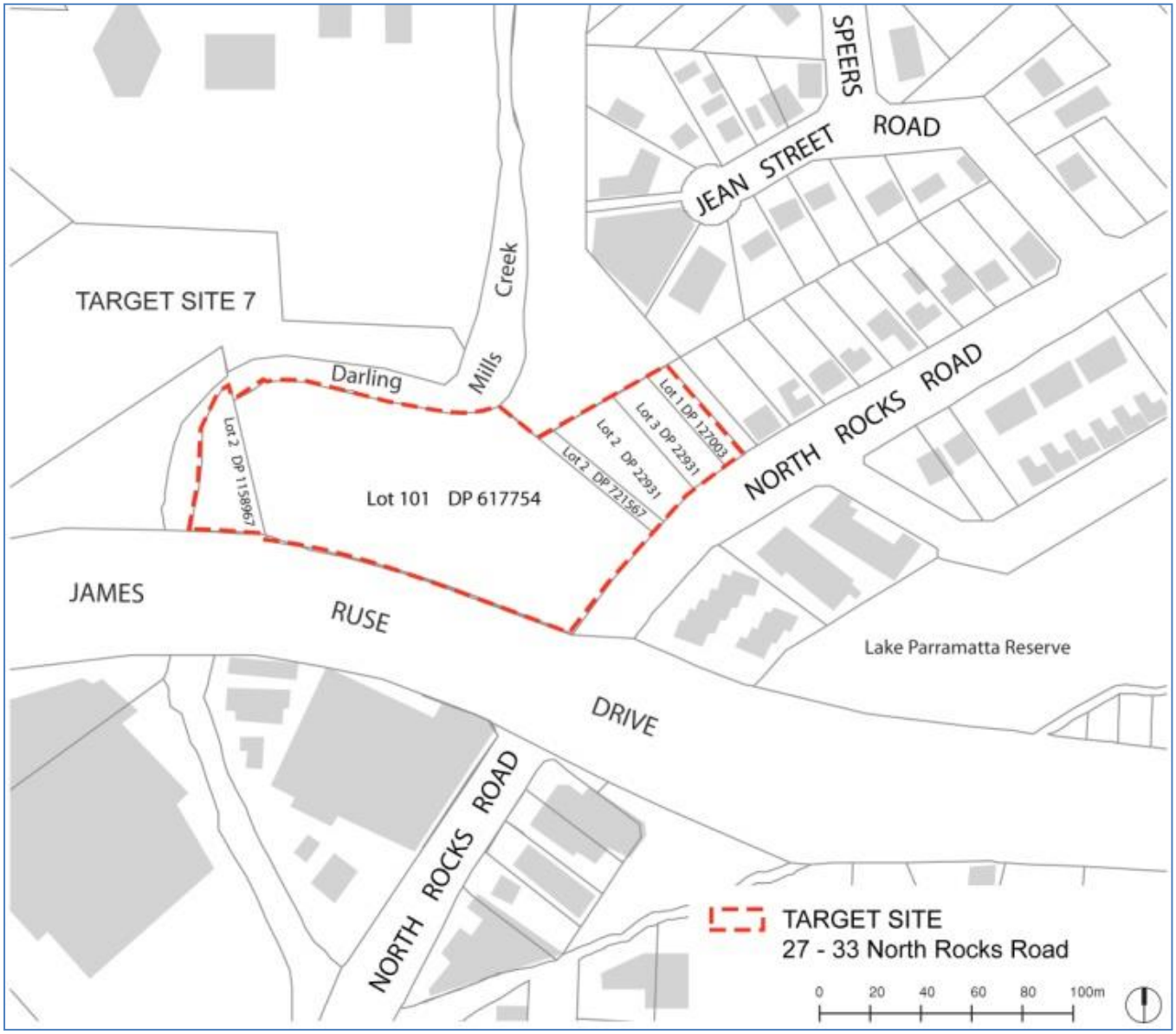


Figure 1: Target Site, 27-33, North Rocks Road, North Rocks

1.2. AIMS AND OBJECTIVES OF THIS SECTION

The aim of this Section of the DCP is to ensure high quality residential development on the subject site.

The objectives of this Section are to:

(i) *Provide an appropriate built form envelope and Development Controls for the subject site that realise its potential for greater density.*

(ii) *Achieve a high quality development that is responsive to the existing natural and built form environment around the site.*

(iii) *Achieve a design solution that demonstrates best practice urban design and architecture;*

(iv) *Require a design that responds to the amenity impacts created by James Ruse Drive and North Rocks Road.*

(v) *Achieve a well-considered and attractive landscape and built form interface to the Darling Mills Creek.*

(vi) *Provide affordable housing choices for the local community close to services and facilities.*

1.3. BACKGROUND TO THIS PLAN

The preparation of this plan has relied on information from reports prepared in respect of relevant State and Regional environmental policy and plans and as a result of consultation with Council's Target Site Review Panel and planning staff.

1.4. STRUCTURE OF THIS SECTION

This document has been divided into three parts:

1. Introduction;
2. Development Strategy; and
3. Objectives and Development Controls.

1.5. RELATIONSHIP TO OTHER PLANS

Where there is any inconsistency between this section of the DCP and any applicable section of the General DCP, the provisions of this section of the DCP shall prevail.

This plan amends The Hills Development Control Plan 2012, Part D Section 1 - Target Site 27-33 North Rocks Road, North Rocks.

This plan should be read in conjunction with:

- The Hills Local Environmental Plan 2012;
- The Hills Development Control Plan 2012;
- The Hills Bush Fire Prone Land Maps; and
- The Hills Vegetation Classification Mapping.

1.6. THE VISION

The vision for the site is to create a sustainable development that will set a new benchmark in architectural excellence in the North Rocks area.

The development will enhance the amenity and visual quality of the North Rocks Road streetscape, the southern and eastern edge of Russell Walker Reserve and the natural character of the riparian corridor along Darling Mills Creek.

The development will provide a built form landmark at the approach to North Rocks Road.

The development will buffer the creek corridor and reserve from the noise and visual impacts of James Ruse Drive whilst allowing generous view corridors to the reserve beyond. The development will provide greater diversity in dwelling types and housing choice close to public transport.

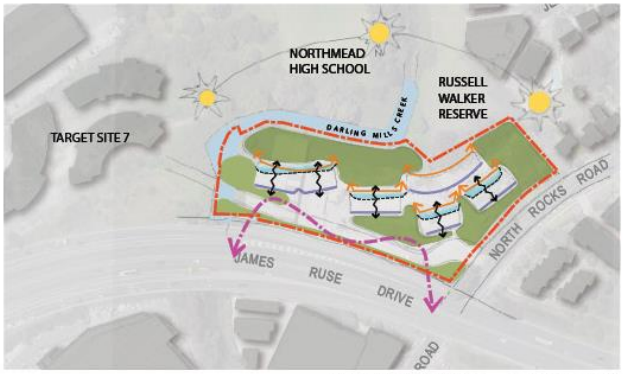
The development will improve the interface to North Rocks Road, the creek and reserve through additional landscaping.

2. DEVELOPMENT STRATEGY

Part 2 contains the vision, indicative master plan (See Figure 2: Indicative Master Plan) and design principles (See Figure 3: Principles for Development) for the site. These principles underpin the Development Controls in Part 3.

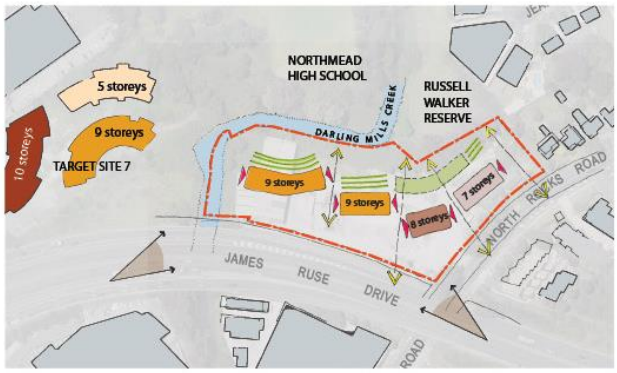


Figure 2: Indicative master plan



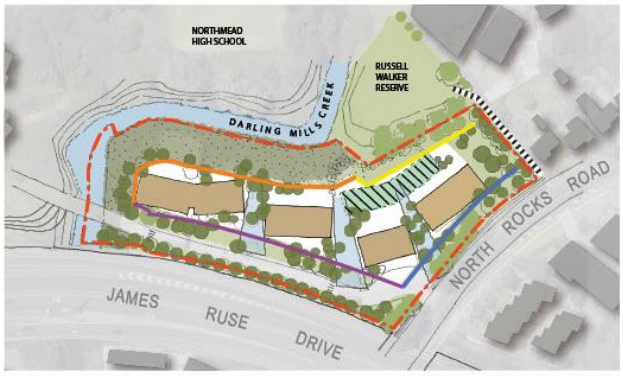
RESIDENTIAL AMENITY

- Subject site
- Narrow depth for cross ventilation and light
- Create a positive landscape character to improve outlook and streetscape
- Location for living areas and private open space
- Preferred location for wet areas and circulation (to minimise noise to living and bedroom areas)
- Primary outlook to creek corridor and reserve
- District views



HEIGHT AND BUILT FORM

- Subject site
- 10 storeys
- 9 storeys
- 7-8 storeys
- 7-5 storeys
- Slender profile / narrow form
- 2 storeys (earth-covered dwellings)
- Visual permeability
- Built edge to reserve
- View from freeway



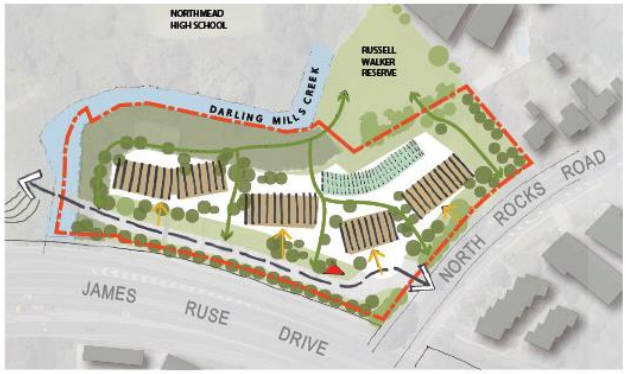
SETBACKS AND SEPARATION

- Subject site
- Riparian corridor setback
- 19m setback
- 10m setback
- 8m setback
- Building separation maintaining buffer role of built form
- Existing pedestrian path to reserve
- Potential for earth-covered dwellings
- Potential location for built form



LANDSCAPING

- Subject site
- Terraced, landscaped private open space (deep soil)
- Landscaped front and new street setbacks to enhance North Rocks Road and provide attractive outlook (deep soil where possible)
- Retain and protect existing trees and riparian vegetation
- Buffer planting to James Ruse Drive
- Top of bank (indicative)
- Setback for riparian corridor (indicative)
- Revegetate riparian corridor to NSW Office of Water requirements (indicative area shown)
- New street access to Target Site 7 (built by others)
- Potential for earth-covered dwellings



PEDESTRIAN MOVEMENT

- Subject site
- Pedestrian network
- Pedestrian entry
- Required new access street to Target Site 7
- Potential location for built form
- Possible earth-covered built form

Figure 3: Design Principles

2.1. DESIGN PRINCIPLES

The design principles to realise this vision for the site are as follows:

(vii) *Repair and enhance the riparian corridor of Darling Mills Creek and buffer to Russell Walker Reserve.*

(viii) *Extend and enhance the existing landscape character of North Rocks Road.*

(ix) *Maximise the landscape setting between the creek and any new development.*

(x) *Maintain some visual connection from North Rocks Road footpath through the site to Russell Walker Reserve and the creek corridor.*

(xi) *Provide a built form that responds to adjoining development and accentuates the corner of James Ruse Drive and North Rocks Road.*

(xii) *Respond to the view from James Ruse Drive towards the site through architectural excellence and a more dominant and stronger form.*

(xiii) *Provide a transition in scale to the low-scale residential development to the east by providing a generous landscaped setback along the eastern boundary.*

(xiv) *Achieve generous view corridors to the creek and reserve between built form.*

(xv) *Improve the amenity and outlook towards the wall to James Ruse Drive through landscape and maximising opportunities for landscaped spaces.*

(xvi) *Minimise the visual and amenity impacts of James Ruse Drive through orientation, design and built form.*

(xvii) *Maximise opportunities for high quality creek and reserve outlooks and northern solar access to dwellings.*

(xviii) *Connect the new site access road for the Target Site 7 to the west with the existing informal walking track by the creek.*

(xix) *Create a strong sense of address for the development to North Rocks Road and the new access street to the adjacent target site through the use and placement of a taller built form.*

(xx) *Minimise vehicle entry impacts to North Rocks Road.*

3. OBJECTIVES AND DEVELOPMENT CONTROLS

The objectives and development controls for any new development on this Target Site are set out in this section. This section is to be read in conjunction with the remainder of the DCP including other relevant sections of Council's DCP:

- Part B Section 4 – Multi Dwelling Housing
- Part B Section 5 - Residential Flat Buildings
- Part C Section 1 – Parking

3.1. SITE PLANNING

OBJECTIVES

(i) *To ensure appropriate placement of development on the site to minimise impact to the creek line, reserve and neighbouring properties.*

(ii) *To ensure appropriate distribution of built form across the site to maximise view corridors to the reserve from James Ruse Drive.*

(iii) *To minimise adverse impacts from the proximity of James Ruse Drive on future apartments within the development.*

(iv) *To achieve a landscape transition that responds to the natural features and topography of the site.*

DEVELOPMENT CONTROLS

(a) Future development to be located generally in accordance with Figure 4.

(b) Building depth is to be a maximum of 18m from glass line to glass line excluding balconies.

3.2. HUNTER PIPELINE EASEMENT & AGL GAS MAIN

The applicant is required to consult with Caltex Australia Petroleum Pty Ltd and AGL with respect to the location of any proposed structure or building on or in the vicinity of the pipeline or gas main.

Evidence of consultation and the concurrence of Caltex Australia Petroleum Pty Ltd and AGL is to be submitted with any development application.

3.3. BUILDING HEIGHT

OBJECTIVE

(i) *To respond to the role of this site as a Target Site for greater residential density.*

(ii) *To ensure that development on the subject site complements without challenging the role of Target Site 7 as a gateway site.*

(iii) *To provide recognition through the allowable height of the visual prominence of the site for drivers on James Ruse Drive.*

(iv) *To ensure that the new development does provide a high quality address to James Ruse Drive from the east and to North Rocks Road.*

(v) *To ensure the new development provides a built form buffer for the creek corridor and development to the north from the noise and visual impacts of James Ruse Drive whilst allowing generous north-south view corridors across the site.*

DEVELOPMENT CONTROLS

(a) Buildings heights are not to exceed the maximum number of storeys shown in Figures 2 and 3.
- Building A – 9 storeys
- Building B – 9 storeys
- Building C – 9 storeys
- Building D – 8 storeys
- Building E – 7 storeys

(b) Mezzanine levels will be counted as storeys.

(c) Number of storeys excludes where basements protrude above ground due to topography on the site.

(d) Additional height for architectural roof features is considered appropriate to achieve architectural excellence.

3.4. DENSITY

OBJECTIVES

(i) *To provide a dwelling density that reflects the target site status of the land.*

(ii) *To provide high density residential development in proximity to public transport.*

(iii) *To ensure that an appropriate level of development is provided on the site that does not dominate the adjoining Target Site 7 or the lower scale development along North Rocks Road.*

DEVELOPMENT CONTROLS

(a) No more than 150 dwellings may be provided on the site.

NOTE: The maximum density should not be considered as the desired yield for the site. The final yield will be dependent on identifying designs that address all of the objectives of this development control plan.

3.5. DESIGN EXCELLENCE

OBJECTIVES

(i) *To achieve design excellence in the architecture and landscape design of any new development.*

(ii) *To ensure high quality materials and detailing is provided which are sustainable and minimise on-going maintenance costs to the development.*

DEVELOPMENT CONTROLS

(a) New development is to provide a high quality architectural response to the site in terms of:
- Articulation and visual interest within the massing and height required.
- Use of high quality, low maintenance materials.
- Interesting roof forms and silhouettes to the buildings.
- Treatment of side walls using high quality materials and visual interest, if fenestration is not provided.
- High quality landscape design solutions maximising the use of native vegetation.
- Presentation to James Ruse Drive in terms of facade treatment, materials and colours and articulation.

(b) Elevation treatment is to be generally consistent with Figure 6.

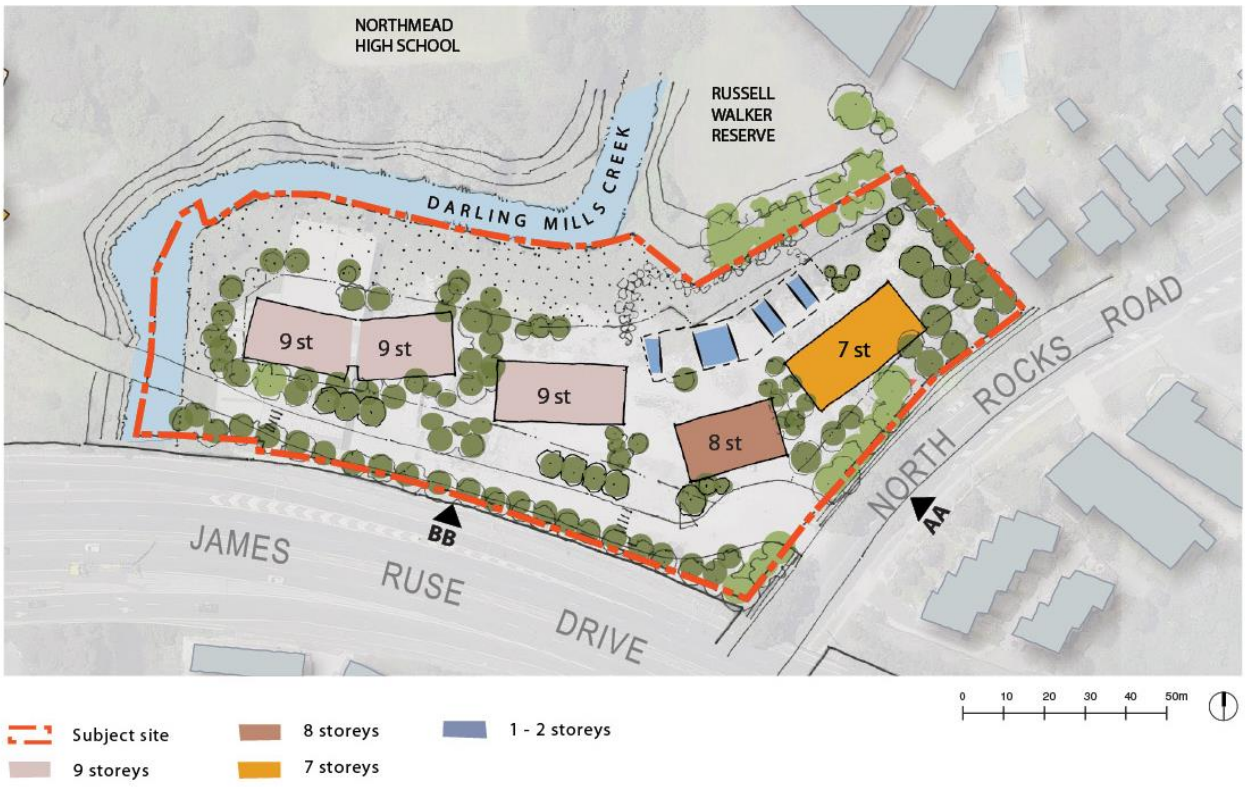
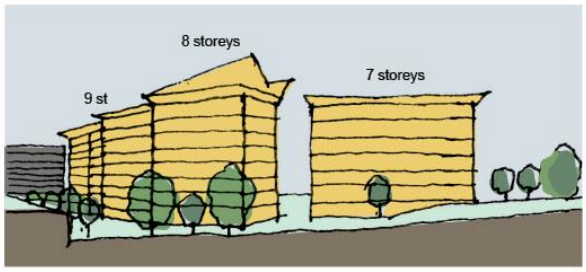


Figure 4: Development footprint location and building heights

Please note: Number of storeys does not include basement protrusion above ground



Elevation A-A to North Rocks Road

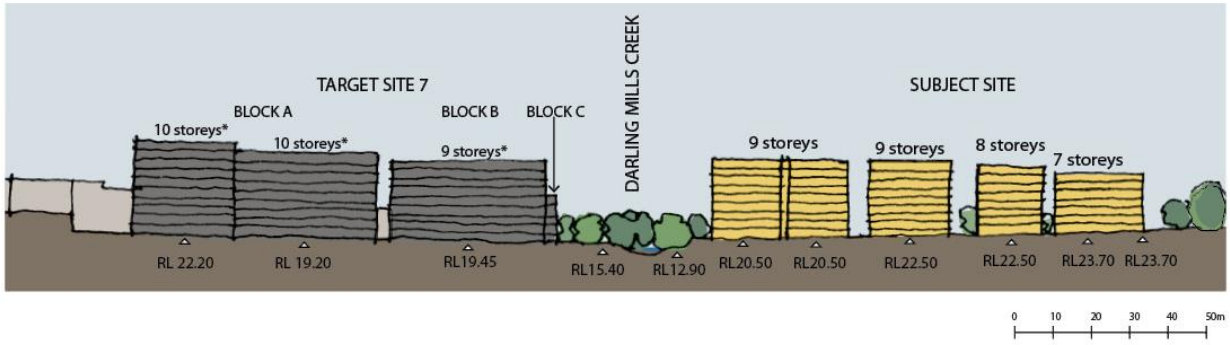
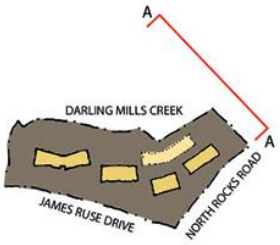


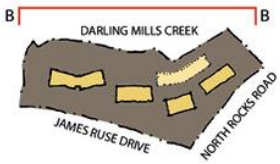
Figure 5: Indicative Built Form





Elevation A-A





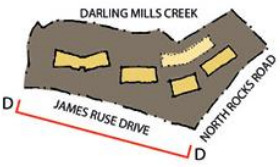
Elevation B-B





Elevation C-C





Elevation D-D

Figure 6: Indicative elevations and building materials

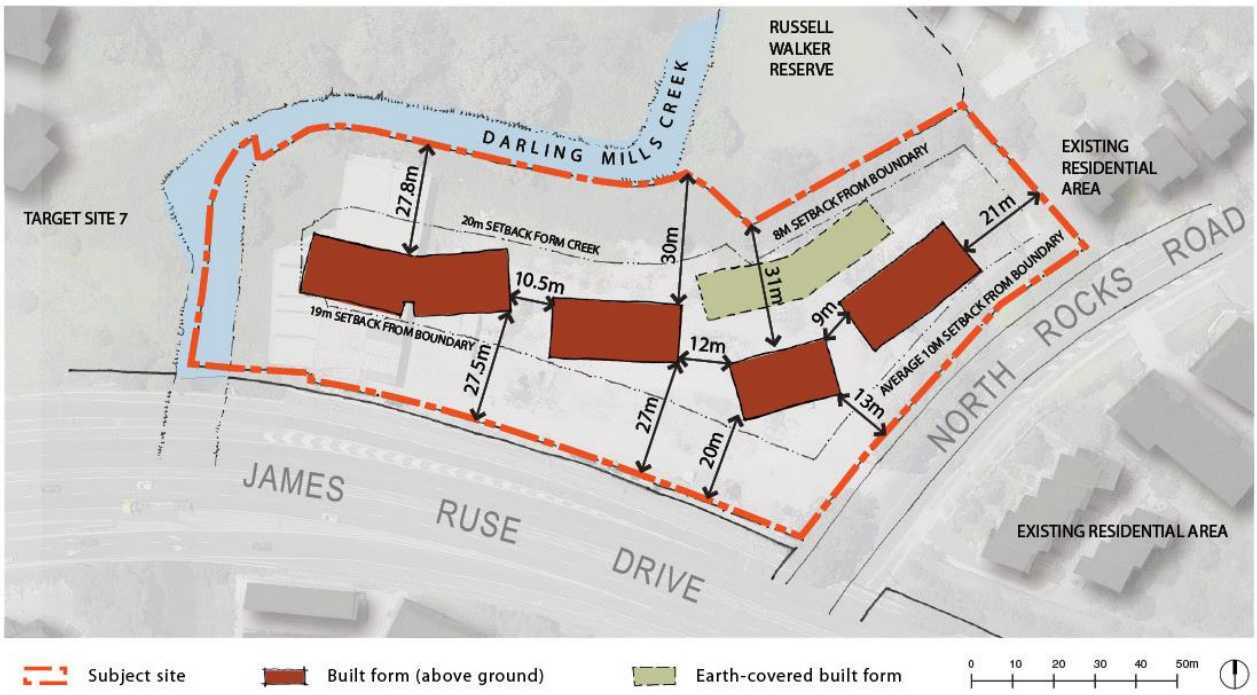


Figure 7: Minimum setback and separation distances

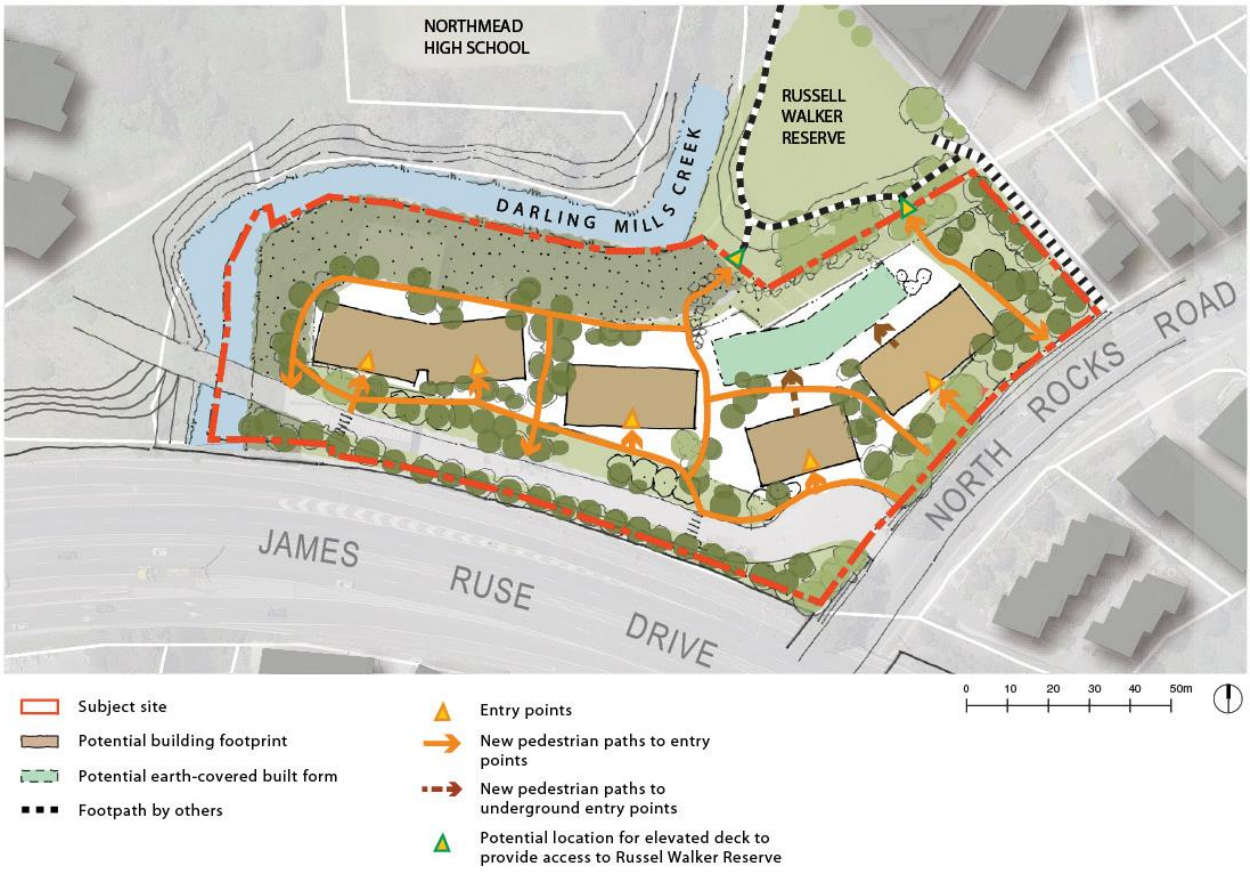


Figure 8: Pedestrian access

3.6. SETBACKS AND SEPARATION

OBJECTIVES

(i) *To mitigate adverse impacts on neighbouring properties.*

(ii) *To mitigate acoustic impacts of James Ruse Drive.*

(iii) *To ensure new development is appropriately setback from North Rocks Road.*

(iv) *To encourage solar penetration and view corridors through the site.*

(v) *To safeguard and protect the required riparian corridor and enable regeneration of native landscape to the creek banks and corridor.*

(vi) *To provide sufficient setback from the riparian corridor to allow private open space to occur at ground level.*

DEVELOPMENT CONTROLS

(a) Average building setbacks and minimum separation distances between the built forms are to be provided in accordance with Figure 7 providing that any windows on the side facades of the buildings (excluding the eastern façade of Building E) are either frosted or high level to ensure adequate privacy is achieved.

(b) The minimum front setback is to align with the predominant setback within the street or 9m whichever is greater.

(c) The setback to buildings from James Ruse Drive is to be a minimum of 19m including balconies and access corridors.

(d) The setback to the north eastern boundary is to be a minimum of 21m.

(e) The setback to Russell Walker Reserve is to be a minimum of 8m.

(f) Additional setbacks are to be provided for built form beyond the riparian corridor to the north to allow for generous private open space terraces and additional landscaping between the development and the riparian zone.

3.7. PEDESTRIAN ACCESS

OBJECTIVES

(i) *To achieve legible way-finding through the site and convenient access into building for residents and visitors.*

(ii) *To ensure access to building entries is direct and clearly visible and a strong sense of address is provided to North Rocks Road.*

(iii) *To provide a range of pedestrian routes through the development to the creek corridor and opportunities to link the site to Russell Walker Reserve.*

DEVELOPMENT CONTROLS

(a) Pedestrian links and entry points are to be provided generally in accordance with Figure 8 Pedestrian access.

(b) Resident pedestrian paths through the site are to be located outside the core riparian corridor and protected waters.

(c) A new public pathway is to be provided within the riparian corridor as an elevated walkway connecting the existing reserve to the new road access for Target Site 7.

(d) Access points for pedestrians are to be separated from vehicle access driveways to ensure safety.

(e) Pathway locations must ensure natural surveillance from primary living areas of adjoining units.

(f) Design buildings to the north eastern boundary of the site to overlook the adjacent pedestrian pathway. A visually permeable, low fence to allow dwellings to address the pathway is preferred.

(g) Bicycle lock-up facilities are to be provided adjacent to the main entries of the buildings and bicycle storage is to be provided as part of the parking space for each unit.

(h) Building entrances are to be fully accessible. Entries are to be clearly visible to public areas and are to be located either directly from North Rocks Road or the access street to Target Site 7.

(i) Identification signage is to be located at the entry to the site along North Rocks Road

displaying clearly the property's name and address.

3.8. VEHICLE ACCESS

OBJECTIVES

(i) *To minimise the visual impact of vehicle access areas to pedestrian areas, North Rocks Road and the development as a whole.*

(ii) *To achieve a single access point for vehicles from North Rocks Road, if possible.*

(iii) *To ensure vehicle access meets with sound traffic management principles.*

(iv) *To ensure that vehicle movement occurs in a safe and efficient manner.*

(v) *To ensure that access for waste collection vehicles meets Council's waste collection requirements.*

DEVELOPMENT CONTROLS

(a) Vehicle entry points are to be provided generally in accordance with Figure 9.

(b) The preferred location for vehicle and service access is by the new access road for Target Site 7 along the site's southern boundary avoiding multiple entry points along North Rocks Road.

(c) The design and configuration of driveways shall be in accordance with Part C Section 1 - Parking of The Hills DCP 2012.

(d) Potential pedestrian/vehicle conflicts are to be minimised by:

- Limiting the width of vehicle access points
- Ensuring clear sight lines at the pedestrian and vehicle crossing.
- Vehicle driveways and entry points into buildings are to ensure that:
  - Garbage collection areas and servicing areas are accessible directly from the access road for Target Site 7, well screened and not visible to the street.
  - Driveways are recessed into the main façade line of the building.
  - Exposed car parking ramps are not permitted.
  - Continue the façade material into the car park entry recess for the extent visible from the street as a minimum to achieve a high quality outcome.

(e) All vehicles, including waste and removalist trucks must be able to manoeuvre on site without relying on access to Target Site 7.

(f) The Roads and Maritime Services will be consulted in relation to any development application on the site. Road and traffic management improvements to North Rocks Road are to be undertaken as specified by and to the satisfaction of the Roads and Maritime Services and Council.

3.9. CAR PARKING

OBJECTIVES

(i) To ensure that all car-parking demands generated by the development are accommodated on the development site.

(ii) To protect the free flow of traffic into and out of residential flat building developments and the surrounding street network in accordance with Council's ESD objective 7.

DEVELOPMENT CONTROLS

(a) Car parking is to be provided in the locations shown in Figure 10.

(b) Car parking shall be in accordance with 3.19 Car Parking within Part B Section 5 - Residential Flat Buildings.

(c) Car parking is to be located within the basement of any new development. The line of the basement car park shall fit generally within the building footprint as shown in Figure 10 with considerations given to optimising consolidated areas of deep soil.

(d) The basement car park shall be designed to mitigate flood impacts. Refer to Section 3.3.

(e) No car parking is to be exposed to the creek riparian corridor or to the reserve.

(f) Any car parking above natural ground due to the slope of the land is to be sleeved behind residential uses or landscaped terraces.

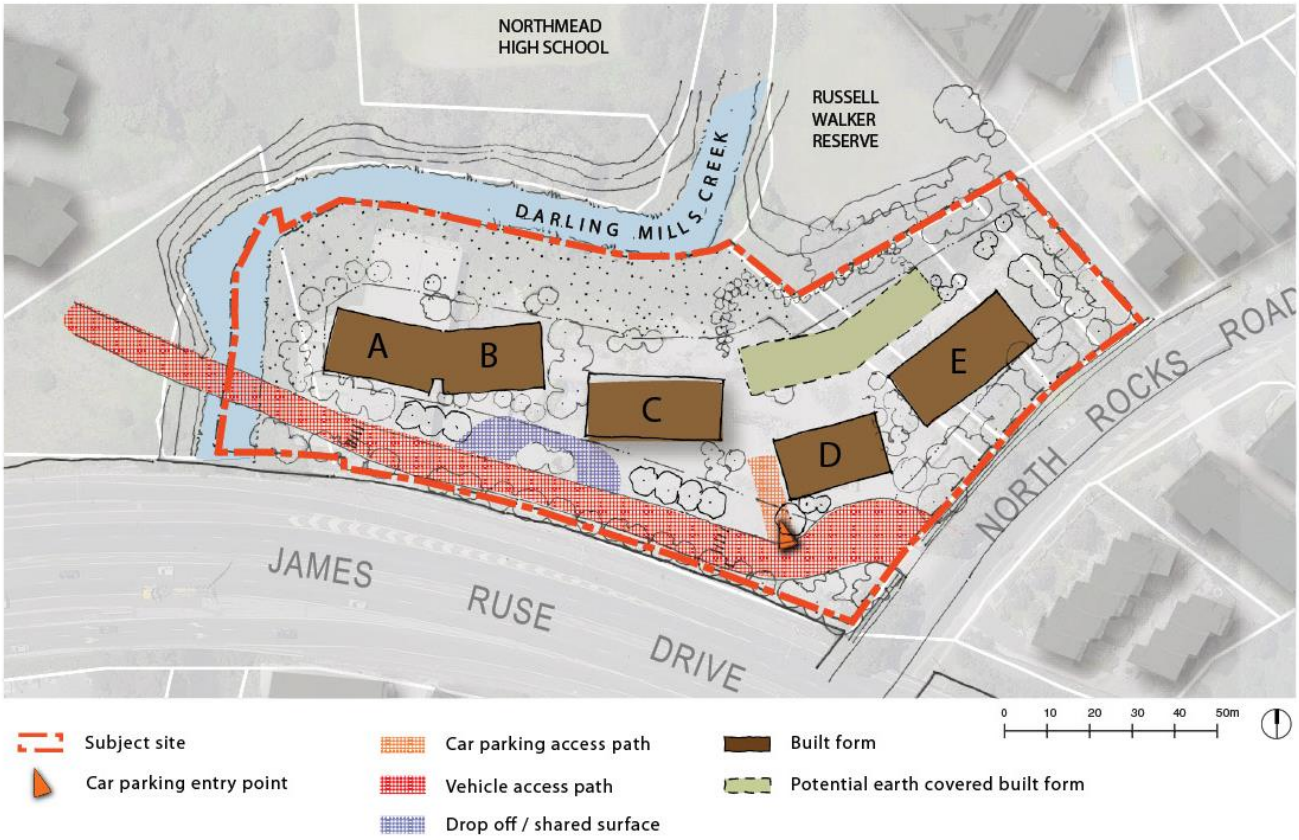


Figure 9: Vehicular access

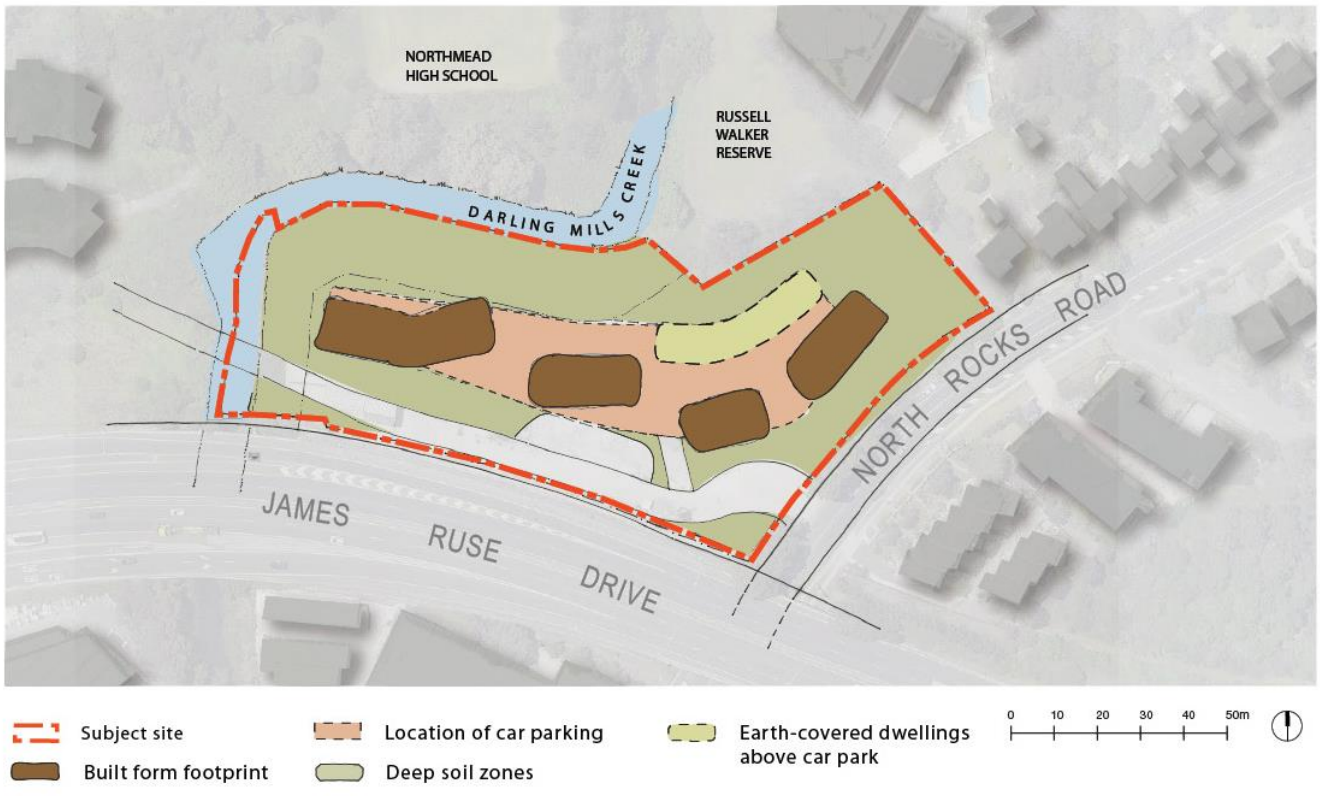


Figure 10: Location of parking, built form and deep soil planting

3.10. LANDSCAPE AND OPEN SPACE

OBJECTIVES

(i) *To maintain and enhance the natural vegetation along Darling Mills Creek and Russell Walker Reserve.*

(ii) *To maximise landscaping and provide opportunities for the planting of native species.*

(iii) *To provide high quality landscaping along the Target Site 7 access road and frontage to North Rocks Road.*

(iv) *To provide a high quality landscaped outlook and private open space for residents.*

(v) *To retain the existing tree planting within the site where possible.*

(vi) *To minimise visual privacy impacts to the dwellings to the north east.*

(vii) *To maximise deep soil zones within the site.*

(viii) *To minimise the visual impact of the existing retaining wall to James Ruse Drive.*

(ix) *To provide high quality communal open space for residents including a range of recreational opportunities for residents.*

DEVELOPMENT CONTROLS

(a) Landscaping is to be provided in the locations shown in Figure 11.

(b) Additional street trees of an appropriate species are to be provided along the North Rocks Road boundary.

(c) Landscaped area is to comprise a minimum of 60% of the site area.

(d) Areas less than 2m in width will be excluded from the landscape calculation.

(e) A minimum of 2,300m^2 of common open space is to be provided.

(f) The new access street to Target Site 7 is to be landscaped with semi mature street trees and landscaped frontages to reduce the visual impact of James Ruse Drive.

(g) Consultation is required with Caltex to consider landscaping opportunities on and adjacent to the Hunter Pipeline easement prior to the lodgement of any development application.

(h) A Vegetated Riparian Zone is to be provided along Darling Mills Creek in accordance with NSW Office of Water requirements (See Figure 14). It is to function as an ecological system and therefore cannot contain any access routes or recreational areas unless detailed as part of a Development Application for the land prior to issue of the Controlled Activity Approval.

(i) Existing trees and vegetation in the riparian corridor and in the 1 in 100 year flood zone (refer to Flood Impact Report by HKMA dated 15/12/2011) are to be retained and the corridor re-vegetated, using native species appropriate to the flood affected location in accordance with NSW Office of Water requirements.

(j) Erosion and sediment control works and water diversion structures are to be provided in accordance with the NSW Office of Water requirements.

(k) A vegetation management plan must be prepared for approval by the NSW Office of Water as part of any development. It is to follow the Office of Water guidelines for Vegetation Management Plans.

(l) Endemic riparian species that overhang the creek should also be used and emergent aquatic vegetation restored where possible.

(m) Existing trees on site are to be retained. If it is not possible to retain existing trees then a replacement mature specimen of the same or similar species is to be provided.

(n) Open spaces are to be concentrated on the northern side of the development.

(o) Landscaping shall be designed to positively contribute to the site's existing characteristics by:

- using plant species that are endemic to the area where appropriate; and
- retaining and incorporating changes of level in the landscape design.

(p) The energy and solar efficiency of dwellings and the micro-climate of private open spaces are to be improved by:

- Incorporating deciduous trees and landscaping which allow shading in summer and low angle sun penetration in winter;
- varying heights of different species of trees and shrubs to shade walls and windows; and
- locating pergolas on balconies and within courtyards to create shaded areas in summer and private areas for outdoor living.

(q) Landscape design is to contribute to water and stormwater efficiency by:

- using plants with low water demand to reduce mains consumption;
- using plants with low fertiliser requirements; and
- utilising permeable surfaces.

(r) Private and common spaces are to be clearly defined through landscape.

(s) Communal open space is to be provided to the northern area of the site adjacent to the creek corridor and existing reserve.

(t) The design of this area is to ensure privacy for ground floor units adjacent to it.

(u) Communal open space is to be accessible to all residents.

(v) Provision of a gym or pool must be restricted to indoors to minimise noise impacts to adjoining residents.

3.11. DEEP SOIL

OBJECTIVES

(i) *To maximise opportunities for deep soil particularly adjacent to Darling Mills Creek, James Ruse Drive and North Rocks Road to contribute to the landscape character of these areas.*

(ii) *To assist with the management of water quality and the water table on the site.*

(iii) *To improve the amenity of the site and its surroundings by retaining existing trees or replacing them with the same or similar species.*

DEVELOPMENT CONTROLS

(a) Deep soil is to be provided generally in the locations shown in Figures 10 and 11.

(b) Deep soil is to comprise a minimum of 30% of the landscape area. (Note: the landscape area excludes the riparian corridor zone and the riparian recovery zone).



Figure 11: Landscape strategy



Figure 12: Landscape character images

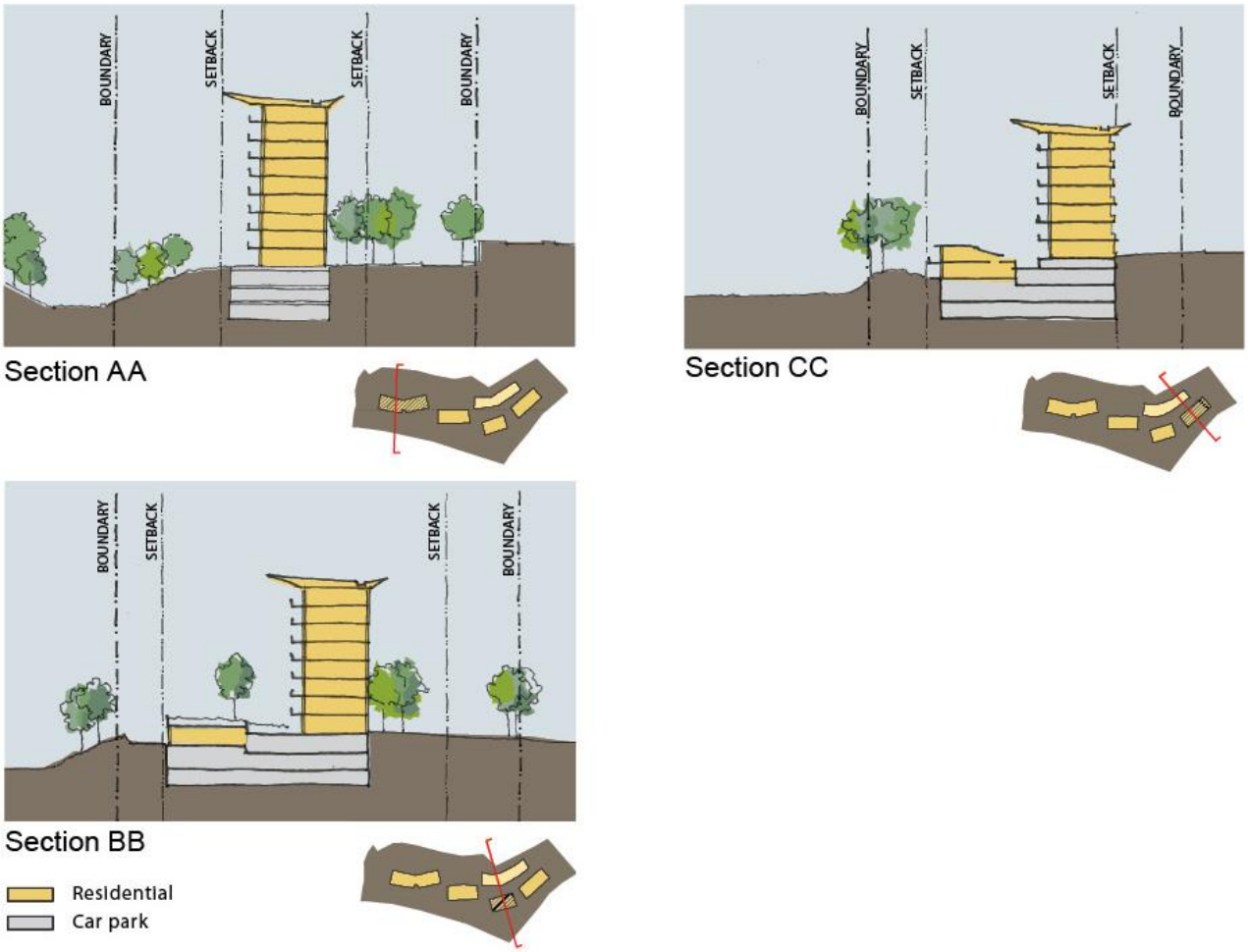


Figure 13: Sections showing location of car parking relative to ground level

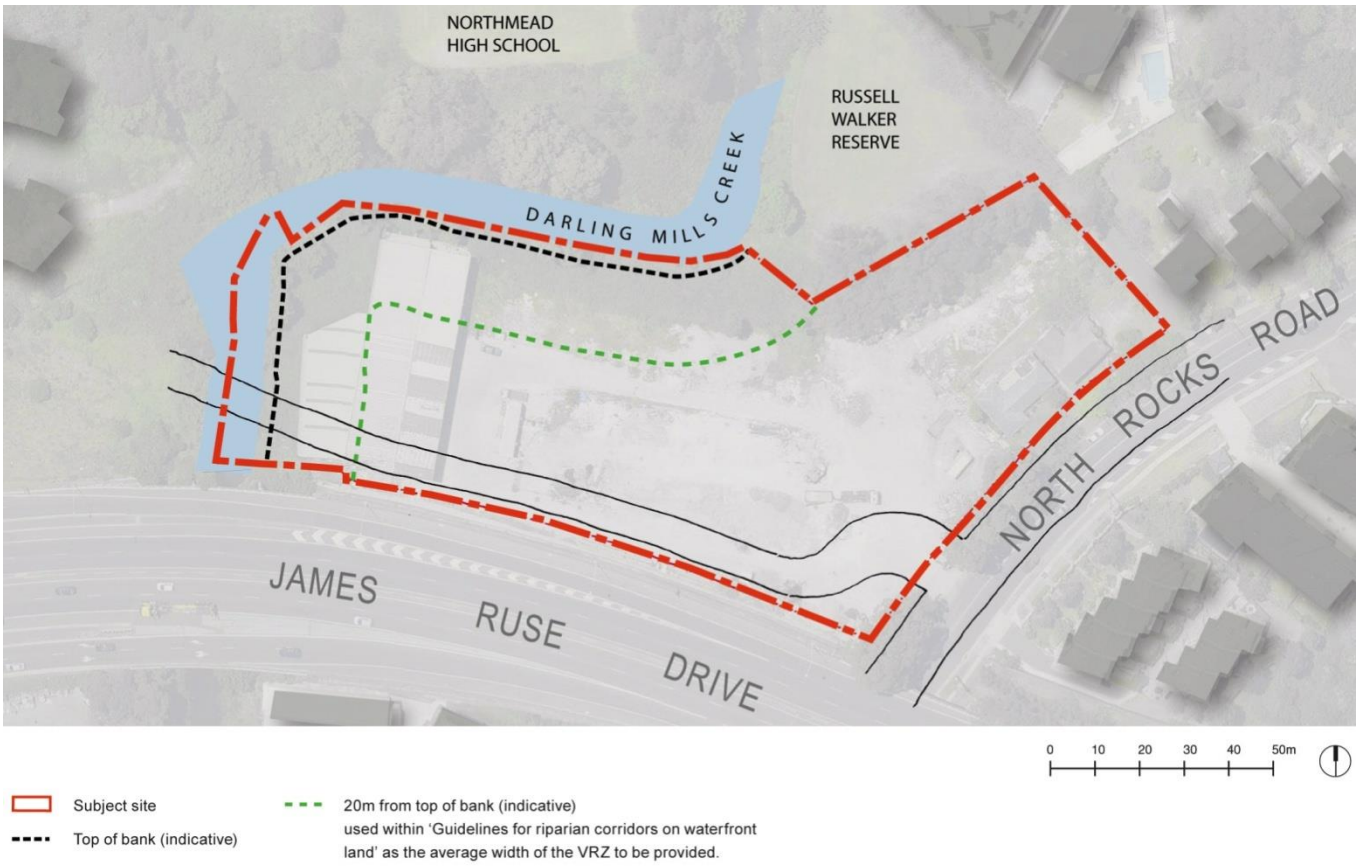


Figure 14: Riparian corridor zone

3.12. PLANTING ON STRUCTURES

OBJECTIVES

(i) *To contribute to the quality and amenity of communal open space over car parking areas.*

DEVELOPMENT CONTROLS

(a) Plant growth is to be optimised by:
- providing soil depth, volume and area appropriate to the size of the plants to be established;
- providing appropriate soil conditions and irrigation methods; and
- providing appropriate drainage.

(b) Planters are to be designed to support the appropriate soil depth and plant selection by:
- ensuring planter proportions accommodate the largest volume of soil possible; and
- providing square or rectangular planting areas, rather than long narrow linear areas.

(c) Minimum soil depths are to be provided in accordance with the following:

Large trees such as figs (16 metres canopy diameter at maturity)	
minimum soil volume	150 cubic metres
minimum soil depth	1.3 metres
minimum soil area	10 metre x 10 metre area or equivalent
Medium trees (8 metre canopy diameter at maturity)	
minimum soil volume	35 cubic metres
minimum soil depth	1 metre
approximate soil area	6 metre x 6 metre or equivalent
Shrubs	
minimum soil depth	500-600mm
Ground cover	
minimum soil depth	300-450mm
Turf	
minimum soil depth	100-300mm

Any subsurface drainage requirements are in addition to the minimum soil depths quoted above.

3.13. FLOODING

OBJECTIVES

(i) *To minimise the impact of flood events on new development.*

(ii) *To maximise public safety and minimise potential damage to property.*

DEVELOPMENT CONTROLS

(a) Flood levels have been determined by the Upper Parramatta River Catchment Thrust (UPRCT) as part of the Upper Parramatta River Flood Study. For any new development all habitable spaces and private open space must be located at or above the established freeboard for the site. This freeboard of RL 17.0 is set up 500mm above the 1% ARI Flood Level (Darling Mills Creek).

(b) Basement access is to be at least on or above the freeboard of RL 17.0.

(c) Basements are to be constructed as a watertight structure and mechanically ventilated.

(d) Appropriate warning signs, flood depth indicators and directional signs are to be indicated as part of any development application.

3.14. SOLAR ACCESS AND OVERSHADOWING

OBJECTIVES

(i) *To orient the development to maximise solar access to living areas and open spaces.*

(ii) *To ensure adjacent dwellings and their private open spaces achieve a reasonable level of solar access.*

(iii) *To provide adequate passive shading to north, west and east facing windows and private open space areas to minimise the need for reliance on fossil fuels for cooling in summer.*

(iv) *To minimise the number of south facing units and single aspect apartments.*

DEVELOPMENT CONTROLS

(a) Buildings are to be oriented so that solar access to living areas and private open spaces is optimised.

(b) Dual aspect apartments are to be maximised with no apartments to be south facing as their only orientation.

(c) Living rooms and private open spaces for at least 70 percent of apartments in the development are to receive a minimum of three hours direct sunlight between 9am and 3pm in mid-winter.

(d) A minimum of 60% of the communal open space areas must receive at least three hours of sunlight between 9am and 3pm on 21 June.

(e) Buildings are to be designed to provide passive shading and glare control, especially in summer, by:

- using shading devices, such as eaves, awnings, colonnades, balconies, pergolas, external louvers and deciduous planting (where appropriate);
- using high performance glass; and
- minimising external glare off windows and other external surfaces by using glass/surfaces with reflectivity index not exceeding 20%.

3.15. NATURAL VENTILATION

OBJECTIVES

(i) *To maximise opportunities for cross ventilation.*

(ii) *To reduce energy consumption by minimising reliance on mechanical ventilation.*

DEVELOPMENT CONTROLS

(a) A minimum of 60% of units are to be cross - ventilated.

(b) A minimum of 25% of kitchens are to have access to natural ventilation.

(c) Building layout is to maximise the potential for natural ventilation by designing narrow building depths and providing dual aspect apartments.

3.16. NOISE AND VISUAL PRIVACY

OBJECTIVES

(i) *To minimise acoustic impacts from James Ruse Drive and North Rocks Road.*

(ii) *To minimise noise transmission in between dwellings and from common open areas.*

(iii) *To avoid overlooking of living areas and private open space.*

(iv) *To maximise opportunities for passive visual surveillance.*

DEVELOPMENT CONTROLS

(a) Stack ventilation should be considered to achieve cross ventilation in apartments where acoustic requirements will not allow operable windows to the southern facade of the development.

(b) Any development proposal is to be accompanied by a noise impact assessment (Acoustic Report) detailing typical noise levels within dwellings.

(c) Minimise direct overlooking of living areas and private open space areas of dwellings both within and between dwellings on site and adjoining sites through building location and orientation, landscape, screening devices and window size, location and glass treatment.

(d) Any plant and equipment for the development is to be screened and acoustically rated to avoid noise transference.

3.17. APARTMENT LAYOUT

OBJECTIVES

(i) *To provide an apartment design that achieves a functional layout and high level of amenity.*

(ii) *To ensure that appropriate storage and facilities are provided within the unit.*

(iii) *To maximise opportunities for cross ventilation and solar access.*

(iv) *To ensure a direct relationship between living spaces and private open spaces for each dwelling.*

DEVELOPMENT CONTROLS

(a) Long continuous corridors servicing units are to be avoided.

(b) All living areas and private open space areas are to be oriented to the north towards the creek corridor or Russell Walker Reserve.

(c) Minimise the number of habitable rooms located to the south adjacent to James Ruse Drive.

(d) Locate wet areas, service rooms and circulation to the southern portion of the buildings or

adjacent to James Ruse Drive and North Rocks Road.

(e) Provide the following minimum storage area to each unit:

- 1 bed apartment - 6 cubic metres
- 2 bed apartment - 8 cubic metres
- 3 bed apartment + - 10 cubic metres

(f) A minimum of 50% of the storage requirement is to be provided within the unit via separate linen and storage cupboards and is not to include wardrobes or kitchen cupboards in the calculation.

3.18. BUSH FIRE

Development consent will not be granted for the subject site unless the consent authority:

(i) is satisfied that the development conforms to the specifications and requirements of 'Planning for Bush Fire Protection", 2006, prepared by NSW Rural Fire Service in co-operation with the Department of Planning; or

(ii) has been provided with a certificate prepared by a qualified consultant in bush fire risk who is recognised by the NSW Rural Fire Service stating that the development conforms to the relevant specification and requirements.

3.19. CONTAMINATION

The subject site is to be fully remediated and a validation report submitted to Council's satisfaction prior to the issue of a Construction Certificate for residential development on the site.

SUBMISSION REQUIREMENT

- A validation report indicating that the site has been made free from contamination.

3.20. WASTE STORAGE AND REMOVAL

(a) All waste storage and servicing will be accessible off the access road to Target Site 7 and comply with Council's preferred waste management strategy.

(b) A waste management plan shall be prepared for green and putrescible waste, garbage, glass, containers and paper.

(c) Every dwelling will include a waste cupboard or temporary storage area of sufficient size to hold a single day's waste and to enable source separation.

(d) All waste storage will comply with Council's Waste Management Information and Bin Bay Design Specifications for Multi-unit Developments.

3.21. STAGING OF DEVELOPMENT

(a) Development approval for the 27-33 North Rocks Road, North Rocks Target Site must have appropriate regard to the amenity of the adjoining residential development known as Target Site 7. Accordingly, any development application for the residential development of Lot 2 DP 1158967 shall have regard to the access requirements for development of the site.

(b) Staging should be organised to follow a logical sequence and minimise disruption to surrounding development.

The Hills Development Control Plan (DCP) 2012

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Part D Section 2
Pennant Street Target Site
Castle Hill

D2

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1. INTRODUCTION

This Section of The Hills Development Control Plan (THDCP) has been prepared to provide direction and control for the development of the Pennant Street Target Site, Castle Hill, located in the Castle Hill Major Centre.

This Section of the DCP must be read in conjunction with Part A – Introduction of this DCP.

1.1. LAND TO WHICH THIS SECTION OF THE DCP APPLIES

This Plan applies to the area outlined in red in Figure 1, being the area bounded by Gay Street, Old Castle Hill Road and Pennant Street, Castle Hill.



Figure 1. Pennant Street Target Site

1.2. AIMS AND OBJECTIVES OF THIS SECTION OF THE DCP

The objectives of this Section of the DCP are:

- *To provide a clear vision and desired future character for the Pennant Street Target Site;*
- *To encourage innovative and high quality architectural outcomes that add to the character of the site with particular emphasis*

  on landmark features, landscape areas, semi – public and private spaces and pedestrian amenity;
- *To provide detailed design guidance for the creation of an iconic, high quality public domain;*
- *To encourage all developments to address the public street frontage and provide an attractive, safe pedestrian environment;*
- *To ensure development will not detrimentally affect the environment of any adjoining land and that satisfactory measures are incorporated to ameliorate any impacts arising from proposals; and*
- *To encourage appropriate landscaping of developments that contributes to the appearance and amenity of the development site and adjoining public domain areas.*

1.3. RELATIONSHIP WITH OTHER PLANS AND POLICIES

In addition to the policies, guidelines and documents specified in Part A – Introduction to The Hills DCP, this Section is to be read in conjunction with other relevant Sections of the DCP, including:

- Part B Section 5 – Residential Flat Building
- Part C Section 1 - Parking
- Part C Section 2 - Signage
- Part C Section 3 – Landscaping
- Part C Section 6 – Flood Controlled Land

Where any provision of this Section of the DCP is inconsistent with any provision of any other Section of the DCP, the provisions of this Section of the DCP shall prevail to the extent of that inconsistency.

This Section should also be considered in relation to DCPs and plans applying to the upgrade of Old Northern Road, the draft Castle Hill Public Domain Plan, The Hills DCP Part D Section 11 - Terminus Street Precinct and The Hills DCP Part D Section 15 – Crane Road Precinct.

2. URBAN CONTEXT

2.1. CASTLE HILL MAJOR CENTRE

The Pennant Street Target Site is situated within the Castle Hill Major Centre (the Centre). The Department of Planning has identified Castle Hill as a Major Centre in the draft North West Subregional Strategy (December 2007). Castle Hill is the premier centre within The Hills Shire Local Government Area

and warrants a high quality urban development, an efficient local road network and the provision of quality civic infrastructure.

Castle Hill consists of retail, commercial, residential and community uses. Over the past two decades the Centre has experienced rapid growth in the quantity of retail floor space, predominately as a result of the expansion of the existing Castle Towers Shopping Centre.

Continued growth of the Centre is anticipated in the future, including an expected growth in traffic volumes and a growth in demand for retail, commercial and residential floorspace. Developments anticipated in the Centre include the Castle Towers Stage 3 expansion, bus interchange, the planned bus transitway link, the Castle Hill Mainstreet Project civic improvements, the draft Castle Hill Centre Public Domain, the completion of the Castle Hill Ring Road, the planned widening of Showground Road and the development of the Terminus Street and Crane Road Precincts. Within this context the intensification of development on the Pennant Street Target Site is proposed.

2.2. PENNANT STREET TARGET SITE

The Pennant Street Target Site lies immediately to the north of the Castle Hill Major Centre. As such, any future use and development of the Site is influenced, to a degree, by the activities and development that take place within the Centre and the overall role, function and structure of the Centre.

Analysis of the Pennant Street Site's context can be distilled into the following elements:

- Landform;
- Development and Uses;
- Traffic and Access; and
- Urban Structure.

Landform

The Centre straddles a prominent ridge. The Pennant Street site overlooks the western side of the ridge. The presence of the ridge generates the following opportunities and constraints:

- Views out of the site to the Centre enhance future resident amenity;
- Views into the site provide opportunities to enhance Centre character;
- Opportunities to explore a range of building heights that are not out of keeping with a densely developed commercial centre located on top of the ridge; and
- The presence of a high retaining wall along the southern boundary which provides elevated exposure reinforcing opportunities to enhance the character of the Centre.

Development and Uses

The Centre exhibits a strict separation of land uses with predominantly low density, low scale residential development to the north of the site and high density, high scale commercial development to the south of the site. There is negligible mixed use development within the Centre. Furthermore the Centre is predicted to experience significant development pressure and demand for additional commercial, retail and residential floor space in the medium to long term as the Shire continues to grow and public transport and access improve.

The pattern and scale of uses and development generate the following opportunities and constraints:

- Opportunities to provide a range of dwelling types for residents who may seek and enjoy close proximity, and convenient access, to a Centre at higher densities;
- The need for sensitivity to ensure that the low density residential character to the north of the site is protected; and
- The need to accommodate the impacts of intense commercial development that exists to the south and possibly to the west in the future.

Vehicle Traffic and Pedestrian Access

The Major Centre enjoys vehicular, and pedestrian / bicycle access networks that are destined for significant improvements in the short to medium term. These improvements include the pending completion of the ring road and bus interchange, as well as the development of a rapid bus transitway along Showground Road. The vehicle and pedestrian network generates the following opportunities and constraints:

- The need for good pedestrian access out of the Site to the Centre; and
- The presence of the Ring Road along the southern boundary of the site precludes major vehicle egress from, and access to, the Site; and
- The impacts of the Ring Road by way of dust, noise, vibration and local pollution need to be accommodated.

Urban Structure

The structure of the Centre is dominated by the retail presence of the Castle Towers Shopping Centre, the important role of Old Northern Road as the traditional "main street" and pedestrian access focused on the road. Council's Mainstreet Project reinforces its role as the locality's principal public space. This generates the following opportunities and constraints:

- The recognition that future development and use of the site will act as a buffer, and will be the interface, between two very different components of the Centre structure (i.e. intense commercial and residential), and this presents opportunities for higher or a graduation in residential densities; and
- The need to provide good access to the Centre's facilities and activities from the site.

3. DEVELOPMENT CONTROLS

The objectives and development controls for development of the Pennant Street Target Site are set out in this Section of the DCP.

3.1. DESIRED FUTURE CHARACTER

The development controls will facilitate a unique development that seeks to balance quality, higher density residential living with the leafy, green suburban character of the Shire. In doing this, the development will seek to:

(i) ***Establish a strong green character to offset higher residential densities****. The development will provide ample provision of a variety of quality open spaces to soften the impacts of the substantial built forms. This will include internal ground level courtyards, shared terrace spaces and roof gardens, vertical landscaping features, a large semi-public central open space and enhancements to the surrounding streetscapes. These will be supplemented by large, outdoor living areas for residents which will overlook these spaces and provide unrivalled internal amenity for residents.*

(ii) ***Be well-connected and integrated with the surrounding areas****. The subject site marks a transition between the Castle Hill Centre to the south, and the low-rise residential area to the north. The development will seek to connect these areas primarily through a semi-public, through-site link that will facilitate movement between these areas. Development will address the surrounding public spaces and streetscapes, enhancing their safety and vitality.*

(iii) ***Mitigate adverse off-site impacts to surrounding residential properties****. As the development will represent a significant shift from the existing character of the surrounding neighbourhood, it must respond as best as possible to limit any adverse off site impacts to these properties, allowing them to continue to experience a reasonable level of amenity.*

(iv) ***Building setbacks will be consistent with the surrounding streetscape qualities and provide space for high quality landscaping****. Higher building forms will be set away from the street to minimise the impacts of overlooking and overshadowing. Detailed design of the development will create heavily modulated building facades which incorporate a variety of harmonious architectural features, colours and textures to minimise visual bulk.*

(v) ***Support the functioning of the Castle Hill Centre and create a high quality, landmark building****. In addition to helping to diversify the centre, the development will deliver substantial residential floorspace in the area and contribute to increased housing diversity in the Shire. The design of the development will comprise a unique, quality architectural character and will be an exemplar of green design. In doing so, it will become a landmark building in the area and will raise the design standard not only in the Centre, but in the entire Shire.*

(vi) ***Create a development that represents good design in terms of scale and built form.*** *The built form on the site is to take a podium and tower arrangement. The use of podiums along Gay Street helps provide scale at the pedestrian level to achieve a more comfortable street environment. The tower element is to be setback further from the road frontage, particularly along Gay Street to minimize the bulk and scale of the tower at ground level. Landscaping is encouraged on podiums to act as a green sanctuary for future residents.*



Figure 2. Desired Future Character

Development will promote smaller scale building form along Gay Street and Old Castle Hill Road, with higher tower elements at the middle of the site and along Pennant Street.

3.2. SITE PLANNING

3.2.1. OBJECTIVES

(i) To achieve a site layout that maximises residential development opportunities whilst providing ample, quality open spaces.

(ii) To create a coherent and legible site layout that is easy for users to understand and navigate.

(iii) To integrate the development into surrounding areas.

(iv) To create development that is responsive to sensitive interfaces.

(v) To create a landmark development that positively contributes to the functioning and attractiveness of Castle Hill Centre.

3.2.2. DEVELOPMENT CONTROLS

(a) Development shall occur in three distinct development areas as identified in Figure 3;

(b) The maximum height of future development shall be 18 storeys/54metres;

(c) The proposed development is to have building height transition in accordance with Section 3.4 Building Height;

(d) The built form shall take a podium/tower arrangement and comply with controls in section 3.5 Podium and Tower Built Form;

(e) The podium development along Gay Street shall be a maximum height of two (2) storeys in height / 9 metres above natural ground level and be designed to a pedestrian scale at street level;

(f) Tower element shall be set back a minimum of eight (8) metres from all boundaries;

(g) The tower element shall have a narrow building footprint to create more slender building forms;

(h) Buildings shall be setback in accordance with section 3.3 Setbacks, to respect the streetscape and built form conditions in surrounding areas;

(i) All setback areas shall be appropriately landscaped in accordance with Section 3.11 Landscape and Vegetation;

(j) A central open space shall create an inviting, quality pedestrian link between Gay Street and the public footpath along Pennant Street;

(k) Development shall front all active edges of the site;

(l) Development along Gay Street shall be designed to a domestic scale at street level;

(m) Future development to be located generally in accordance with building zones shown in Figure 3;

(n) Development shall front all adjoining public open space to provide casual surveillance of the area;

(o) Maximum building footprints shall not exceed 80% of each building zone; and

(p) The central open space shall be partly accessible by the public.

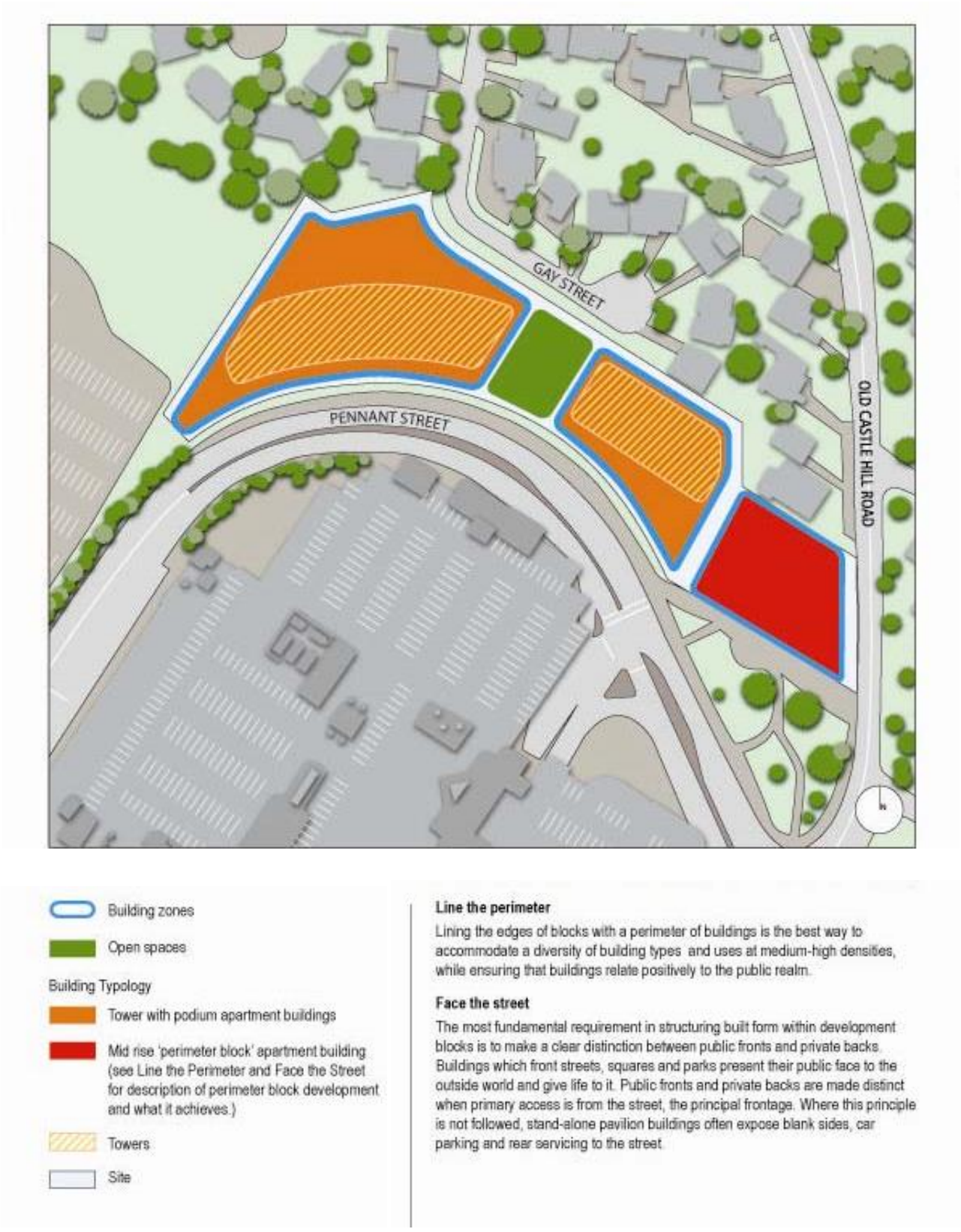


Figure 3. Site Planning

3.3. BUILDING SETBACKS

3.3.1. OBJECTIVES

(i) To ensure development is setback from the street at ground level in a way that respects the character of the adjoining streetscapes.

(ii) To create sufficient opportunities for landscaping, open spaces and outdoor living areas which contribute to establishing a garden setting on the site.

(iii) To protect the amenity of adjoining public spaces through appropriate building siting.

3.3.2. DEVELOPMENT CONTROLS

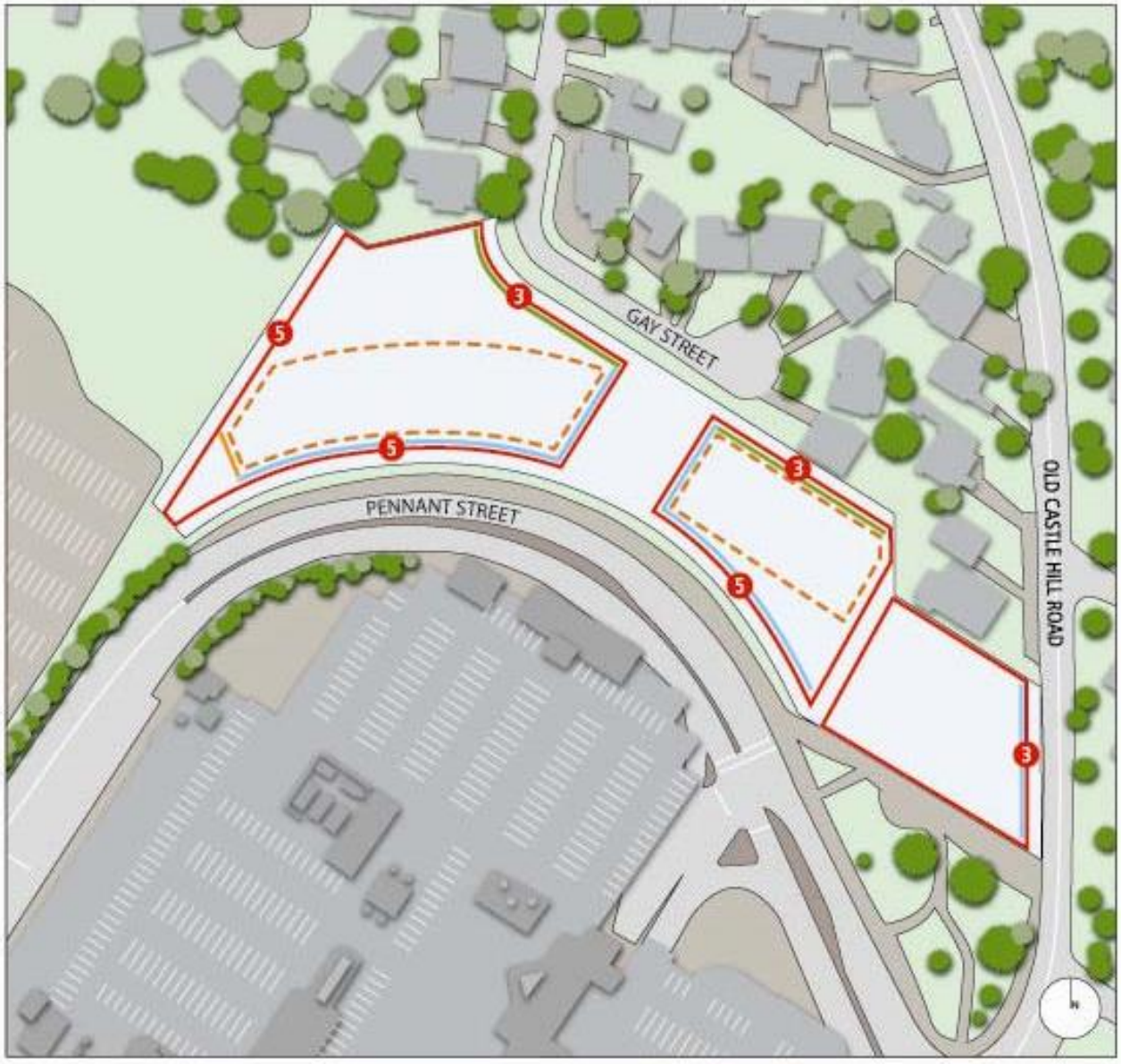
(a) Setbacks shall be sympathetic with the existing qualities of the adjoining streetscapes and provide sufficient area for ground level landscaping;

(b) In buildings above four storeys in height, setbacks shall be used to create distinct podium and tower forms;

(c) Setbacks shall minimise overlooking, overshadowing and visual impacts on surrounding residential areas;

(d) Upper level setbacks shall be used to create useable terrace and roof spaces in buildings above four storeys; and

(e) Building setbacks shall be in accordance with Figure 4.



Building Footprint

3 Potential extent of building footprint with distance from boundary denoted on plan in metres

Podium Setback

5.0m setback after 2 storeys

3.0m setback after 2 storeys

Setback to tower after 2 storeys

Note: Where no setback to podium is indicated the face of the building can extend to the building footprint indicated

Indicative tower footprint - Ration of tower to podium as defined is to be respected

Site

Site Interface	Building Interface
Gay Street	3m setback from Gay street boundary, 5m setback from building edge after 2 storeys.
Pennant Street	5m setback from Pennant Street boundary; 3m setback from building edge after 2 storeys.
QIC Site	5m setback from western site boundary.
Old Castle Hill Road	3m setback from western site boundary.
Public Park	No Setback
Ajoining residential property on Castle Hill Road (North of Site)	No Setback

Figure 4. Building Setbacks

3.4. BUILDING HEIGHT

3.4.1 OBJECTIVES

(i) To ensure development contributes to a significant amount of additional residential floorspace within the Castle Hill Centre.

(ii) To minimise adverse impacts on the public realm.

(iii) To use higher building heights to achieve a landmark development on the site.

3.4.2 DEVELOPMENT CONTROLS

(a) The maximum height of the building at any point shall be measured from the natural ground level to the ridge of the roof or top of the flat roof slab or top of the parapet if there is parapet on the roof slab. Natural ground level means the actual physical level of the site as existing prior to development taking place;

(b) The combined height of the podium/tower shall be a maximum of 18 storeys / 54metres;

(c) Permanent and temporary structures shall be included in the maximum building height of the building;

(d) The height of development along Gay Street and Old Castle Hill Road shall respect the scale of development in these areas;

(e) Building height shall transition from low to high between Gay Street and Pennant Street, with higher building forms along Pennant Street;

(f) Higher building forms shall be designed to limit the impacts of overshadowing and overlooking on surrounding sensitive areas;

(g) Variations in building heights and roof forms across the site and within individual buildings shall be used to reduce visual bulk and add to visual interest (Figure 5); and

(h) Maximum building heights shall be in accordance with Figure 6.

3.5. PODIUM AND TOWER BUILT FORM

3.5.1 OBJECTIVES

(i) To ensure that podiums are responsive to the surrounding residential character, in terms of height and design.

(ii) To ensure that towers minimise the bulk and scale of the proposed development and reflect a slender built form.

3.5.2 DEVELOPMENT CONTROLS

(a) The built form is take a podium and tower arrangement with an overall maximum height of 18 storeys / 54 metres.

(b) The maximum height of the podium shall be in accordance with Figure 6.

(c) The podium shall have building transition as identified in Figure 6.

(d) The podium development along Gay Street shall have a maximum height of two (2) storeys in height / 9 metres above natural ground level and be designed to a pedestrian scale at street level.

(e) The podium frontage along Gay Street at ground level is to be setback a minimum of 3 metres from the sites boundary, as shown in Figure 4.

(f) An upper level setback of 5 metres to Gay Street above the second floor of the podium, as shown in Figure 4.

(g) Podium design along Gay Street shall respect the lower scale of surrounding development.

(h) Podium facades along Gay Street shall establish a strong vertical rhythm and use a variety of materials and textures to respond to the surrounding low-rise character, as shown in Figure 8.

(i) The podium design expression shall be deliberately distinctive and separate from the building forms above.

(j) Tower elements are to be sited towards the Pennant Street boundary as identified in Figure 4.

(k) Tower elements shall have a narrow building footprint to create more slender building forms.

(l) Tower elements shall comprise various building heights to create a unique feature and reduce its apparent visual bulk.



Figure 5. Variation in roof form

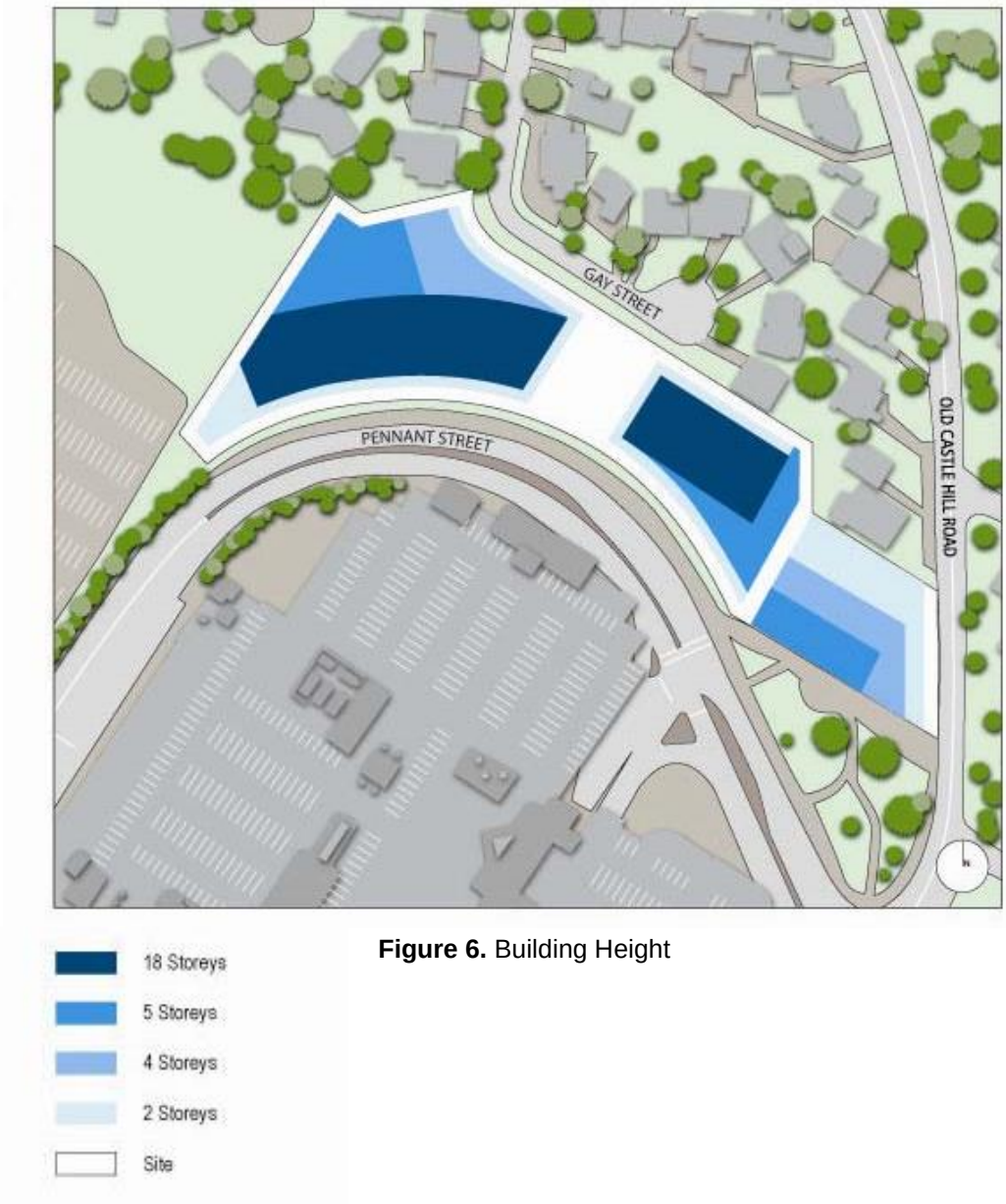


Figure 6. Building Height

3.6. ARCHITECTURAL STYLE AND CHARACTER

3.6.1. OBJECTIVES

(i) To achieve a 'landmark' development that sets a high standard of design excellence and positively contributes to the surrounding neighbourhood and centre.

(ii) To ensure the architectural response acknowledges the characteristics and scale of the surrounding development and seeks to reduce the impact of higher building forms.

(iii) To ensure the architectural style conveys a distinctive 'green' character.

3.6.2. DEVELOPMENT CONTROLS

(a) Buildings should be designed with a clear base, podium and top to reduce visual bulk;

(b) Building facades should be well articulated with textures, materials, colours, windows and recessed elements to soften the visual bulk of the development (Figure 7);

(c) Buildings shall use a diverse range of natural and visually appealing materials;

(d) Building materials shall be predominantly non-reflective and may potentially include masonry, timber, painted and rendered finishes;

(e) Subdued colours and tones shall be encouraged, with bright colours used sparingly to accent building features and provide visual interest;

(f) Building design along Gay Street shall respect the lower scale of surrounding development;

(g) Building facades along Gay Street shall establish a strong vertical rhythm to the street;

(h) Building facades should be designed to add to the visual interest of the surrounding areas;

(i) Where appropriate, roof forms such as pitched roofs and gable ends may be used to provide architectural character and visual interest to the development;

(j) Roof areas intended for use as shared open space shall be designed with flat roofs that provide for accessibility and safety of users;

(k) Foyer entries should be clearly defined to communicate points of entry; and

(l) Terrace / rooftop areas shall be adequately enclosed with fencing that adds visual interest to the roof forms.



Figure 7. Building Articulation

Development along Gay Street should establish a strong vertical rhythm and use a variety of materials, and textures to respond to the surrounding low-rise residential character.

3.7. STREETSCAPE AND PUBLIC REALM

3.7.1. OBJECTIVES

(i) To contribute to the creation of attractive, safe and useable streets and semi-public / public spaces.

3.7.2. DEVELOPMENT CONTROLS

(a) Streetscapes, semi-public and public spaces shall be designed to enhance pedestrian convenience, amenity and comfort and connect the development with adjacent areas;

(b) The interface of development with any adjacent streetscapes and public spaces shall be clearly defined and designed to enhance the comfort / safety of the user;

(c) Buildings shall address any shared open space and adjacent public areas to increase the natural surveillance of these areas and contribute to their safety and security (Figure 8);

(d) Building design shall avoid creating opportunities for personal concealment;

(e) All public spaces, building entries, car parks and internal access ways shall be provided with adequate lighting;

(f) Blank facades shall not dominate the streetscape;

(g) Any exposed parking structures shall be designed to increase their attractiveness to the public realm whilst providing for adequate security of the area;

(h) Lighting and directional signage shall be provided to all pedestrian paths, car parking areas, building entries and public spaces;

(i) Unique and attractive human-scale lighting shall be provided along the public footpath to the south of the site to enhance its safety and amenity;

(j) All fencing or walls shall be constructed of similar materials, colours and textures and shall be compatible with the design, materials and colours of the building;

(k) Front fences or walls along Gay Street and the Pennant Street interface shall be no higher than 1.2 metres provided the design of the fence or wall incorporates opening or other design elements that maintain at least 60% transparency through the fence or wall;

(l) Front fences or walls along Old Castle Hill Road shall be no higher than 1.8 metres provided the design of the fence or wall incorporates opening or other design elements that maintain at least 80% transparency through the fence or wall; and

(m) Fences or walls along the site's western interface shall be predominantly solid and no higher than 1.8 metres.



Figure 8. Buildings address open space

Development should front adjoining public spaces to increase natural surveillance and help integrate development into the surrounding area.

3.8. CAR PARKING AND VEHICULAR ACCESS

3.8.1. OBJECTIVES

(i) To ensure that vehicular access to and from the development is simple and safe and does not compromise the safety or amenity enjoyed by more vulnerable road users.

(ii) To provide sufficient and accessible parking for residents and visitors so as to maintain the amenity of adjoining properties and the efficiency of the road network.

3.8.2. DEVELOPMENT CONTROLS

(a) On site parking shall be provided at the following rates:

	RATE
1 Bedroom Unit	1 space
2 Bedroom Unit	1. 5 spaces
3 Bedroom Unit	2 spaces
Visitor	2 spaces for every 5 dwellings

(b) Car parking shall generally be provided underground;

(c) Driveway design shall provide safe and efficient access/egress to the site;

(d) The design of driveways and parking areas shall minimise the visual impact of hard paved areas;

(e) The design of driveways and parking areas shall take into account pedestrian walkways and give priority to pedestrian crossings;

(f) The driveway design shall make provision for service vehicles where practicable;

(g) Car parking access to the site shall be provided at a single access point along Gay Street, as indicated in Figure 9; and

(h) The design and configuration of accessways and driveways shall be in accordance with THDCP Part C Section 1 – Parking.

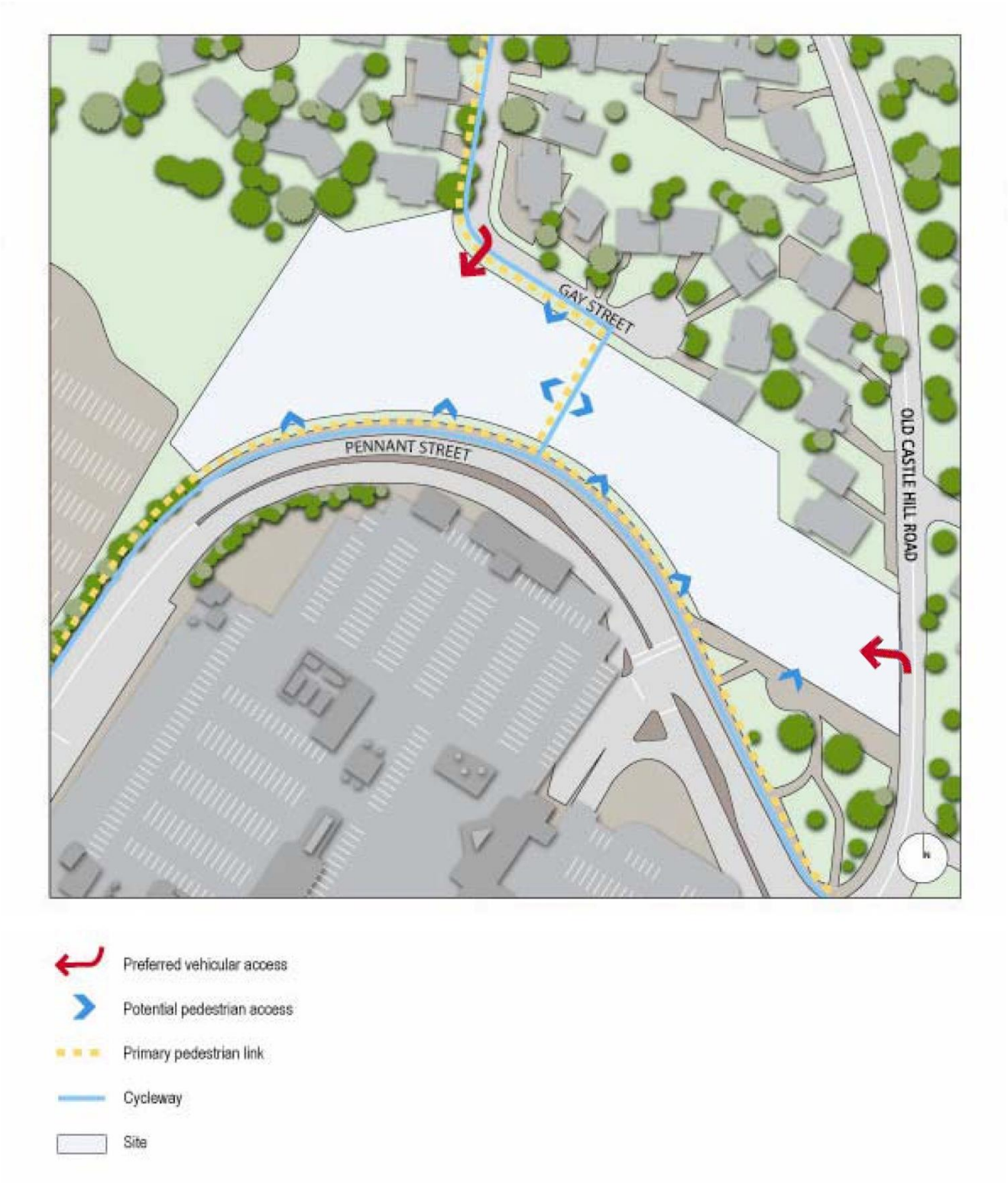


Figure 9. Vehicular, Pedestrian and Cycle Access

3.9. PEDESTRIAN AND CYCLE ACCESS

3.9.1. OBJECTIVES

(i) To ensure pedestrian and cycle access to, from and through the development is simple, safe and direct.

(ii) To facilitate cycling trips in the area by providing adequate and secure bicycle storage.

3.9.2. DEVELOPMENT CONTROLS

(a) Pedestrian access should generally be in accordance with Figure 9;

(b) Development shall provide separate pedestrian access from the street, separately defined to vehicular access;

(c) A clearly defined, direct pedestrian pathway through the central open space shall be provided to facilitate movement through the site;

(d) Pedestrian and cycle access between Gay Street, Old Castle Hill Road and Pennant Street through the proposed development shall be provided with adequate signage; and

(e) Bicycle storage areas shall be provided for both residents and visitors. Provision shall be at the rate of one (1) secure bicycle storage space per apartment. Resident cycle parking shall be located in secure rooms at ground level with separate provision for each building. Cycle parking rooms should be collocated with the foyer areas, and will ideally have a separate entry. Fixings to enable bikes to be locked securely should be provided for 50% of the bicycles expected in each cycle parking room.

3.10. PRIVATE AND SHARED OPEN SPACE

3.10.1. OBJECTIVES

(i) To ensure the ample provision of high quality private and shared open spaces that contribute to the creation of a strong, green garden character.

(ii) To integrate areas of common open space into building design to allow for the development of a sense of community.

(iii) To ensure that private and shared open spaces respect the privacy of adjoining and adjacent residents.

(iv) To ensure the safety and security of shared open space.

(v) To ensure the provision of at least one large central open space at ground level to provide a focal point to the development.

3.10.2. DEVELOPMENT CONTROLS

Private Open Space

(a) All balconies and/or roof top areas conveniently accessible from a main living area must have a minimum area of 10sqm, with a minimum dimension of 2.5 metres;

(b) South facing balconies shall be recessed a minimum of 1.5m and utilise solid balustrades to minimise the impacts of street noise along Pennant Street and create a high degree of privacy to residents;

(c) North facing balconies shall be designed to prevent unreasonable overlooking of adjacent residential properties;

(d) All primary balconies shall be no deeper than 4m to ensure sunlight penetration into all dwellings;

(e) Balconies shall be recessed and partially enclosed. All balconies must be entirely contained within the building envelopes except balconies on elevations directly fronting a primary street where the balcony may extend a maximum of 1 metre outside the envelope;

(f) All balconies shall be provided with water and gas outlets; and

(g) Each dwelling shall provide an area of useable private open space, or private courtyard area, which has direct private access from the dwelling.

Shared Open Space

(a) Areas of shared open space above the ground floor such as terrace or rooftop gardens shall be provided to maximise landscape opportunities and improve the internal amenity of the development;

(b) Residences shall overlook shared open spaces where possible to improve their visual amenity and increase the natural surveillance of these areas;

(c) The location of all shared open space areas shall have regard to such requirements as solar access, outlook, privacy and the location of adjoining dwellings to make these spaces as attractive and useable to residents as possible;

(d) Shared open space shall generally be located in accordance with Figure 11;

(e) The central open space shall be a minimum of 30m wide along Gay Street and Pennant Street;

(f) A minimum of 50% of terrace / rooftop areas must be used for shared open space;

(g) Terrace / rooftop areas must be adequately enclosed with fencing as per relevant safety requirements;

(h) Where possible, each building shall incorporate a central, shared courtyard at ground level that is overlooked by residences;

(i) Shared open spaces are to include equipment such as seating, shade structures, barbeques and children's play equipment. Consideration should also be given to the provision of a swimming pool; and

(j) Common room and hard stand outdoor play area shall be provided as part of the overall development of the site.



Figure 10. Roof Top Open Space

Rooftop areas are excellent spaces for providing useable and quality shared open spaces that can meet some of the passive recreation needs of residents and contribute to the development of a sense of community. These areas can be sensitively designed to integrate servicing requirements and screen them from the view of users.



Figure 11. Open Space

3.11. LANDSCAPE AND VEGETATION

3.11.1. OBJECTIVES

(i) To maximise landscaping opportunities that contribute to the establishment of a garden setting through the provision of high quality and appropriate landscaping.

(ii) To achieve a landscape design that is well integrated into the design of the development.

(iii) To ensure that landscape design contributes to the safety and security of the development and its' surrounding areas.

3.11.2. DEVELOPMENT CONTROLS

(a) A landscape plan shall be submitted by a suitably qualified landscape architect and include but not limited to both botanical and common names, quantity of plants, pot sizes and height at maturity;

(b) High quality landscaping shall be provided in all shared open spaces;

(c) Building setbacks shall be appropriately landscaped to improve the amenity of the development and assist in protecting the privacy of residents in surrounding properties;

(d) Landscaping design shall be used as a strategy to break up the massing of the development;

(e) Shared open spaces shall be landscaped to achieve a high degree of amenity;

(f) Landscape design shall support the safety and security of private and public spaces within, and around the edges of, the development;

(g) Landscape design shall seek to mitigate the impacts of sunlight to reduce building heating and cooling loads;

(h) Species selection shall utilise native vegetation to minimise water usage;

(i) Clean stemmed, branching trees shall be planted along the street edges of Gay Street, Old Castle Hill Road and Pennant Street and be compatible with the existing characteristics of the streetscape;

(j) Shrubs less than 1 metre tall and clean stemmed trees shall be used in areas adjacent to public spaces to minimise opportunities for concealment;

(k) A minimum of 20% of shared open space on ground level must be suitable for deep planting. In cases, where underground parking limits the soil depth, landscape beds/tubs to provide additional soil depth must be provided;

(l) Landscaping of all shared terrace / roof spaces shall be easy to maintain and not compromise the structural integrity of the building;

(m) Terrace / roof spaces shall be capable of being planted with climbing plants and falling plants selected to spill over the edge of the terrace onto the building façade (Figure 12);

(n) Landscaping of shared terrace / roof spaces shall consider the effects of wind and seek to mitigate its effects to users;

(o) Buildings shall incorporate vertical landscaping features along the building façade to contribute to the buildings green character and soften the visual bulk of the building;

(p) All exposed car parking structures must be masked with attractive landscaping features to enhance their appearance;

(q) The central open space shall contain linear rows of clear stemmed trees to provide shade and facilitate clear views and safe movement through the site; and

(r) All landscaping works within the public domain shall be consistent with the draft Castle Hill Public Domain Plan.



Figure 12. Roof Top and Terrace Landscaping

Terrace / roof areas provide excellent landscaping opportunities which can contribute to creating a strong green character.

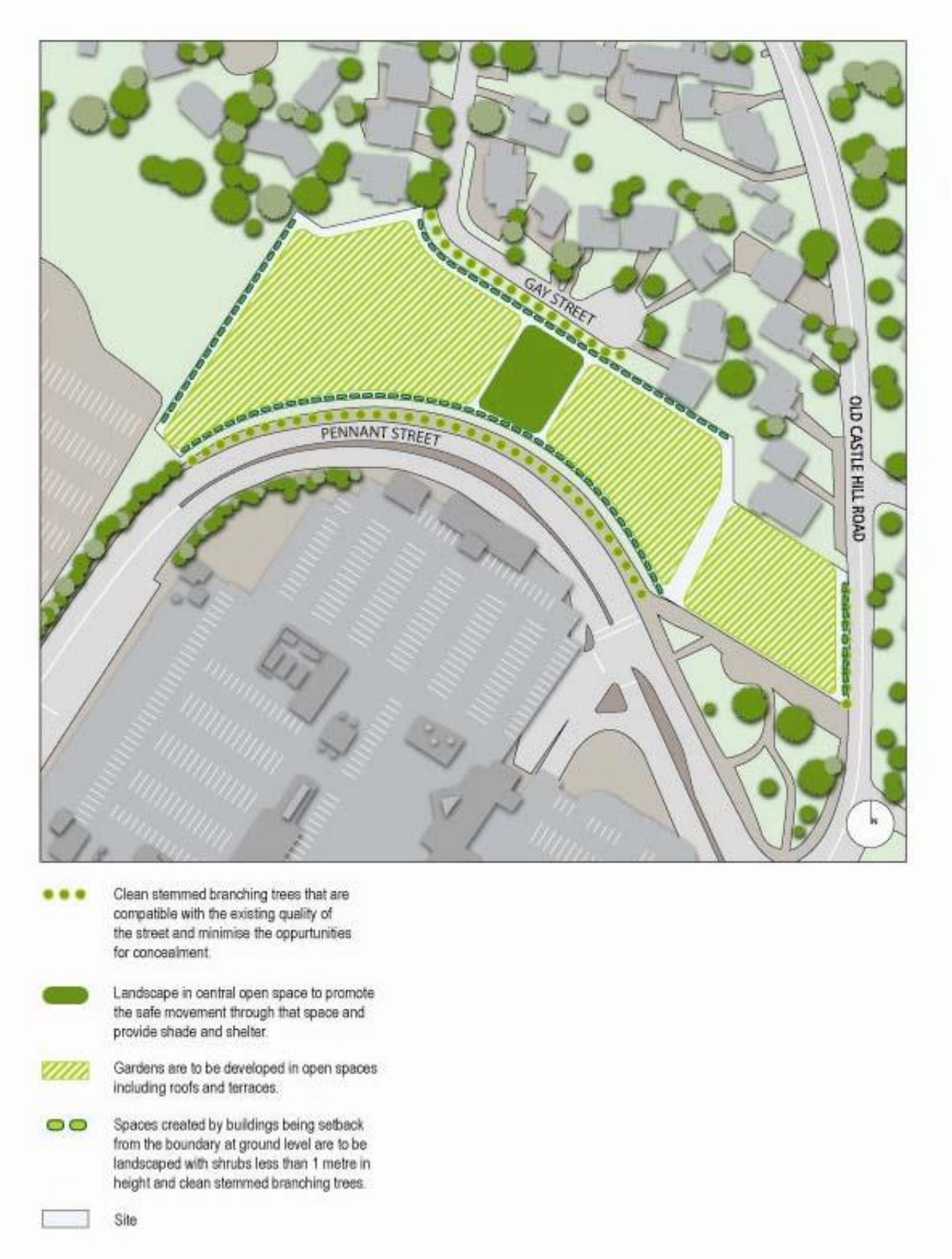


Figure 13. Landscaping

3.12. PLANTING ON STRUCTURES

3.12.1. OBJECTIVES

(i) To contribute to the quality and amenity of communal open space on roof tops, podiums and internal courtyards; and

(ii) To encourage the establishment and healthy growth of trees in urban areas.

3.12.2. DEVELOPMENT CONTROLS

(a) Large trees such as figs (canopy diameter of up to 16 metres at maturity):
- minimum soil volume: 150 cubic metres
- minimum soil depth: 1.3 metre
- minimum soil area: 10 metre x 10 metre
- minimum soil area: 10 metre x 10 metre area or equivalent

(b) Medium trees (8 metre canopy diameter at maturity):
- minimum soil volume: 35 cubic metres
- minimum soil depth: 1 metre
- approximate soil area: 6 metre x 6 metre or equivalent

(c) Small trees (4 metre canopy diameter at maturity):
- minimum soil volume: 9 cubic metres
- minimum soil depth: 800mm
- approximate soil area: 3.5 metre x 3.5 metre or equivalent

(d) Shrubs:
- minimum soil depths: 500-600mm

(e) Ground cover:
- minimum soil depths: 300-450m

(f) Turf:
- minimum soil depths: 100-300mm

(g) Any subsurface drainage requirements are in addition to the minimum soil depths quoted above.

3.13. INTERNAL FLOOR AREA

Refer to Residential Flat Buildings Part B Section 5.

3.14. CEILING HEIGHT

3.14.1. OBJECTIVES

(i) To increase the sense of space in apartments and provide well proportioned rooms; and

(ii) To promote the penetration of daylight into the depths of the apartment.

3.14.2. DEVELOPMENT CONTROLS

(a) Ceiling heights shall be measured from finished floor level (FFL) to finished ceiling level (FCL). These are minimums only and not preclude higher ceilings, if desired.

(b) In general, 2.7 metre minimum for all habitable rooms on all floors, 2.4 metres if the preferred minimum for all non- habitable rooms, however 2.25 is permitted.

3.15. ECOLOGICALLY SUSTAINABLE DEVELOPMENT

3.15.1. OBJECTIVE

(i) To reduce the energy requirements associated with constructing, operating and maintaining development.

(ii) To conserve and protect water resources.

(iii) To minimise the amount of material waste leaving the site.

3.15.2. DEVELOPMENT CONTROLS

(a) Development will achieve a 6 Star Green Star accredited rating;

(b) Building design shall maximise opportunities for natural ventilation such as cross-ventilation, operable windows, ventilators and shafts;

(c) Building envelopes shall be fitted with high efficiency windows and insulation;

(d) Highly efficient HVAC systems shall be installed to reduce the energy required for heating and cooling;

(e) Lighting of shared spaces shall avoid unnecessary energy use;

(f) Sustainable building materials shall be used in building design where possible;

(g) Sustainable drainage systems shall be incorporated within the development to manage stormwater impacts;

(h) Hard surfaces shall be minimised to reduce stormwater outflows on external drainage infrastructure;

(i) Opportunities for rainwater capture, storage and reuse shall be considered in building design;

(j) Opportunities to recycle organic waste shall be integrated into development and appropriately managed;

(k) Triple glazed windows and insulation with an R value of at least 3 shall be used in building design;

(l) Photo sensors and dimming control gear shall be used in shared spaces such as corridors and foyers where incoming daylight meets indoor lighting needs at least part of the time;

(m) Occupancy sensitive lighting controls shall be used in areas with intermittent occupation such as utility rooms, bicycle storage areas other ancillary areas;

(n) Heat / Energy Recovery Ventilation systems shall be used in HVAC design;

(o) Eave overhangs, pergolas and other shading structures shall be used in building design to permit winter sun and screen summer sun;

(p) Sustainable building materials such as FSC-certified timbers, recycled materials and other materials with low embodied energy shall be considered in building design;

(q) Bio-retention areas such as swales and rain gardens shall be used to filter and mitigate stormwater runoff;

(r) Rainwater capture features such as rain water tanks shall be integrated into building design;

(s) Non-potable water shall be reused for uses such as toilet flushing, landscape irrigation and on-site water features;

(t) Waterless or very low water flow hydraulic fixtures shall be installed in all residences and shared open spaces;

(u) All residences shall be provided with 'Green Waste' bins for disposing organic waste; and

(v) Waste-sorting bins shall be provided to all internal and external spaces to facilitate materials recycling.

3.16. BASIX

All development applications will be required to demonstrate that they meet the BASIX targets.

More information on BASIX can be found at the following website:

www.planning.nsw.gov.au

3.17. SOLAR ACCESS AND OVERSHADOWING

3.17.1. OBJECTIVES

(i) To ensure reasonable access to sunlight for living spaces within buildings and open space areas around dwellings.

(ii) To ensure adjacent open spaces, living spaces in dwellings, and public places are not deprived of reasonable access to sunlight.

3.17.2. DEVELOPMENT CONTROLS

(a) A minimum of 2 hours of direct sunlight between 9am and 3pm on June 22nd is to be available to the majority of balconies, living room spaces and private and communal open space areas of the proposed dwellings; and

(b) The primary living areas and private open space of existing dwellings are to receive a minimum of 4 hours of direct sunlight between 9am and 3pm on June 22nd. This is to be achieved by, but not limited to:

- Building siting;
- Living area orientation;
- Location of windows;
- Tree species;
- Pergolas;
- Eaves;
- Fencing;
- Roof pitch; and
- Building height.

3.18. OVERLOOKING AND ACOUSTIC PRIVACY

3.18.1. OBJECTIVES

(i) To limit views into adjoining private open spaces and living rooms.

(ii) To protect residents from external noise.

(iii) To contain noise between dwellings and control unreasonable transmission to adjoining dwellings.

3.18.2. DEVELOPMENT CONTROLS

(a) Private open space and habitable rooms of proposed and adjacent existing dwellings shall be reasonably protected from overlooking by attending to, but not being limited to:

- Building layout;
- Location, size and design of windows and balconies;
- Screening devices; and
- Landscaping.

(b) Private open space areas and habitable rooms shall be reasonably protected from uncomfortable levels of external noise by attention to, but not being limited to, the following;

- Use of noise resistant wall, ceiling, floor and roof material;
- Site planning;
- Location of habitable rooms away from the noise source;
- Use of triple glazing; and
- Use of fencing porches and walls as noise buffers.

(c) Building design elements are to be applied to improve visual and acoustic privacy such as recessed balconies and/or vertical fins between adjacent balconies, vegetation and louvers and pergolas which limit overlooking of lower dwellings and/or private open space;

(d) Building facades are to be acoustically sound treated with triple glazing;

(e) External air conditioning units are to be located and screened in order to minimise noise and visual impacts on neighbours. Air conditioners must not exceed 5dB(A) above the background noise level.

(f) Habitable rooms of dwellings adjoining Pennant Street and Old Castle Hill Road shall be designed and located to limit internal noise levels to a maximum of 45dB(a) in accordance with AS 3671 – Road Traffic; and

(g) In order to safeguard occupants from loss of amenity as a result of undue sound being transmitted, separating walls and floors between dwellings or sole occupancy units, shall be constructed in accordance with the requirements of the Building Code of Australia.

3.19. SITE FACILITIES AND SERVICES

3.19.1. OBJECTIVES

(i) To provide site facilities which are adequate and conveniently located for residential needs.

(ii) To provide site facilities which facilitate more sustainable lifestyles for residents.

(iii) To ensure site facilities are practical, attractive and can be easily maintained.

3.19.2. DEVELOPMENT CONTROLS

(a) Rubbish and recycling bin enclosures, letter boxes, and other site facilities should be adequate in size, durable, weatherproof, visually integrated with the development and be located having regard to the protection of residential amenity, vehicle services access, visual impact and resident access;

(b) Laundries shall be provided to each dwelling;

(c) Letter boxes shall be provided in accordance with the delivery requirements of Australia Post;

(d) A communal rubbish storage area shall be provided within the site. The storage area shall:

- not be located between the front alignment of the building and the road;
- be of a construction material that is the same as the construction material of the development and of a similar style and colour;
- include a bin wash down facility;
- have a sufficient capacity in accordance with Council's waste management requirements; and
- be located to the satisfaction of Council to permit acceptable access by refuse vehicles.

(e) Provision shall be made for a single common television / radio antenna to service each building within the development.

(f) Minimise the visual intrusiveness of service elements including telecommunications facilities by integrating them into the design of the roof.

3.20. STORAGE

3.20.1. OBJECTIVES

(i) To provide adequate storage for everyday household items within easy access of the apartment; and

(ii) To provide storage for sporting, leisure, fitness and hobby equipment.

3.20.2. DEVELOPMENT CONTROLS

(a) In addition to kitchen cupboards and bedroom wardrobes, provide accessible storage facilities at the following rates:

Apartments

- Studio apartments – 6m^3
- One-bedroom apartments – 6m^3
- Two-bedroom apartments – 8m^3
- Three plus bedroom apartments – 10m^3.

3.21. STORMWATER MANAGEMENT

3.21.1. OBJECTIVES

(i) To control stormwater runoff to mitigate the effect on adjoining properties and existing local drainage systems before, during and after construction.

(ii) To ensure development does not increase flooding or prejudice the effectiveness of existing flood mitigation measures.

(iii) To provide for the management of stormwater in an efficient, equitable and environmentally sustainable way in accordance with Council's ESD objectives.

(iv) To provide for the on-site detention of stormwater drainage.

(v) To encourage the storage and reuse of stormwater.

3.21.2. DEVELOPMENT CONTROLS

Water Sensitive Urban Design

(a) The best practice principles of WSUD are to be applied during the construction and post construction phases of development. Schemes that promote water capture, reuse initiatives and water quality management measures are to be employed, as described in documents including, but not limited to:

- On-site Stormwater Detention Handbook, Version 4 2005, UPRCT;
- Australian Runoff Quality, Engineers Australia, 2006; and
- Water Sensitive Urban Design – Technical Guidelines for Western Sydney, May 2004, Prepared by UPRCT by URS.

These are required for all new commercial and residential developments, or where the increase in impervious area over a site is greater than 150sqm. Common open space and publicly accessible courtyard areas may be utilised for WSUD initiatives;

(b) Rainwater tanks are to be installed to enable the reuse of rainwater. Overflow from rainwater tanks must be connected to a piped drainage system; and

(c) Concentrated stormwater flows must discharge to a lawful point of discharge. This may require the creation of drainage easements over downstream properties.

3.22. WASTE MANAGEMENT

Refer to Residential Flat Building Part B Section 5 for waste management requirements.

3.23. EROSION AND SEDIMENT CONTROL

3.23.1. OBJECTIVES

(i) To minimise land degradation, water pollution and damage to infrastructure from accumulated sediment.

3.23.2. DEVELOPMENT CONTROLS

(a) Applications for development approval shall be accompanied by an Erosion and Sediment Control Plan (ESCP) which will describe the measurements to be taken at development sites to minimise land disturbances and erosion and control sediment pollution of waterways. ESCPs are to clearly identify the erosion and sediment control measures to be used (see Part A – Introduction).

(b) Erosion and Sediment Control Plans shall be prepared in accordance with "Managing Urban

Stormwater – Soils and Construction", produced by the NSW Department of Housing.

3.24. PUBLIC IMPROVEMENT WORKS

3.24.1. OBJECTIVES

(i) To provide public improvement works to contribute to the orderly development of the site and effectively manage additional traffic.

(ii) A condition of a development consent may be imposed if it requires the carrying out of works (whether or not being works on land to which the application relates) relating to any matter referred to in Section 79C(1) applicable to the development subject of the consent (Section 80A (1) (f) of the EP&AA Act 1979).

3.24.2. DEVELOPMENT CONTROLS

(a) The following public work improvements shall be provided prior to the completion and occupation of the development:

(i) A roundabout at the intersection of Gilham Street and Old Castle Hill Road.

(ii) An extension of the concrete footpath along the southern side of Gilham Street from the existing concrete footpath along Old Castle Hill Road to Gay Street, and along Gay St up to the development site.

3.25. AVIATION REQUIREMENTS

3.25.1. OBJECTIVES

(i) To ensure future development does not adversely affect the safety and operational efficiency of air space.

3.25.2. DEVELOPMENT CONTROLS

(a) Each corner of the building (tower element) shall be provided with low intensity red obstacle lights.

(b) Consultation with the Civil Aviation Safety Authority (CASA) shall be undertaken and written evidence submitted to Council.

3.26. INFORMATION REQUIRED FOR A DEVELOPMENT APPLICATION

In preparing plans applicants must also address the submission requirements listed in this Section of the DCP relevant to the application. The following plans and details will be required with all development applications along with the relevant application form(s).

STATEMENT OF ENVIRONMENTAL EFFECTS

ACOUSTIC REPORT

SITE PLANS

SITE ANALYSIS

ARCHITECTURAL PLANS

- Internal layout of unit/building (existing and proposed)
- Elevations
- Sections

PRELIMINARY ENGINEERING DRAINAGE PLANS

- Including any On Site Detention Plans

LANDSCAPE PLAN

EARTHWORKS PLAN

SIGNAGE PLANS

- See Part C Section 2 – Signage

STREETSCAPE PERSPECTIVE

MODEL

- For all developments comprising 10 or more units a scale model must be provided including adjoining properties at the time of the submission of the development application and be on display for the duration of the public exhibition period.
- Should a model not be submitted with the application, an immediate "stop the clock" order will be placed on the development application until the model is submitted.

WASTE MANAGEMENT PLAN

DESIGN VERIFICATIONS

- As per SEPP 65 requirements

BASIX CERTIFICATE

Note. Refer to Part A – Introduction section 4.0 for general lodgement requirements and detailed requirements to be included in each of the above documentation.

REFERENCES

- Baulkham Hills Shire Council, 2002 Making Access For All.
- Department of Planning State Environmental Planning Policy No. 53 – Design Quality of Residential Flat Development.
- Faculty of the Constructed Environment, RMIT University et al, Australia's Guide to Good Design – Residential, prepared on behalf of the National Office for Local Government.
- NSW Planning Department, 2002, Residential Flat Design Code, Tools for improving the design of residential flat buildings.

The Hills Development Control Plan (DCP) 2012

www.thehills.nsw.gov.au

THE HILLS Sydney's Garden Shire



Part D Section 3
257 Windsor Road & Russell Street
Baulkham Hills

D3

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1. INTRODUCTION

This Section of the DCP must be read in conjunction with Part A – Introduction of this DCP.

This Section of the DCP has been prepared to provide direction and control of the development of the Target Site at 257 Windsor Road, Baulkham Hills.

1.1. LAND TO WHICH THIS SECTION OF THE PLAN APPLIES

This Section of the DCP applies to all land commonly referred to as "Russell Street Target Site", and comprises those lots identified in Figures 1 - 2 and legally identified as:

- Lots 1 to 5, 20 to 22, DP 8214
- Lots 1, 3 to 6, DP 866897

1.2. OBJECTIVES OF THIS SECTION OF THE DCP

The objectives of this Section of the DCP are:

(i) To provide detailed design and environmental standards for the development of the "Russell Street Target Site".

(ii) To ensure the development adopts a form and style that enhances the green garden character of the Shire and neighbourhood.

(iii) To demonstrate best practice in urban and residential design to act as a model development and prototype for other target sites within the Shire.

(iv) To enhance and preserve the historic school buildings and provide for their long term preservation.

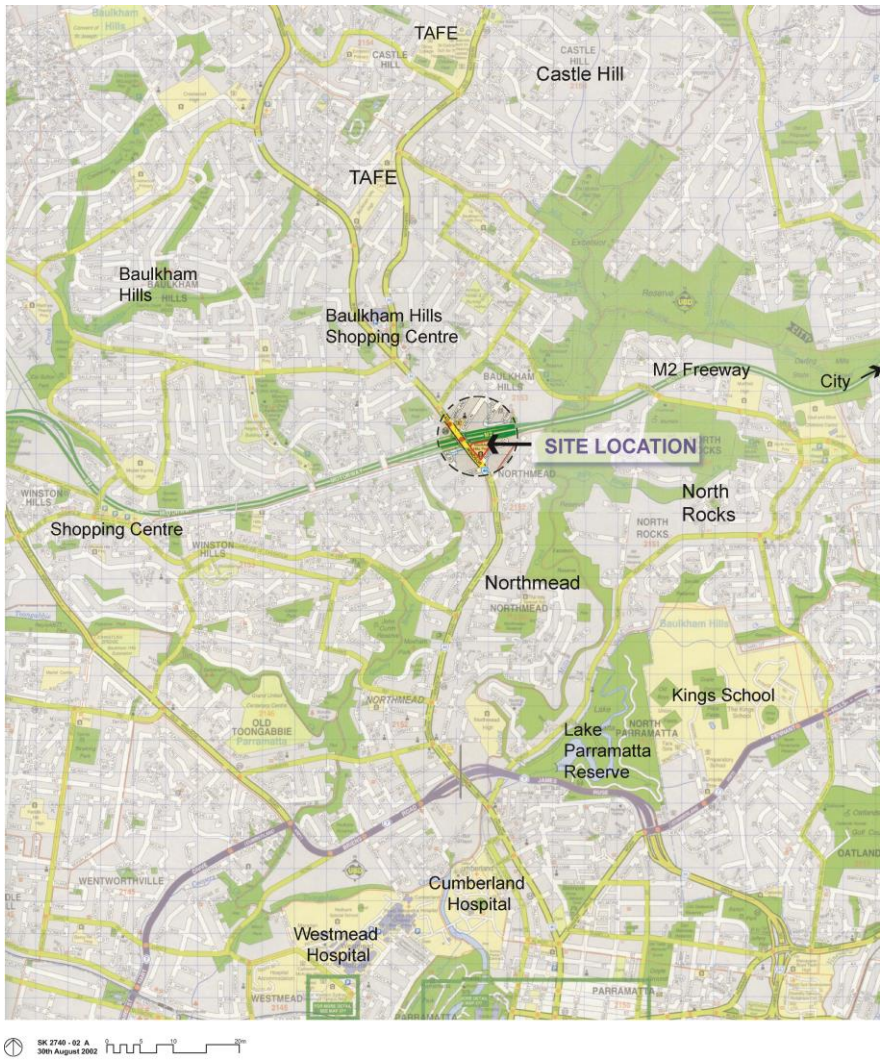

Figure 1



Figure 2

2. DEVELOPMENT OVERVIEW

2.1. TRAFFIC AND ACCESS

The triangular site is bounded by the M2 motorway along the northern boundary, Windsor Road on the west and Russell Street to the east.

A pedestrian footpath skirts the east and west boundary along Windsor Road and Russell Street.

Traffic Solutions Pty Ltd prepared a report on the potential traffic impact of the proposed re-zoning of the site to permit residential flat buildings. The statement addressed the following requirements of The Hills Shire Council:

a) Existing traffic environment

"The intersection of Windsor Road and Russell Street and Oakland Avenue and Ventura Road currently operates at an unsatisfactory level of service due to the lengthy delays for right turn vehicles.

A previous development application proposed the installation of traffic signals at this intersection as part of the proposal, however the Roads and Traffic Authority strongly objected to the concept."

b) Proposed development - traffic generation

"The development proposal of 130 units is estimated to generate approximately 52 vehicle trips in the morning and evening peak hour."

"Consequently, the proposed development with an estimated potential traffic generation of 52 vehicle trips in the peak hours will not increase the peak hour volumes beyond the RMS (300 max) or Council's suggested maximum environmental goal for Russell Street, Baulkham Hills."

c) Cumulative impact in locality and surround streets

The impacts on the surrounding network, including Oakland Avenue and Ventura Road were examined and found to be minimal.

d) Need for traffic improvements in the locality

The assessment explored the need for traffic improvements including the Windsor Road/Russell Street intersection.

e) Sight distance

"The proposed driveway locations along the Russell Street frontage of the site will provide satisfactory site lines in both directions along Russell Street."

f) Conclusion

"The good Level of Service at the intersection of Windsor Road will continue with the estimated additional traffic generation of the proposed residential development and even if the right turns were prohibited at Russell Street."

"The additional traffic demand on the intersections of Windsor Road with Oakland Avenue and Ventura Road, as a consequence of additional traffic utilizing these intersections to turn around (including the proposed development) will only alter the Degree of Saturation and Total Average Delays minutely."

The following opportunities and constraints were identified:

Opportunities

- Enhance level of service and minimise the number of accidents occurring at the Windsor Road and Russell Street intersection by controlled left turn entry and egress during peak hours only.
- Take advantage of the Russell Street pavement width and sight lines.

Constraints

- Single point of access to Windsor Road.

2.2. LANDSCAPE AND VEGETATION

A vegetation report for the site was prepared in January 2000. The report noted that there were approximately 200 trees on site of which a significant proportion were of good health and form. It was noted that very few were indigenous to the area and that none represented remnant tree species. The species range was dominated by native Australian and American trees.

The report noted that the trees were generally some 60 to 80 years old and of more recent origin than the heritage buildings. The older trees generally occurred on the south-western corner and along the western boundary. Significant numbers of planting within the site were consistent with the built framework defined by the later school buildings [now demolished] which were in the order of 20 to 25 years old.

Landscaping within the historic school boundary consists of some mature native and exotic species. Of particularly high aesthetic and historic value are the two fig trees fronting Windsor Road on the northern section of the site.

The supporting drawing clearly indicates that the report identified significant groupings of trees within courtyards formed by the school buildings. It is evident that a substantial number of trees have now been removed from the site, even though they were identified in the January 2000 report as being in good condition and of a substantial scale. This is regrettable since their retention would have contributed to the gardenesque character of the Shire and would have also added significant value to any proposed residential development. There is no evidence that the removal of significant vegetation has been approved by Council.

The vegetation drawing, Figure 4, clearly shows the remaining vegetation on site and those trees that may be impacted as a result of the proposed development outlined as part of this Section of the DCP. In addition, the drawing also shows those trees that were identified in the January 2000 report to be in good condition and which have subsequently been removed from the site, together with those trees that were identified to be in poor condition and scheduled for removal in the January 2000 report.

Opportunities

There is substantial perimeter planting which will help to mitigate the impact of development within the site. The landscape to the edges of the site represents an important element which will facilitate screening the residential development and provide a foil, particularly against the M2, Russell Street and Windsor Road frontages.

The loss of vegetation previously identified as being in fair/good/excellent condition, particularly within the previous ‘courtyards’, will need to be addressed as part of the detailed landscape proposals associated with the development of the site.



Figure 3 Access



Figure 4 Vegetation

2.3. DEVELOPMENT FRAMEWORK

Proposed development demonstrates that it represents a high quality urban design solution and that adequate regard has been given to the following aspects of the design:

Visual Impact and Views

The proposed development must:

- Be compatible with the surrounding heights of the adjacent mixed height single dwellings and two storey multi dwelling housing.
- Explore built form that minimises any negative impact on the Russell Street streetscape/landscape.
- Explore a range of building forms that represent a transition between the low scale residential forms to the east and the two storey multi dwelling housing developments to the west and higher building forms within the site.
- Preserve the existing views of the historic school precinct from Windsor Road.

Heritage

Reflect and respect the significant heritage buildings and identified curtilage.

Land Use and Density

The proposed development must:

- Achieve an appropriate relationship to the topography of the site and ensure the built form does not adversely impact on the solar access and privacy of adjoining owners.
- Provide adequate communal open space.
- Respect the historic low density visual setting of the historic school curtilage.

Access

The proposed development must:

- Provide comfortable and safe pedestrian access for future residents.
- Not adversely impact on the residential ambiance of Russell Street.
- Limit vehicular access into and out of site to three locations along Russell Street.

Urban Structure

The proposed development must:

- Provide an appropriate transition between the low-rise, low-density housing skirting the east and west boundaries and higher density residential development within the site.

Landscape and Character

The proposed development must:

- Where possible retain and protect any existing mature trees within the site that have been identified for retention.
- Provide appropriate communal streetscape character of Russell Street with sympathetic landscaping treatment.
- Have regard to the physical setting of the site, including the fall from the north-east to the north-west.
- Ensure the retention and ongoing maintenance of the identified historic plantings associated with the school through the provision of generous space for spread and protection of root zones.

2.4. DESIGN PRINCIPLES

The site analysis process has lead to the identification of a number of key design principles including:

- Retention/reinforcement of perimeter landscape.
- Augmentation of internal landscape to reinforce and reinstate the gardenesque characteristics of both the site and the Shire. This will also provide the basis for a series of active passive communal recreational places within the site.
- Adaptive re-use of the heritage buildings and curtilage for communal active functions.
- 10 metre building setback from historic school buildings.
- Low rise development (to maximum two storeys plus attic) within the zone contiguous with curtilage and heritage buildings and generally paralleling Windsor Road.
- Primary vehicular access to the site from Russell Street located to take advantage of site slopes and thus giving vehicular entry to basements associated with individual building complexes.
- Pedestrian entry zones identified to provide for a range of alternate access points from both Windsor Road and Russell Street.
- Three storeys plus attic buildings located behind perimeter landscaping to Russell Street. Facades to be articulated.
- Six storey residential flat building located in the centre of the site with a northern aspect. Siting

designed to maximise panoramic views and minimise external impacts.

- Maximum development capacity of 130 dwellings consistent with the recommendations in the Traffic Report.
- Internal roads and vehicular access/visitor parking to be lightly incised into the site.



Figure 5 Opportunities & constraints



Figure 6 Design principles

3. OBJECTIVES AND DEVELOPMENT CONTROLS

The objectives, performance criteria and development controls for development within the Windsor Road & Russell Street Site are set out in the following sections.

In addition to the policies, guidelines and documents specified in Section 1.4 of Part A – Introduction, this Section is to be read in conjunction with other relevant sections including:

- Part B Section 4 – Multi dwelling housing
- Part B Section 5 – Residential flat buildings
- Part C Section 4 – Heritage
- Part C Section 6 – Flood Controlled Land

Where any provision of this Section of the DCP is inconsistent with provisions in other Sections of the DCP, the provisions of this Section shall prevail.

3.1. SITE PLANNING

OBJECTIVES

(i) To achieve coherent site planning and development that relates to the natural contours of the site and contributes to the character of the area.

(ii) To protect, contribute and enhance the existing residential character and amenity.

PERFORMANCE CRITERIA

There are no performance criteria that apply to the control and assessment of land use.

DEVELOPMENT CONTROLS

(a) Future development to be located generally in accordance with Figure 6.

(b) The site coverage shall be a maximum 50% of the site area.

3.2. BUILDING SETBACKS

OBJECTIVES

(i) To provide setbacks that compliment the surrounding setting and allow flexibility.

(ii) Front setback to be provided to enhance the existing character and streetscape quality of Russell Street and provide opportunity for visually significant as well as functional landscape.

PERFORMANCE CRITERIA

a) Setbacks are to complement the existing and future desired streetscape of the area.

b) Setbacks are to provide sufficient area for landscaping to compliment building form.

c) Front setbacks for the proposed development are to minimise negative impact on the existing landscape.

d) Side and rear setbacks of the proposed development are to minimise any adverse impacts such as overshadowing and privacy between the proposed and existing developments.

DEVELOPMENT CONTROLS

Development setbacks shall be in accordance with Figure 7.

Residential flat buildings	
Front Setback - (Windsor Road)	10.0 metres
Front Setback - (Russell Street)	10.0 metres
Rear Setback - (M2 Motorway)	6.0 metres
Multi dwelling housing (two storeys + attic):	
Front Setback - (Windsor Road)	10.0 metres
Front Setback - (Russell Street)	10.0 metres
Rear Setback - (M2 Motorway) - Single storey or more	6.0 metres



Figure 7 Setbacks

3.3. BUILDING HEIGHT AND FORM

OBJECTIVES

(i) To ensure that the scale and bulk of new buildings have regard to the natural topography and retained vegetation within the site.

(ii) To ensure that new buildings are compatible in bulk and scale with the surrounding developments.

(iii) To ensure that the new buildings have minimum impact on the neighbouring properties in terms of overshadowing, privacy and views.

(iv) To ensure that new buildings within the two storey zone are compatible in height, bulk and scale with the remaining heritage buildings.

PERFORMANCE CRITERIA

(a) The height of new buildings shall be related to the topography of the site.

(b) The height of new building shall not exceed the bulk and scale of buildings on adjoining lands.

(c) Building height and bulk shall be located on the site to ensure that there is no significant loss of amenity to adjacent dwellings and the public domain.

(d) The design of the units adjacent to Russell Street properties should provide for articulation of built form and fenestration to provide visual interest and diversity.

DEVELOPMENT CONTROLS

(a) The maximum height of any two storey building and attic abutting the M2 Motorway, Windsor Road or Russell Street shall not exceed 7.2 metres (height to eaves).

(b) The maximum height of any three storey building and attic or part of a building addressing Russell Street shall not exceed 12 metres to the eaves or 14 metres to the ridge.

(c) The maximum height of any building abutting the M2 Motorway along the northern boundary shall not exceed more than six residential storeys (18 metres height to eaves or 20 metres maximum ridge height).

(d) The attic level in any unit may contain a maximum of one bedroom (with associated wardrobe and ensuite). The maximum total useable floor area permitted in the attic is 25m^2, (including the area of the ensuite and wardrobe). No additional floor space will be permitted in the attic area.

(Refer to Figure 6 for building storey heights and Figures 8 and 9 - Indicative sections and elevations.)



Figure 8 Indicative Russell Street elevation

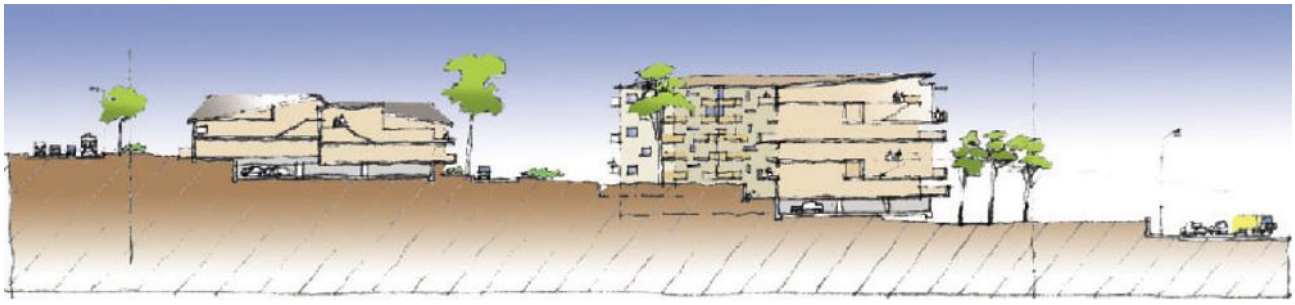

Figure 9 Indicative cross-section

3.4. CAR PARKING AND VEHICULAR ACCESS

OBJECTIVES

(i) To provide sufficient and convenient on site parking for residents and visitors and hence maintain the amenity of adjoining properties and the efficiency of the road network.

(ii) To ensure that vehicular access to and from the development is simple, safe and direct.

PERFORMANCE CRITERIA

a) Car parking shall be located underground where practicable, to minimise the height of buildings above the natural ground level.

b) Driveway design shall provide safe and efficient ingress/egress to the site.

c) The design of driveways and parking areas shall minimise the visual impact of hard paved areas.

d) The driveway design shall make provision for service vehicles where practicable.

DEVELOPMENT CONTROLS

Public Roads

(a) Line marking and curb treatment to delineate left and right turns for vehicles exiting Russell Street is to be provided to Council's requirements.

Car parking

(b) Refer to Part C Section 1 – Parking.

(c) All car parking areas and spaces shall be designed in accordance with Part C Section 1 – Parking.

(d) Tandem car parking may be considered depending upon the merits of the proposal having regard to overall car parking provision.



Figure 10 Car parking & vehicular access

(e) A carwash bay must be provided in accordance with Part C Section 1 – Parking.

(f) Car parking design to be generally in accordance with Figure 10.

Pedestrian Access

(g) Separate pedestrian access shall be provided from the street independent of vehicular access.

(h) Pedestrian access shall be legible, inviting, safe and provide visible interest.

(i) Pedestrian access to be in accordance with Figure 6.

(j) Given the existing width of Russell Street the opportunity to establish perpendicular to the kerb car parking zones for visitors, together with associated landscaping should be explored with the Council during the DA design phase. The introduced landscape should be no less than one mature street tree for every four car parking spaces.

Driveways

(k) Vehicular access to the site should reflect the principles shown in Figure 10.

(l) The design and configuration of access ways and driveways shall be in accordance with Part C Section 1 - Parking.

3.5. OVERLOOKING AND VISUAL/ACOUSTIC PRIVACY

OBJECTIVES

(i) To limit views into private open space areas and internal living room areas within the development as well as adjacent dwellings.

(ii) To protect residents from external noise.

(iii) To contain noise within a dwelling without unreasonable transmission to adjoining dwellings.

PERFORMANCE CRITERIA

a) Private open space areas and habitable rooms of proposed and adjacent existing dwellings shall be reasonably protected from overlooking by considering, but not being limited to:

- Building layout.
- Location, size and design of windows & balconies.
- Screening devices.
- Landscaping.

b) Private open space areas and habitable rooms shall be reasonably protected from uncomfortable levels of external noise by considering, but not being limited to:

- Use of noise resistant wall, ceiling, floor and roofing materials.
- Site planning.
- Location of habitable rooms placing them away from the noise source.
- Use of double glazing.
- Use of fencing, porches, walls and landscaping as noise buffers.

DEVELOPMENT CONTROLS

(a) Windows of living rooms with direct outlook to any living room window of any proposed, or and/or existing adjoining dwelling living rooms within 9.0 metres shall be:

- offset a minimum of 1.0 metre from the edge of one window to the edge of the other.
- screened by permanently fixed structures made of durable but aesthetically pleasing materials.

(b) Dividing walls and floors between dwellings shall be constructed to limit noise transmission to 45 STC (Sound Transmission Class) in accordance with Part F(5) of the Building Code of Australia.

(c) Submission of an acoustic report prepared by a suitably qualified person that addresses internal noise levels of dwellings based on AS 3671 - Road Traffic Noise Intrusion Guidelines".

3.6. SOLAR ACCESS AND OVERSHADOWING

OBJECTIVES

(i) To ensure reasonable access of sunlight to living areas within buildings and open space areas around buildings in winter and minimize the need for artificial heating.

(ii) To ensure adjacent open space/areas, living areas of adjacent dwellings, and communal areas are not deprived of reasonable solar access.

(iii) To minimise the need for artificial lighting in dwellings during the day.

(iv) To provide adequate shading to internal areas and private open space in summer to minimise the need for artificial cooling.

PERFORMANCE CRITERIA

a) Sunlight is to be available to the majority of living areas and private and communal open space areas of the proposed dwellings, and to any adjoining dwellings having regard but not limited to:
   - Preferred living area orientation between 20 degrees east and 30 degrees west.
   - Larger windows to the north and smaller to east, west and north.
   - Pergolas, eaves and fencing.
   - Building height.
   - Window shading devices.

b) Locate the private open space areas to achieve 4 hours sunlight between 9.00am and 3.00pm on 21 June.

DEVELOPMENT CONTROL

(a) A target of 70% of units to achieve solar access to living areas.



Figure 11 Shadow Diagram June 21 0900



Figure 12 Shadow Diagram June 21 1200



Figure 13 Shadow Diagram June 21 1500



Figure 14 Shadow Diagram December 21 0900



Figure 15 Shadow Diagram December 21 1200



Figure 16 Shadow Diagram December 21 1500

3.7. PRIVATE AND COMMUNAL OPEN SPACE

OBJECTIVES

(i) To provide private open space for outdoor living areas for use by the future residents.

(ii) To provide communal open space.

(iii) To enhance the quality of the built environment by providing opportunities for adequate vegetation and landscaping.

(iv) To fully integrate the proposed landscape as part of the overall design of the site.

PERFORMANCE CRITERIA

a) Private and communal open space areas to be located to receive adequate sunlight and shading, maintain privacy and minimise noise.

b) Each dwelling shall provide an area of useable private open space, or private courtyard area, which has direct private access from the dwelling.

c) Area(s) of communal open space shall be provided for the recreational needs of the future residents.

d) The location of all open space areas shall have regard to such requirements as solar access, outlook, noise minimisation, privacy and location of adjoining dwellings.

e) Ground floor dwellings shall be provided with courtyards.

DEVELOPMENT CONTROLS

Private Open Space

(a) Private open space areas shall be directly accessible from living areas of all dwellings.

(b) For dwellings with ground level access private open space to be provided by way of courtyard shall be:

- A minimum width of 4.0 metres and a depth of 3.0 metres.
- A maximum gradient of 1 in 15.
- Provided with enclosing screen walls of other forms of screening designed to ensure visual privacy, both from communal open space area access ways and between the adjoining other dwellings and their courtyards.

(c) For Above Ground Level Dwellings

- A balcony or roof top area conveniently accessible from a main living area of the dwelling, having a minimum area of $10m^2$, with a minimum depth of 2.5 metres.
- The balcony shall be recessed into the façade of the building to a minimum depth of 1.5 metres.

Communal Open Space

(d) To provide for the recreational needs of the residents, communal open space is to be provided in the locations as shown in Figure 7.

(e) Such open space area is to include equipment such as seats, shade structures, barbecues and children's play equipment for passive recreational use.

(f) Access to and through the common open space area shall be secured for use by residents of the development only.

(g) The area provided shall be equivalent to the rate of $20m^2$ per dwelling.

3.8. SITE FACILITIES & SERVICES

OBJECTIVES

(i) To Provide site facilities that are adequate and conveniently located for fulfilling the resident's needs.

(ii) To ensure that the site facilities are practical, attractive and easily maintained.

PERFORMANCE CRITERIA

a) Rubbish and recycling bin enclosures, letter boxes, clothes drying areas and other site facilities should be adequate in size, made of durable, weatherproof materials, and to be visually integrated with the development. They need to be located having regard to the protection of residential amenity, vehicle serviced access, visual impact and residents access.

DEVELOPMENT CONTROLS

(a) A minimum of $10m^2$ of dedicated storage space shall be provided to each dwelling with a minimum clearance height of 2.1 metres from floor level. This can be provided in a way of an enclosure and as an extension of the dedicated car park for each unit.

(b) An internal laundry shall be provided to each dwelling.

(c) Letter boxes shall be provided in accordance with the delivery requirements of Australia Post.

(d) A communal rubbish storage area shall be provided within the site. The storage area shall:

- Be of a construction material that is the same as the construction material of the development and of a similar style and colour.
- Include a bin wash down facility.
- Have sufficient capacity in accordance with Council's requirement.

3.9. LANDSCAPE AND VEGETATION

OBJECTIVES

(i) To integrate the landscape design with the design of the future residential development.

(ii) To protect and enhance the gardenesque character of the Shire.

PERFORMANCE CRITERIA

a) Landscaping is to be appropriately scaled and located relative to both the building bulk, incorporating existing vegetation where possible.

DEVELOPMENT CONTROLS

(a) The landscape area shall be a minimum 50% of the area of the site, exclusive of access driveways and parking.

(b) Areas less than 2.0 metres in width will be excluded from the landscaped area calculation.

(c) A minimum of 25% of the landscaping area shall permit deep soil planting.

(d) Landscape plans shall clearly demonstrate that an additional quantum of mature landscaping will be provided and located in a form that reflects as closely as possible the landscape that existed as at January 2000 (refer Figure 4).

(e) A 7500mm wide deep soil planting landscape medium island is to be provided at the entry to the central driveway off Russell Street which provides access to the six storey building basement.

(f) Mature landscaping is to be provided on Russell Street to supplement existing trees and enhance screening of the future development from Russell Street.

3.10. ECOLOGICALLY SUSTAINABLE DEVELOPMENT

OBJECTIVE

(i) To actively encourage and promote urban design and urban housing developments to minimize consumption of energy from non-renewable sources, improve the comfort of dwellings, preserve the environment and reduce the greenhouse emissions.

PERFORMANCE CRITERIA

a) All dwellings shall be sited and designed to maximise natural cross-ventilation and solar access to all living area by:

- Maximising orientation of living areas to the north with access to the winter sun and provision for summer shade.
- Shading large glass openings located on the northern side from the higher summer sun by providing roof eaves, verandahs, balconies, hoods and/or external screens. Conversely these design elements shall be flexible to permit exposure of living areas to the lower winter sun.
- Location of windows and doors to permit cross ventilation.

b) Landscaping shall assist microclimate management by the strategic location of deciduous trees to permit winter sunlight access to living areas and provide summer shade to north exposed windows and other glass openings.

c) The building shall adopt :

- Water recycling.
- Energy and water efficient fittings.
- Stormwater runoff detention and treatment.

DEVELOPMENT CONTROLS

(a) The building shall achieve, as minimum, a 3.5 star rating by natHERS in respect to energy efficiency and a greenhouse score of 4. Details of the rating are to be submitted with the Development Application.

Elements include:

- Passive solar design strategies.
- Reduction of energy requirements by incorporating low energy appliances and lighting, supplementary systems and active solar design strategies like:
  - A hot water system, suitable for each dwelling, with a greenhouse score of 4 or greater;
  - Water efficient fittings and fixture; and
  - Rubbish recycling space within the refuse area.

3.11. HERITAGE

OBJECTIVES

(i) To retain the former school building, teacher's residence and heritage curtilage within the development of the subject site for the benefit of future residents.

(ii) To enhance and preserve the fabric of the remaining heritage structures and provide for their long-term preservation.

(iii) Utilise the heritage curtilage of heritage buildings for communal open space and recreation.

PERFORMANCE CRITERIA

a) Future use of the former school building to provide a communal function for use by future residents of the subject site.

b) Future use of the former teacher's residence as a caretaker's residence and meeting room for the development.

c) The preservation and maintenance of historic school buildings and landscape plantings within the historic boundary of the former Baulkham Hills Public School.

DEVELOPMENT CONTROLS

(a) The former school and teacher's residence are to be used solely for the benefit of the residents of the subject development for uses such as a gymnasium, pool change room, caretaker's residence and meeting room.

(b) The historic buildings and curtilage are to be retained upon the same title as the subject site and maintained by the strata body corporate.

(c) A Conservation Management Plan is to be prepared by a suitably qualified conservation architect and is to be submitted with a development application for the redevelopment of the subject site.

(d) The historic buildings and curtilage are to be the subject of restoration works in accordance with a Conservation Management Plan and are to occur concurrent with the redevelopment of any part of the subject site and be completed prior to the issue of an occupation certificate and/or subdivision certificate.

(e) Future development shall ensure the ongoing preservation and maintenance of the historic fig trees at the northern end of the historic school site.

(f) The Plan shall have regard to the following documentation:

- Preliminary Heritage Assessment 1999 - Clive Lucas, Stapleton and Partners Pty Ltd.
- Heritage Management Plan 2004 - Clive Lucas, Stapleton and Partners Pty Ltd.

4. COLOURS AND MATERIALS

4.1. BUILDING MATERIALS

OBJECTIVE

(i) To achieve development that respects and makes a positive contribution to the heritage character of the remaining school buildings.

PERFORMANCE CRITERIA

a) Compatibility of style and character of the proposed development with that of the predominant style and character of surrounding residential or heritage buildings shall be demonstrated within the development application.

DEVELOPMENT CONTROL

(a) Building materials and colours selected and utilised on the site are to be coordinated throughout the site and be compatible with the remaining heritage structures.

The Hills Development Control Plan (DCP) 2012

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THE HILLS Sydney's Garden Shire



Part D Section 4

Target Site,Pennant Hills Road
Carlingford

D4

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1. INTRODUCTION

This Section of the DCP must be read in conjunction with Part A – Introduction of this DCP.

This Section has been prepared to provide direction and control of the development of the 179 Pennant Hills Road Target Site in The Hills Shire.

1.1. LAND TO WHICH THIS SECTION OF THE PLAN APPLIES

This Section applies primarily to land known as 179 Pennant Hills Road (Lot C2 DP 101 334).

1.2. OBJECTIVES

The objectives of this Section are:

(i) To demonstrate best practice in urban and residential design and to act as a model development and prototype for other target sites within the Shire.

(ii) To provide detailed design and environmental standards for the development.

(iii) To ensure that all development is compatible with, and has minimum impact on adjoining dwellings and offers high levels of amenity for existing and future residents.

(iv) To provide opportunities for housing choice and affordability in order to meet the broader housing needs of the community while retaining the landscaped amenity of the Shire.

(v) To provide a basis for rezoning part of the target site.

2. OBJECTIVES AND DEVELOPMENT CONTROLS

The objectives, performance criteria and standards for development within the Target site are divided into a number of key areas and discussed throughout this Section. The Site Analysis and its opportunities are also addressed in terms of development control objectives, performance criteria and development control.

In addition to those policies, guidelines and documents specified in Section 1.4 of Part A - Introduction, this Target Site Section is to be read in conjunction with other relevant Sections including:

- Part B Section 4 – Multi Dwelling Housing
- Part B Section 5 – Residential Flat Buildings

Where any provision of this Section is inconsistent with any provision of any other Section of the DCP, the provisions of this Target Site Section shall prevail.

2.1. SITE PLANNING

OBJECTIVES

(i) To ensure that the design of the development is of high quality and sensitive to its environment, the site layout and building design needs to consider the existing characteristics, opportunities and constraints of both the sites and their surroundings.

(ii) To achieve a coherent site layout and development which relates to the natural contours of the site and contributes to the character of the area.

(iii) To enhance the existing character and amenity of Pennant Hills Rd.

(iv) To ensure no through traffic between Pennant Hills Rd and Sandringham Drive.

(v) To provide adequate communal open space which enhances the quality of the built environment and increases the opportunity for increased community safety.

DEVELOPMENT CONTROLS

(a) Future Development to be located generally in accordance with Figure 1 below.

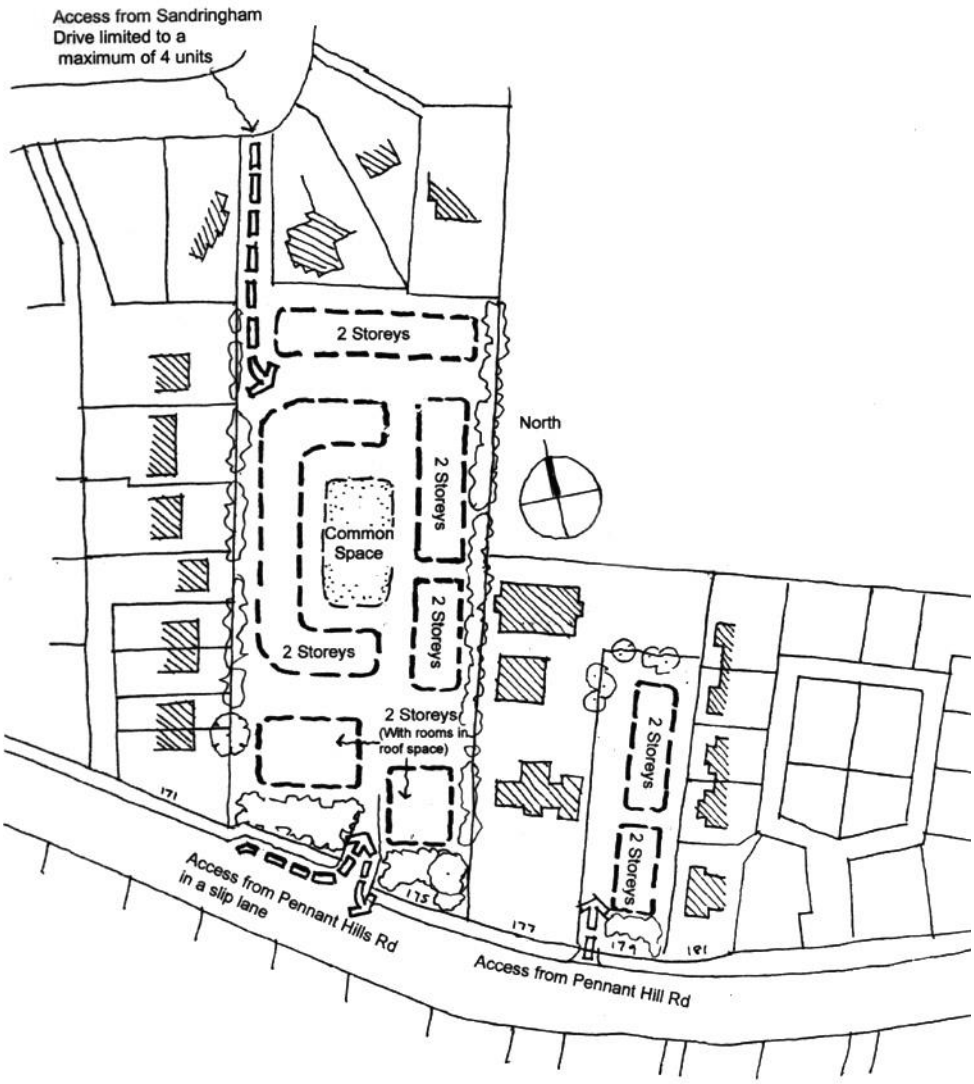


Figure 1 Site planning





Establishing an attractive public domain which is overlooked by building frontages is a key objective of the design.







Figure 2 Communal space



Townhouses along Pennant Hills Road are often out of scale and too close to front boundary having no room for deep soilplanting and mature trees along the ridge road.









Large institutional 2/3 storey buildings behind mature trees and landscaping.

Figure 3 Street character



Typical townhouse environment:
- Mainly hard surface driveways
- Little room for deep soil planting
- Tokenistic landscaping





Enough space for deep soil planting and meaningful central open space.



Figure 4 Landscaping

2.2. STREETSCAPE AND BUILT FORM

OBJECTIVES

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

(ii) To ensure that the appearance of housing is of a high visual quality, enhances the streetscape and complements good quality surrounding development.

(iii) To encourage streetscape variation whilst maintaining a high level of amenity for the development.

(iv) To ensure that the appearance of housing is of a high visual quality and enhances the streetscape and the urban environment.

(v) To allow flexibility in the siting of new buildings and ensure the bulk and scale of new development protects reasonable neighbour amenity and maintain appropriate residential character.

PERFORMANCE CRITERIA

(a) The design of buildings should reflect and complement the streetscape to Pennant Hills Road with an appropriately landscaped setback and building styles, which reflect the institutional and grand nature of buildings along the ridge top in the locality. Materials should be a mix of masonry and render finishes.

(b) Building design should aim to create external elements, which visually break up the street facing façade, with elements such as verandas, pergolas and porches as well as gables and roof detailing. Side elevations to street frontages should be similarly considered and corner-turning buildings be created.

(c) Other quantitative controls relating to streetscape are those established by this plan relating to landscaping, height and building setbacks.

(d) Buildings should be designed to fit within the setback and height requirements of this section, in order to ensure that the intended bulk, scale and amenity of the development is achieved.

(e) The site should comprise a variety of housing types, which may include multi dwelling housing and residential flat buildings.

(f) Pitched roofs with eaves are the preferred choice of roof form for development, as these exist in the adjoining residential area.

DEVELOPMENT CONTROLS

(a) Dwellings should be orientated to maximise solar access and enjoy views.

(b) External walls of a residential flat building shall not exceed 12 metres in length unless a return balcony, change in material or plane or other method is adapted to break the straight run of brickwork.

(c) Any fence or wall along the Pennant Hills Rd boundary shall have a maximum height of 1.2 metres when of solid construction or be up to a maximum 1.8 metres with 50% solid construction.

(d) The minimum internal floor area for each individual unit, excluding common passageways, car parking spaces and balconies should be in accordance with Part B Section 4 – Multi Dwelling Housing and Part B Section 5 – Residential Flat Buildings









Examples of building elements which can visually break up the street facing facade:

- eaves
- tiled roof
- front verandahs/elements
- front fence/hedge piers
- mix of face brick and render

Figure 5 Building character

2.3. DENSITY

OBJECTIVES

(i) To provide density controls for a variety of building forms within an integrated development to achieve the desired character of a residential environment.

(ii) To provide the opportunity for increased densities in appropriate localities having regard to opportunities for increased housing densities.

(iii) To provide opportunities for a mix of housing development forms within an integrated development.

DEVELOPMENT CONTROL

(a) A maximum overall gross residential density of 95 persons per hectare for a small lot housing development, based upon the following occupancy rates:

Dwelling Type	Occupancy Rate
Existing dwelling	3.5 persons
1 Bedroom Unit	1.3 persons
2 Bedroom Unit	2.1 persons
3 Bedroom Unit	2.7 persons
4 Bedroom Unit	3.5 persons

2.4. SITE REQUIREMENTS

OBJECTIVES

(i) To ensure development sites have sufficient areas to provide adequate access, open space and building separation.

(ii) To enable development on the 'target site' to have regard to the relationship with adjoining developments.

(iii) To provide residential flat building development on part of the 'target site' that addresses the existing street character of larger building forms along Pennant Hills Road.

PERFORMANCE CRITERIA

(a) To encourage the amalgamation of allotments to form better overall developments and more opportunities to provide for landscaping, common open space and better design of development sites.

DEVELOPMENT CONTROLS

Site Area

(a) Where residential flat buildings will be integrated with multi dwelling housing development the minimum site area for 'target site' development shall be 9000 m^2 with a maximum of 27% of the site area for proposed residential flat buildings.

Site Frontage

(b) The minimum allotment frontage for the selected 'target site' is 24.5 metres. Where residential flat building development will be integrated with multi dwelling housing the minimum allotment frontage is 30 metres.

Site Access

(c) Access driveways should be centrally located within any proposed residential flat building development or site.

2.5. SETBACKS

OBJECTIVES

(i) To provide setbacks that complement the streetscape of the area while allowing flexibility in siting of buildings.

(ii) To allow for the adequate provision of landscaping throughout the development and protect the visual quality of the community and private open space areas.

(iii) To minimise any adverse impacts on adjoining properties such as privacy and overshadowing.

PERFORMANCE CRITERIA

(a) Setbacks shall complement the streetscape of the established area.

(b) Setbacks shall provide sufficient area for landscaping to complement building form.

(c) The setbacks of proposed buildings are to minimise any adverse impacts such as over shadowing and privacy on to adjacent properties.

DEVELOPMENT CONTROLS

Front Setback to Pennant Hills Road

(a) The minimum front setback shall be 10m for all buildings except where a 3 metre wide slip lane is required. Where buildings front the slip lane the minimum setback permitted will be 7 metres subject to an average setback of 10 metres being achieved across the frontage of the building.

(b) Front boundary setbacks shall be in accordance with Figure 6 over.

Side and Rear Setbacks - Multi Dwelling Housing

- 179 Pennant Hills Road:

(a) The minimum side setback shall be 4.5 metres to the boundary of an existing adjoining property for one storey developments. For two storey developments the minimum setback to the boundary of an adjoining property shall be 6 metres.

Side and Rear Setbacks –Residential Flat Buildings

(a) Setbacks shall be in accordance with Figure 6 over.

(b) For two storey developments the minimum setback to the boundary of an adjoining property shall be 6 metres. However a variation of the 6 metre setback to 4.5 metres is permissible where obscure glazed or highlight windows to upper floors are used, and where the proposal does not unduly overlook or overshadow adjacent dwellings. These areas are shown as hatched areas on Figure 6.

(c) The minimum setback for habitable roof areas shall be 6 metres to the boundary of an existing adjoining property.

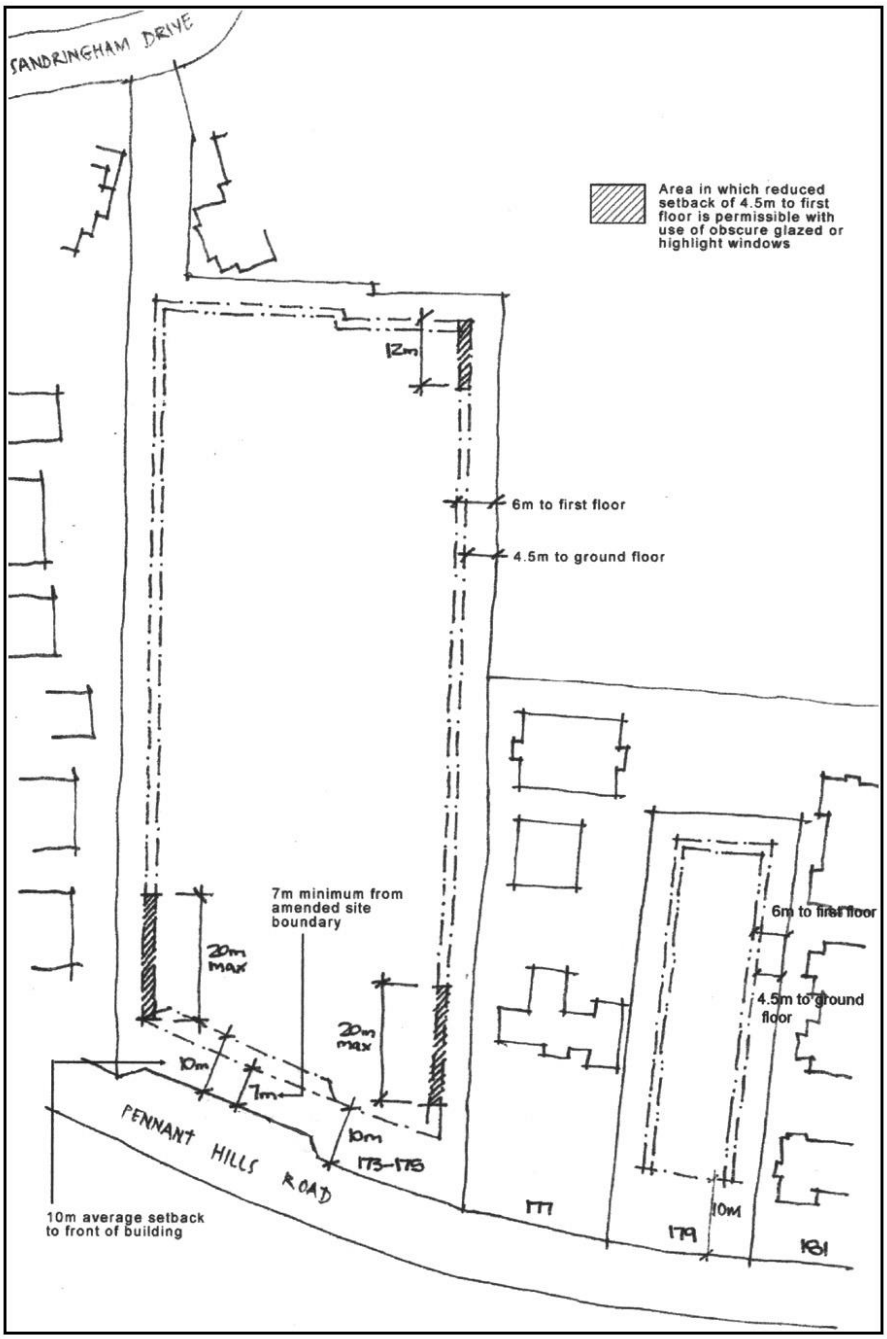


Figure 6 Boundary setbacks

2.6. BUILDING HEIGHT

OBJECTIVES

(i) To ensure that development has minimal impact on neighbouring properties to south, east & west in terms of building bulk, shadows, privacy and views.

(ii) To ensure the scale of development integrates well with landscape and topography, and reflects the scale of existing buildings along Pennant Hills Road.

(iii) To optimise opportunities with regard to view and solar access.

PERFORMANCE CRITERIA

(a) The height of walls does not result in significant loss of amenity to adjacent dwellings and land.

(b) Building height relates to the landform with minimal cut and fill.

DEVELOPMENT CONTROLS

(a) Refer to Clause 4.3 *Height* of Buildings of The Hills Local Environmental Plan 2012.

(b) The maximum height of multi dwelling housing shall be two storeys. Height controls are as shown in Figure 7.

(c) Multi dwelling housing is to be located so that the ground floor does not exceed 1m above the natural ground level immediately below except in the area shown hatched in Figure 8. Dwellings in the area shown hatched may have a floor level up to 2 metres above natural ground level providing the applicant can demonstrate that there will be no adverse impact on the privacy of adjoining properties.

This exception is required for the following reasons:-

- to allow the provision of a relatively level common area located in the centre of the development.
- This zone still ensures any development within 6.5 metres of the property boundary is within one metre of existing ground level to protect the amenity of adjoining neighbours.
- Part of the area shown hatched contains a tennis court and previous excavation occurred to allow the court to be constructed. Part of the fill in this area will be required to fill the court area back to the natural ground level in place prior to the construction of the court.

(d) The maximum height of residential flat buildings shall be 12 metres to ridge and 8 metres to the eaves, measured from natural ground line. Residential flat buildings may include habitable dwellings contained within the roof space to a maximum of 60% of the roof area, with use of dormer window structures. Building forms which are two storeys plus 'dwellings in the roof' are permissible on the Pennant Hills Road frontage of Nos. 173-175 to respond to typical building forms along the road in this locality. Additional variations in the roof form are permissible where they face away from Pennant Hills Road. Height controls are shown in Figs 7.

(d) A storey is defined as 'a space within a building which is situated between one floor level and the floor level next above, or if there is no floor above, the ceiling or roof above. It does not include parking, service or storage areas contained within a basement which is located below ground providing that the ground floor is not more than one metre above natural ground line.



Figure 7 Building height

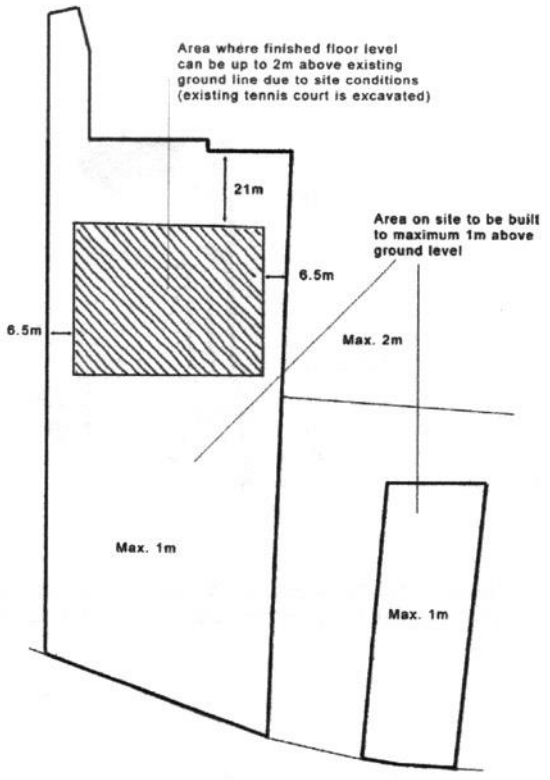


Figure 8 Height of ground floor above natural ground line

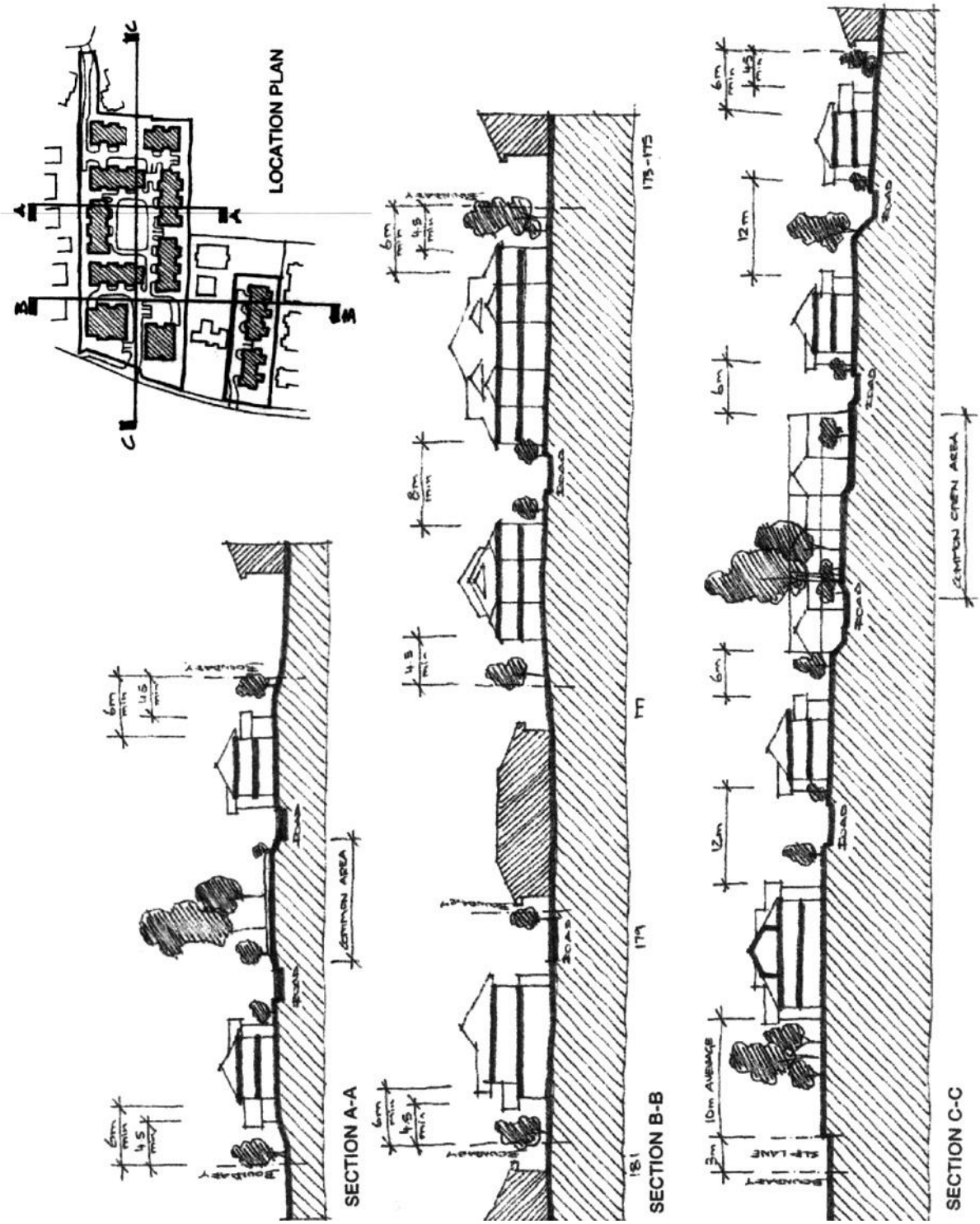


Figure 9 Sections – Building setbacks and locations

These cross-sections are representative and illustrate a variety of cross-sections through the site.

2.7. BUILDING SEPARATION

OBJECTIVES

(i) To ensure privacy between buildings.

(ii) To avoid overlooking of living spaces and private open space.

PERFORMANCE CRITERIA

(a) Create privacy between dwellings with screening as necessary.

DEVELOPMENT CONTROLS

(a) The minimum separation required between residential flat buildings shall be 12 metres.

Note. as recommended in "Better Urban Housing Guidelines for Urban Housing"

(b) Use of utility and rooms and service functions such as bathrooms is appropriate to the minimum separation façade. Where habitable rooms are proposed these should have obscure or highlight glazing.

(c) Direct views from living rooms of dwellings into open space or the interior of other dwellings are to be screened or obscured.

(d) A maximum of four multi dwelling housing units will be permitted along the northern boundary shared with 31-35 Sandringham Drive. These four units shall be split into two buildings and the minimum separation between the two buildings shall be 6 metres.

2.8. ACCESS & CAR PARKING

OBJECTIVES

(i) To ensure that vehicular access to and from the development is simple, safe and direct.

(ii) To provide adequate and convenient parking for resident and visitor vehicles so as to maintain the amenity of the adjoining properties and the efficiency of the road network.

(iii) To promote the creation of a safe environment for pedestrians.

PERFORMANCE CRITERIA

(a) Resident and visitor parking shall be provided according to the performance standard.

(b) Resident car parking for the residential flat building component of the development shall be underground to minimise the height of building above natural ground line.

(c) Driveway design shall provide safe and efficient ingress and egress to the site.

(d) The design of driveways and parking areas shall minimise the visual impact of hard paved areas.

(e) The driveway design shall make provision for service vehicles where practicable.

(f) All driveways and open car parking spaces and access ways should be suitably landscaped and lit to enhance the amenity of the site and provide security.

(g) Car parking areas and access ways should be designed surfaced and sloped to facilitate stormwater infiltration on the site.

DEVELOPMENT CONTROLS

(a) Off-street parking should be provided within the site for dwellings at the rate of 1 space per 1 bed dwelling and 2 spaces per 2-4 bed dwelling

Note. the above car parking rates are to be rounded up to the nearest whole number.

(b) Covered car parking shall comprise lockable type single garages with a minimum clear dimension of 5.5 metres x 3.0 metres and double garages with a minimum clear dimension of 5.5 metres x 5.4 metres.

(c) Visitor spaces are to be provided at a rate of two spaces for every five dwellings, within the development with any part spaces being rounded up and they shall have a minimum dimension of 5.5 metres x 2.6 metres.

(d) Manoeuvring areas to all parking spaces shall comply with Australian Standard 2890.1 and shall have a minimum turning area of 6.7 metres. A one metre wide turfed area with rolled mountable kerbs can be located within this minimum clearance providing vehicle manoeuvring is not restricted. The layout shall ensure that all vehicles enter and leave in a forward direction.

(e) External parking spaces are to be an extra 300mm wider where they adjoin a solid wall.

(f) Visitor spaces are to be accessible at all times and are not to be located behind security gates.

(g) Parking areas within the front setback are discouraged and in this regard, no more than 2 spaces shall be provided within the setback area.

(h) Car parking areas should be separated by any adjoining property boundary by a 2 metre wide landscaped strip.

(i) Driveways should be separated by any adjoining property boundary by a one metre wide landscaped strip.

(j) Driveways are to have a minimum width of 6 metres at the property boundary for a distance of 6 metres. Internal driveways shall have a minimum width of 3 metres with adequate provision for passing provided, and be designed to accord with Council's Car Parking requirements - Part C Section 1.

(k) All car parking areas and spaces shall be designed in accordance with Car Parking requirements – Part C Section 1.

(l) Traffic and parking arrangements for No 173-175 and 179 Pennant Hills Rd:

- The primary vehicle access point to No 173-175 Pennant Hills Rd will be off Pennant Hills Road as shown in Fig 11. This may require a left turn deceleration slip lane across the site frontage of 173-175 Pennant Hills Rd subject to approval with the RMS.
- A secondary access to service a maximum of four dwellings to No 173-175 Pennant Hills Rd is to be provided off Sandringham Drive to the north of the site, providing this does not link to the main access from Pennant Hills Road.
- The access driveway for No 179 Pennant Hills Rd should be at the western end of the Pennant Hills Rd boundary. Selection of landscaping to avoid obstruction of sight distance and angling entry to allow entry to the site quickly but safely.
- All car parking areas and spaces shall be designed in accordance with Car Parking requirements – Part C Section 1.
- The main access driveway should be min. 5 metre wide with mountable kerbs.
- The secondary access driveways should be min. 3 metres wide with mountable kerbs.
- Parking aisles to satisfy Australian Standard 2890.1.
- Driveways should be designed to allow adequate access not only for residents but also for emergency and service vehicles, with space to allow up to an 11 metre rigid truck to enter and leave Pennant Hills Road in a forward direction.

(m) Traffic and parking arrangements must also satisfy the following Road and Maritime Services requirements:

- Provision of one vehicular access, with left in left out movements only, for each development at 173-175 and 179 Pennant Hills Road, Carlingford.
- Vehicle crossovers are to be constructed with one metre wide splays to facilitate efficient ingress /egress for the site.
- Front boundary fences are to be designed in such a way so as to not impede common sight between vehicles and pedestrians using the public footway.
- If security gates are to be used at any Pennant Hills Road access point, they must be located an appropriate distance into the site so that the stationary vehicles do not impede movements on Pennant Hills Road.
- The left turn deceleration lane is to be in accordance with Australian Standards and RMS Design Guidelines (i.e. a minimum length of 40 metres from start of entry taper to the tangent point of the entry curve).
- Driveway access design for Pennant Hills Road is to restrict movements to left in left out. As it is unlikely that it will be possible to construct a central median island on Pennant Hills Road, an island separating ingress and egress movements is to be constructed as part of the driveway works, similar to a seagull treatment, so as to channel vehicles appropriately and deter right turn movements. Additionally, the use of No Right Turn signs may be required.
- All road works are to be undertaken by the developer. The Roads and Maritime

Services will not incur any costs associated with the road works described above.

(n) Consideration should be given to the design of the access driveway from Sandringham Drive to minimise the speed and potential noise impacts on adjoining properties. Design measures such as pinch points, speed bumps and other possible design options should be assessed and the design measure that will minimise the impact on adjoining properties must be implemented.

2.9. OPEN SPACE

2.9.1. LANDSCAPED AREA

OBJECTIVES

(i) To provide open space which enhances the buildings.

(ii) To provide useable out door open areas for residents.

(iii) To provide a satisfactory relationship between buildings and open space.

(iv) To provide a configuration of open space which enhances the amenity of the overall development while providing a total landscaped site area of 50%.

(v) Landscaping is to be appropriately scaled and located relative to both the building bulk, incorporating existing vegetation where possible .

(vi) To enhance the quality of the built environment by providing opportunities for landscaping.

(vii) To provide landscaped areas that respond to the requirements of recreational use as well as providing for the visual amenity and psychological well being of residents.

PERFORMANCE CRITERIA

(a) A well designed and well built landscape which improves the image of the development and enhances the streetscape should be provided.

(b) The landscape should retain and enhance existing significant vegetation on the site.

(c) Trees and other planting should be used to achieve an improved level of privacy between units while still allowing casual surveillance for safety. Trees should be selected to allow for winter sun entry and some summer shading to courtyards/principal living areas.

(d) Areas of deep soil planting should be specified within both public and private areas in order to allow for mature tree growth.

(e) Location of any water management infrastructure should be carefully considered so as not to compromise tree planting in the public domain.

(f) High quality landscaping should include significant tree planting, well defined entrances, play areas and kerbside planting. These are considered important elements for the creation of a good setting for urban housing, and should be encouraged.

(g) The landscaping should incorporate species indigenous to the area and those, which will not cause damage to adjacent buildings or driveways. Indigenous species selected with reference to Council's preferred planting list are particularly appropriate for landscaped setbacks to Pennant Hills Road, and common open space areas. Elsewhere exotic species to a defined landscape theme can be considered.

(h) Fencing in or adjacent to communal open space areas is to be of a height, design and construction, which promotes passive surveillance, and adds to the streetscape and visual character of the development.

(i) All boundary fencing is to have a minimum height of 1.8 metre when measured from the finished ground level in the courtyard or common landscaped space on the site being developed.

(j) A 2 metre landscaping strip, containing advanced planting, which when mature will provide a landscape screen to adjoining properties 31-35 Sandringham Drive, must be provided along the northern boundary of 173-175 Pennant Hills Road.

DEVELOPMENT CONTROLS

(a) A minimum of 50% of the site shall be provided with landscaped areas, exclusive of access driveways and parking. This 50% landscaped area can include up to 5% porous hard paving, which allows for stormwater infiltration, and where these porous areas complement common open space and they:

- Improve the quality of open space for recreation and for use by residents within the development.
- Improve the quality of the landscaped and built environment by denoting separate hard landscape areas that are for use by both pedestrians and vehicles, through the use of differing surface materials and textures and that are integral with the common open space design.
- Fully integrate with the landscape design as part of the overall development of the site.

(b) The 50% landscaped area requirement will be made up of private open space (courtyards/gardens) and common open space. Private open space areas will be contiguous to the dwelling for which it is provided.

(c) Semi-private open space that adjoins common open space shall be enclosed with a wall or fence of minimum height 900mm with a maximum height of 1200mm and shall not be more that 50% solid.

(d) Advanced planting is to be provided to front setback areas of dwellings, particularly the Pennant Hills Road frontage, and to the common central open space.

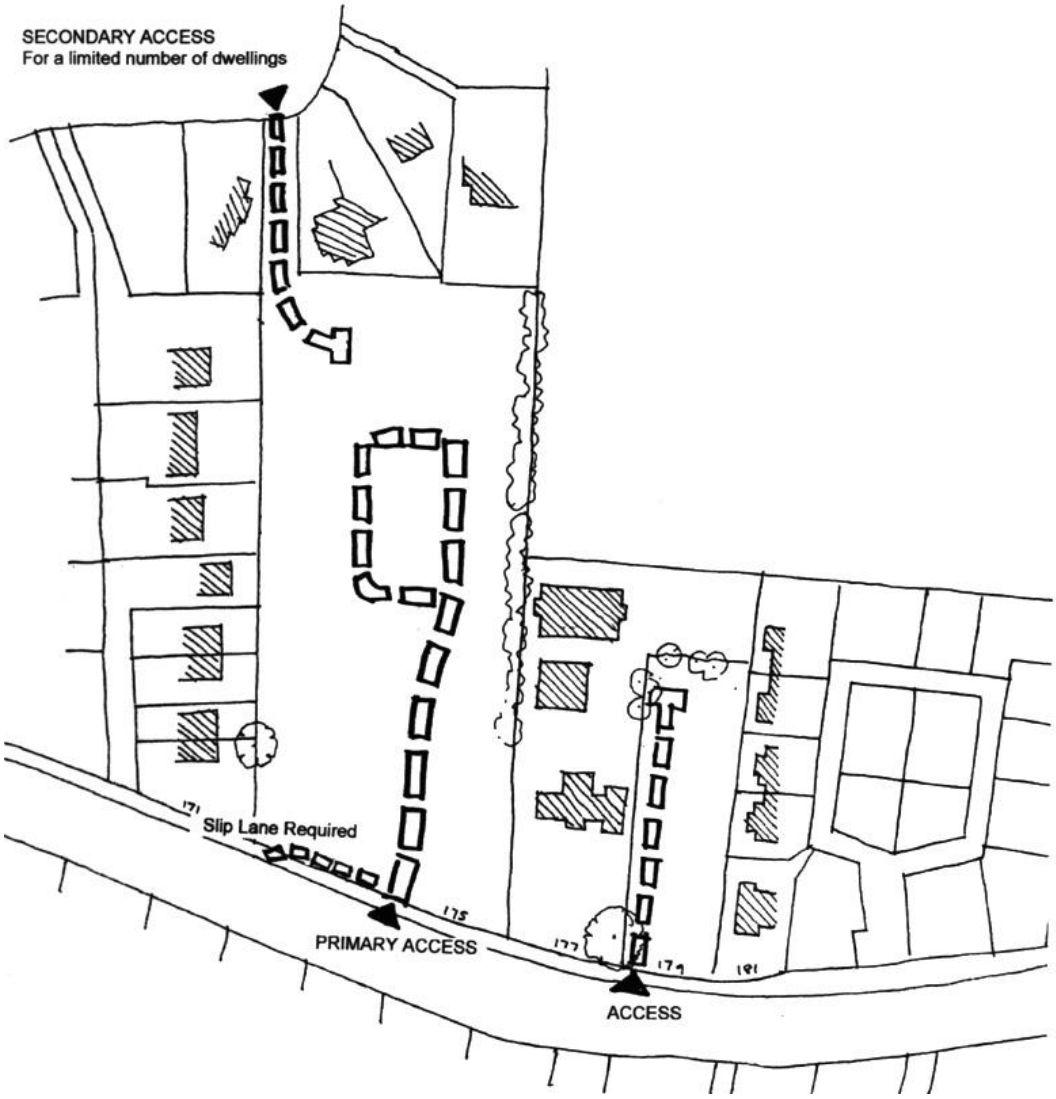


Figure 10 Access

2.9.2. PRIVATE OPEN SPACE

OBJECTIVES

(i) To provide adequate open space areas for the enjoyment and use by residents.

(ii) To enhance the quality of the built environment by providing opportunities for landscaping.

(iii) To provide an open space area within the development for the recreation of residents and children's play and which creates a visual and physical extension of private open space to the front of dwellings.

DEVELOPMENT STANDARDS

Reference should be made to the relevant category of development listed below.

For all dwellings (except residential flat buildings)

(a) Each dwelling is to be provided with an area of private open space equal to 50% of the floor area of the dwelling. However up to 50% of the dwellings may be provided with an area of private open space equal to 35% of the floor area of the dwelling, subject to the balance of the area being added to the common open

space requirement for the development. These areas shall have a minimum dimension of 2 metres.

(b) An area of 10m^2 private open space can be provided separately to the dwelling where these semi-private areas complement adjoining common open space. These semi-private areas shall be a min 10m^2 and shall have a minimum dimension of 2 metres and shall be enclosed with a wall or fence of minimum height 900mm with a maximum height of 1500mm and shall not be more that 50% solid. These semi-private areas shall be continuous with the main private open space where possible.

(c) Private open space areas should include an area of 24m^2 with a minimum dimension of 4 metres which is directly accessible from a living area. Screening or fencing (minimum 1.8 metres) to the rear courtyards should be provided where necessary to ensure privacy for users of this open space.

(d) Private open areas should be directly accessible from the primary living area and shall be relatively level for a minimum of 3 metres from the dwelling.

For dwellings in the residential flat building:

(e) Private open space shall be accessible from the living area of dwellings.

(f) For dwellings with ground level access, private open space shall be provided with a minimum width of 4 metres and a depth of 3 metres.

(g) This private open space shall be provided within one metre of natural ground level and may be included as part of the minimum landscaped area requirements.

(h) Enclosing screen walls or fences where provided shall be designed to ensure privacy from communal open space, access ways or external roads.

(i) In order to provide useable open space to dwellings above ground level, a balcony or terrace is to be provided to each dwelling, which shall have a minimum area of 10m^2 and a minimum dimension of 2 metres.

2.9.3. COMMON OPEN AREA

OBJECTIVES:

(i) To provide common open space for use by residents for relaxation and recreation.

(ii) To provide common landscaped space that improves the visual amenity of the development with adjoining dwellings as well as between proposed dwelling clusters within the development, and allows for greater psychological well being of the residents.

(iii) To provide common landscaped areas between the development and the street frontage.

(iv) To provide opportunities for additional landscaping which add to the amenity of the site.

DEVELOPMENT CONTROLS

173-175 Pennant Hills Road

(a) In order to provide for the recreational needs of the residents, a common open space is to be provided in a singular parcel. Such open space area is to include equipment such as seating, shade structures, BBQ and children's play equipment for passive recreational use.

(b) The centrally located common open space shall have an area equal to 10m^2 per dwelling in a multi dwelling housing development and 20m^2 per residential flat and will include areas of level space to accommodate children play area or recreation facilities.

If any dwelling in a multi dwelling housing dwelling is not provided with 50% of the floor area of the unit as private open space the area of private open space not provided within the courtyard must be added to the minimum common open space requirement. (Refer to Section 3.9.2 Development Control (a)).

(c) Additional common landscaped space will be provided along the street frontage of Pennant Hills Rd, along the Sandringham Dr access and throughout the site which will improve the visual amenity of the development.

(d) The maximum change in level between the kerb height of the internal road and the finished level of the common open space shall be 600mm.

(e) A pedestrian link should be provided between the pedestrian entrances of the residential flat

buildings and the common open area in the centre of the site. The pathway link should be direct, and maintain lines of sight along the pathway from the residential flat building to the communal area. Landscaping shall define the pathway route to enhance site legibility.

179 Pennant Hills Road

(f) If more than 5 dwellings are proposed on this site a common open space equivalent to $10m^2$ per unit must be provided with a minimum dimension of 12 metres.

2.10. SOLAR ACCESS

OBJECTIVES

(i) To ensure reasonable access to sunlight for living spaces within buildings and open space areas around the buildings.

(ii) To ensure no adverse overshadowing of habitable rooms or the principal area of private open space of adjoining properties occurs.

PERFORMANCE CRITERIA

(a) Buildings are to be designed and sited to minimise loss of solar access to adjacent buildings.

(b) To ensure common open space areas receive adequate sunlight.

(c) Design of dwellings is to maximise solar access to living rooms, where possible.

(d) Deciduous species should be planted to improve solar access where appropriate, particularly to the north of solar courtyards.

(e) In order to maximise solar access, living areas of buildings should where possible, be located on the north side of the dwelling, with north facing walls orientated between 20° west and 30° east of true north.

DEVELOPMENT CONTROLS

(a) Buildings should be designed to enable private open space areas to enjoy at least four hours of sunlight to 50% of the areas between 9.00 am and 3.00 pm on 21 June. Where this cannot be achieved, provision for additional solar access to the windows of the primary living area for a similar time period will be considered.

(b) The proposed development shall be designed to ensure solar access to adjoining properties is retained and these living and landscaped areas receive at least four hours of sunlight between 9.00 am and 3.00 pm on 21 June.

(c) Buildings should be arranged on 173-175 Pennant Hills Road and 179 Pennant Hills Road to optimise solar access opportunities. The plan in Figure 11 shows the principle of establishing north or east/west facing courtyard/balcony opportunities to create the optimum solar outcome.

(d) Shadow diagrams are to be submitted to demonstrate compliance with the criteria described above.

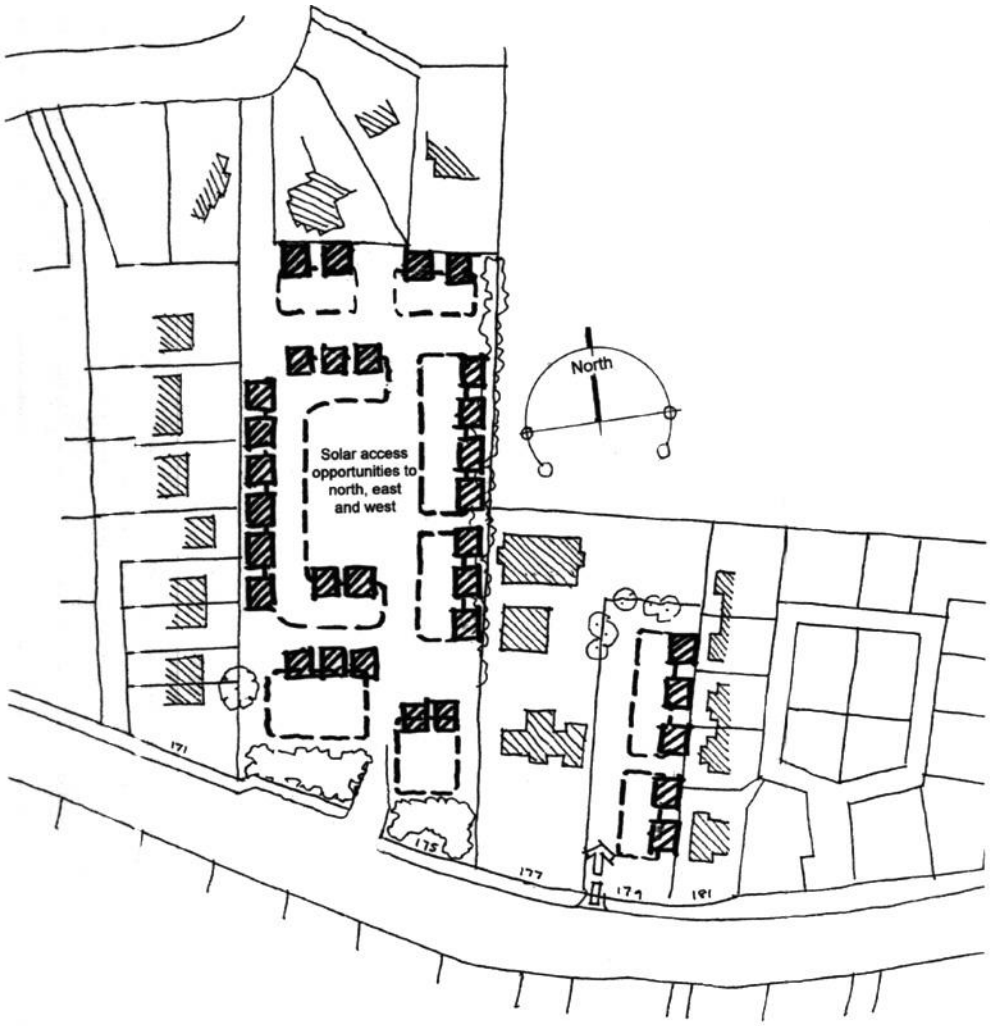


Figure 11 Solar access

2.11. ECOLOGICALLY SUSTAINABLE DEVELOPMENT (ESD)

OBJECTIVES

(i) To achieve energy efficient and environmentally sensitive developments.

(ii) To encourage the use of renewable, energy efficient materials and fixtures that is durable and cost effective in accordance with Councils objectives.

(iii) To consider the long term impact of production and use of materials and products used in the development.

(iv) To provide adequate insulation and thermal mass to enhance the thermal comfort of residents and to reduce energy usage within the development.

(v) To maximise use of natural lighting and to minimise energy usage through energy efficient fittings.

(vi) To reduce water consumption of the development.

(vii) To explore the use of alternate renewable energy systems.

DEVELOPMENT CONTROLS

(a) All dwellings should be designed to maximise cross-ventilation where possible.

(b) All dwellings should utilise solar access to living areas where possible.

(c) All toilet cisterns to have a AAA dual flush rating. All showerheads to have a AAA rating. Appliances are to be water efficient, preferably with a AAA rating.

(d) Roof orientation and pitch of all new dwellings/buildings should be designed and suitable for potential use of solar collectors.

(e) Landscape design should assist in microclimate management through the location and selection of appropriate trees and planting allowing solar access to living areas of new dwellings.

(f) All building shall adopt:

- Waste recycling and water re-use strategies and actions.
- Energy and water efficient fittings.
- Stormwater run of infiltration, detention and treatment.
- Retention of suitable vegetation within the site and providing suitable re-vegetation where required.

(g) All common open space, pathways, and parking area lighting shall be powered by a grid interactive Photo-voltaic Solar System.

2.12. VISUAL & ACOUSTIC PRIVACY

OBJECTIVES

(i) To site and design buildings in a manner which considers the visual and acoustic privacy of nearby dwellings and private open space.

(ii) To contain noise between dwellings or in communal areas without reasonable transmission to adjoining dwellings.

(iii) Dwellings should be arranged so that reasonable internal privacy and privacy in respect to adjoining residences and private open space is achieved.

PERFORMANCE CRITERIA

(a) Any dwellings located close to Pennant Hills Road or affected by traffic noise from Pennant Hills Road are to comply with the criteria for road and traffic noise contained in the publication "Environmental Criteria for Road Traffic Noise", prepared by the Environmental Protection Agency May 1999.

(b) An acceptable acoustic environment can be achieved for noise sensitive rooms and for outdoor recreation spaces by means of:

- Use of noise resistant walls, ceilings, floors and roofing material.
- Site planing and layout.
- Location of noise sensitive rooms.
- Use of double glazing where required.
- Use of fencing, balconies and walls as noise buffers.
- Landscaping.

(c) Direct views from living rooms of dwellings into adjoining private open space or the interior of other dwellings is to be screened or obscured.

DEVELOPMENT CONTROLS

(a) The development should achieve LA10 (20 minute) noise level or less in habitable rooms, with windows and external façade doors closed, shall be less than 40dBA.

(b) The development should achieve LA10 (20 minute) noise level or less in habitable rooms, with windows and doors 'normally' open (i.e. at least 50% of flow area of the room), shall be less than 50dBA. This requirement may be equally satisfied by the alternate provision of either a mechanical or natural ventilated system or a special acoustic design solution as approved by Council.

(c) Dwellings that face Pennant Hills Rd are to be designed to achieve acceptable internal noise levels, based on AS 3671 – Road Traffic Noise Intrusion Guidelines.

(d) Dividing walls and floors shall be constructed to limit noise transmission to 45 STC (Sound Transmission Class) in accordance with part F(5) of the Building Code of Australia.

(e) An acoustic study will be required to demonstrate that the objectives and criteria for acoustic privacy can be met.

(f) All costs associated with provision of acoustic measures in (a) to (e) above are to be provided by the developer at no cost to the Roads and Maritime Services.

(g) Second storey windows on the elevations fronting 31-35 Sandringham Drive shall have a

minimum sill height of 1.5 metres from the second storey floor level except where obscured glass or similar material is used to restrict views into adjoining properties.

2.13. WASTE MANAGEMENT

Refer to Part B Section 4 – Multi Dwelling Housing and Part B Section 5 – Residential Flat Buildings.

2.14. STORAGE

OBJECTIVES

(i) To ensure that each dwelling has reasonable private storage space.

(ii) Storage requirements include household items either within the dwelling or in a secure garage.

DEVELOPMENT CONTROL

(a) At least 10 m^3 must be provided for storage per dwelling within the dwelling or within a lockable garage. If located within a garage it must not encroach into the parking space. Storage areas are to have a min height of 2.1 metres.

2.15. DRAINAGE AND WATER QUALITY

OBJECTIVES

(i) To provide for on-site detention of site drainage.

(ii) To ensure that development does not exacerbate downstream drainage problems.

(iii) To ensure the quality of water leaving the site does not create downstream water quality problems.

(iv) To allow for future provision of stormwater storage and reuse for individual dwellings.

PERFORMANCE CRITERIA

(a) Water sensitive urban design (WSUD) principle should be employed in the management of the sites stormwater in terms of water retention, reuse and cleansing.

DEVELOPMENT CONTROLS

(a) Council requires the preparation of a Stormwater Management Plan, which includes:

- On-site detention for the 1:100 year event to reduce the possible adverse impacts of overland flow.
- An on-site detention system is required which is likely to be in the form of underground detention tanks. The location of these to detain water should be considered as an integral part of the site design. It is important that the location of any infrastructure does not compromise other site design outcomes in terms of suitable landscaping.
- Drainage easements will be required where the development property does not drain directly into the existing stormwater drainage system or a public road.
- Erosion and sedimentation controls and plan are to be provided in accordance with the document "Managing Urban Stormwater from Construction Sites", produced by the NSW Department of Housing August 1998.
- Pollution control pits are required to ensure improved water quality at discharge point to Council's drainage system. These control pits can either be installed at the point of discharge or as a central unit prior to discharge into the detention system.
- Allow for provision of a communal rainwater tank, or storage facilities for the domestic and landscape reuse of stormwater, integrated into the OSD system, as allowed by Council. A rainwater re-use system with a minimum capacity of 2000 litres per dwelling (including residential flat building dwellings) must be provided. Re-use of the rainwater shall occur in accordance with the requirements set out in Appendix 2 Water Sensitive Urban Design of the Hills Development Control Plan.
- Developments within the Upper Parramatta Catchment area will have to comply with any requirements of the relevant Authority.

2.16. SECURITY

OBJECTIVES

(i) To ensure personal and property security within the site for residents and visitors.

(ii) To provide for proper demarcations between private and public spaces.

(iii) To enhance perceptions of community safety.

PERFORMANCE CRITERIA

(a) Buildings should be designed to overlook public and communal streets and spaces to provide for casual surveillance by residents.

(b) Buildings, fences and landscaping should clearly define territory and ownership of all public, communal, semi-private and private space.

(c) Appropriate lighting should be provided to all pedestrian paths between public and communal areas, parking areas and building entries.

(d) Building entries to provide security and safety for both residents and visitors.

(e) Anti Graffiti measures should be provided in the design of any fencing or walling to Pennant Hills Road.

2.17. ACCESS & ADAPTABILITY

OBJECTIVES

(i) To provide 'visitability' across common property and to provide convenient conditions for the use of strollers and similar.

(ii) To provide a small number of dwelling units suitable for use by disabled people.

DEVELOPMENT CONTROLS

(a) Applications for development approval shall be accompanied by an 'Access Plan' that demonstrates the compliance of the proposed development with Australian Standard 1428 Part 1.

(b) At least 1, or 5 percent of the units in any development of 20 or more units must be either:

- An accessible unit to Australian Standard 1428 part 2, suitable for a wheelchair user; or
- Meeting Class B adaptability under Australian Standard 4299.

(c) Each unit so provided above shall have an accessible car parking bay complying with Australian Standard 2890 for people with a disability, and be accessible to a pick-up and drop-off point.

(d) A lift is to be provided for all residential flat buildings to serve all dwellings over two storeys above ground level.

(e) A fence, with a lockable gate, shall be provided in a location on the site where it restricts pedestrian access through the site from Pennant Hills Road to Sandringham Drive. Only residents of the development should be permitted access through the gate.

2.18. CONTAMINATION ASSESSMENT

OBJECTIVES

(i) To ensure additional soil testing is undertaken prior to any development occurring to determine whether the site is contaminated.

(ii) To ensure if the site is identified as being contaminated that the site is remediated prior to any development proceeding.

DEVELOPMENT CONTROLS

(a) A further soil contamination report must be submitted with any development application for this target site to confirm whether or not the site is contaminated. The report will need to be prepared in accordance with Council's Guidelines for the Management of Contaminated Sites. If the soil contamination report identifies any contamination a remediation plan will be required to be submitted prior to any approval being granted by Council.

Note. A Preliminary Soil Contamination Study – May 2003 has been submitted to Council. While the report indicates that no soil contamination found further testing will be required.

(b) Where a remediation plan is submitted and endorsed by Council any development approval granted will be in the form of deferred commencement consent. The deferred commencement condition will require remediation of the site in accordance with the remediation plan before final approval is granted.

2.19. DEVELOPER CONTRIBUTIONS

Applicants should consult with Council's Section 94 Contribution Plan.

2.20. SYDNEY WATER REQUIREMENTS

OBJECTIVE

(i) To ensure the requirements of Sydney Water are addressed in the development of the site.

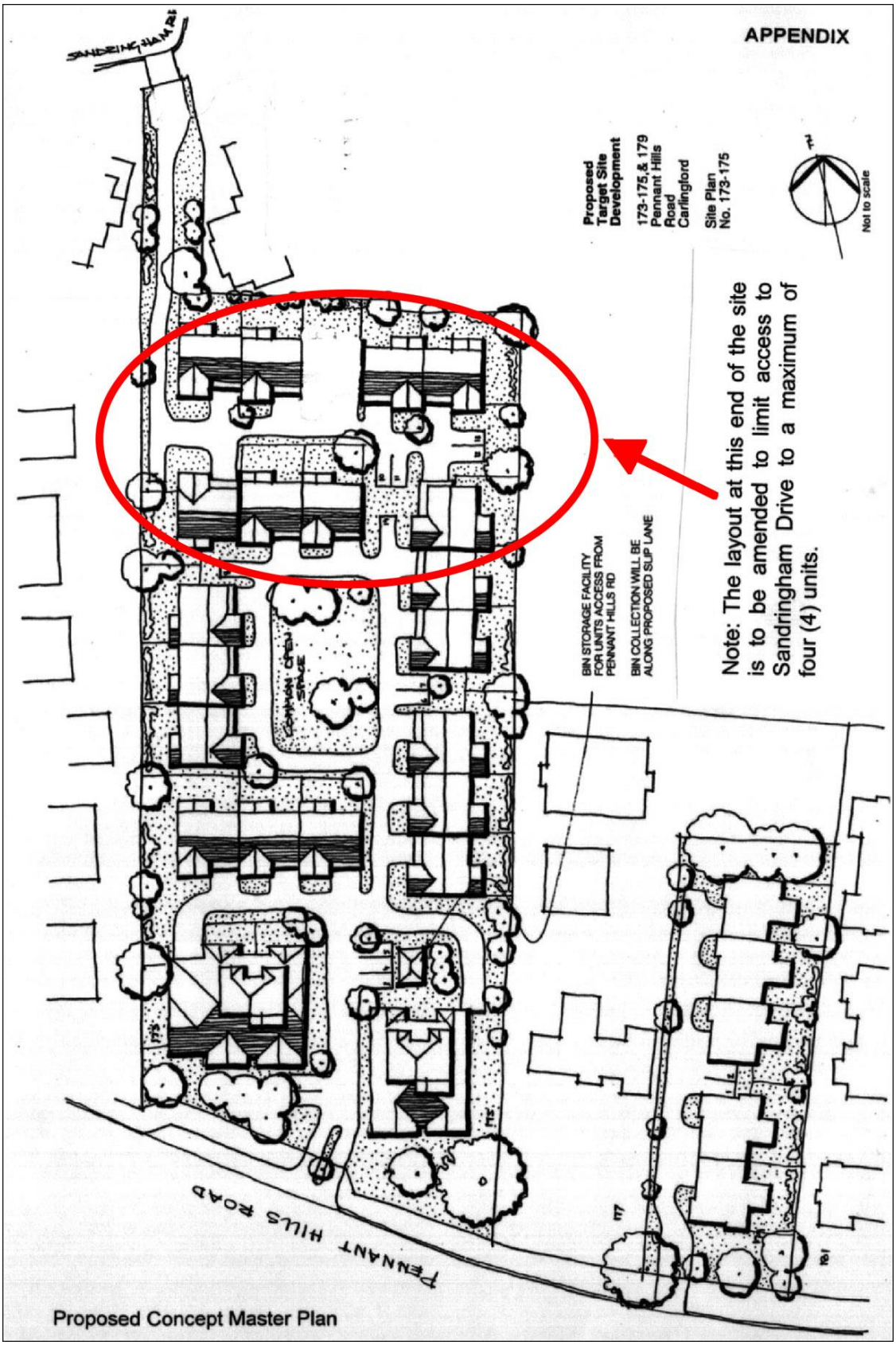
DEVELOPMENT CONTROLS

(a) A Section 73 Certificate must be obtained from Sydney Water. This will be a condition of any development approval granted by Council.

(b) All development over or adjoining any Sydney Water Services must comply with Sydney Water's "Guidelines for Building Over/Adjacent to Sydney Water Sewers"; (available from Development Coordination Branch of Sydney Water or Council's Forward Planning Team*).

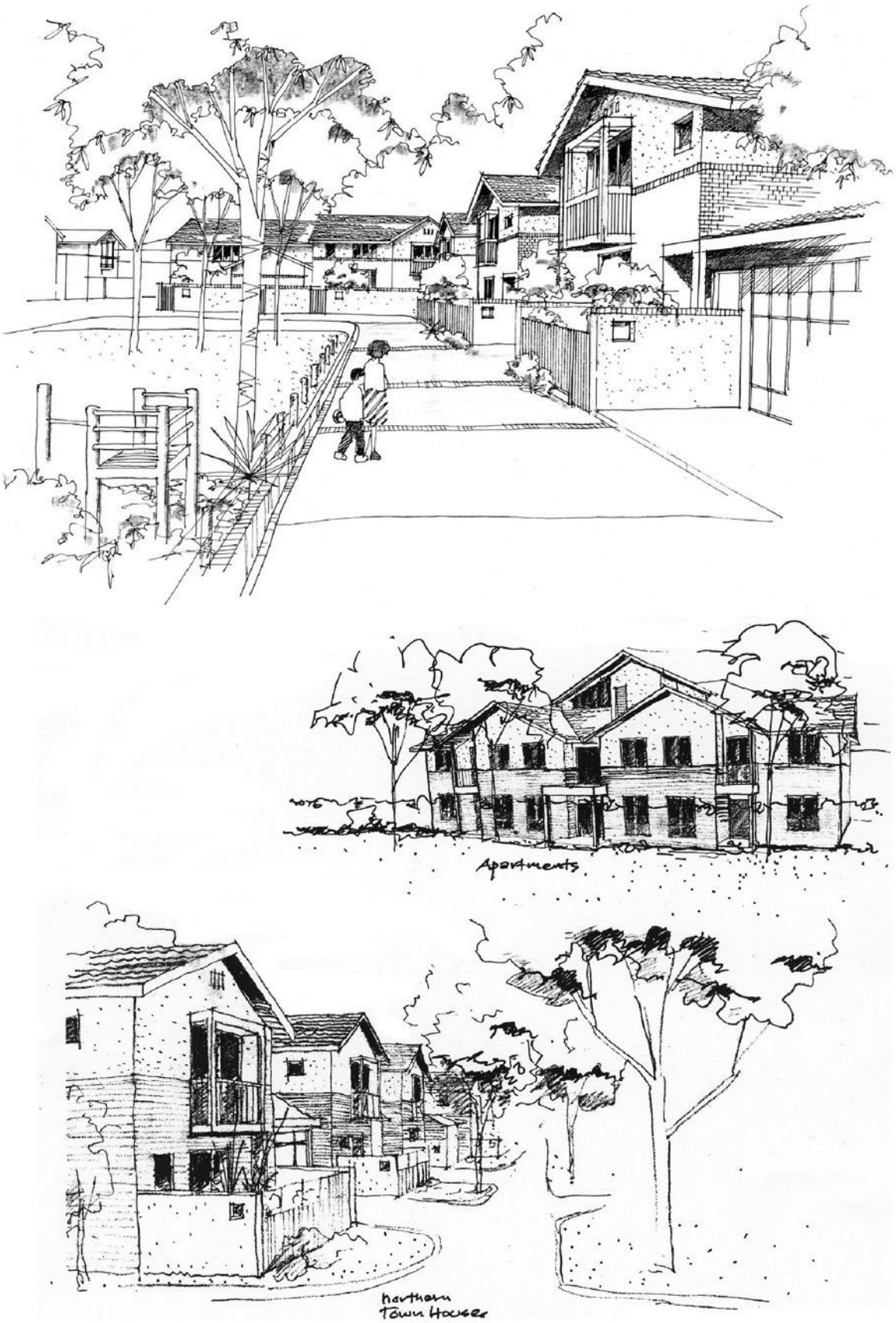
(c) In preparing the landscape plan for the site care should be taken to ensure species that have invasive root systems, that could potentially cause damage to water and sewer pipes, are not used. A schedule of species that Sydney Water consider unsuitable for propagation near water and sewer pipes are available from the Development Coordination Branch of Sydney Water or Council's Forward Planning Team*.

* Council's copies of these documents are saved as Doc No4734111 in ECM.



PROPOSED CONCEPT MASTER PLAN

APPENDIX 1



PROPOSED BUILDING FORM AND CHARACTER

The Hills Development Control Plan (DCP) 2012

www.thehills.nsw.gov.au

THE HILLS Sydney's Garden Shire







Part D Section 5
Kellyville / Rouse Hill Release Area

D5

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1. INTRODUCTION

This Section of the DCP must be read in conjunction with Part A – Introduction of this DCP.

This Section of the DCP consists of this written document and four accompanying maps (Sheets 1, 2, 3 & 4) which can be viewed at Council's Customer Service Centre or www.thehills.nsw.gov.au.

1.1. LAND TO WHICH THIS SECTION OF THE PLAN APPLIES

This Section of the DCP applies to land within the Kellyville/Rouse Hill Release Area as outlined by a bold black line shown in Figure 1. Reference should be made to the accompanying maps (Sheets 1 to 4) for detailed boundary location.

1.2. OBJECTIVES AND DEVELOPMENT CONTROLS

This Section of the DCP provides detailed guidance for persons wishing to develop within the Kellyville/Rouse Hill Release Area and seeks to ensure the orderly development of the area through the application of planning objectives and controls specific to the release area. The controls relate to subdivision planning, road design, dwelling design and small lot housing.

The specific objectives of this Section of the DCP are as follows:

(i) To establish a single comprehensive and integrated set of development objectives and controls for most aspects of residential development occurring within the release area;
(ii) To implement the aims and objectives of LEP 2012 with respect to residential development;
(iii) To ensure that residential development is compatible with and has minimal impact upon surrounding development and offer high levels of amenity, solar access and energy efficiency for future residents;
(iv) To control the character and quality of residential development consistent with the expectations of existing release area residents;
(v) To ensure that the housing market recognises the community's changing demographic profile and provides a mix of household types catering for the different stages in the household life-cycle; and
(vi) To ensure cost effective residential development reflecting appropriate community standards for health, safety, environmental protection and amenity.

A number of planning investigations and studies resulted in the zoning framework for the release area and assisted in the preparation of this Section of the Development Control Plan. These documents are listed below and in Part A of the DCP and can be read in conjunction with this Section of the DCP to enable a greater understanding of Council's planning objectives for the area:

i. Kellyville/Rouse Hill Landscape and Urban Design Strategy, 1993

ii. Kellyville/Rouse Hill Open Space and Recreation Plan, 1998

iii Kellyville/Rouse Hill Release Area Contributions Plans No's 8A – 8E.

The controls in this Section are not an exhaustive list of controls applicable to development within the Kellyville/Rouse Hill Release Area. In addition to the following Section references, this Section must be read in conjunction with Part A – Introduction of the DCP.

- Part B Section 2 – Residential
- Part B Section 3 – Dual Occupancy
- Part B Section 4 – Multi Dwelling Housing
- Part B Section 5 – Residential Flat Buildings
- Part C Section 6 – Flood Controlled Land

For example where residential flat buildings are proposed within the release area, the relevant provisions of this plan will apply in addition to Part B Section 5 – Residential Flat Buildings.

In the event of any inconsistency between this Section of the DCP and any other Sections of the DCPs, the provisions of this Section shall prevail only to the extent of the inconsistency.

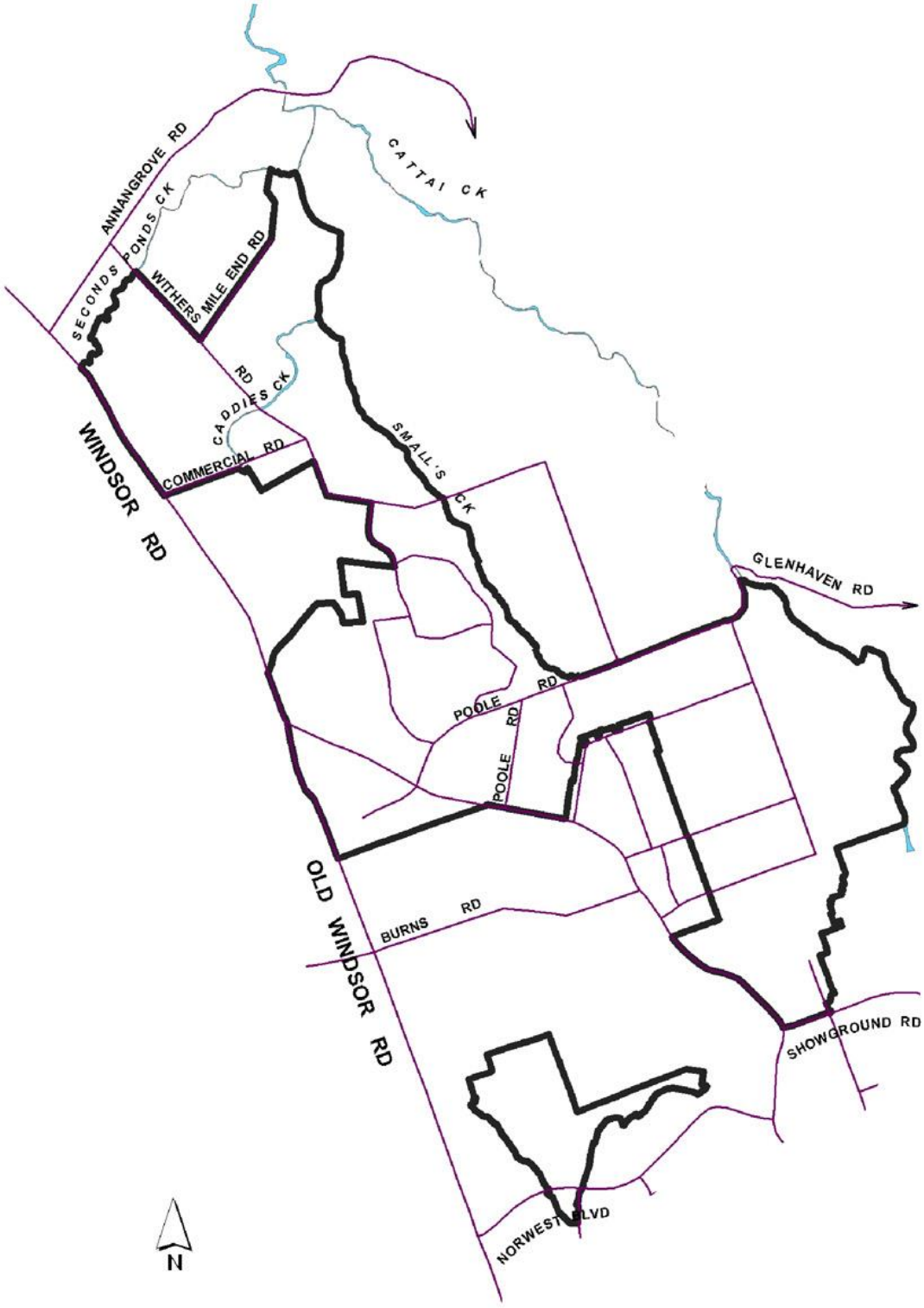


Figure 1 Land to which plan applies (not to scale)

1.3. DEVELOPMENT CONTROL MAPS

OBJECTIVE

(i) *To ensure the release area develops in an orderly manner consistent with the identified land use structure and current zoning framework.*

DEVELOPMENT CONTROL

(a) All applications for residential development particularly subdivision should conform to the land use structure and pre-planned road layout as shown on the maps accompanying this Section of the DCP.

1.4. SITE ANALYSIS

OBJECTIVES

(i) *To encourage a comprehensive approach to site planning, design and assessment of residential development.*

(ii) *To facilitate assessment of how future dwellings relate to their immediate surroundings and each other.*

(iii) *To facilitate development of a design that minimises the negative impacts on the amenity of adjoining residential development in accordance with Council's ESD objective 7.*

(iv) *To ensure development is compatible with land capability.*

(v) *To minimise adverse impacts on the environment in accordance with Council's ESD objectives 3 and 4.*

DEVELOPMENT CONTROLS

(a) Development should be designed to respect site constraints such as topography, drainage, soil, landscapes, flora, fauna and bushfire hazard.

(b) Disturbance to existing natural vegetation and landforms, watercourses, wetlands and overland flow paths should be minimised.

(c) Development on land adjoining bushland reserves should incorporate measures (such as setbacks and buffers) to prevent any impact on the reserves.

(d) Development should be sited on the area of land presenting the least topographic constraints.

(e) Development should be sited away from steep slopes (particularly those containing natural vegetation) so that, where possible, these features can be kept in a natural state.

SUBMISSION REQUIREMENTS

For subdivision applications the site analysis must include:

- the site and its surrounds (Refer to Appendix 2 of this Section).
- a plan describing the site (Refer to Figure 2 of this Section).
- a statement explaining how design and development has regard to the site analysis carried out in one above.
- demonstration of how allotment /dwelling locations and dimensions respond to topography, site constraints and achieve solar orientation.
- the results of the tree survey/assessment and identification of trees/and or bushland to be protected (refer section 2 of this Section).

For all applications proposing one or more dwellings the site analysis must include:-

- the site and its surrounds (Refer Appendix 2 of this Section).
- a plan describing the site (Refer Figure 2 of this Section).
- calculation of built upon area – site coverage.
- a statement explaining how design and development has regard to the site analysis carried out in one above.
- demonstration of how allotment / dwelling locations and dimensions respond to topography, site constraints and achieve solar orientation.

Applications for all other residential development types are to submit a Site Analysis Plan in accordance with the provisions of the relevant Sections of this Development Control Plan.

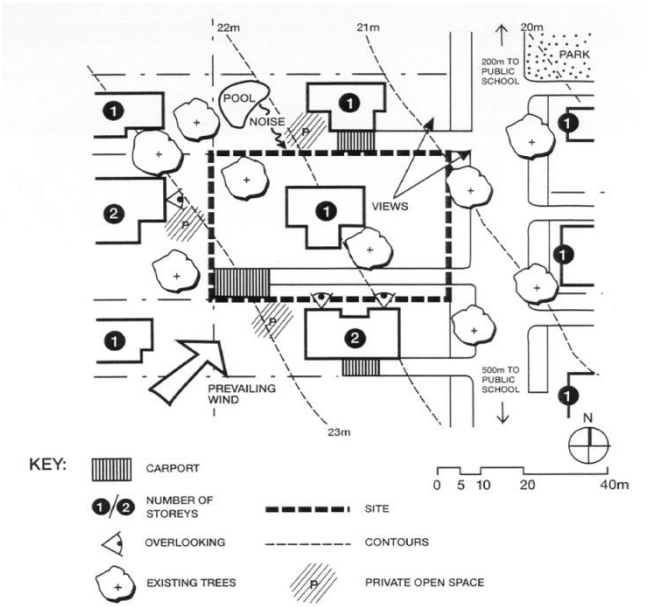


Figure 2 Site analysis plan

1.5. DEVELOPER CONTRIBUTIONS

Refer to Section 94 Kellyville/Rouse Hill Contributions Plan No's 8A – 8E.

1.6. BUSH FIRE HAZARD MANAGEMENT

OBJECTIVE

(i) *To reduce the risk to life and property in areas of bushfire risk.*

DEVELOPMENT CONTROL

(a) Council has adopted the NSW Rural Fire Service Guidelines entitled 'Planning for Bushfire Protection 2006'. Development subject to bushfire risk will be required to satisfy the requirements of these guidelines.

2. SUBDIVISION

2.1. TREE AND BUSHLAND PROTECTION

The retention of trees and bushland in new development areas provides a range of benefits to the new home buyer including a contribution to the character of the neighbourhood, spatial definition and interest. Environmental values gained include:

- the possible retention of wildlife links.
- an ecological framework which sustains overall environmental health and ecological processes.
- improved aesthetic values following subdivision and building development.

OBJECTIVES

(i) *To ensure significant bushland is substantially retained and protected and that development enhances and complements this bushland.*

(ii) *To conserve and protect the biodiversity of the release area including habitats of threatened flora and fauna species and communities.*

(iii) *To ensure development and subdivision adjacent to bushland does not detrimentally affect the continued survival of that bushland through appropriate protection mechanisms.*

(iv) *To provide a basis for adapting lot dimensions and areas, particularly within the Fringe Density areas to enable the retention of trees and bushland.*

DEVELOPMENT CONTROLS

(a) Prior to development for the purposes of subdivision or small lot housing the applicant is to prepare a tree survey utilising the services of a qualified arborist. This plan will ensure an understanding of the condition of existing trees which will assist in analysing the site opportunities and is to be submitted at subdivision application stage. The tree survey must incorporate a survey of all trees as defined under Council's Tree Preservation Order and all bushland, as defined by SEPP 19 - Bushland in Urban Areas.

(b) The tree survey/assessment must include:
- species identification of all trees;
- a rating of the condition of all existing trees, their health, aesthetic value and life expectancy as a basis for ascertaining their value for retention;
- an overall rating for groups of trees where they contribute to the area as a mass;
- definition of tree protection zones and measures consistent with the requirements outlined below;
- details indicating the position of trees/bushland in relation to proposed roads and building platforms; and

- identification of trees and bushland to be retained following subdivision.

The tree survey may also include any other vegetation that the arborist considers may contribute to the landscape if retained, particularly where the survey includes bushland or regenerating bushland.

(c) Trees and bushland nominated for retention and proposed protection measures are to be submitted with the subdivision application and shown on the site analysis plan. Protection mechanisms must include:
   - protective fencing around trees and bushland to be retained to prevent damage; and
   - fences are to be constructed to the drip-line of existing vegetation as a minimum and to prevent damage within the drip-line/protection zone by limiting access into it (Refer to Figure 3),

(d) Where threatened species or communities are identified and are to be conserved the following actions should be undertaken:-
   - protection measures in accordance with the requirements of the relevant recovery plan; identification on site of the extent of the community to be retained;
   - plan of management for the land outlining how the land is proposed to be managed in the future; and
   - the provision of chain-wire/protective fencing (min 1.2 metres in height) around areas where rare flora and fauna are to be retained and to remain in place during the duration of the subdivision and building construction.

(e) Any new tree plantings are to be consistent with the tree species selection and planting guidelines provided in Appendix 1 of this Section of the DCP.

2.2. DENSITY AND ALLOTMENT SIZE

This Section of the DCP incorporates density targets which were derived from an analysis of their location to surrounding uses, and topographic and vegetation constraints. All residential development is required to meet these targets. The location of the different density types are shown on the maps accompanying this Section of the DCP.

They are described as follows:

- **Fringe Density** areas typically occur in environmentally sensitive areas and are to be dominated by large lot detached housing with environmentally significant features of the site are protected. The density range for these areas is 5 to 8 dwellings per net hectare, however the minimum density will depend on individual site constraints;
- **Cluster Density** areas are similar in character to the conventional lot subdivisions and are required to be developed within the density range of 10 to 13 dwellings per net hectare. The area requires a mix of residential allotment sizes;
- **Local Centre Density** areas typically occur within close proximity to community and/or commercial facilities and are similar to cluster density areas, however, the density range is between 15 to 20 dwellings per net hectare; and
- **Town Centre Density** areas are in close proximity to either the Regional Centre or the Kellyville District Centre. The density range for these areas is 30 to 35 dwellings per net hectare. Due to the high density requirement, it is envisaged that a major form of the housing will take the form of multi-unit housing.

OBJECTIVES

(i) *To facilitate a range of lot sizes and housing types within the release area to meet changing demographic profiles and housing requirements.*

(ii) *To locate smaller lots and multi unit housing types within close proximity to community facilities, open space, public transport, and commercial centres.*

DEVELOPMENT CONTROLS

(a) Residential development shall achieve the densities within the range of the applicable density type as shown in Table No.1.

(b) All residue allotments created for future small lot housing developments are to have the minimum dimensions of 40 metres x 50 metres.

(c) Subdivision applications seeking to create residue parcels for future small lot housing developments shall be accompanied by a concept plan, consistent with the provisions of this Section of the DCP, demonstrating the attainment of the density provisions of this plan.

(d) All residential subdivisions are required to provide a mix of allotment sizes.

Table 1 Density requirement

Residential Type	**Minimum Density**	**Maximum Density**
Fringe	5 dwg/net ha	8 dwg/net ha
Cluster	10 dwg/net ha	13 dwg/net ha
Local Centre	15 dwg/net ha	20 dwg/net ha
Town Centre	30 dwg/net ha	35 dwg/net ha

(e) A number of development constraints apply to those areas indicated with a Development Restriction on the maps accompanying this Section of the DCP. They are:

- All areas affected by the Development Restriction are required to submit a Development Application for the filling of the land in line with Part C Section 6 of this DCP – Flood Controlled Land; and
- The area of land to the north of Georgia Terrace affected by the Development Restriction shall not be developed for residential purposes until such time as the adjacent detention basin has been constructed. Filling of the land will be required to a height of one metre above the crest of the adjacent detention basin embankment tapering down to the natural surface level downstream of the basin.

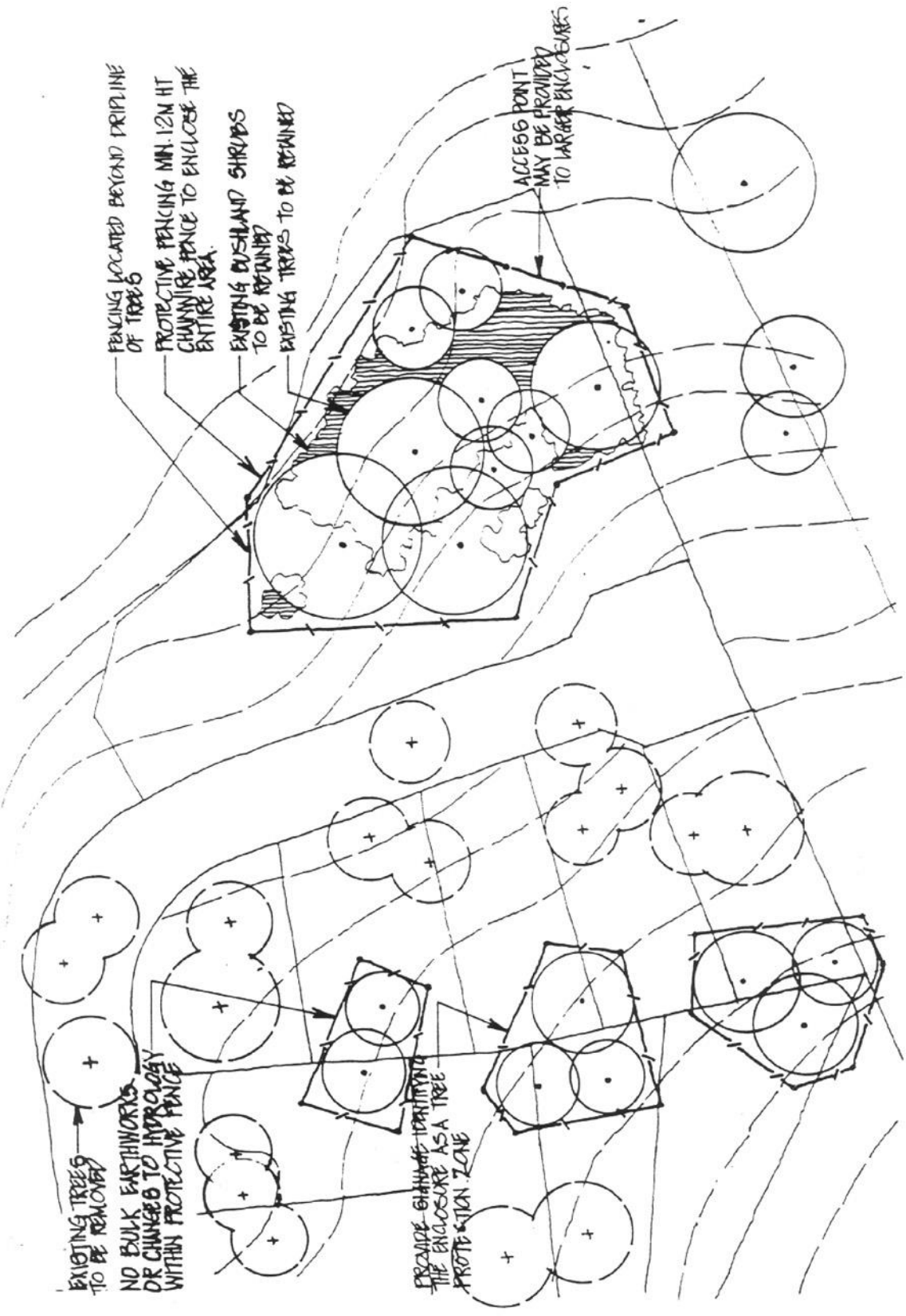


Figure 3 Protective fencing around trees and bushland

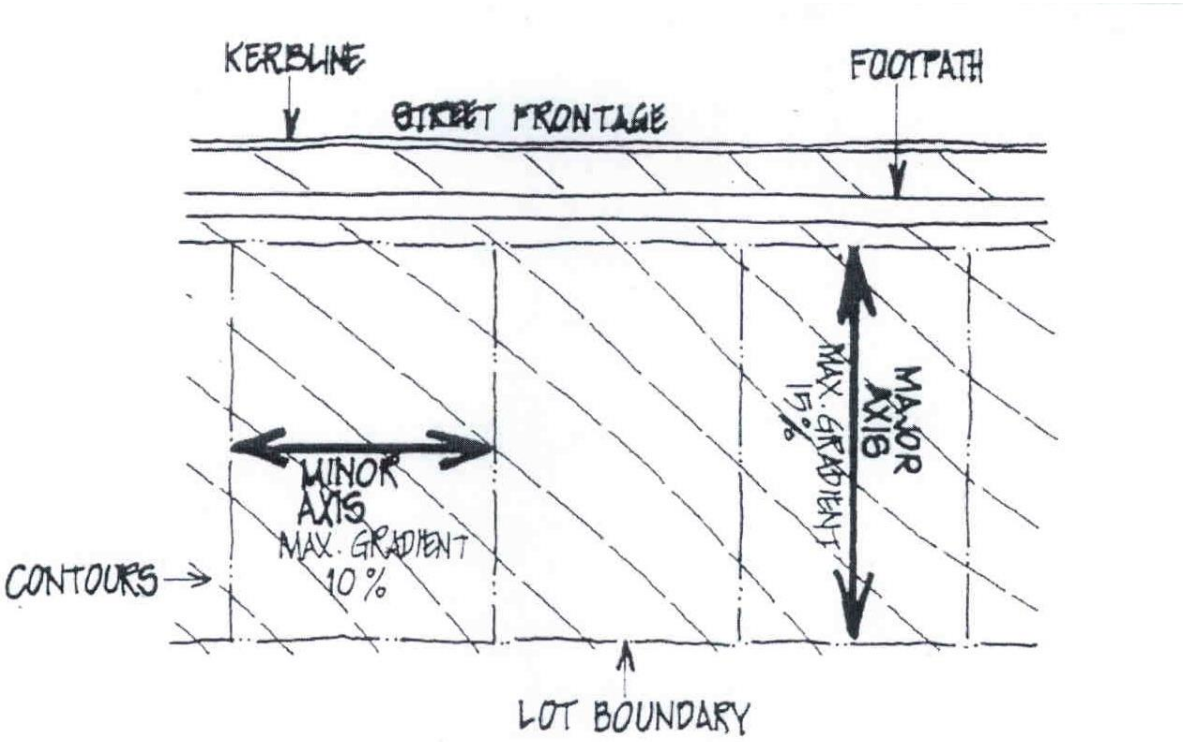


Figure 4 Small lot development

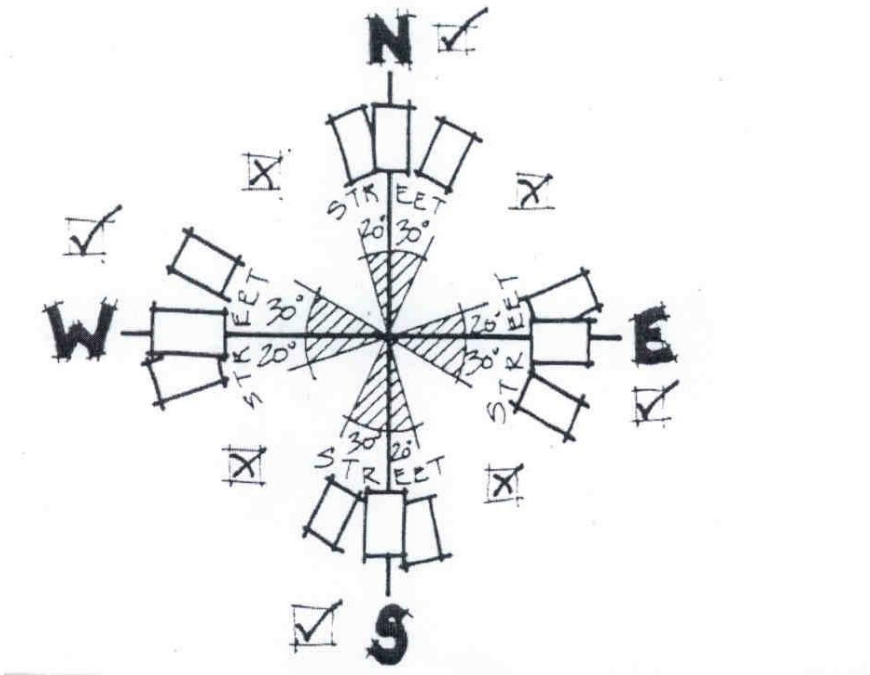


Figure 5 Permissible orientation

2.3. ORIENTATION AND SHAPE OF ALLOTMENTS

The shape and orientation of allotments and dwellings have a fundamental bearing on the level of comfort in a dwelling and the ability to take advantage of solar access, energy conservation and generation.

OBJECTIVES

(i) *To ensure lots are orientated to enable microclimate management and that environmental features are protected.*

(ii) *To maximise solar access to dwellings, internal dwelling spaces, and associated private outdoor spaces.*

DEVELOPMENT CONTROLS

(a) Each allotment shall be orientated and of a shape to enable the siting of a dwelling and ancillary outbuildings, outdoor space, and vehicle parking so as to allow the house to receive direct sunlight. The allotment should also be able to satisfy the other design provisions of this Section of the DCP.

(b) Dimensions of lots are required to be adequate to protect solar access on-site, taking into account likely dwelling size and the relationship of each lot to the street.

(c) Lot sizes and dimensions are required to enable dwellings to be sited to protect natural or cultural features, and respond to site constraints including slope, vegetation, drainage or bushfire risk.

(d) Lot frontages are required to be orientated to streets and open spaces to assist personal and property security, deterrence of crime and vandalism, and surveillance of footpaths, drainage lands and public open space.

(e) In standard subdivision applications a minimum of 70% of all lots are required to be orientated to facilitate siting of dwellings to take advantage of solar access by ensuring the long axis of lots are within the range N20W to N30E, or E20N to E30S, refer to Figure 5.

Variations to the above orientation requirement will be considered where it can be demonstrated that the parcel to be subdivided is too constrained to make the orientation within the specified range possible.

(f) All allotments are to be rectangular in shape and not splayed at the end of cul-de-sacs.

(g) All allotments (not including small lot housing or multi-unit housing) are to have a minimum width of 15 metres and a minimum depth of 30 metres.

(h) All allotments are required to be capable of containing a rectangular building platform of 10 metres x 15 metres within the required setbacks.

(i) The access handle to a single battleaxe lot is required to have a minimum width of 4 metres, and 6 metres where the access handle provides access to 2 lots.

2.4. ROAD PLANNING

OBJECTIVES

(i) *To provide an acceptable level of access, safety and convenience for all street and road users in residential areas, while ensuring acceptable levels of amenity, and minimising the negative impact of traffic.*

(ii) *To provide a legible and permeable movement network for pedestrians and cyclists along streets and paths to points of attraction within and adjoining the development.*

(iii) *The road network is based on a hierarchy of nine road/street types, as shown in Figures 6, and include:*

- **Arterial Roads** such as Windsor Road and Old Windsor Road carry major regional traffic flows and are largely the responsibility of the State Government;
- **Sub-Arterial Roads** are expected to carry between 5000 to 15000 vehicles per day and will require one to two traffic lanes in each direction. Direct residential access to these roads is not normally permitted unless stated on the maps accompanying this Section of the DCP;
- **Collector Streets** collect traffic from the access places and access streets and carry higher volumes of traffic. A reasonable level of residential amenity and safety is to be maintained by restricting traffic volumes and vehicle speeds through street alignment and intersection design;
- **Access Street** is a street providing local residential access with shared traffic, pedestrian and recreation use, but with local traffic priority;

- **Access Place** is a minor street providing local residential access with shared traffic, pedestrian and recreation use, but with pedestrian priority; and
- **Access Way** is a minor street providing local residential and cycleway access where house lots front one side of the street only, and the other side of the street is either public open space or a drainage reserve.

The specific objectives of locating Access Ways adjacent to open space and trunk drainage areas are:

(i) *To facilitate the orientation of allotments and dwellings to front the open space/drainage areas.*

(ii) *To enhance the outlook, setting and amenity of subdivisions adjoining open space/drainage areas.*

(iii) *To increase pedestrian accessibility to these areas.*

(iv) *To promote passive surveillance of publicly accessible areas thereby increasing safety.*

The planning objectives for the intersection of Old Windsor Road and Windsor Road are as follows:

Short Term - To incorporate traffic management and safety improvements including signalisation and any such works as proposed are to be funded by the Roads and Maritime Services.

Long Term - The intersection or treatment to Windsor and Old Windsor Road to incorporate either local access or service roads to facilitate the orderly development of commercially zoned lands north of Whitehart Bridge.

DEVELOPMENT CONTROLS

(a) The street and road network should conform to the pre-planned road layout as shown on the maps accompanying this Section of the DCP.

(b) Internal intersections are to be either T-junctions, roundabouts or controlled by other appropriate traffic management treatments to slow and control traffic.

(c) Street leg lengths, radius of bends and speeds at slow points are to comply with the requirements of AustRoad Guidelines 1992. Care should be taken to ensure that the changed street conditions do not become a hazard to an unsuspecting motorist. Sudden and unexpected changes in driver conditions are another cause of accidents. This reinforces the need for street design and construction which reflects the required driver behaviour.

(d) An acoustic report prepared by a suitably qualified consultant is to be submitted with all residential development applications for land adjacent to existing or proposed Arterial and Sub-arterial roads and should comply with the EPA publication 'Environmental Criteria for Road Traffic Noise' (May, 1999).

(e) In regard to roads that cross natural drainage channels, the construction of bridges with piered approaches is preferred to culverts in order to maintain stream corridor function. Any works within, or alterations to, natural drainage systems will require the necessary approvals of the Office of Water/Office of Environment and Heritage.

(f) Direct vehicular access to Arterial and Sub-arterial roads will not be permitted where alternate access is available. Access will not be restricted to any property from Arterial or Sub-Arterial roads until such time as alternate access is available.

(g) Roads, in particular Access Ways are, wherever possible, to occur along and adjacent to public open space or drainage lands. Where Access Ways front open space or drainage land the costs associated with their construction is the responsibility of the developer.

(h) Street networks are to conform to the requirements set out in Table 3: Characteristics of Street Types.

(i) When travelling from any dwelling to the most convenient collector street or higher order road no more than three turns should be required.

(j) The driving distance from any dwelling to the nearest collector or higher order street is a maximum of 700 metres.

(k) Street and road junctions are to be spaced as set out in Table 2.

(l) The street network is to be designed to limit target street speeds to those specified in Table 3. This may be done by limiting street leg length, and providing appropriate slow points at the end of each leg. Slow points may be provided by a variety of mechanisms including street junctions, introduction of bends and surface obstructions. Speed may also be restrained by

a continuous series of bends, or by a combination of approaches.

(m) The requirements for acoustic fencing along Arterial and Sub-arterial roads are to consist of the following:

- the fence and associated footings to be sited entirely within private land.
- where possible earth mounding along sub-arterial roads should be considered in association with the fencing to enhance the effectiveness of noise attenuation.
- timber fences are to be constructed from hardwood or treated pine with low maintenance finishes.
- coloured and painted finishes are to be avoided.
- fencing and any associated acoustic measures are to be provided for the full length of the subdivision adjoining an arterial or sub-arterial road.

(n) The construction standards for fencing are to include:

- 1800mm high lapped and capped paling fence with three rails.
- paling and capping to have a minimum overlap of 35mm.
- paling to have a minimum thickness of 20mm.
- metal strapping is to be provided on external side to prevent paling removal.

(o) If noise consultant reports recommend a fence greater than 1800mm, then a solid panel material is required. Suitable construction materials may include lightweight aerated concrete, dense concrete panels or masonry walls.

(p) The fencing requirement along sub-arterial roads is indicatively shown in Figure 9.

Table 2 Minimum junction spacing

Road Type	Typical Average Junction Spacing (metres)	Minimum Indicative Staggered Junction	Traffic Volumes (Vehicles per day)
Access Place	NA	NA	<300
Access Street	40	40	300 to 2000
Collector Street	40	40	2000 to 3000 (minor) 3000 to 6000 (major)
Sub-Arterial	150	200	5000 to 15000
Arterial	500	200	10,000 and over

Table 3 Characteristics of street types

Street Type	Maximum Traffic Volume(1)	Maximum Number of Dwellings	Design Speed km/hr(2)	Carriageway Width (m) (3)	Verge Widths	Road Reserve	Footpath Required
Access Way (Fronting open space)	100 veh/d	10	15	6.0 metres (4)	3.5 metres*(5)	10.5 metres	No
Access Place	300veh/d	30	30	7.5 metres	3.5 metres*	14.5 metres	No
Access Street	2000veh/d	200	40	8.5 metres	3.5 metres*	15.5 metres	Yes 1.2 metres wide one side only
Collector	3000veh/d with access to lots	1000	50 (20 at ped/cycle crossings)	9.5 metres	3.5 metres*	16.5 metres	Yes 1.5 metres wide both sides

NOTE:

1. For single dwelling allotments apply traffic generation rate of 10 veh/day per lot (equivalent to approximately 1 veh/day in the peak hour) unless a lower rate can be demonstrated.
2. See Council's Design Guidelines for Subdivisions and Developments for specific operating speeds.
3. Widening required at bends to allow for wider vehicle paths (using Austroads Turning Templates). Also refer advisory note at rear of this document.
4. Maximum length of carriageway is 80 metres.
5. Council will consider a reduction in the verge width along the open space side down to a minimum of 1m.

* Verges may also require an additional widening requirement for the provision of a pedestrian/cycleway path, refer to section 2.9: Public Open Space of this Section of the DCP.

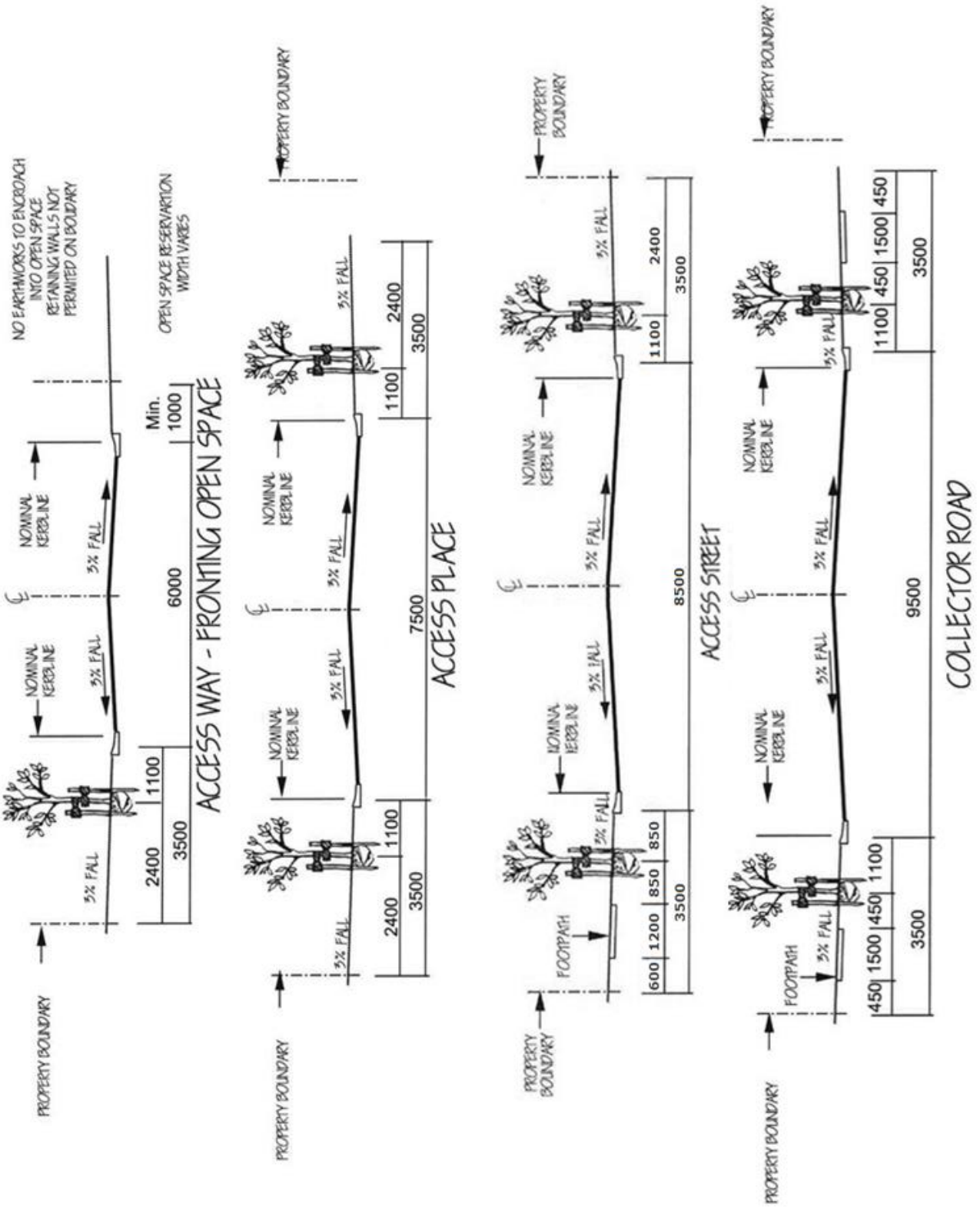


Figure 6 Road hierarchy

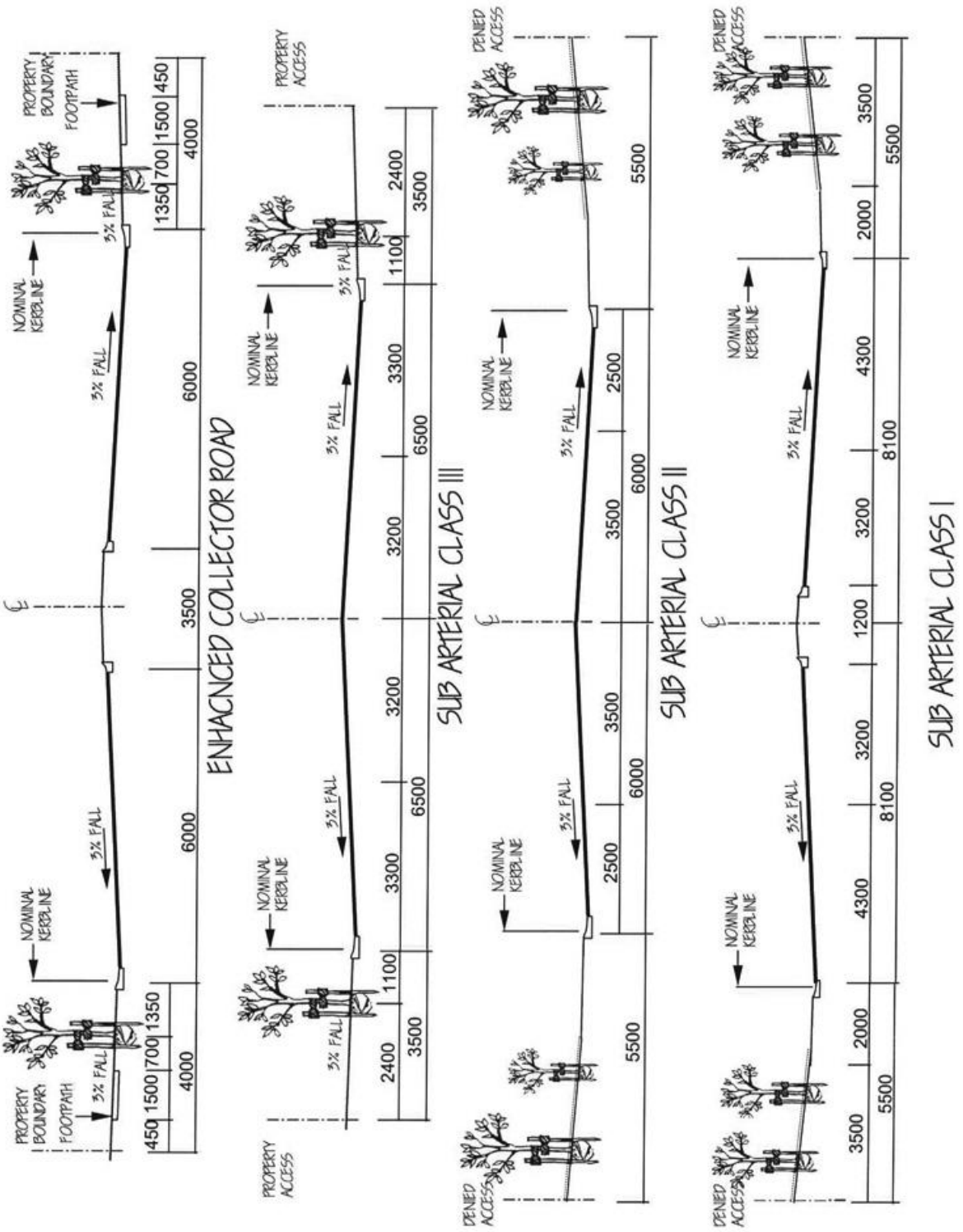


Figure 6 Road hierarchy (cont)

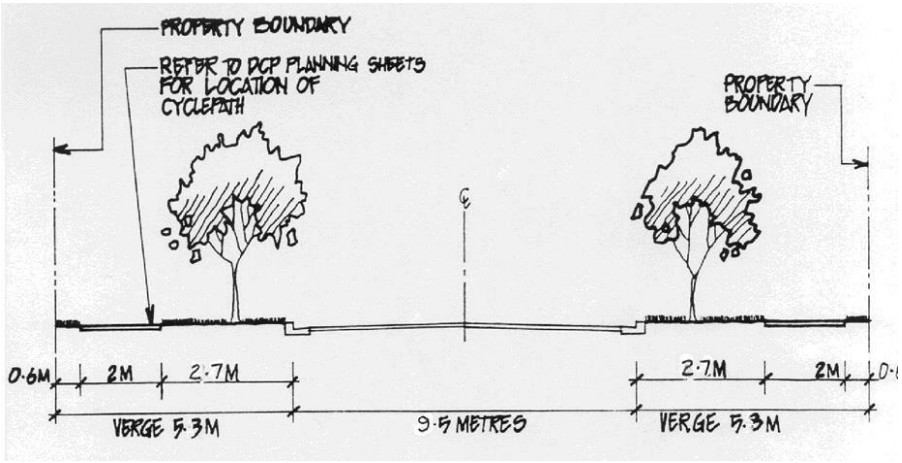


Figure 7 Road widening for major open space links

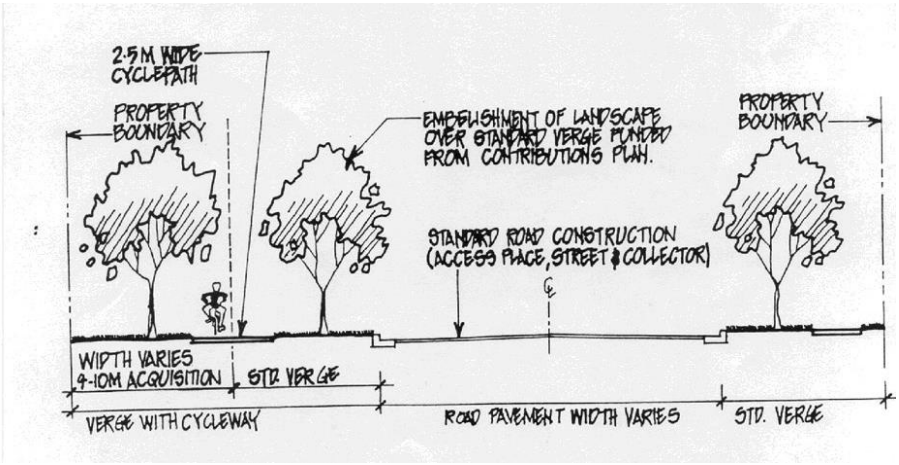


Figure 8 Collector road construction within existing road reserves

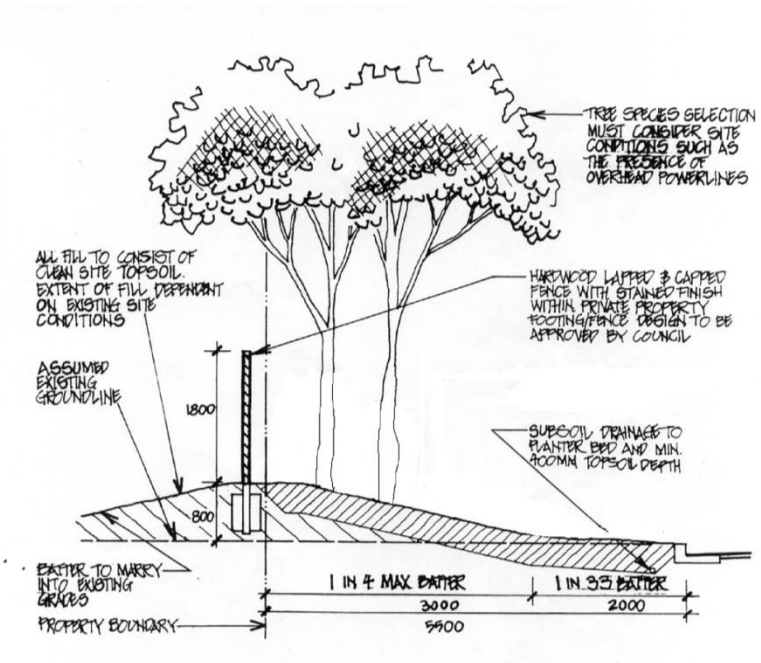


Figure 9 Indicative example of noise attenuation along sub-arterial roads

2.5. ROAD DESIGN AND CONSTRUCTION

OBJECTIVES

(i) *To ensure sufficient carriageway and verge widths are provided to allow streets to perform their designated functions within the street network and to accommodate public utilities and drainage systems.*

(ii) *To encourage the use of residential streets by pedestrians and cyclists, and allow cars, buses and other users to proceed safely without unacceptable inconvenience or delay.*

(iii) *To provide street geometry consistent with the needs of the street function, physical land characteristics and safety.*

DEVELOPMENT CONTROLS

(a) On collector streets, which function as two-way bus routes, a travelled way allowing unobstructed movements in both directions is required. Safety at bus stops, particularly the overtaking of stationary buses, is also an important design consideration. Speed control through design is a fundamental principle of this Section of the DCP. The alignment and geometry of all collector streets are to be designed for the efficient and unimpeded movement of buses.

(b) On access streets and access places there will be only light traffic and the travelled way should allow for unobstructed movement in one lane as well as passing opportunities. As speeds are low and there are entrance drives where passing can take place, a narrow pavement is acceptable.

(c) The design of the carriageway is to discourage motorists from travelling above the intended speed by reflecting the functions of the street in the network. In particular the width and horizontal and vertical alignment is not to be conducive to excessive speeds.

(d) Roundabouts, street crossfalls, longitudinal gradient, vehicle turning movements and sight distances are to comply with Council's Design Guidelines Subdivisions/Developments.

(e) Carriageway widths for each type of street are to be as specified in Table 3: Characteristics of Street Types.

(f) Minimum verge widths for each street type are to be as specified in Table 3. Verge widths may need to be increased to allow space for provision of services, larger scale landscaping, indented parking, future carriageway widening, retaining walls or cycle paths.

(g) Streets are to be designed to meet the target street speeds in Table 3 for each street type.

(h) Where the termination of a street is visible from the entry street, T-heads should be used.

(i) No retaining walls are to be constructed along the edge of roads fronting open space and drainage areas.

(j) Street trees are to be provided in all residential subdivisions in the alignments shown in Figure 11.

(k) All collector roads which are to be constructed within existing previously rural road reserves are to be aligned as shown in Figure 7.

(l) Street tree planting is to be provided to all streets with a spacing of between 7 and 10 metres, with a minimum of one tree per lot frontage. Corner lots will have a minimum of two street trees and normally three trees. The location of street trees must complement proposed driveway locations.

(m) Street tree planting will only be permitted within publicly dedicated roads following approval of a tree planting plan prepared by a Landscape Architect. The early provision of street tree planting as part of subdivision works will only be agreed to where the planting includes tree guards that will protect the trees during building construction. Refer to Figure 4 of Part C Section 3 – Landscaping of The Hills DCP 2012 for details of minimum construction standards.

(n) All plans documenting proposed street tree planting must indicate the location of Sydney Water sewer pipes including where they enter a public road reservation.

(o) Street tree species must be drawn from the landscape character zone maps and tree planting matrix in Appendix 1 of this Section of the DCP. Refer to Part C Section 3 – Landscaping of this DCP for guidance on street tree planting on Access Way, Access Place and Access Street.

(p) For all sub-arterial roads landscape works in roundabout islands may include low maintenance groundcover planting and native grasses with a mature height of up to 0.5 metres as well as clear stemmed tree planting. A metered water supply point and subsurface drainage is required in all small island planter beds at the developer's expense. Refer to Figure 10 for details of landscape standards.

2.6. STORMWATER MANAGEMENT

OBJECTIVES

(i) *To prevent stormwater and flood damage to properties arising from the subdivision of land.*

(ii) *To ensure the statutory requirements of the Office of Environment and Heritage is considered at the early stages of land development.*

(iii) *To contain nuisance flows to a level which is acceptable to the community, and ensure the street system operates adequately during and after major storm events.*

DEVELOPMENT CONTROLS

(a) Prior to any pre-lodgement meeting held with Council consultation with Office of Environment and Heritage should occur where development is proposed adjoining a stream, river or similar.

(b) A riparian zone may be required by Office of Environment and Heritage is to be retained and enhanced along all streams, as a means of conserving stream health, fauna habitat and biological diversity, bank stability, and water quality.

(c) The minor drainage systems minimum design standard is to capture and convey flows produced by a 10 year Average Recurrence Interval design storm.

(d) Trapped sag points are not to be created.

(e) Drainage reserves or Local Drainage Links are required to discharge gaps flows (the difference between the 100 year ARI storm event and half design pipe flow, allowing for blockage, maximum pipe design 100 year ARI) from all ARI runoffs to the generally accepted maximum of the 100 year ARI storm event.

(f) Local Drainage Links adjacent to residential properties are to be designed in accordance with Kellyville/Rouse Hill Open Space and Recreation Plan. They are to be designed to utilise both their drainage capabilities, landscaping and pedestrian opportunities.

(g) Local Drainage Links are to be a minimum of 5 metres in width. The Developer is required to supply the land, all associated drainage works including energy dissipation, erosion control planting, pathways and tree planting.

(h) Drainage facilities are to be of a standard acceptable to Council.

(i) All drainage pits shall have access from the ground surface. Buried junction pits shall not be permitted.

(j) All pipes to be dedicated to Council are to be located within public land.

(k) The drainage system is to be designed by a qualified person in accordance with the requirements of the responsible drainage authority.

(l) All owners of properties adjoining SP2 Trunk Drainage land are required to contact Council and Sydney Water to confirm the inundation line prior to the lodgement of subdivision applications.

(m) All drainage designs, excluding minor drainage systems, are to comply with Council's Design Guidelines Subdivisions/Developments. Design criteria are to be confirmed by Council.

(n) Any discharge to, or construction within Sydney Water trunk drainage land will require the approval of Sydney Water.

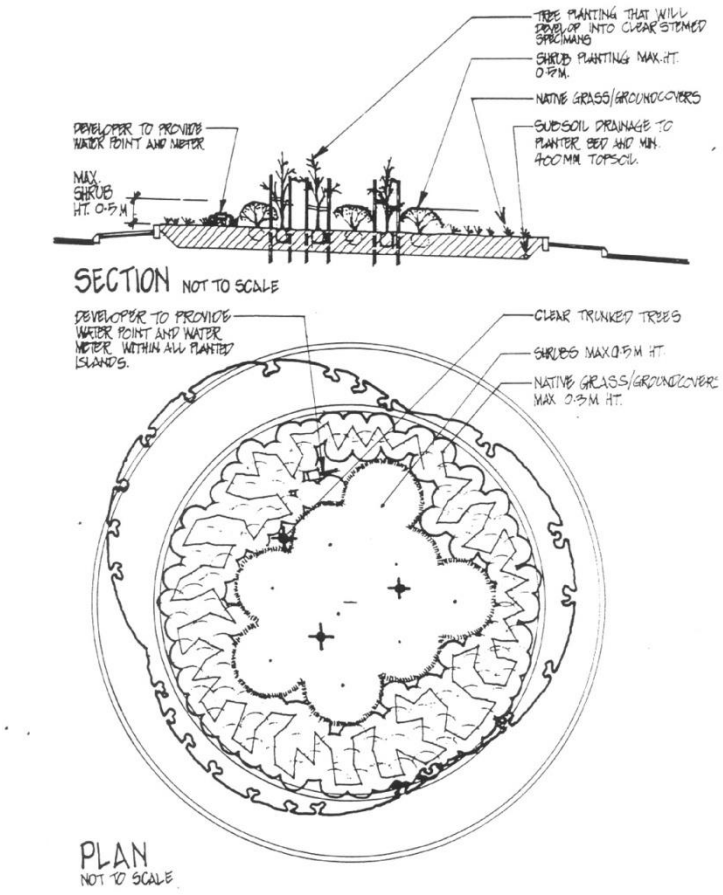


Figure 10 Landscape construction standards in roundabout

2.7. WATER QUALITY

OBJECTIVES

(i) *To protect downstream waters during construction activities within the release area.*

(ii) *To assist in the protection and enhancement of stream health.*

DEVELOPMENT CONTROLS

(a) Applications for residential development including subdivision are to be accompanied by an Erosion and Sediment Control Plan which will describe the measures to be taken at development sites to minimise land disturbance, erosion, and control sediment pollution of waterways.

(b) Erosion and Sediment Control Plan's shall be prepared in accordance with 'Managing Urban Stormwater – Soils and Construction' produced by the NSW Department of Housing.

(c) Any discharge to, or construction within Sydney Water drainage land will require the approval of Sydney Water.

(d) Natural vegetation shall be maintained wherever possible.

(e) Natural drainage channels are to be retained wherever possible.

(f) Soil and Water Management Plans are to be submitted with all residential subdivisions and are to be designed in accordance with The Hills Shire Council's 'Works Specification, Subdivisions/Development' and the Department of Housing manual, 'Managing Urban Stormwater: Soils and Construction'.

2.8. UTILITIES PROVISION AND LOCATION

This Section of the DCP seeks to promote shared trench practices.

Advantages of shared trenches include:

- elimination of a number of single trenches each with its own construction, settlement and reinstatement problems.
- accurate location of services for possible repair or maintenance.
- less conflict between services as depth relativities are known.
- more efficient use of construction equipment.
- reduced verge and footpath disturbance enables earlier site development.

OBJECTIVES

(i) *To maximise the opportunities for shared (common) trenching and reduce constraints on landscaping within road reserves.*

(ii) *To ensure the provision of public utilities is undertaken in accordance with the requirements of both Council and the relevant servicing authority.*

DEVELOPMENT CONTROLS

(a) Gas and water services may be located in a shared trench on one side of the street and electricity power and telephone located in a shared trench on the other side of the street. The Kellyville/Rouse Hill release area is also to be serviced with a recycled water supply which will require an increase in Sydney Water Corporation's service allocation.

(b) The Council requires underground electricity reticulation for all urban residential development.

(c) Where agreement to develop shared trench practices cannot be met the alignment of services shall be to a standard acceptable to Council.

(d) Council requires the provision of street tree planting within all verge areas and service authorities are expected to cooperate to ensure this is achieved.

(e) Provision of all utilities and services is to be supplied and constructed in accordance with the requirements of the relevant authority.

(f) Details of the location of all sewer reticulation mains are to be supplied to Council for assessment of environmental and property considerations.

(g) Development is to have water supply for fire fighting purposes in accordance with Specification E1.2 of the Building Code of Australia.

(h) Concurrence from the relevant Electricity Authority is required for all subdivision

applications where the property is affected by electricity easements.

(i) Road verge widths are to be in accordance with Table 3.

(j) Service allocations for local to sub-arterial roads are to be in accordance with Figure 11, subject to consultation with, and the requirements of, individual service providers.

2.9. PUBLIC RECREATION SPACE

Land set aside for open space use has been selected on the basis of its suitability for play facilities and the proposed recreation facilities set out in Council's Kellyville/Rouse Hill Open Space and Recreation Plan.

- **District Parks and Sports Complexes** perform a broad environmental and recreational function. Their distribution is site related and includes areas of conservation and environmental significance, while catering to needs of the district and local residents.
- **Local Open Space Parks** primarily provide for playspace with opportunities for supervised play within a maximum radius of 400 metres from any given residence.
- **The Greenway** is the primary off road open space connection that traverses the release area between Rouse Hill House and Bella Vista Homestead. The route of the Greenway has been determined to maximise the historic and scenic qualities of the release area, and to link major activity nodes such as active open space areas, schools, commercial centres, and community facilities.
- **Major Open Space Links** provide important off road connections through neighbourhoods and a range of landscape settings. They also connect open space areas, schools, commercial and community facilities.
- **Local Open Space Links** are planned within subdivisions to ensure direct access to local parks, schools, commercial centres and complement the pedestrian network provided along collector roads and access streets.
- **Drainage Links** are similar to Major Open Space Links except they occur along major drainage corridors.

OBJECTIVES

(i) *To ensure the adequate protection of land identified for public open space purposes on the maps accompanying this Section of the DCP occurs during the subdivision and dwelling construction stage.*

(ii) *To ensure the provision of open space occurs in accordance with the objectives and requirements set out in the Kellyville/Rouse Hill Landscape And Urban Design Strategy and Open Space and Recreation Plan (1998).*

DEVELOPMENT CONTROLS

(a) Proposed plans of subdivision are required to set aside the area of land for public open space identified in the relevant map accompanying this Section of the DCP.

(b) Footpath links are to be provided in accordance with the maps accompanying this Section of the DCP.

(c) Where the maps accompanying this Section of the DCP identify road widening for provision of Greenway Link/Major Open Space Link, the road verge is to be widened in accordance with details provided in Figure 8. The additional area of verge is to be funded through the Kellyville/Rouse Hill Section 94 Contributions Plan No. 8A.

(d) The maximum gradient of cyclepaths is not to be greater than the adjacent road pavement and is required to provide adequate sight distances at crossings.

(e) A designated Cyclepath/Footpath route is to have the following pavement widths:

- Greenway link: 3.0 metres
- Major Open Space Link: 2.5 metres
- Drainage Link: 2.5 metres
- Roads with 3.5 metre verge: 2.0 metres
- Existing previously rural road reserves: 2.0 metre wide path on both sides of road (Where identified as collector roads, refer to Figure 7).

(f) Refer to the Kellyville/Rouse Hill Open Space and Recreation Plan for details of the location of the Greenway, Major Open Space and Drainage Links.

(g) A shared pedestrian/cyclepath with a minimum width of 2 metres is to be provided adjacent to

all collector streets giving major access to a primary or high school, as indicated on maps 1, 2, 3 and 4 accompanying this Section of the DCP.

(h) Pipes through bushland areas and areas with significant vegetation coverage are to be laid by hand with the aid of small machinery causing minimal disturbance to vegetation and exposed rock outcrops.

(i) Local Drainage Links within subdivisions are to be a minimum of 5 metres width. The Developer is required to supply the land, 2 metre wide concrete path and planting in accordance with details indicated in Figure 11. Details are to be submitted with the engineering designs.

(j) Where Local Links are required for open space purposes they are to be a minimum 5 metres width. Council will acquire and provide landscape works where identified in the Section 94 Contributions Plan.

(k) No retaining walls are to be constructed adjacent to existing or proposed Open Space Parks, Open Space Links or SP2 infrastructure (Trunk Drainage) Land.

(l) No filling is permitted within proposed Open Space Parks, Open Space Links or Trunk Drainage Land.

(m) The provision of a 1.5 metre high chain wire fence around proposed open space parks with access provided by a lockable gate, at the developers expense is required.

(n) Details of fence construction are to be provided by the proponent with the engineering designs.

(o) The fence must be sited in such a way as to limit access into the open space area, ensuring protection of the area for the duration of subdivision and building construction.

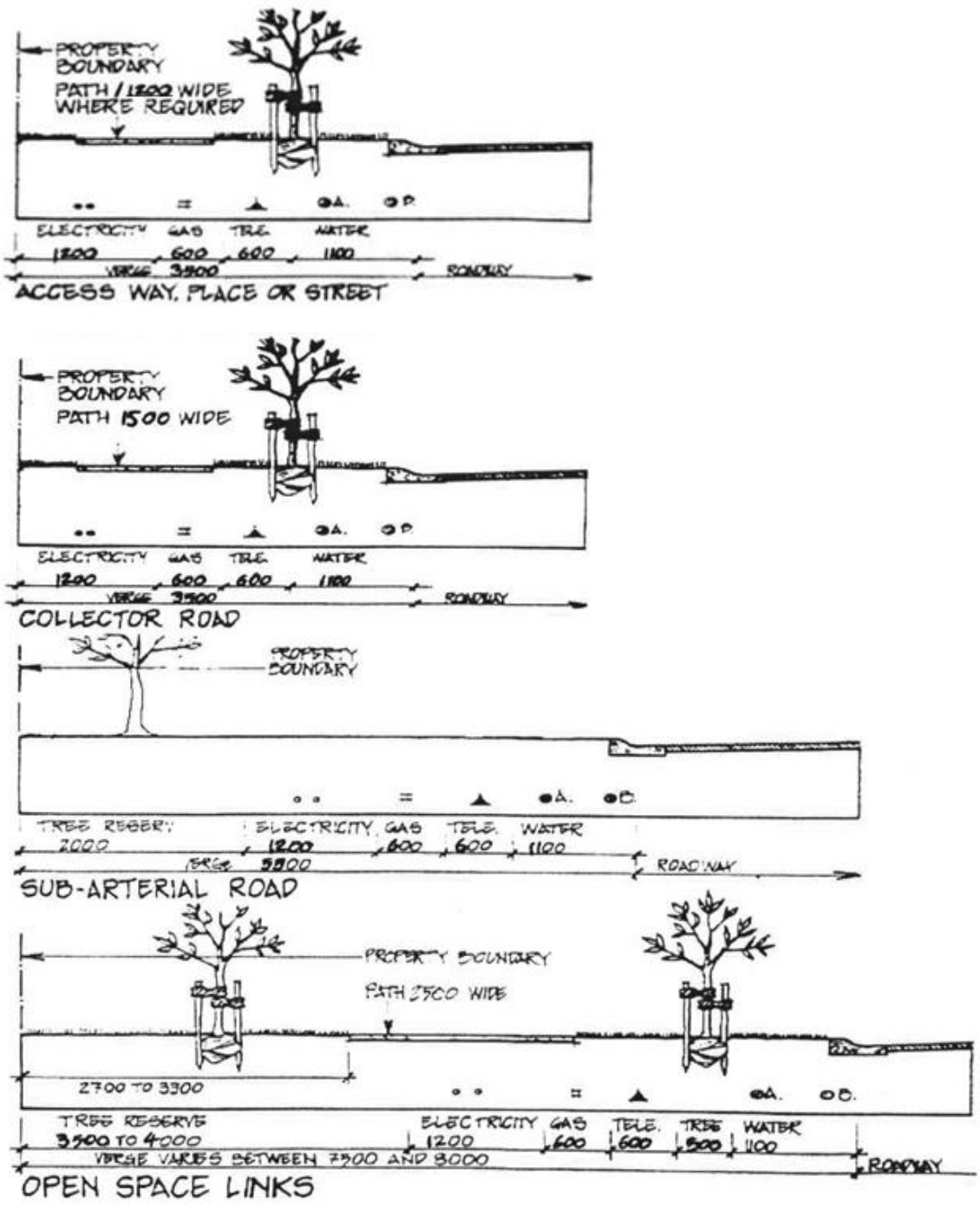
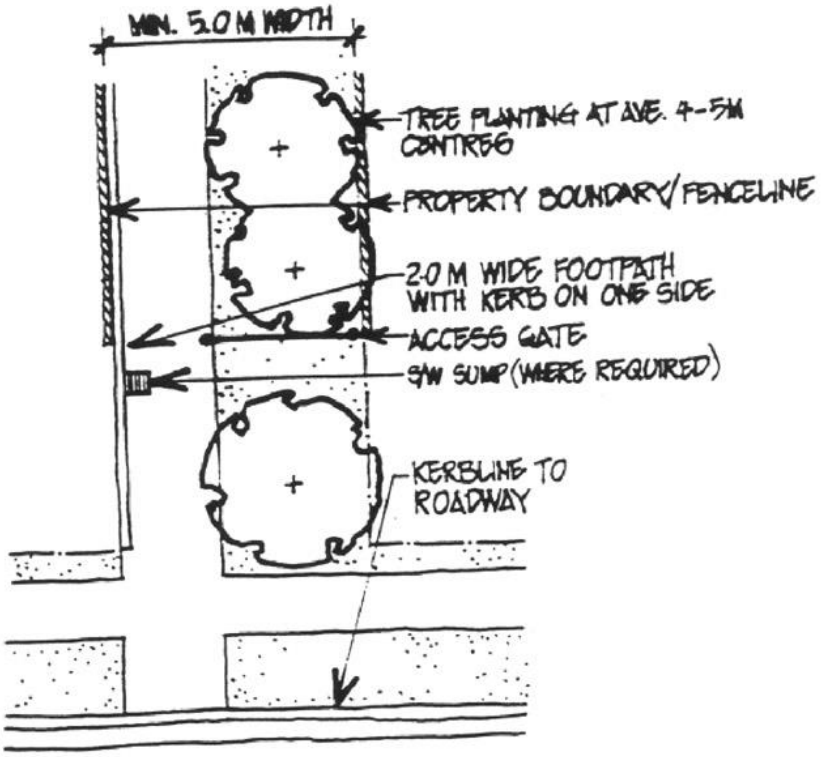
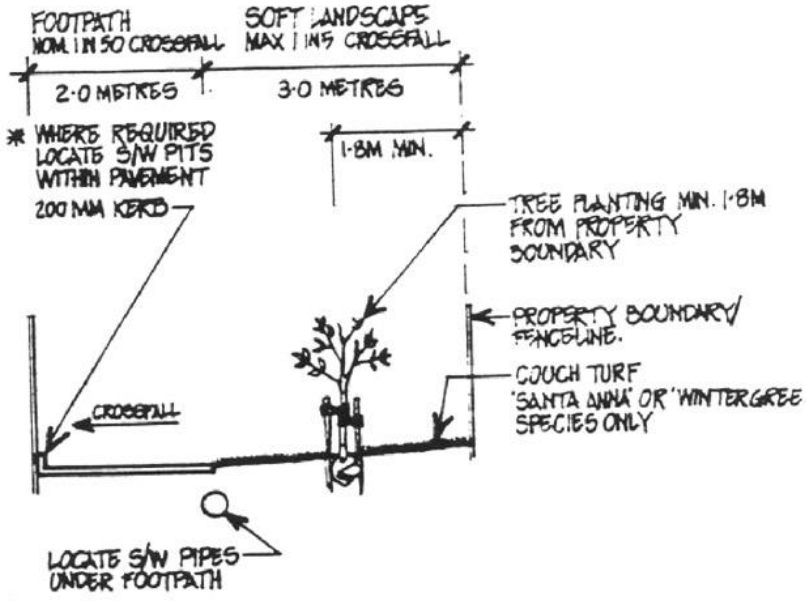


Figure 11 Service allocation



PLAN VIEW



SECTION VIEW

Figure 12 Local drainage links

3. DWELLING DESIGN

The following development control provisions primarily relate to the development of land for detached dwellings.

3.1. SITING OF BUILDINGS

OBJECTIVES

(i) *To ensure that dwellings are designed with regard to site conditions and minimise the impact on landform.*

(ii) *To ensure that dwelling design and siting have regard to the amenity of adjoining development and surrounding properties.*

DEVELOPMENT CONTROLS

(a) Practical and stable access shall be provided from a public road to the building platform.

(b) The building platform shall be sited in an accessible and practical location and on relatively flat terrain with stable soil and geology.

(c) Dwellings should be sited so that their height does not detract from the use, appearance, and enjoyment of adjoining spaces and dwellings, including the protection of solar access, or privacy of adjoining neighbours.

(d) The design and siting of dwellings should ensure that all habitable rooms and recreational open space receive adequate natural light.

3.2. TURKEY NEST PARK – HEIGHT RESTRICTIONS

OBJECTIVES

(i) *To maintain views to and from Turkey Nest Park and adjoining Greenway Link.*

(ii) *To maintain the visual prominence of Turkey Nest Park, the adjoining ridgeline to the north, and associated plantings within the urban landscape.*

DEVELOPMENT CONTROLS

(a) All dwellings, within the area identified on the map (Sheet No.2 and Appendix 2) accompanying this Section of the DCP as **Building Height Restriction A** shall be single storey in height and are not to exceed 1.5 metres above the level of the pedestrian path along the Greenway Link (including the roof and any other structure associated with the dwelling). This height restriction is to be measured perpendicular to the pathway direction. Cross sections are to be provided with all development applications.

(b) All dwellings, within the area identified on the map (Sheet No.2 and Appendix 2) accompanying this Section of the DCP as **Building Height Restriction B** shall be single storey in height. Cross sections are to be provided with all development applications.

(c) All dwellings, within the area identified on the map (Sheet No.2 and Appendix 2) accompanying this Section of the DCP as **Building Height Restriction C** are not to exceed 1.5 metres above the level of the pedestrian path along the Greenway Link. (including the roof and any other structure associated with the dwelling). This height restriction is to be measured perpendicular to pathway. Cross sections are to be provided with all development applications.

(d) All dwellings, within the area identified on the map (Sheet No.2 and Appendix 2) accompanying this Section of the DCP as **Building Height Restriction D** are not to exceed two storeys in height. Cross sections are to be provided with all development applications.

(e) Any variation to the above standards will only be considered by Council where :-

- Compliance with the building height restriction is not possible; and
- The design and siting of the dwelling incorporates the following:-
  - site excavation to reduce building height,
  - roof design to reduce the overall building height,
  - split level dwelling design, and
  - the maintenance of view lines to and from the ridgeline.

(f) For Building Height Restriction areas A and B where single storey dwellings are required, consideration will be given to two storey

development where the overall height does not exceed the specified height restriction.

Note. The building height restriction areas and levels along the pathway within the Greenway Link are shown in Appendix 2 of this Section.

3.3. SETBACKS

OBJECTIVES

(i) *To provide visual separation of built forms, privacy and opportunities for landscaping.*

(ii) *To protect sunlight and daylight to habitable rooms, protect and optimise useable open space around dwellings, and protect adjoining dwellings from excessive overlooking, overshadowing, and general loss of amenity.*

(iii) *To provide sufficient space for vehicle parking, manoeuvrability and clear sight lines.*

(iv) *To provide a useable area of private open space to the rear of a dwelling.*

DEVELOPMENT CONTROLS

(a) The minimum building setbacks are shown in the following table.

Table 4 Building setbacks

Location/Frontage	Setback
Primary Street Secondary Street (corner allotments)	4.5 metres 2.0 metres
Garages	5.5 metres
Side Boundaries	0.9 metres
Rear boundary setback 1 storey 2 storey Arterial/Sub-Arterial Roads 1 storey 2 storey	 4.0 metres (1) 6.0 metres (2) 6 metres 8 metres

- In the case of rear boundary setbacks to single storey dwellings, that part of any single storey dwelling encroaching into the 4 metre rear building setback shall not be any wider than 50% of the rear boundary dimension (when measured in metres) to a maximum width of 7.5 metres. The minimum setback from the rear boundary to the external face of any wall comprising part of the dwelling shall not be less than 2 metres.
- Consideration to a larger proportion of the building width being permitted to occur at a minimum setback of 2 metres may be given, provided:-
  - a courtyard is provided to the side boundary with a minimum area of 24m^2;
  - the courtyard has a minimum dimension of 4 metres;
  - it can be demonstrated that at least half (50%) of the courtyard will receive a minimum of 2 hours of direct sunlight between 9am and 3pm during mid winter; and
  - the site coverage control (Refer Section 3.5 of this Section of the DCP) is not exceeded.
- In the case of rear boundary setbacks to two storey dwellings, that part of the dwelling encroaching into the 6 metre rear building setback shall not be any wider than 50% of the rear boundary dimension (when measured in metres) to a maximum width of 7.5 metres, provided that part of the dwelling to be setback less than 6 metres from the rear boundary is single storey only. The minimum setback from the rear boundary to the external face of any wall comprising part of the dwelling shall not be less than 4 metres.

(b) For all dwelling houses the primary street façade must be suitably articulated and incorporate two of the following design elements:-

- Non-enclosed verandah for at least 40% of the dwelling width;
- Entry feature or portico;
- Awnings or similar treatment used over windows;
- Balcony or window box treatment to first floor element;
- Recesses or projection of prominent architectural elements to visually break up the façade and avoid blank wall appearance;
- Use of bay window or similar along façade; and
- Verandah, pergola or similar provided over garage doors.

(c) For corner allotments garages shall not form part of the secondary street setback.

(d) In addition to the setback requirement all dwellings fronting or backing onto arterial roads are to be constructed with appropriate materials

to attenuate noise and designed to acceptable internal noise levels, based on EPA – Environmental Criteria for Road Traffic Noise and Australian Standard 3671 – Road Traffic Noise Intrusion – Building Siting and Construction.

3.4. SITE COVERAGE AND PRIVATE OPEN SPACE

OBJECTIVES

(i) *To maximise the provision of open space.*

(ii) *To avoid the creation of drainage and runoff problems, through minimising the amount of impervious area.*

(iii) *To minimise bulk and scale of residential development.*

(iv) *To facilitate spatial separation between buildings.*

(v) *To provide adequate space within residential lots for the establishment of landscaping/tree planting to enhance the quality of the residential environment.*

(vi) *To provide outdoor living space which is an extension of the dwelling for the enjoyment of its inhabitants.*

DEVELOPMENT CONTROLS

(a) The maximum site coverage (including garage/carport, driveways, outbuildings, decks, patios, paved areas, tennis courts and pools) for residential development on residential zoned land, as a percentage of the total site area shall not exceed 60% where two storey dwellings are proposed, and 65% where single storey dwellings are proposed. Except for land zoned E4 Environmental Living where the maximum site coverage shall not exceed 30%.

Private Open Space

(b) The principal private open space area (behind the front building line) must be able to contain a rectangle measuring 4 metres x 6 metres.

3.5. CORNER LOTS

OBJECTIVES

(i) *To ensure that dwellings sited on corner allotments take advantage of their visually prominent location whereby the design addresses both street frontages.*

(ii) *To ensure that the dwelling façade along the secondary street frontage provides architectural relief to the streetscape.*

DEVELOPMENT CONTROLS

(a) On corner allotments a minimum of two of the following design elements are to be included along the secondary frontage:-

- Verandahs;
- Gables;
- Vertical elements to reduce the horizontal emphasis of the façade;
- Entry feature or portico;
- Balcony/window boxes or similar elements; and
- Landscaping/fencing compatible with the frontage status of elevation.

(b) The following features are not to occur along either façade:-

- Blank walls without relief;
- Windows/doors of utility rooms exposed to view; and
- Hot water services or similar utility installations.

(c) Any high fencing along the secondary street frontage exceeding 1.2 metres in height should be limited to 60% of the frontage and occur toward the rear of the allotment. Any low fencing equal to or less than 1.2 metres in height may occur toward the front of the allotment.

Reference is made to Appendix 4 of this Section, which provides an example of the dwelling design controls for corner allotments.

3.6. GARAGE DESIGN

OBJECTIVES

(i) *To reduce the visual dominance of garages.*

(ii) *To improve the visual quality of the overall built form and streetscape.*

DEVELOPMENT CONTROLS

(a) Carports and garages shall be designed to be:-
- visually subservient;
- integrated into the overall dwelling design; and
- constructed of similar materials and finishes to the dwelling.

(b) Where a double garage is proposed a minimum of two of the following design measures are to be employed:-
- Garage doors are divided by a vertical masonry pillar or similar;
- Upper floor element projected forward of the garage to cast shadow and take prominence;
- Colours and textures to ensure garage doors do not dominate the street elevation;
- Verandah or pergola provided across the face of the garage;
- Utilisation of vertical elements to mitigate the horizontal emphasis of the garage;
- Garage entrance to be orientated away from primary street frontage to face the side boundary; and
- Staggered garages whereby one garage is setback from the adjoining garage.

Reference is made to Appendix 5 of this Section which provides examples of the garage design controls.

4. HOUSING AS PER CLAUSE 4.1 B OF THE HILLS LOCAL ENVIRONMENTAL PLAN 2012

4.1. MASTERPLAN REQUIREMENT AND APPLICATION OF DEVELOPMENT CONTROLS

OBJECTIVES

(i) *To provide greater flexibility in the design of larger housing developments.*

(ii) *To demonstrate that all of the relevant design objectives of this Section of the DCP can be satisfied.*

DEVELOPMENT CONTROLS

(a) Where a development application for development in accordance with Clause 4.1 B of The Hills LEP 2012, Council may set aside a number of the provisions of this Section of the DCP where:
- The proposal has been the subject of pre-lodgement discussions with Council's planning services staff;
- A Masterplan is prepared and submitted with the development application; and
- The Masterplan is able to satisfactorily demonstrate the achievement of the objectives for each development control.

(b) The above provision does not apply to the following development controls:-
- Density;
- ESD;
- Site Boundary Setbacks;
- Site Coverage;
- Vehicular Access;
- Open Space; and
- Energy Efficiency.

SUBMISSION REQUIREMENT

- Where required applicants are required to submit a detailed coloured Masterplan of the proposed development at 1:200 scale showing contours, adjoining development, major site constraints, internal roadways, areas of common open space, dwelling locations, landscaping, private open space areas, and using annotation justification of any variation sought to the development controls of this Section of the DCP.

4.2. SITING OF BUILDINGS

OBJECTIVES

(i) *To ensure that dwellings are designed with regard to site conditions and minimise the impact on landform.*

(ii) *To ensure that dwelling design and siting have regard to the amenity of adjoining development and surrounding properties.*

DEVELOPMENT CONTROLS

(a) Practical and stable access shall be provided from an internal roadway to the building platform.

(b) Dwellings shall be sited in an accessible and practical location and on relatively flat terrain with stable soil and geology.

(c) Dwellings should be sited so that their height does not detract from the use, appearance, and enjoyment of adjoining spaces and dwellings, including the protection of solar access, or privacy of adjoining neighbours.

(d) The design and siting of dwellings should ensure that all habitable rooms and the principle private open space area receive adequate natural light.

SUBMISSION REQUIREMENT

- Plans must show contours, building platforms and their relationship to the internal road system and adjoining dwellings.

4.3. SETBACKS

OBJECTIVES

(i) *To create an attractive, interesting and pleasant streetscape through the siting of buildings.*

(ii) *To provide visual separation of built forms, privacy and opportunities for landscaping.*

(iii) *To protect sunlight and daylight to habitable rooms, protect and optimise useable open space around dwellings, and protect adjoining dwellings from excessive overlooking, overshadowing, and general loss of amenity.*

(iv) *To provide sufficient space for vehicle parking, manoeuvrability and clear sight lines.*

DEVELOPMENT CONTROLS

(a) Where dwellings abut public land, public roads or private property not part of the development application, the minimum setbacks in Table 5 shall apply.

Table 5 Building setbacks to site boundaries

Frontage	Setback
Primary Street	4.5 metres
Secondary Street	2 metres
Side Boundary to adjoining property	2 metres
Rear boundary setback	
Arterial or Sub-Arterial 1 storey 2 storey All other streets	 6 metres 8 metres 3 metres

(b) All garages are to be set back a minimum of 5.5 metres from the primary street frontage or internal roadways.

(c) For all dwellings the façade must be suitably articulated and incorporate two of the following design elements:-

- Non-enclosed verandah for at least 40% of the dwelling width;
- Entry feature or portico;
- Awnings or similar treatment used over windows;
- Balcony or window box treatment to first floor element;
- Recesses or projection of prominent architectural elements to visually break up the façade and avoid blank wall appearance;
- Use of bay window or similar along façade; and
- Verandah, pergola or similar provided over garage doors.

(d) All side setbacks are to be proportioned to the slope of the site having regard to the height and relationship of the building on adjoining properties and will be required to demonstrate:

- building setbacks that progressively increase as wall heights increase to reduce bulk and overshadowing; and
- setbacks which provide adequate separation between buildings for visual amenity, solar access, movement and landscaping.

(e) With respect to building setbacks from private internal driveways and/ or access roads the development on the subject land will be required to demonstrate:

- building setbacks that progressively increase as wall heights increase to reduce bulk and overshadowing; and
- that an adequate area is provided between the dwelling and the driveway or private access road to enable adequate areas for

landscaping ensuring an attractive, vibrant and consistent streetscape.

(f) Buildings facing each other across internal driveways or private access roads shall not be erected less than:-

- 6 metres apart in the case of single storey development; and
- 9 metres apart in the case where 1 or more of the buildings is 2 storey.

SUBMISSION REQUIREMENT

- Site plans must clearly indicate setbacks from adjoining public land, public roads or private property not part of the development application, in addition to all front, rear and side setbacks within the development.

4.4. ZERO LOT LINE HOUSING

Note. Council may consider a setback of zero metres along one side boundary (known as zero lot line housing) subject to the compliance with the objectives and development controls outlined below. The purpose of these controls is to ensure an appropriate relationship is established between individual dwellings within the development. They do not apply to the overall site boundaries.

OBJECTIVE

(i) *To facilitate the more efficient use of land, concentrate open space in a useable focus, optimise areas of sun and shade, and enhance privacy by avoiding overlooking and noise intrusion.*

DEVELOPMENT CONTROLS

(a) Zero lot line housing shall occur only on the southern side boundary of east-west allotments and either side boundary (but not both sides) of north-south allotments.

(b) Access to the external face of a zero lot line wall may be protected by easements on the Certificate of Title to adjoining allotments. If such an easement is to be provided, it should be noted at the outset and be included on plans of subdivision submitted to Council.

(c) No dwelling built on the zero lot line is to abut an adjoining dwelling also built on the zero lot line.

(d) No windows are to occur along the boundary wall which is to be constructed of maintenance free materials such as face brick or masonry materials, with gutters, eaves and facias constructed of colorbond steel or similar with no visible downpipes.

(e) The length of zero lot line walls for single storey dwellings shall be a maximum of 10 metres.

(f) Walls may be constructed on the boundary where:-

- Eaves, fascias and gutters do not overhang on adjoining property; or
- Box gutters are utilised and inset within the wall; and
- A restriction as to user is created for a one metre wide maintenance easement over the adjoining property pursuant to Section 88B of the Conveyancing Act.

4.5. VEHICULAR ACCESS

OBJECTIVES

(i) *To provide an acceptable level of vehicular access, safety and convenience for all users of the development.*

(ii) *To ensure that the internal roadway design can satisfactorily accommodate the expected traffic volumes of the development.*

(iii) *To provide a safe environment for both pedestrians and vehicles using the site and surrounding road network.*

(iv) *To provide a direct and legible means of vehicular access and circulation within the development.*

DEVELOPMENT CONTROLS

(a) Internal roadways are to have a minimum width of 6m at the property boundary for a distance of 6m within the development to ensure the safe movement of vehicles into and out of the site from the public road system.

(b) All internal roadways are to be of a sufficient width to adequately accommodate the volume of traffic generated by the development.

(c) Table 3 – 'Characteristics of Street Types' of this Section of the DCP is to be used as a guide in determining the required width and design of an internal roadway.

(d) The internal roadway design should make provision for service vehicles where possible.

(e) Internal roadways should be separated from any adjoining property boundaries by a landscaped verge at least 2 metres in width.

SUBMISSION REQUIREMENT

- Applicants are required to submit plans and details with the development application of proposed vehicular access arrangements, circulation patterns, internal carriageway widths, and demonstrate that the carriageway width and design will satisfactorily accommodate the expected traffic volumes.

4.6. HEIGHT

OBJECTIVES

(i) *To minimise the impact of overshadowing, loss of privacy on adjoining properties and open space areas.*

(ii) *To ensure the height of small lot housing forms are compatible with adjoining residential development and the overall streetscape.*

DEVELOPMENT CONTROLS

(a) Refer to Clause 4.3 *Height of buildings* in The Hills LEP 2012.

(b) For corner allotments consideration will be given to a three storey element at the street corner of the dwelling which addresses its prominent location within the streetscape.

SUBMISSION REQUIREMENT

- The height all dwellings measured from natural ground level to the eaves and to the roof ridgeline is to be shown on all plans and elevations.

4.7. STREETSCAPE

OBJECTIVE

(i) *To ensure small lot housing forms are of a high visual quality, enhance the streetscape and are compatible with the existing streetscape.*

DEVELOPMENT CONTROLS

(a) The proposed development must contribute to an attractive residential environment with clear character and identity.

(b) Small lot housing forms are to address the public road frontage, internal roadways, and side boundaries with a building form compatible with adjoining development in terms of street elevation, bulk and scale, quality materials and finishes.

SUBMISSION REQUIREMENTS

- All development applications for small lot housing are to be accompanied by a streetscape plan and typical elevation showing the visible components within a street. As a minimum it is to include:-
  - the street reserve together with typical cross sections;
  - location and detailing of pavement, parking bays footpaths and the like;
  - location of landscaping including fencing, lighting and street tree plantings;
  - typical dwelling front alignments, heights and façade designs; and
  - a schedule of external materials, finishes, colours.

4.8. OPEN SPACE

OBJECTIVES

(i) *To provide outdoor living space which is an extension of the dwelling for the enjoyment of its inhabitants.*

(ii) *To provide outdoor living space which is of useable dimensions and which is located to receive a reasonable quantity of sunlight.*

(iii) *To enhance the quality of the built environment by providing high quality landscaping.*

(iv) *To promote a pleasant and safe living environment.*

(v) *To provide functional open space within the development for the informal recreation of residents and children's play.*

DEVELOPMENT CONTROLS

(a) All private open space areas are to be:
- contiguous to, and accessible from, the primary living areas of the dwelling;
- located and oriented to ensure it is not directly overlooked from adjoining lots or buildings; and
- located on relatively flat land to ensure it is useable as open space.

(b) All common open space areas are to be:
- centrally located and easily accessible to all residents within the development;
- provided with direct frontage to an internal roadway for at least 70% of the total open space boundary;
- of a configuration, slope, and design so as to ensure it is easily maintained;
- located to ensure the area receives adequate sunlight during mid-winter;
- of a sufficient size to satisfy the immediate open space demands of the proposed population and accommodate informal active recreational activities; and
- provided with passive surveillance whereby surrounding dwellings are orientated toward the common open space.

(c) A minimum area of private open space per allotment is to be provided being 20% of the allotment area of the individual dwelling. All side boundary passages less than 2 metres in width are to be excluded from the calculation of private open space.

(d) The principle private open space area must be able to contain a minimum area of 24m² and have a minimum dimension of 4 metres.

(e) At least half (50%) of the principle private open space area is to receive a minimum of 2 hours direct sunlight between 9am and 3pm during mid-winter.

(f) Where a small lot housing development consists of more than five dwellings a common open space area comprising a child play area or recreation activities area is to be provided within the overall site

(g) The common open space area must have a minimum dimension of 12 metres x 12 metres.

(h) For developments consisting of 15 or more dwellings the common open space area is to comprise an area equivalent to ten square metres per dwelling.

(i) Access for all residents to the common open space area is to be guaranteed via the titling system.

(j) The majority of the common open space area is to receive direct sunlight between 9am and 3pm during mid-winter.

SUBMISSION REQUIREMENT

- Plans are to indicate those areas (including dimensions) of any part of the site to be used for private open space or common open space purposes, and demonstrate compliance with the subject development controls.

4.9. CAR PARKING

OBJECTIVES

(i) *To ensure dwellings have adequate areas of ingress and egress from the local road system and satisfactory on-site access.*

(ii) *To provide sufficient and convenient parking for residents of and visitors to the site.*

(iii) *To ensure that adequate car parking is provided on-site so as to prevent inconvenience to residents and congestion in nearby streets.*

DEVELOPMENT CONTROLS

(a) A minimum of two car parking spaces are to be provided per dwelling of which one space must be within a garage. Should a carport be proposed for the second space, the design of the carport shall be of similar materials as the dwelling, and be located behind the building setback.

(b) Carports and garages facing a public place are to be no more than 6 metres in width nor extend across more than 50% of the property frontage, whichever is the lesser.

(c) Carports and garages are to be designed to be:-
- visually subservient;
- integrated into the overall dwelling design; and
- constructed of similar materials and finishes to the dwelling.

(d) Where a double garage is proposed a minimum of two of the following design measures are to be employed:-
- Garage doors are divided by a vertical masonry pillar or similar;
- Upper floor element projected forward of the garage to cast shadow and take prominence;
- Colours and textures to ensure garage door subservience;
- Verandah or pergola provided across the face of the garage;
- Utilisation of vertical elements to mitigate the horizontal emphasis of the garage;
- Garage entrance to be orientated away from primary street frontage to face the side boundary; and
- Staggered garages whereby one garage is setback from the adjoining garage.

Refer to Appendix 5, which provides examples of the garage design controls.

4.10. SITE COVERAGE

OBJECTIVES

(i) *To maximise the provision of open space.*

(ii) *To avoid the creation of drainage and runoff problems, through minimising the amount of impervious area.*

(iii) *To minimise bulk and scale of residential development.*

(iv) *To facilitate spatial separation between building.*

(v) *To provide adequate space within allotments for the establishment of landscaping/tree planting to enhance the quality of the residential environment.*

(vi) *To provide an outdoor landscaped open space area for the enjoyment of inhabitants.*

DEVELOPMENT CONTROL

(a) The maximum site coverage (including dwellings, roads, garage/carport, driveways, outbuildings, decks, patios, paved areas, tennis courts and pools) for the total development site area shall not exceed 60%.

4.11. LANDSCAPING

OBJECTIVES

(i) *To enhance the quality of the built environment by providing a high standard of landscaping.*

(ii) *To ensure that landscaping may be efficiently maintained.*

(iii) *To promote a pleasant and safe living environment.*

(iv) *To limit tree removal to maintain the character of the area.*

(v) *To satisfy Council's ESD objectives No. 3, 4 & 7.*

DEVELOPMENT CONTROLS

(a) The minimum required landscaped or naturally vegetated area for small lot housing as a percentage of the total site area is 40%.

(b) Landscaping is to be provided in accordance with the provisions set out in Part C Section 3 of this DCP.

(c) Tree planting within the development is to be consistent with the tree species selection and planting guidelines provided in Appendix 1.

(d) Existing trees should be preserved.

(e) Native species are to be used to maintain a strong natural theme for the neighbourhood due to their low maintenance characteristics, relative fast growth, aesthetic appeal and compatibility with the natural habitat.

(f) All landscaped areas are to have a minimum width of 2 metres.

SUBMISSION REQUIREMENTS

Landscaping plans are to be submitted with the development application and should include the following:

- North point;

- Scale;
- Main structures on the site (buildings, visitor car parking, driveways, walls, fences, paving, storage areas, etc.);
- Proposed planting and turfed areas;
- Drainage areas;
- All fencing details; and
- Name and contact telephone number of the person who prepared the plans.

All existing trees on site are to be shown on the development application plans with an indication of those trees that are proposed to be retained, and those that are to be removed.

4.12. CORNER LOTS

Refer to section 3.6 of this section of the DCP.

4.13. SOLAR ACCESS

OBJECTIVES

(i) *To maximise solar access to internal living and open space areas in winter.*

(ii) *To ensure no adverse overshadowing of adjoining allotments/developments.*

(iii) *To orient the development in a way that best allows for appropriate solar access and shading, to ensure energy efficient outcomes in accordance with Council's ESD objective 5.*

(iv) *To minimise the need for artificial lighting in dwellings during the day, to ensure energy efficient outcomes in accordance with Council's ESD objective 5.*

(v) *To orientate dwellings so that the living areas face north.*

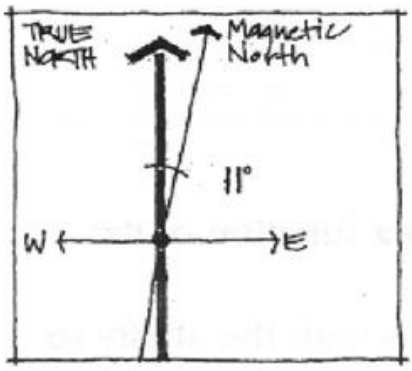
DEVELOPMENT CONTROLS

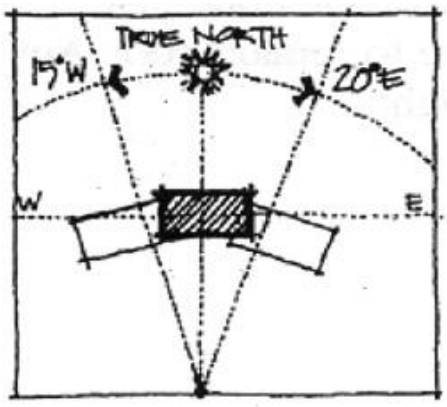
(a) Dwellings should be sited to allow adequate provision for access of direct sunlight to adjacent dwellings.

(b) Living areas of dwellings shall be orientated to the north wherever possible.

(c) Dwellings areas should be sited to maximise the amount of direct sunlight available to clothes drying areas.

(d) Dwellings are to be orientated to promote direct sunlight. Ideally, face the long axis of the development up to 30 degrees east and 20 degrees west of true north. This is illustrated in the following diagrams:





Source: BDP Environment Design Guide

(e) Where winter solar access is not optimum consider the use of double-glazing or high performance glass.

(f) Windows to living areas or bedrooms should have suitable shading or other solar control to avoid summer overheating and are to be integrated into the overall elevation design.

(g) Consider the use of horizontal shading devices (for north facing windows) including eaves, verandahs, pergolas, awnings and external horizontal blinds to allow low summer sun whilst providing shade from high summer sun.

SUBMISSION REQUIREMENT

Shadow Diagrams may be required to identify the shadow impact of any development on adjoining properties.

4.14. PRIVACY – VISUAL AND ACOUSTIC

OBJECTIVES

(i) *To site and design buildings to ensure visual privacy between dwellings in accordance with Council's ESD objective 7.*

(ii) *To avoid overlooking of living spaces in dwellings and private open spaces.*

(iii) *To contain noise within dwellings and communal areas without unreasonable transmission to adjoining dwellings.*

DEVELOPMENT CONTROLS

(a) Buildings are to be designed to ensure maximum protection of privacy, in particular the privacy of primary living areas must be protected. Where appropriate consideration should be given to:

(b) using windows that are narrow, translucent or obscured or have window sills a minimum of 1.5 metres above the upper storey floor level.

(c) ensuring that windows that face directly to the windows, balconies or yards of adjoining dwellings are appropriately screened.

(d) First floor balconies will not be permitted where they overlook living areas of adjacent dwellings.

(e) Windows should be placed to minimise direct viewing between dwellings.

(f) Dwellings are to be designed to limit the potential for noise transmission to the living and sleeping areas of adjacent existing and future developments.

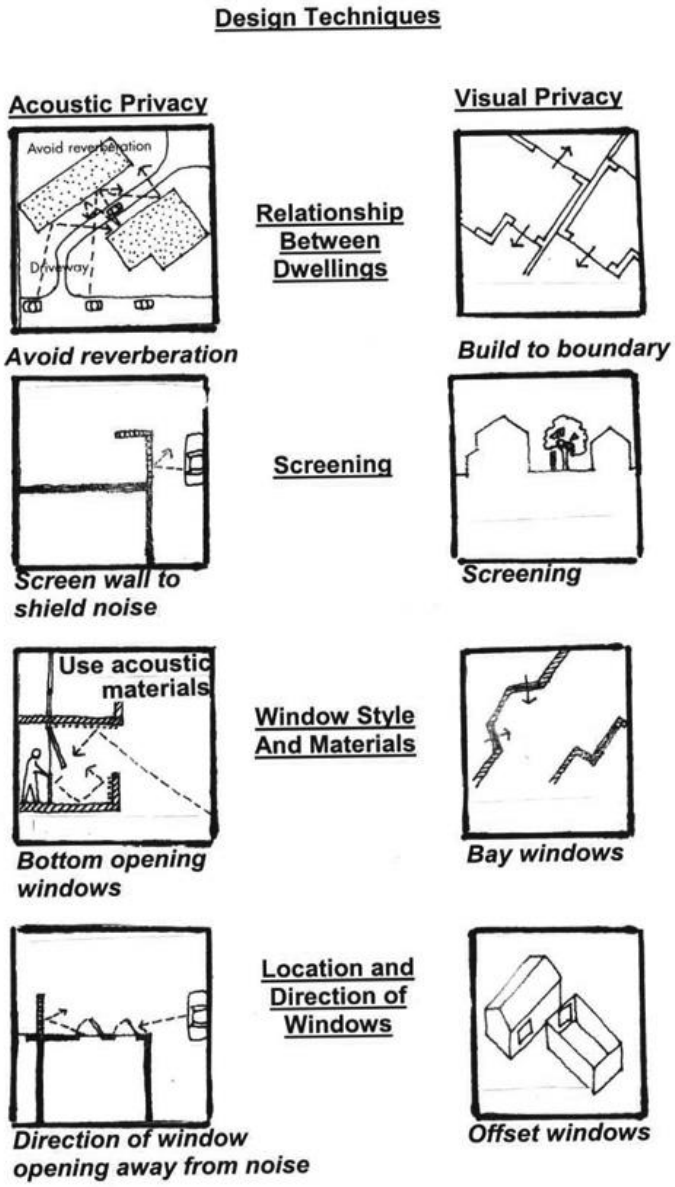
(g) Careful consideration should be given to the location of air-conditioning systems, swimming pools and the like to minimise the impact on the amenity of adjoining properties.

(h) Private open space areas and driveways are to be designed to minimise noise impacts.

(i) Dwellings that adjoin arterial or sub-arterial roads are to be designed to acceptable internal noise levels, based on Environmental Protection Authority – Environmental Criteria for Road Traffic Noise and Australian Standard 3671 – Road Traffic Noise Intrusion – Building Siting and Construction.

SUBMISSION REQUIREMENT

- Statement from a qualified acoustic consultant certifying that the design and construction of the building meets the Environmental Protection Authority – Environmental Criteria for Road Traffic Noise and Australian Standard 3671 – Road Traffic Noise Intrusion – Building Siting and Construction.



Source: Australia's Guide to Good Design – Residential

4.15. ACCESS AND SURVEILLANCE

OBJECTIVES

(i) *To ensure the needs of residents and visitors are considered with particular regard to access requirements, safety and security in accordance with Council's ESD objective 9.*

(ii) *To promote incorporation of community safety aspects in the development design in accordance with Council's ESD objective 8.*

DEVELOPMENT CONTROLS

(a) Small lot housing developments are to provide safe and convenient access for prams, wheelchairs and people with disabilities from the public road to all areas of the development.

(b) The design of an integrated development is to demonstrate consideration of resident safety and security whereby pedestrian pathways and associated areas are not to be obscured, but rather provided with natural surveillance.

(c) The siting and design of dwellings shall ensure surveillance of all common areas.

(d) Access to dwellings is to be direct and without unnecessary barriers. For example, use ramps instead of stairs/steps, consider the height and length of handrails and eliminate changes in level between ground surfaces.

(e) Stairs and ramps are to have reasonable gradients and non slip even surfaces. Refer to AS 1428.1 - 1988 Design for Access and Mobility and supplementary AS 1428.2 - 1992.

4.16. FENCING

OBJECTIVE

(i) *To ensure that fencing is of a high visual quality, complements the character of the existing streetscape and is compatible with the proposed development.*

DEVELOPMENT CONTROLS

(a) Where fencing is proposed, it is to form part of the architectural design concept for the site.

(b) Where there is no front fencing within the existing public road streetscape, front fencing to the public road frontage is to be avoided to maintain an open streetscape appearance.

(c) Consideration will be given to fencing on secondary public road frontage setbacks, subject to there being no adverse affect on the immediate area and on traffic visibility and be of a design to incorporate features such as landscaping bays or a variation/combination of materials.

5. LOT 5 DP 30916, COMMERCIAL ROAD, ROUSE HILL

This section of the Development Control Plan applies to land at Lot 5 DP 30916, Commercial Road, Rouse Hill (Figure A).

The controls within this section apply in addition to other relevant controls in this DCP, however where there is any inconsistency the provisions of this section shall apply.



Figure A – The site

The objectives and development controls outlined in this section aim to:

(ii) *Facilitate a high quality residential and commercial development that responds appropriately to its context in terms of built form and scale.*

(iii) *Ensure that future development on the site provides amenity to residents within and surrounding the site.*

(iv) *Ensure that appropriate access and connectivity is provided to and from the site including the construction of the Green Hills Drive extension along the site's eastern boundary.*

(v) *Provide for development which supports the viability of the Rouse Hill Train Station and the adjacent Rouse Hill Regional Centre.*

Refer to The Hills Local Environmental Plan 2012 for development standards relating to building height, floor space ratio and permitted number of dwellings on land to which this section applies.

4.17.1 SITE LAYOUT

OBJECTIVES

(i) *To achieve a site layout that maximises development opportunities whilst providing ample, quality open spaces.*

(ii) *To integrate future development with surrounding land uses and ensure a suitable interface is provided between development on the site and surrounding lower scale residential development.*

(iii) *To enable the provision of the Green Hills Drive extension.*

DEVELOPMENT CONTROLS

(a) The layout of future development shall be generally in accordance with Figure B.



Figure B – Indicative site layout and built form

4.17.2 ACCESSIBILITY

OBJECTIVES

(i) *To ensure safe and efficient vehicular access is provided to and from the site.*

DEVELOPMENT CONTROLS

(a) The extension of Green Hills Drive must be constructed and dedicated to Council, in accordance with the designs adopted by Council, as detailed within the Voluntary Planning Agreement dated TBA (Figure C).

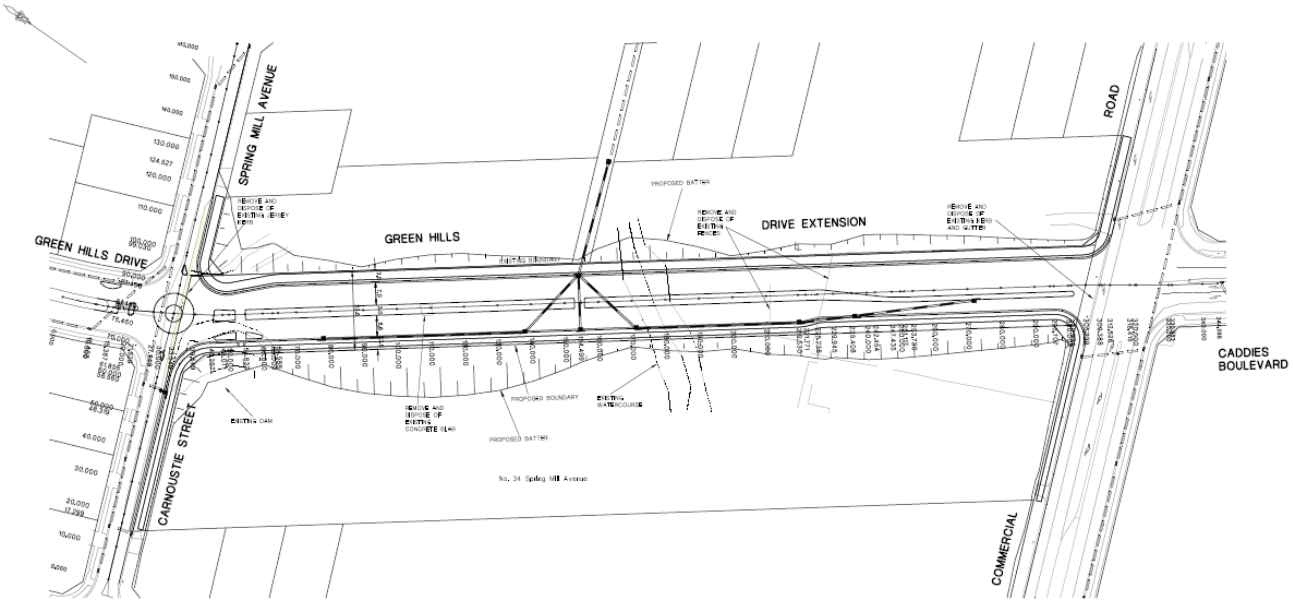


Figure C – Extract of Council's Approved Design Plan

4.17.3 BUILDING HEIGHTS

OBJECTIVES

(i) *To enable building heights that respond to surrounding development, particularly lower density forms of residential development.*

(ii) *To minimise the bulk and scale of development when viewed from surrounding residential areas.*

DEVELOPMENT CONTROLS

(a) Building heights on the site are to generally comply with the number of storeys indicated in Figure B.

(b) If future development does not comply with the controls within Clause 7.12 of The Hills Local Environmental Plan 2012 relating to unit size/mix and car parking, the maximum height of buildings permitted on the site is to be in accordance with Figure D.



Figure D - Building heights if not compliant with LEP2012 Clause 7.12

4.17.4 SETBACKS

OBJECTIVES

(i) *To protect privacy and amenity of adjoining land uses and to reduce bulk and scale.*

DEVELOPMENT CONTROLS

(a) Development shall be setback from Commercial Road by:
- A minimum of 6 metres for residential development.
- A zero setback may be provided for retail/commercial floors that provide active frontages.

(b) Development shall be setback from Green Hills Drive by 8 metres.

(c) Development shall be setback from the western site boundary by 6 metres.

(d) High quality landscaping is to be planted within setbacks.

4.17.5 COMMON OPEN SPACE

OBJECTIVES

(i) *To provide recreational opportunities for all residents of the development.*

DEVELOPMENT CONTROLS

(a) A common open space area with dimensions of at least 50 metres x 50 metres must be provided within the northern portion of the site fronting the western property boundary, Carnoustie Street and Green Hills Drive.

(b) Common open space areas are encouraged elsewhere throughout the site to provide a natural setting with ample spaces for passive recreation.

4.17.6 ACTIVE STREET FRONTAGES

OBJECTIVES

(i) *To ensure that the development is active and inviting and emphasises the pedestrian where practical and possible.*

DEVELOPMENT CONTROLS

(a) Active frontages are required for retail/commercial development at ground level fronting Commercial Road and Green Hills Drive. Active frontages are defined as one or a combination of the following:
- Entrance to retail;
- Shop front;
- Café or restaurant if accompanied by an entry from the street;
- Glazed entryway;
- Street entryway.

4.17.7 BUILDING MATERIALS AND FINISHES

OBJECTIVES

(i) *To ensure future development is of a high quality and demonstrates an appreciation for urban design.*

DEVELOPMENT CONTROLS

(a) Building materials and finishes are to be generally in accordance with Figures E and F.
(b) Materials shall be low maintenance and generally comprise natural/neutral colours.
(c) Painted surfaces are to be limited to accents such as soffits and architectural features for added visual interest.

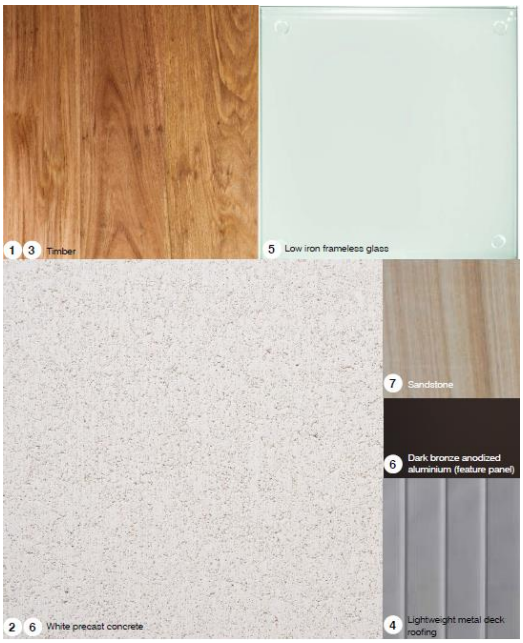


Figure E – Proposed material pallet



Figure F – Example materials and finishes

4.17.8 HERITAGE

Refer to Part C Section 4 – Heritage of this DCP

SUBMISSION REQUIREMENT

(a) An archaeological assessment involving the identification and assessment of aboriginal objects and their management based on archaeological criteria; and
(b) A cultural heritage assessment involving consultation with aboriginal stakeholders and can include historical oral history assessment and broader values assessment.

4.17.9 VEGETATION

OBJECTIVES

(i) *To ensure the significant vegetation on the site is retained.*

DEVELOPMENT CONTROLS

(a) Future development should have regard to opportunities to retain threatened species on the site, particularly within the pocket park.

APPENDIX 1 - TREE SPECIES SELECTION AND PLANTING GUIDELINES

TREE SPECIES SELECTION PRINCIPLES

The attached plans establish neighbourhood character zones based on the landscape topography, neighbourhood boundaries, character and features of the release area.

The plan establishes four main zones where distinct landscape characters will be established:

- Drainage Landscape Zone.
- Native Landscape Zone.
- Cultural Landscape Zone.
- Ridgetop Landscape Zone.

Proposed tree species lists for each zone are identified on the basis of the site characteristics and the intended character, allowing for a varied and contrasting landscape to be established.

Works involving restoration of bushland must utilise indigenous species and following establishment have low ongoing maintenance requirements.

For works within open space areas refer to the Kellyville Rouse Hill Open Space and Recreation Plan 1998 and seek discussions with Council prior to submission of any plans for approval.

1.1 Street Tree Species Matrix

The tree species matrix includes species that are considered suitable for growing in the area covered by this Development Control Plan, and are long lived species that will require minimum maintenance while growing in urban conditions.

The species list has been developed to respond to the microclimatic conditions including exposure to harsh weather conditions, soil, drainage conditions and aspect as well as the space allocated within road reserves and drainage land.

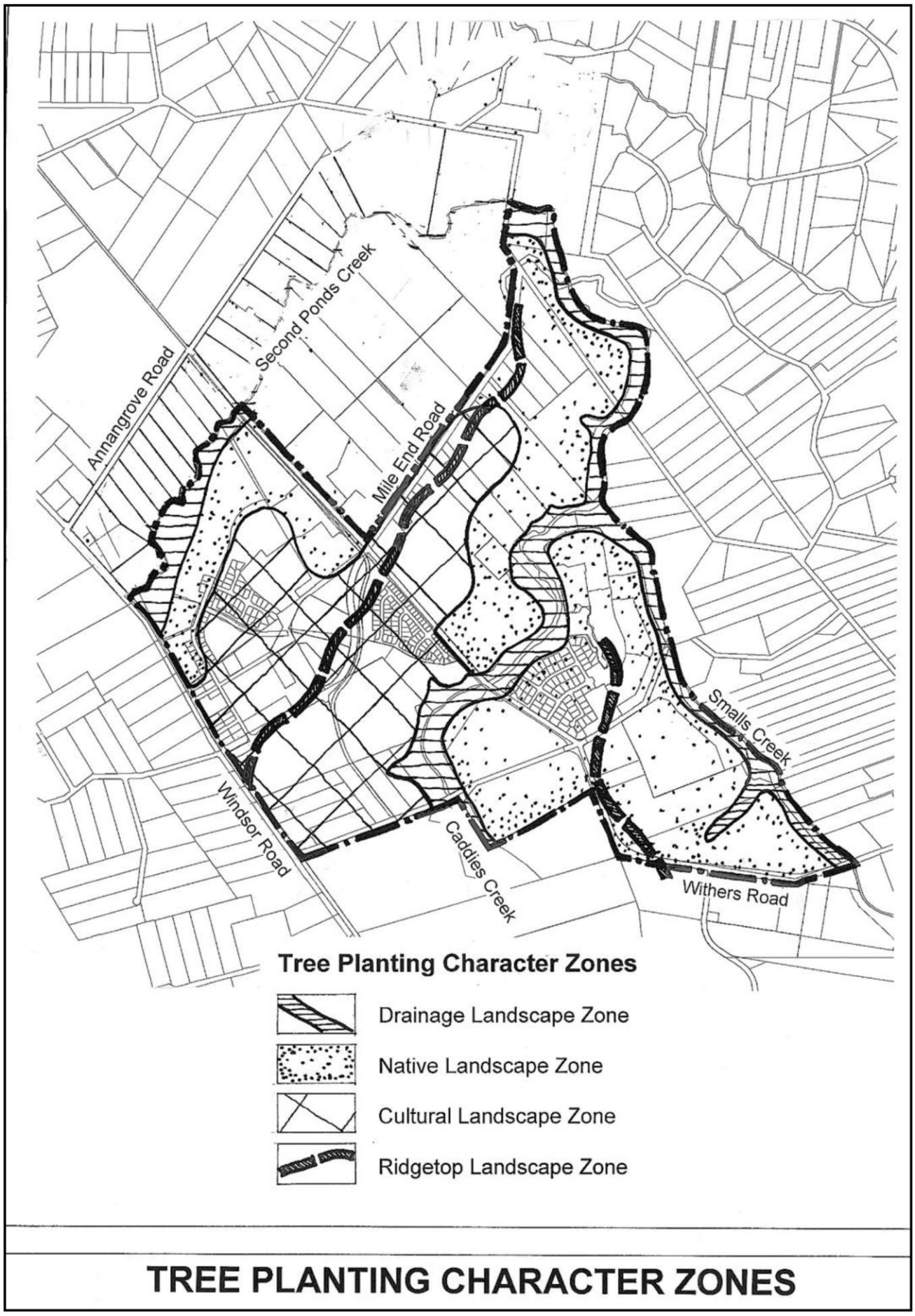
Refer to Part C Section 3 – Landscaping for guidance on street tree planting on Access Way, Access Place and Access Street.

Note. Plans indicating proposed tree planting within publicly owned land must be submitted to Council for approval. The following list must be read in conjunction with the attached plans of Tree Planting Character Zones.

Landscape Setting and Tree Species	Drainage Land	Collector	Sub-arterial, Arterial
Drainage Landscape Zone			
Smalls Creek			
Eucalyptus pilularis	x	x	x
Eucalyptus punctata	x	x	x
Eucalyptus saligna	x		
Eucalyptus teriticornis	x	x	x
Syncarpia glomifera	x		x
Second Ponds Creek			
Melaleuca decora	x		x
Casuarina glauca	x		x
Eucalyptus teriticornis	x	x	x
Caddies Creek			
Angophora floribunda	x	x	x
Casuarina glauca	x		x
Eucalyptus amplifolia	x		x
Eucalyptus teriticornis	x	x	x
Melaleuca decora	x		x
Melaleuca linarifolia	x		x

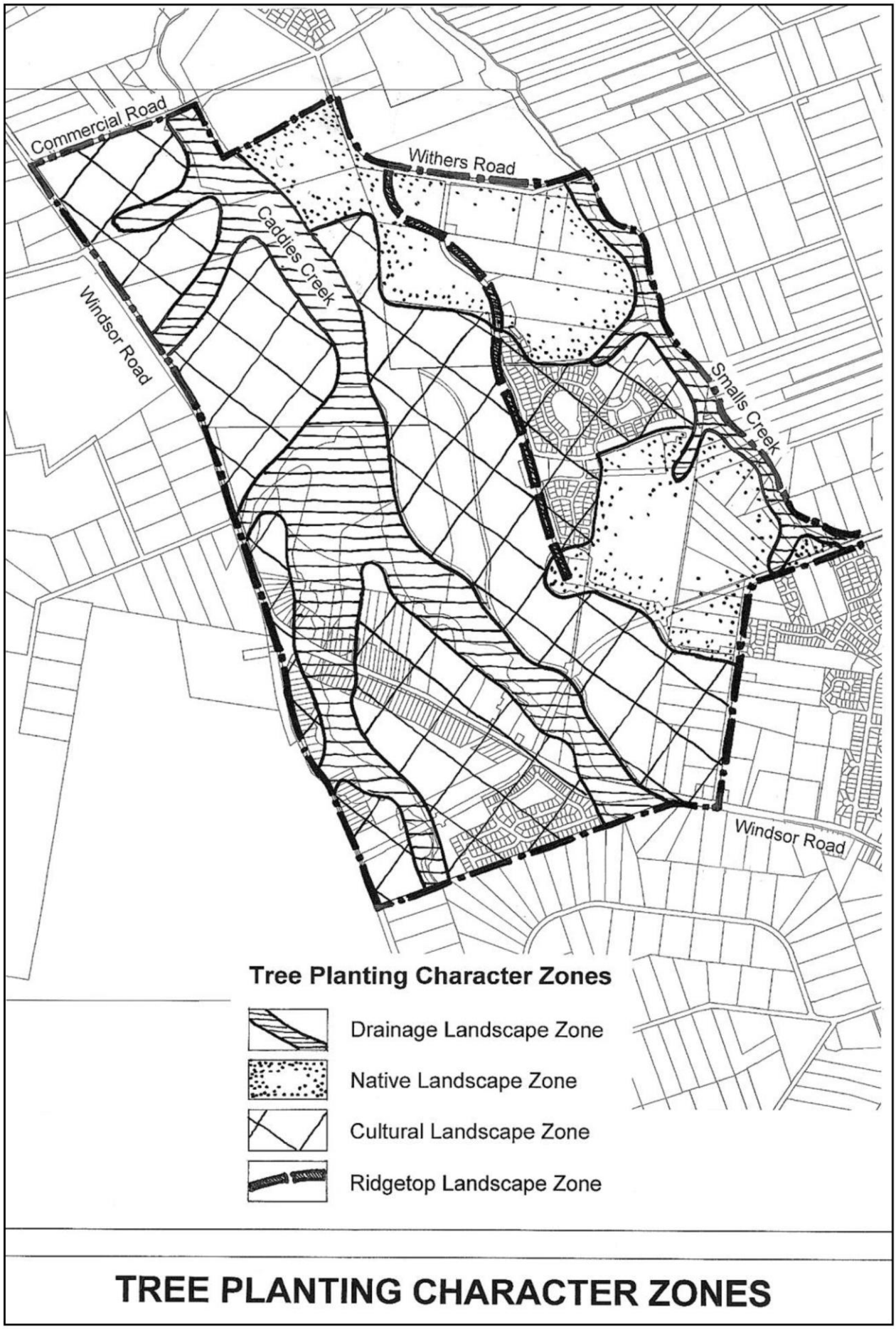
Landscape Setting and Tree Species	Drainage Land	Collector	Sub-arterial, Arterial
Adjacent to flood prone land:			
Adjacent to Cattai Creek Conservation Area			
Angophora costata		x	
Eucalyptus eximia		x	
Eucalyptus piperita		x	x
Eucalyptus sclerophylla		x	x
Native tree species – adjoins Native Landscape Zone			
Acmena smithii	x		x
Eucalyptus elata	x	x	x
Eucalyptus moluccana			x
Syncarpia glomulifera	x		x
Syzigium paniculatum	x		x
Tristaniopsis laurina	x		x
Waterhousia floribunda	x		x
Exotic Tree species – adjoins Cultural Landscape Zone			
Citharexylum quadrangulare		x	
Magnolia x Soulangiana		x	
Ulmus parvifolia		x	
Fraxinus raywoodii		x	
Native Landscape Zone			
Angophora floribunda	x	x	x
Angophora costata		x	x
Eucalyptus crebra	x	x	x
Eucalyptus haemestoma		x	x
Eucalyptus maculata		x	x
Eucalyptus microcorys	x	x	x
Eucalyptus paniculata	x	x	x
Eucalyptus pilularis	x		
Eucalyptus punctata	x	x	x
Eucalyptus scoparia		x	x
Eucalyptus teriticornis		x	x
Lophostemon confertus		x	x
Melaleuca linarifolia	x	x	x
Cultural Landscape Zone			
Native tree species			
Brachychiton discolor		x	x
Eucalyptus cinerea		x	x
Eucalyptus crebra		x	x
Eucalyptus maculata		x	x
Eucalyptus punctata		x	x
Eucalyptus scoparia		x	x
Exotic tree species			
Calodendron capense		x	
Citharexylum quadrangulare		x	
Gleditsia tricanthos ‘Sunburst’		x	
Jacaranda mimosifolia		x	
Sapium sebiferum		x	
Ulmus parvifolia		x	

Landscape Setting and Tree Species	Drainage Land	Collector	Sub-arterial, Arterial
Ridgetop Landscape Zone			
Native species			
Araucaria heterophyla		x	
Araucaria cunninghamiana		x	
Eucalyptus maculata		x	x
Eucalyptus scoparia		x	x
Ficus macrophyla		x	
Exotic species			
Fraxinus raywoodii		x	x
Jacaranda mimosifolia		x	x
Lophostemon confertus		x	x



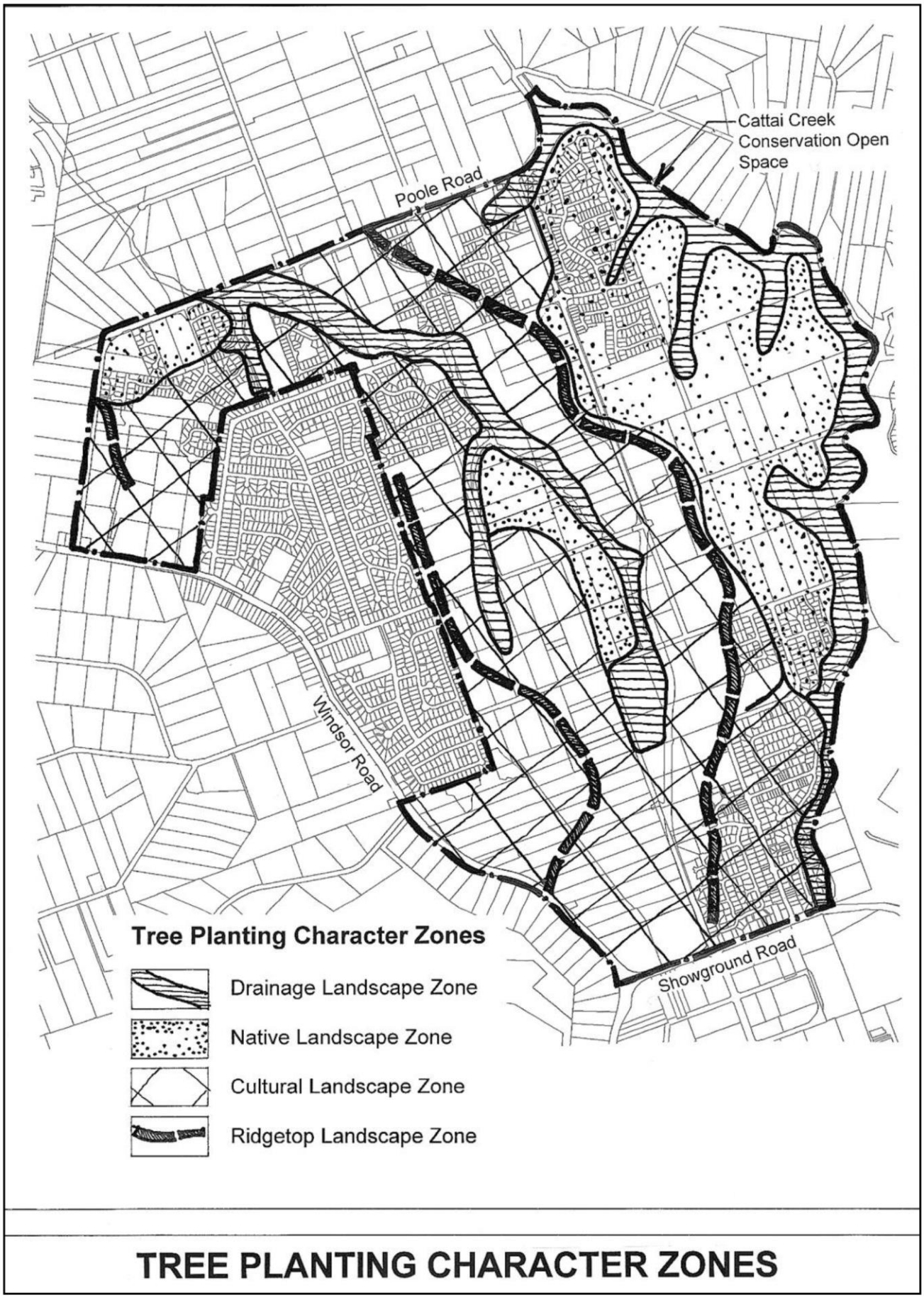
TREE PLANTING CHARACTER ZONES

Part D Section 5 Kellyville Rouse Hill Sheet 1 of 4



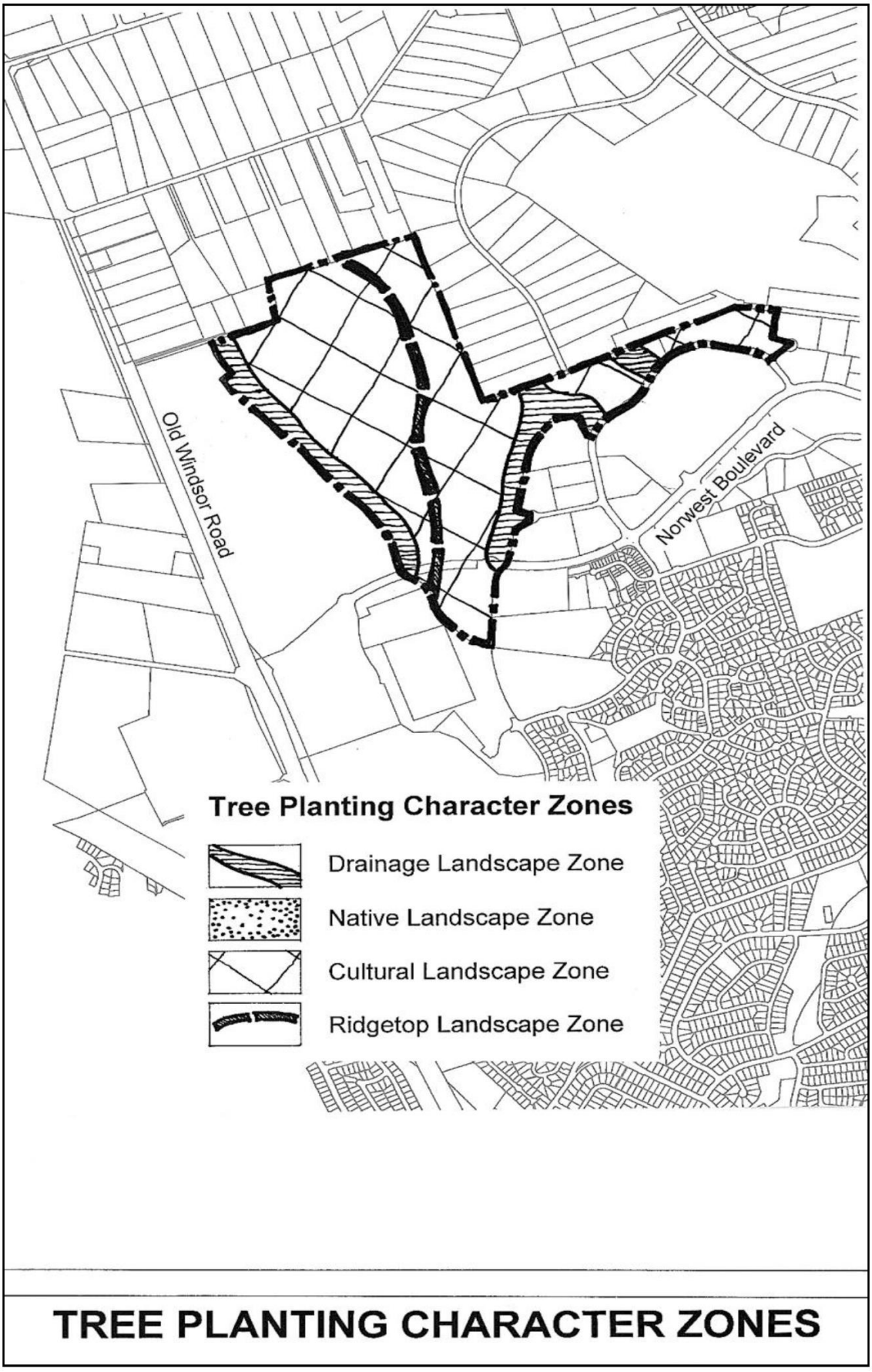
TREE PLANTING CHARACTER ZONES

Part D Section 5 Kellyville Rouse Hill Sheet 2 of 4



TREE PLANTING CHARACTER ZONES

Part D Section 5 Kellyville Rouse Hill Sheet 3 of 4



Part D Section 5 Kellyville Rouse Hill Sheet 4 of 4

APPENDIX 2 - MAP SHOWING LOCATION OF TURKEY NEST PARK HEIGHT RESTRICTIONS AND LEVELS ALONG GREENWAY LINK PATHWAY



APPENDIX 3 - INFORMATION TO BE SUBMITTED WITH A DEVELOPMENT APPLICATION FOR SMALL LOT HOUSING

(REFER TO CLAUSE 4.1B OF THE HILLS LEP 2012)

The following plans and details are required to be submitted with all development applications.

COMPLETED APPLICATION FORM

You must have the written consent of all current owners.

STATEMENT OF ENVIRONMENTAL EFFECTS (SEE)

SITE PLANS

These plans should include the following information:

- Be produced in ink and be not less than A4 and no greater than A1 in size;
- Be of suitable scale (1:500 or 1:000 wherever possible). In cases where there is more than 1 sheet an overall plan at 1:4000 should be submitted to illustrate the overall layout;
- Include existing boundaries and lot or portion numbers in broken lines/lettering;
- Proposed boundaries as form lines with proposed dimensions and areas;
- Proposed lots consecutively numbered and include any easements and restricted development areas;
- Widths of all existing roads;
- Footpath and pavement widths of all proposed internal roadways;
- Position of all intersecting adjoining property boundaries, existing roads or property boundaries of land on the opposite side of all existing roads adjoining the site;
- All vegetation and trees on the subject property (separate plan);
- Contours in one metre intervals at Australian Height Datum;
- All existing buildings, watercourses, drains, dams, swamps, easements, right-of-ways, structures or permanent improvements;
- All services;
- Dimensions and area of site;
- Location, size and height of all dwellings;
- Distance to all boundaries from buildings and courtyard fences;
- Existing trees (indicating whether or not they are to be removed or retained);
- Original ground levels and proposed finished ground levels;
- Location of services;
- Location and general description of any adjoining developments;
- Extent of landscaped area provided;
- Site coverage calculations; and
- The height of all dwellings at site boundaries and internal site levels.

ARCHITECTURAL PLANS

- Internal layout of unit/building (existing and proposed);
- Number of garages/carports/spaces for residents/spaces for visitors;
- Location of services/ancillary features;
- Elevations;
- Types of external materials/finishes/colours;
- Must be at an appropriate scale (eg. Scale 1:100 or Scale 1:200); and
- Shadow Diagrams (i.e. 9.00am, 12.00pm and 3.00pm in mid-winter). In addition shadow diagrams are to take into consideration shadows from adjoining development, existing trees, etc.

LANDSCAPE PLANS

- These plans are to be prepared in accordance with Part C Section 3 – Landscaping.

EARTHWORKS PLAN

- Existing and proposed levels/contours.

BASIX certificate

Submission of a BASIX Certificate issued within three months of the date of lodgement is required for a new residential development, including swimming pools, to which BASIX applies. See website for further information: www.basix.nsw.gov.au.

WASTE MANAGEMENT PLAN

Refer to Part B Section 2 – Residential.

SEDIMENT EROSION CONTROL PLAN

Refer to Part B Section 2 – Residential.

COMMUNITY TITLE SUBDIVISION

In addition to the plans required above, a Draft Management Statement and Development Contract must be provided.

STRATA TITLE SUBDIVISION

For Strata Title Subdivision the plans required must:

- Be produced in ink and be not less than A4 and no greater than A1 in size;
- Be of suitable scale (1:500 or 1:000 wherever possible). In cases where there is more than 1 sheet an overall plan at 1:4000 should be submitted to illustrate the overall layout;
- Show proposed boundaries as form lines with proposed dimensions and areas; and
- Show proposed lots consecutively numbered and include any easements and restricted development areas.

MODEL

A scale model is required to be submitted for each development application that proposes more than 20 dwellings, showing the relationship of the proposed development to adjoining properties and the existing streetscape.

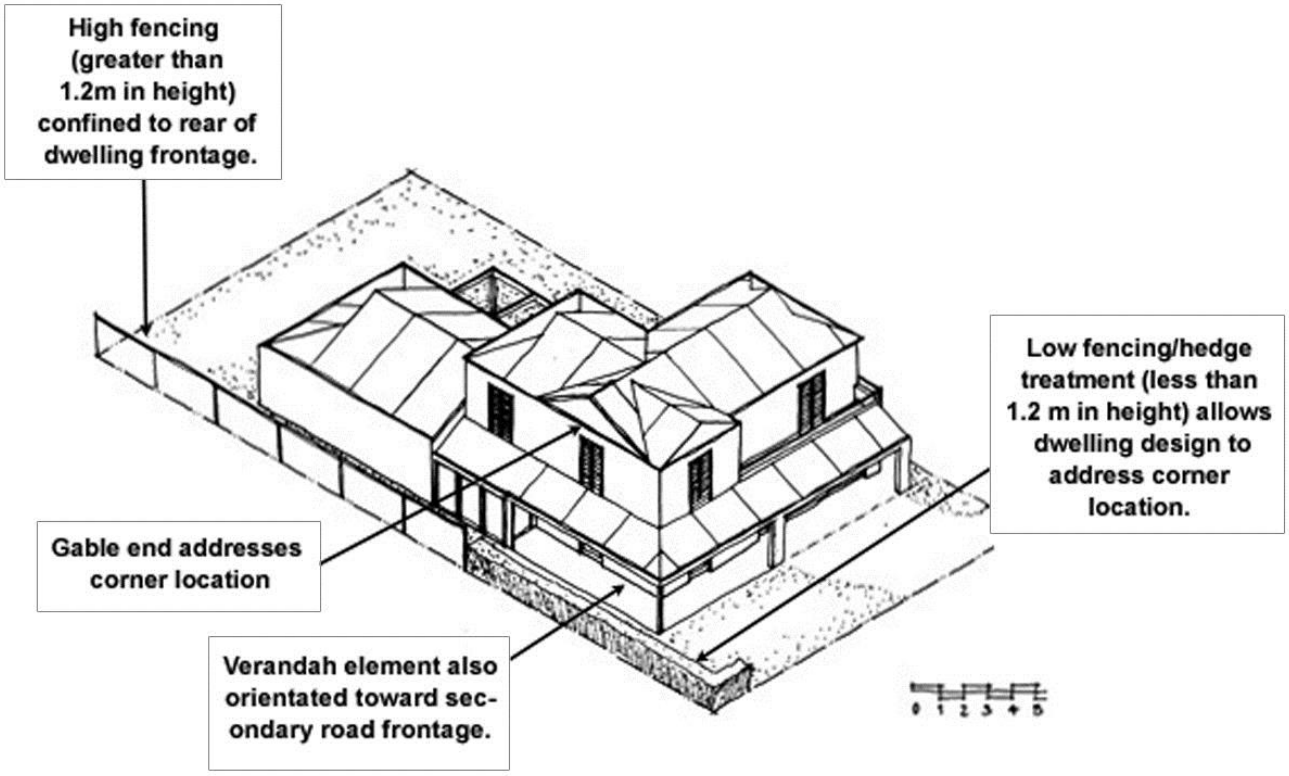
ADDITIONAL REPORTS/PLANS

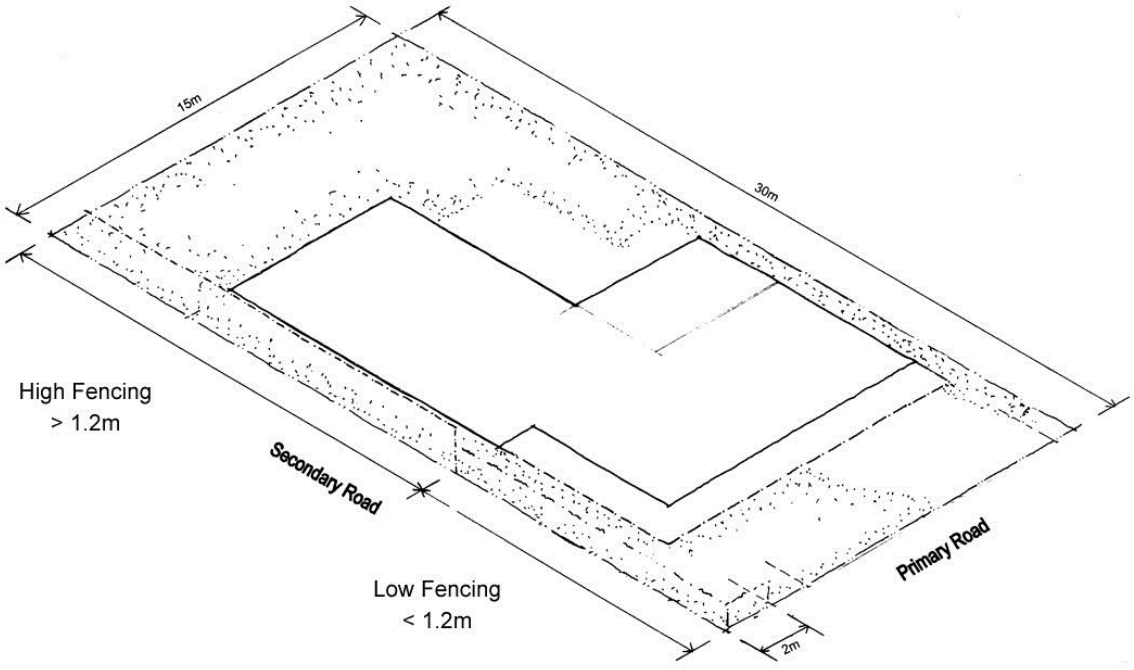
The following reports may be required depending on the nature of the site and application. Advice will be provided at pre-lodgement stage as to which of the following are required with the application:

- Flora and Fauna Assessment;
- Geotechnical Contamination Assessment;
- Geotechnical Assessment;
- Heritage Impact Assessment;
- Bush Fire Assessment;
- Tree Assessment Report;
- European and Aboriginal Archaeological Assessment;
- Flood Study;
- Landscape Plan or Masterplan;
- Streetscape Perspective Plan;
- Solar Access and Siting Plan;
- Concept On-Site Detention plans/details; and
- Shadow Diagrams where applicable.

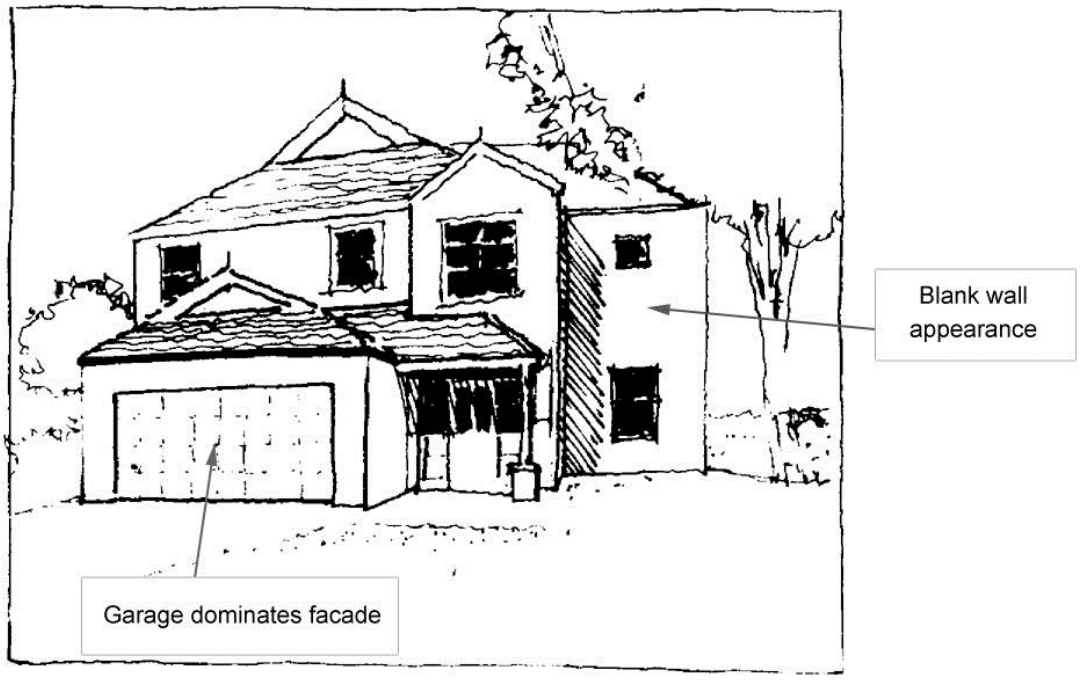
Note. Refer to Part A – Introduction section 4.0 for general lodgement requirements and detailed requirements to be included in each of the above documentation.

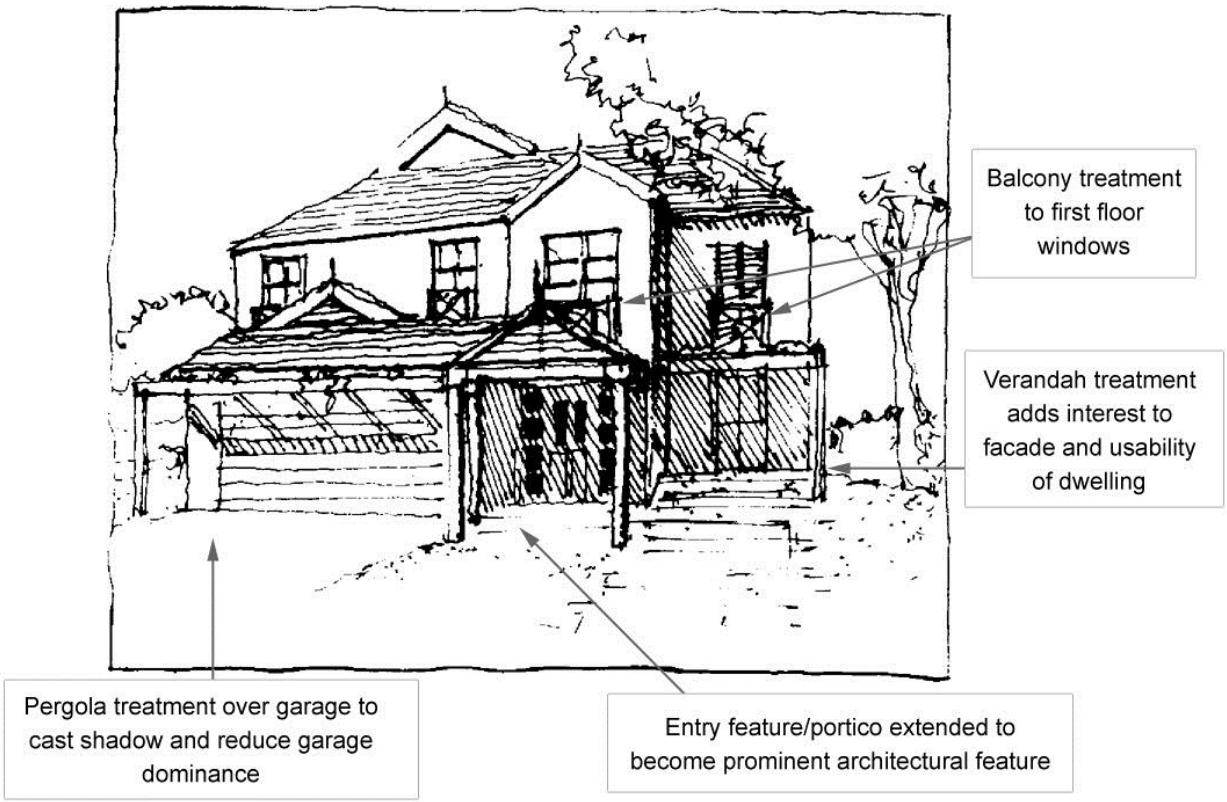
APPENDIX 4 – EXAMPLE OF DWELLING DESIGN ON CORNER ALLOTMENT


High fencing (greater than 1.2m in height) confined to rear of dwelling frontage.
Low fencing/hedge treatment (less than 1.2 m in height) allows dwelling design to address corner location.
Gable end addresses corner location
Verandah element also orientated toward secondary road frontage.
0 1 2 3 4 5


15m
30m
High Fencing
> 1.2m
Secondary Road
Low Fencing
< 1.2m
Primary Road
2m

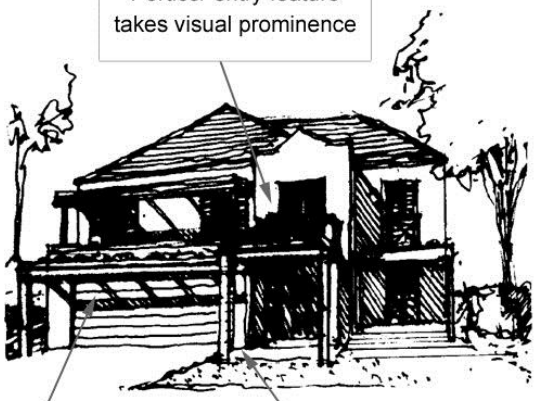
APPENDIX 5 – EXAMPLES OF GARAGE DESIGN CONTROLS

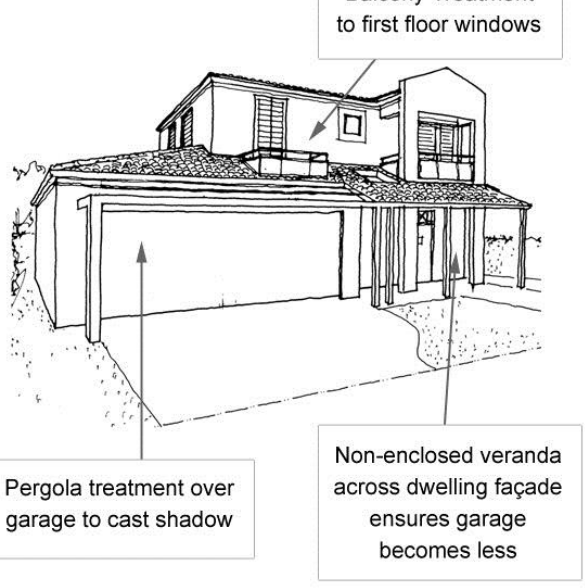

Blank wall appearance
Garage dominates facade


Balcony treatment to first floor windows
Verandah treatment adds interest to facade and usability of dwelling
Pergola treatment over garage to cast shadow and reduce garage dominance
Entry feature/portico extended to become prominent architectural feature






Portico/ entry feature takes visual prominence
Pergola/balcony over garage to cast shadow
Garage set back from dwelling facade


Balcony Treatment to first floor windows
Pergola treatment over garage to cast shadow
Non-enclosed veranda across dwelling façade ensures garage becomes less

APPENDIX 6 – CARRIAGEWAY DESIGN

Advisory Note:

Council at its meeting of the Planning Services Review Committee on 4 April, 2000 resolved to adopt changes to the carriageway width standards of this Development Control Plan as follows:

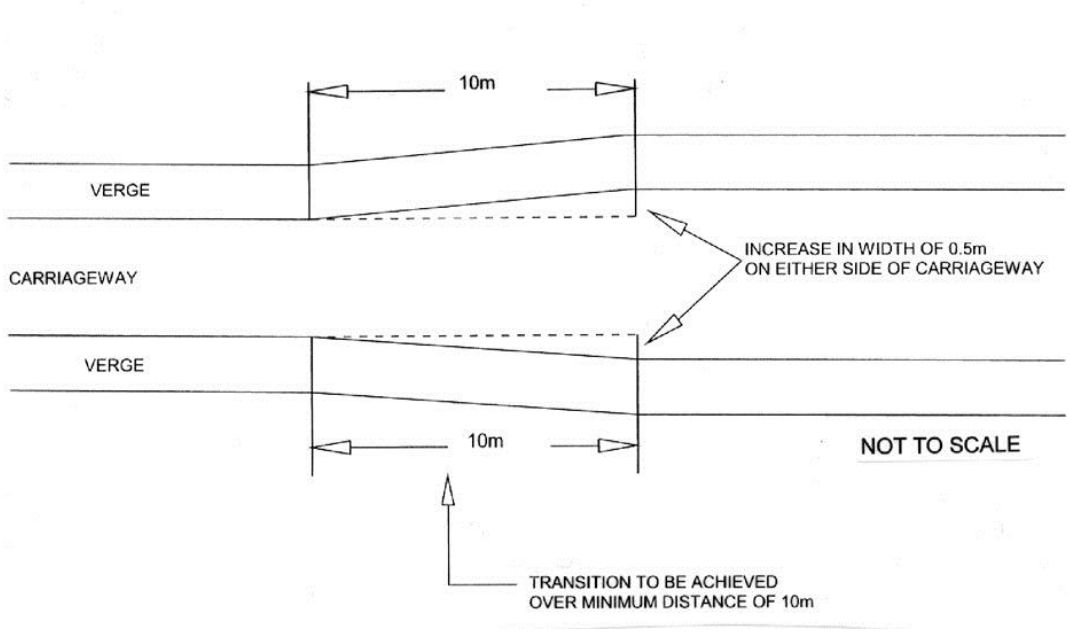
Road type	Required carriageway width	
	PREVIOUS	CURRENT
Access Way	5.0 metres	6.0 metres
Access Place	6.5 metres	7.5 metres
Access Street	7.5 metres	8.5 metres
Collector Road	9.5 metres	9.5 metres (no change)

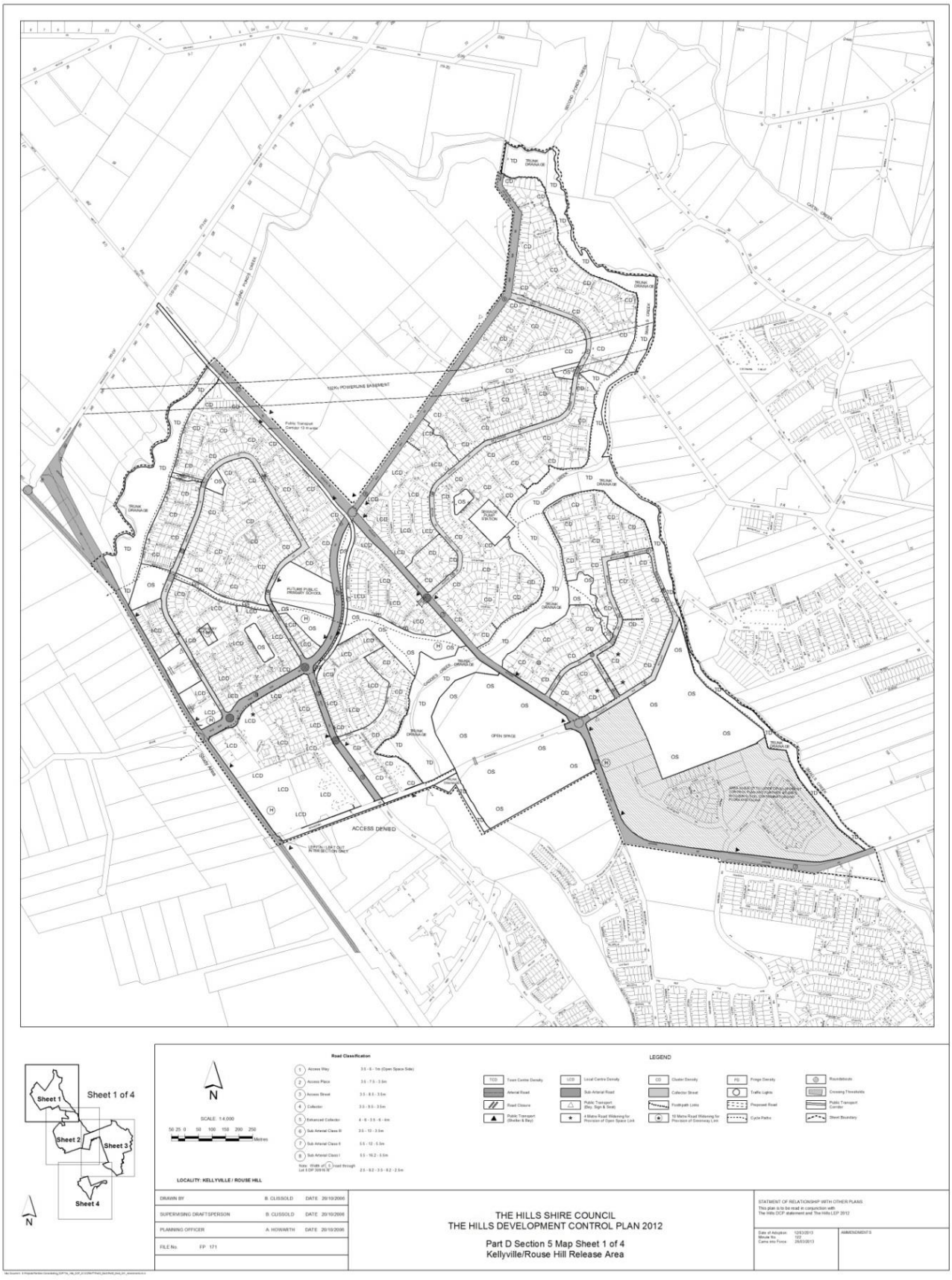
In the event that a road is required to be constructed under the current carriageway width standards and will join a road constructed under the previous standards the transition is to be achieved as follows:-

(i) The required increase to the carriageway width of one (1) metre is to be achieved by a 0.5 metre increase on either side of the carriageway, and

(ii) The transition to the wider carriageway is to be achieved over a length of 10 metres.

The above criteria are demonstrated graphically below.




Sheet 1
Sheet 1 of 4
Sheet 2
Sheet 3
Sheet 4
N
SCALE: 1:4,000
50 25 0 50 100 150 200 250
Metres
LOCALITY: KELLYVILLE / ROUSE HILL
Road Classification
LEGEND
DRAWN BY B. CLISSOLD DATE 20/10/2006
SUPERVISING DRAFTSPERSON B. CLISSOLD DATE 20/10/2006
PLANNING OFFICER A. HOWARTH DATE 20/10/2006
FILE No. FP 171
THE HILLS SHIRE COUNCIL
THE HILLS DEVELOPMENT CONTROL PLAN 2012
Part D Section 5 Map Sheet 1 of 4
Kellyville/Rouse Hill Release Area
STATEMENT OF RELATIONSHIP WITH OTHER PLANS
This plan is to be read in conjunction with
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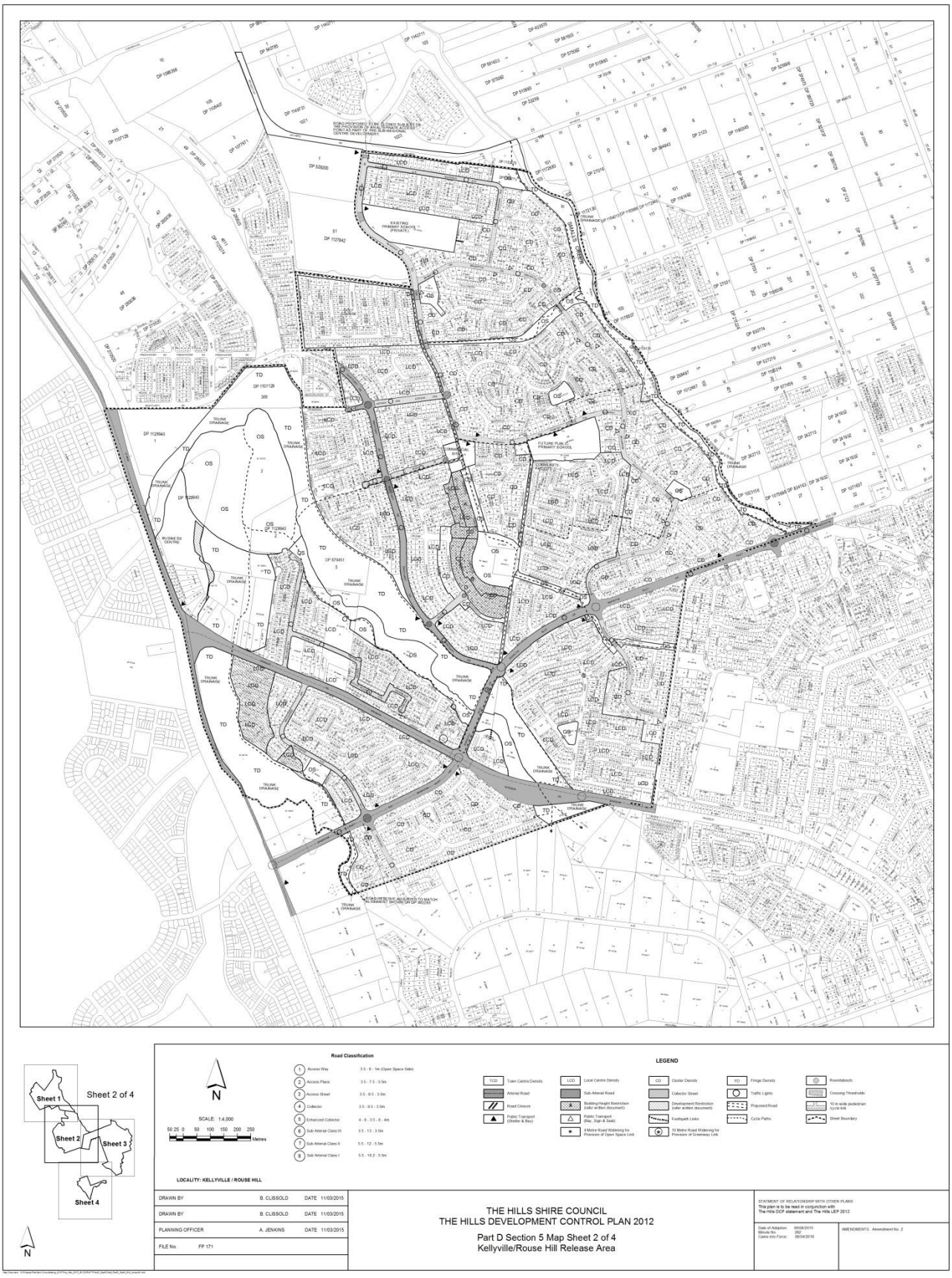
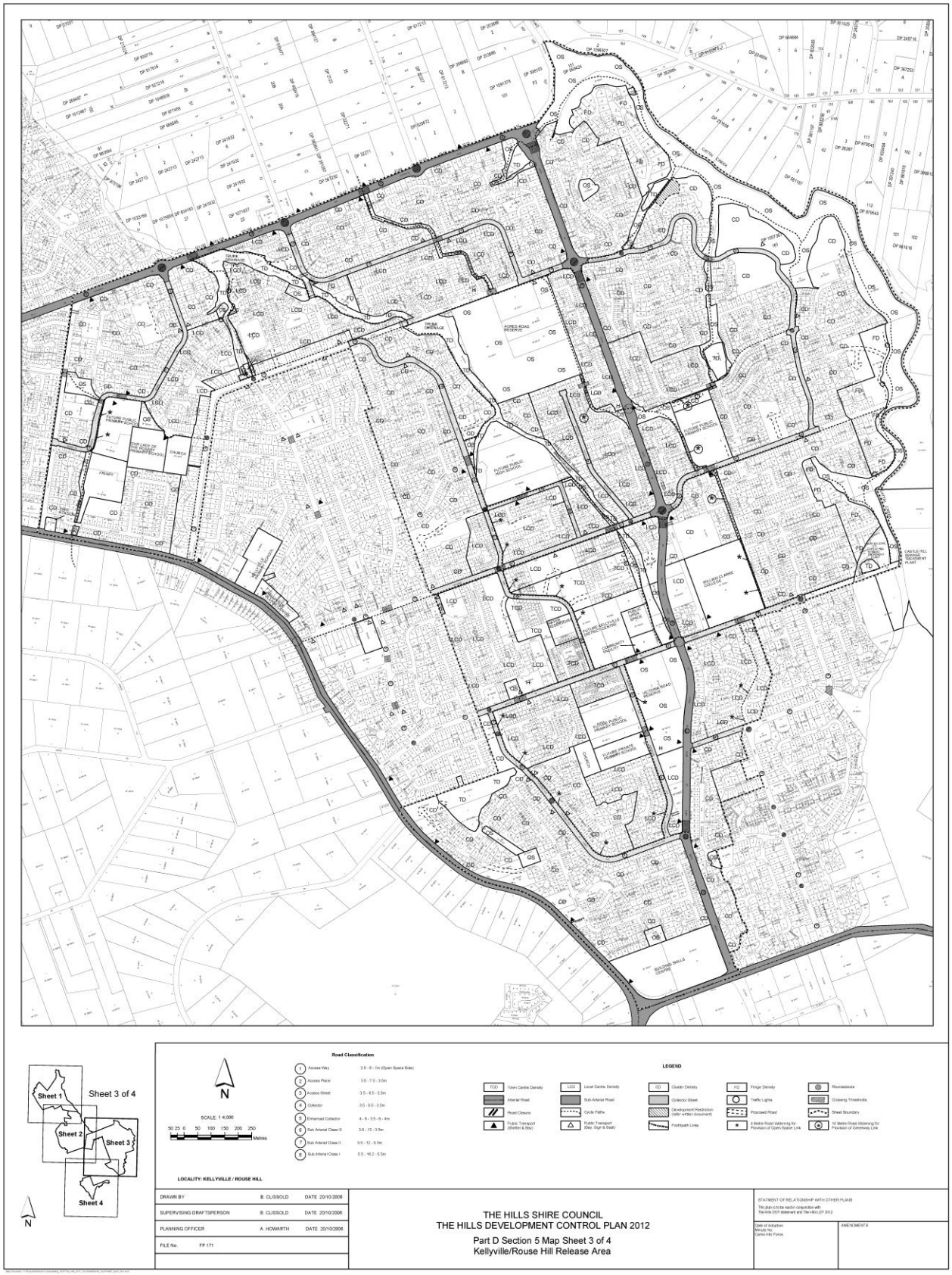
AMENDMENTS


Sheet 1
Sheet 2 of 4
Sheet 2
Sheet 3
Sheet 4
N
SCALE: 1:4,000
50 25 0 50 100 150 200 250
Metres
Road Classification
1 Access Way 3.5 - 6 - 5m (Open Space Side)
2 Access Place 3.5 - 7.5 - 3.5m
3 Access Street 3.5 - 8.5 - 3.5m
4 Collector 3.5 - 9.5 - 3.5m
5 Enhanced Collector 4 - 6 - 3.5 - 6 - 4m
6 Sub Arterial Class III 3.5 - 13 - 3.5m
7 Sub Arterial Class II 5.5 - 12 - 5.5m
8 Sub Arterial Class I 5.5 - 16.2 - 5.5m
LEGEND
TCD Town Centre Density
LCD Local Centre Density
CD Cluster Density
FD Fringe Density
Roundabouts
Arterial Road
Sub-Arterial Road
Collector Street
Traffic Lights
Crossing Thresholds
Road Closure
Building Height Restriction (refer written document)
Development Restriction (refer written document)
Proposed Road
10 m wide pedestrian / cycle link
Public Transport (Shelter & Bay)
Public Transport (Bay, Sign & Seat)
Footpath Links
Cycle Paths
Street Boundary
1 Metre Road Widening for Provision of Open Space Link
10 Metre Road Widening for Provision of Greenway Link
LOCALITY: KELLYVILLE / ROUSE HILL
DRAWN BY B. CLISSOLD DATE 11/03/2015
DRAWN BY B. CLISSOLD DATE 11/03/2015
PLANNING OFFICER A. JENKINS DATE 11/03/2015
FILE No. FP-171
THE HILLS SHIRE COUNCIL
THE HILLS DEVELOPMENT CONTROL PLAN 2012
Part D Section 5 Map Sheet 2 of 4
Kellyville/Rouse Hill Release Area
STATEMENT OF RELATIONSHIP WITH OTHER PLANS
This plan is to be read in conjunction with
The Hills DCP statement and The Hills LEP 2012
Date of Adoption: 09/08/2015
Minute No: 282
Came into Force: 09/04/2016
AMENDMENTS: Amendment No. 2


Sheet 1
Sheet 3 of 4
Sheet 2
Sheet 3
Sheet 4
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SCALE: 1:4,000
50 25 0 50 100 150 200 250
Metres
Road Classification
LEGEND
LOCALITY: KELLYVILLE / ROUSE HILL
DRAWN BY: B. CLISSOLD DATE: 20/10/2006
SUPERVISING DRAFTSPERSON: B. CLISSOLD DATE: 20/10/2006
PLANNING OFFICER: A. HOWARTH DATE: 20/10/2006
FILE No.: FP 171
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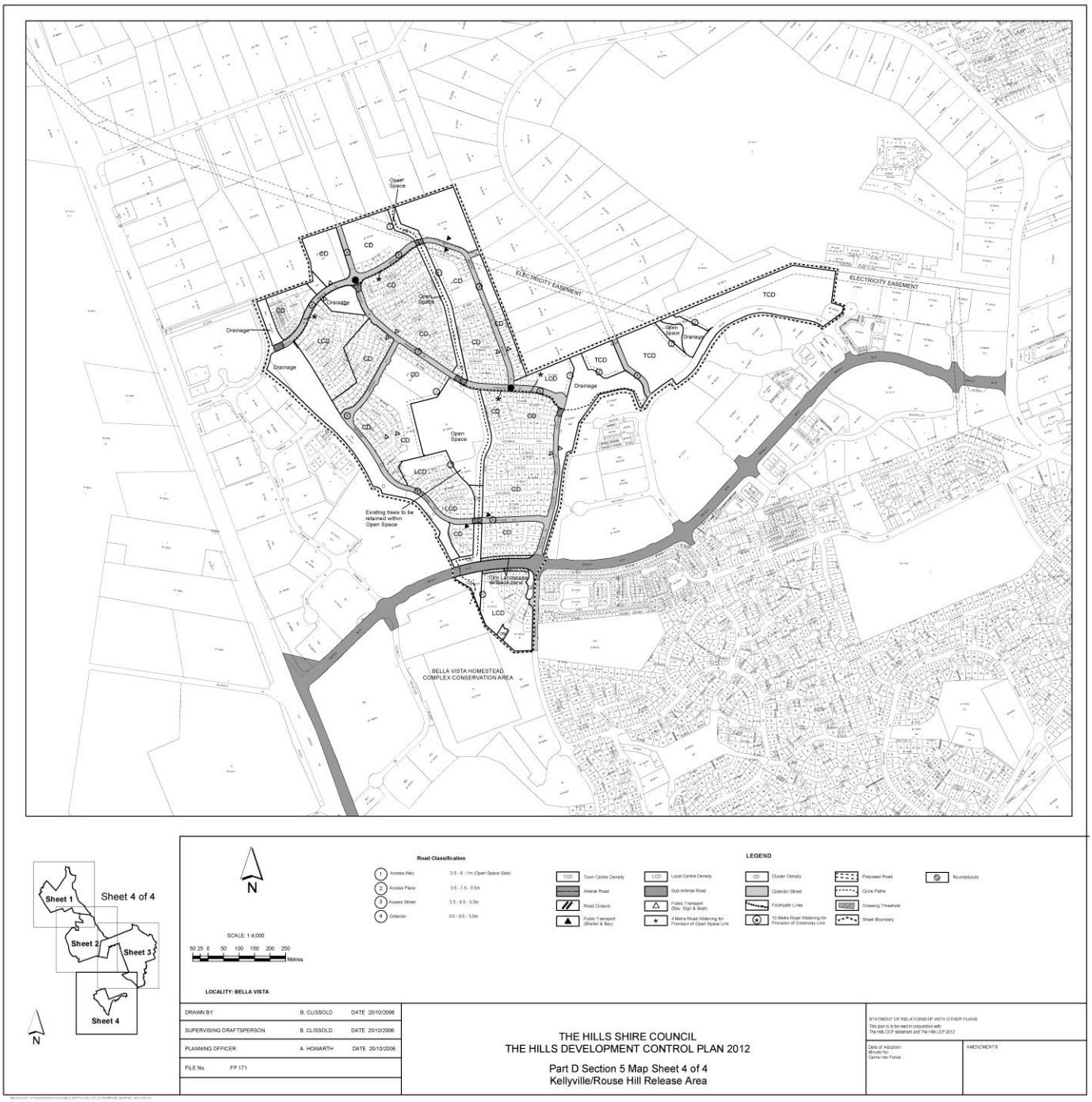
Date of Adoption:
Minute No:
Came into Force:
AMENDMENTS


Open Space
CD
LCD
TCD
ELECTRICITY EASEMENT
Drainage
Existing trees to be retained within Open Space
10m Landscape Buffer Zone
BELLA VISTA HOMESTEAD COMPLEX CONSERVATION AREA
Sheet 1
Sheet 2
Sheet 3
Sheet 4
Sheet 4 of 4
N
SCALE: 1:4,000
50 25 0 50 100 150 200 250
Metres
LOCALITY: BELLA VISTA
Road Classification
1 Access Way 3.5 - 6 - 1m (Open Space Side)
2 Access Place 3.5 - 7.5 - 3.5m
3 Access Street 3.5 - 8.5 - 3.5m
4 Collector 3.5 - 9.5 - 3.5m
LEGEND
Town Centre Density
Local Centre Density
Cluster Density
Proposed Road
Roundabouts
Arterial Road
Sub-Arterial Road
Collector Street
Cycle Paths
Road Closure
Public Transport (Bay, Sign & Seat)
Footpath Links
Crossing Threshold
Public Transport (Shelter & Bay)
4 Metre Road Widening for Provision of Open Space Link
10 Metre Road Widening for Provision of Greenway Link
Sheet Boundary
DRAWN BY B. CLISSOLD DATE 20/10/2006
SUPERVISING DRAFTSPERSON B. CLISSOLD DATE 20/10/2006
PLANNING OFFICER A. HOWARTH DATE 20/10/2006
FILE No. FP 171
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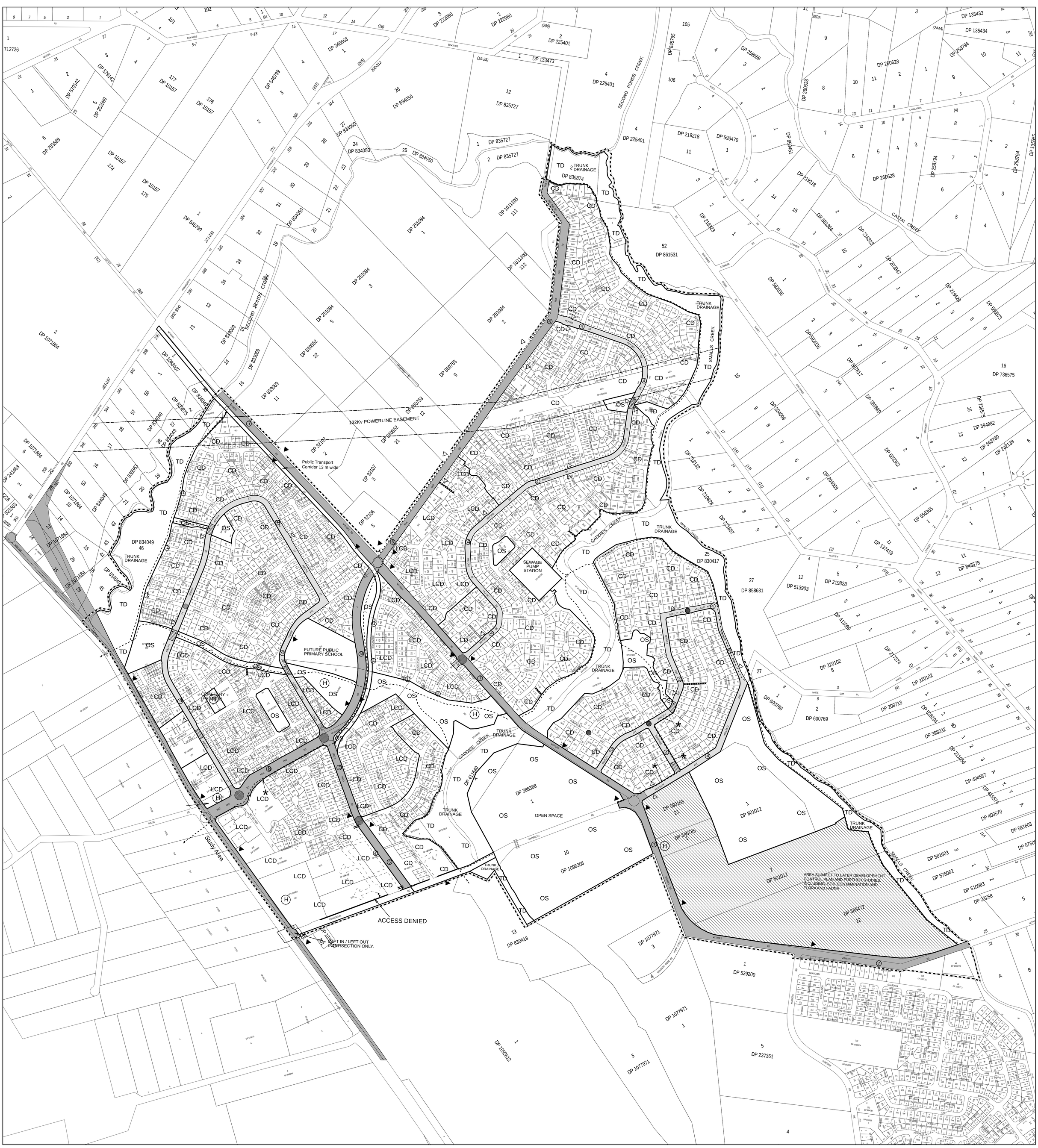
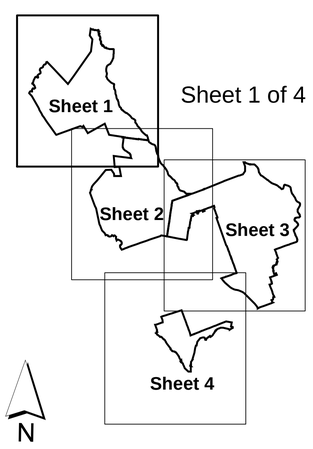
Date of Adoption:
Minute No:
Came into Force:
AMENDMENTS





Sheet 1 of 4

N

SCALE: 1:4,000

50 25 0 50 100 150 200 250 Metres

LOCALITY: KELLYVILLE / ROUSE HILL

Road Classification

1	Access Way	3.5 - 6 - 1m (Open Space Side)
2	Access Place	3.5 - 7.5 - 3.5m
3	Access Street	3.5 - 8.5 - 3.5m
4	Collector	3.5 - 9.5 - 3.5m
5	Enhanced Collector	4 - 6 - 3.5 - 6 - 4m
6	Sub Arterial Class III	3.5 - 13 - 3.5m
7	Sub Arterial Class II	5.5 - 12 - 5.5m
8	Sub Arterial Class I	5.5 - 16.2 - 5.5m
Note: Width of (5) road through Lot 5 DP 30916 is		2.5 - 8.2 - 3.5 - 8.2 - 2.5m

LEGEND

TCD Town Centre Density	LCD Local Centre Density	CD Cluster Density	FD Fringe Density	Roundabouts
Arterial Road	Sub-Arterial Road	Collector Street	Traffic Lights	Crossing Thresholds
Road Closure	Public Transport (Bay, Sign & Seat)	Foothpath Links	Proposed Road	Public Transport Corridor
Public Transport (Shelter & Bay)	* 4 Metre Road Widening for Provision of Open Space Link	* 10 Metre Road Widening for Provision of Greenway Link	Cycle Paths	Sheet Boundary

DRAWN BY	B. CLISSOLD	DATE 20/10/2006
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2006
PLANNING OFFICER	A. HOWARTH	DATE 20/10/2006
FILE No.	FP 171	

THE HILLS SHIRE COUNCIL
THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part D Section 5 Map Sheet 1 of 4
Kellyville/Rouse Hill Release Area

STATMENT OF RELATIONSHIP WITH OTHER PLANS

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The Hills DCP statement and The Hills LEP 2012

Date of Adoption: 12/03/2013
Minute No. 122
Came into Force: 26/03/2013

AMMENDMENTS

Map Document: S:\Projects\PlanServ\Consolidating_DCP\The_Hills_DCP_2011\PartD_Sec5\PartD_Sec5_Sh1.mxd

ROAD PROPOSED TO BE CLOSED SUBJECT TO THE PROVISION OF AN ALTERNATE ACCESS POINT AS PART OF THE SUB-REGIONAL CENTRE DEVELOPMENT.

EXISTING PRIMARY SCHOOL (PRIVATE)

FUTURE PUBLIC PRIMARY SCHOOL

COMMERCIAL SITE

COMMUNITY FACILITY

BUSINESS CENTRE

ROAD RESERVE ADJUSTED TO MATCH ALIGNMENT SHOWN ON DP 862283

TRUNK DRAINAGE

SMALLS CREEK

Sheet 2 of 4

Sheet 1 | Sheet 2 | Sheet 3 | Sheet 4

N

SCALE: 1:4,000

50 25 0 50 100 150 200 250 Metres

Road Classification

1	Access Way	3.5 - 6 - 1m (Open Space Side)
2	Access Place	3.5 - 7.5 - 3.5m
3	Access Street	3.5 - 8.5 - 3.5m
4	Collector	3.5 - 9.5 - 3.5m
5	Enhanced Collector	4 - 6 - 3.5 - 6 - 4m
6	Sub Arterial Class III	3.5 - 13 - 3.5m
7	Sub Arterial Class II	5.5 - 12 - 5.5m
8	Sub Arterial Class I	5.5 - 16.2 - 5.5m

LEGEND

TCD Town Centre Density	LCD Local Centre Density	CD Cluster Density	FD Fringe Density	Roundabouts
Arterial Road	Sub-Arterial Road	Collector Street	Traffic Lights	Crossing Thresholds
Road Closure	A Building Height Restriction (refer written document)	Development Restriction (refer written document)	Proposed Road	10 m wide pedestrian /cycle link
Public Transport (Shelter & Bay)	Public Transport (Bay, Sign & Seat)	Foothpath Links	Cycle Paths	Sheet Boundary
	* 4 Metre Road Widening for Provision of Open Space Link	10 Metre Road Widening for Provision of Greenway Link		

LOCALITY: KELLYVILLE / ROUSE HILL

DRAWN BY	B. CLISSOLD	DATE 11/03/2015
DRAWN BY	B. CLISSOLD	DATE 11/03/2015
PLANNING OFFICER	A. JENKINS	DATE 11/03/2015
FILE No.	FP 171	

THE HILLS SHIRE COUNCIL
THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part D Section 5 Map Sheet 2 of 4
Kellyville/Rouse Hill Release Area

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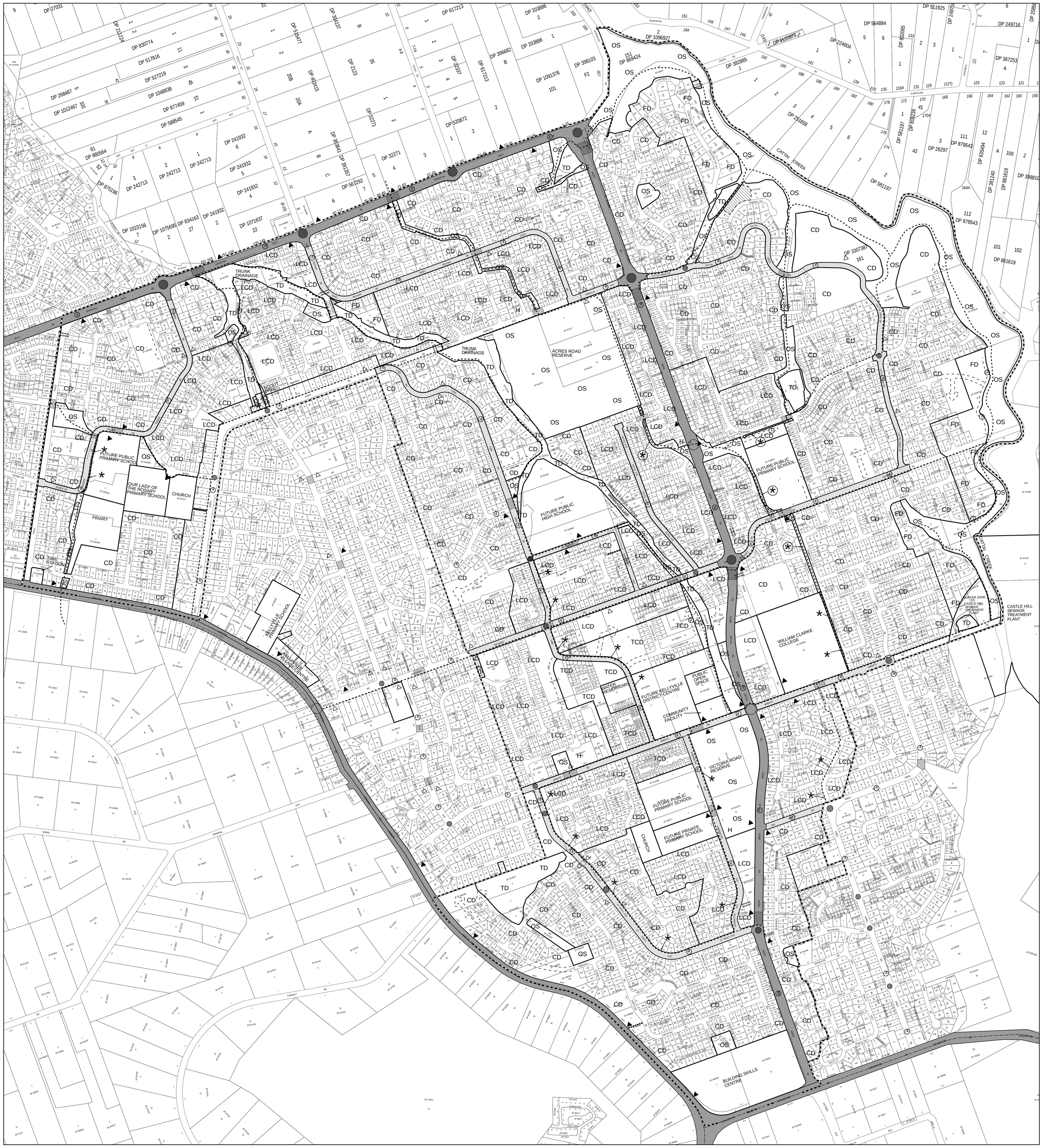
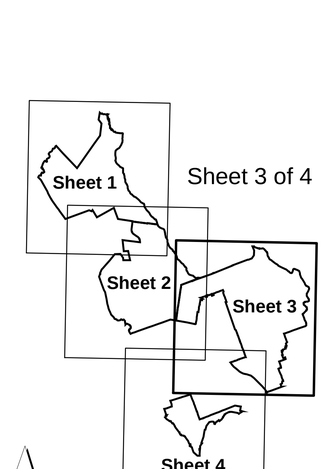
Date of Adoption: 09/08/2015
Minute No. 282
Came into Force: 08/04/2016

AMENDMENTS Amendment No. 2

Map Document: S:\Projects\PlanServ\Consolidating_DCP\The_Hills_DCP_2012\DRAFT\PartD_Sec5\Draft_PartD_Sec5_Sh2_Amend2.mxd





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SCALE: 1:4,000

50 25 0 50 100 150 200 250 Metres

Road Classification

1	Access Way	3.5 - 6 - 1m (Open Space Side)
2	Access Place	3.5 - 7.5 - 3.5m
3	Access Street	3.5 - 8.5 - 3.5m
4	Collector	3.5 - 9.5 - 3.5m
5	Enhanced Collector	4 - 6 - 3.5 - 6 - 4m
6	Sub Arterial Class III	3.5 - 13 - 3.5m
7	Sub Arterial Class II	5.5 - 12 - 5.5m
8	Sub Arterial Class I	5.5 - 16.2 - 5.5m

LEGEND

TCD Town Centre Density	LCD Local Centre Density	CD Cluster Density	FD Fringe Density	Roundabouts
Arterial Road	Sub-Arterial Road	Collector Street	Traffic Lights	Crossing Thresholds
Road Closure	Cycle Paths	Development Restriction (refer written document)	Proposed Road	Sheet Boundary
Public Transport (Shelter & Bay)	Public Transport (Bay, Sign & Seat)	Foothpath Links	4 Metre Road Widening for Provision of Open Space Link	10 Metre Road Widening for Provision of Greenway Link

LOCALITY: KELLYVILLE / ROUSE HILL

DRAWN BY	B. CLISSOLD	DATE 20/10/2006
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2006
PLANNING OFFICER	A. HOWARTH	DATE 20/10/2006
FILE No.	FP 171	

THE HILLS SHIRE COUNCIL
THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part D Section 5 Map Sheet 3 of 4
Kellyville/Rouse Hill Release Area

STATMENT OF RELATIONSHIP WITH OTHER PLANS

This plan is to be read in conjunction with
The Hills DCP statement and The Hills LEP 2012

Date of Adoption: 12/03/2013
Minute No. 122
Came into Force: 26/03/2013

AMENDMENTS

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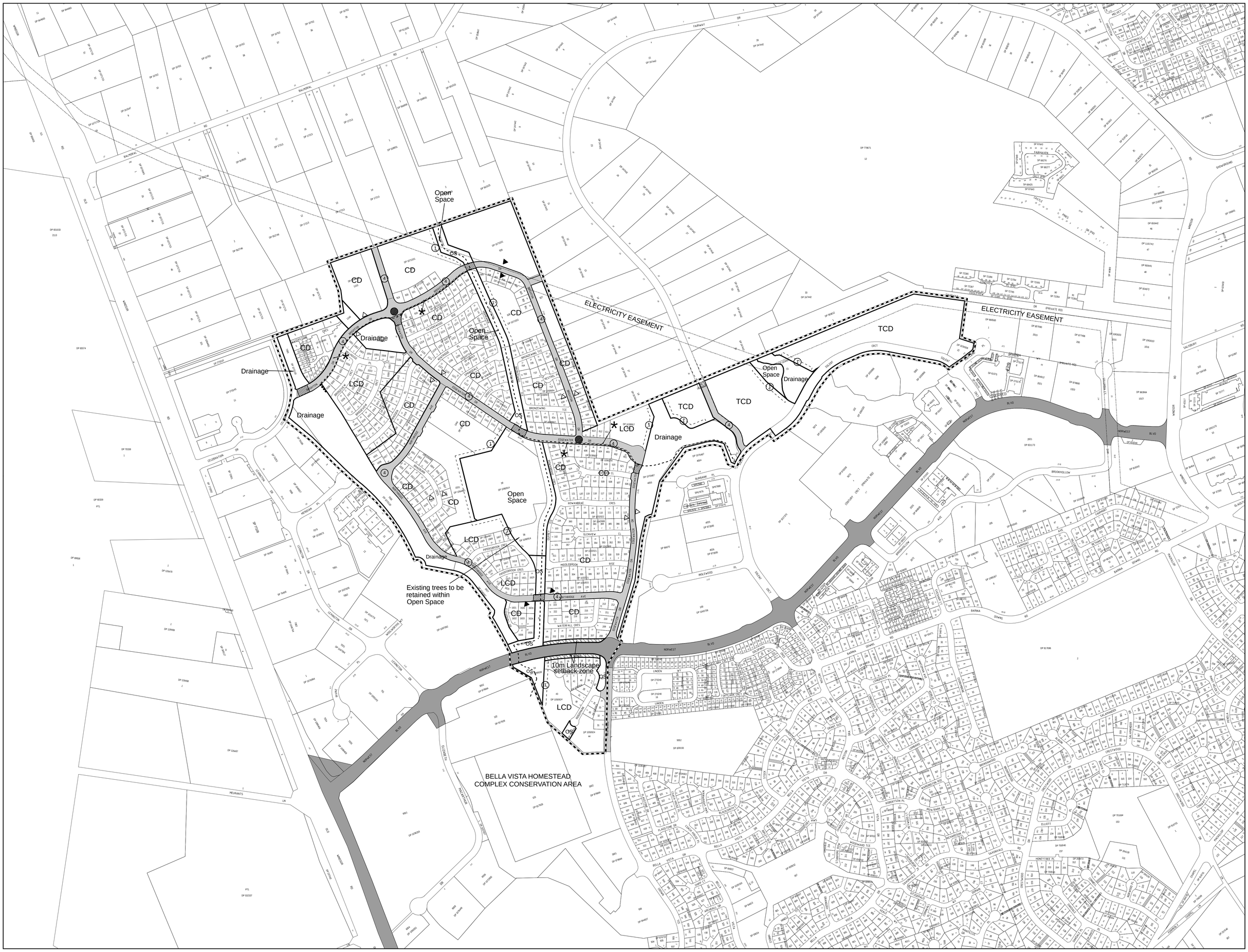

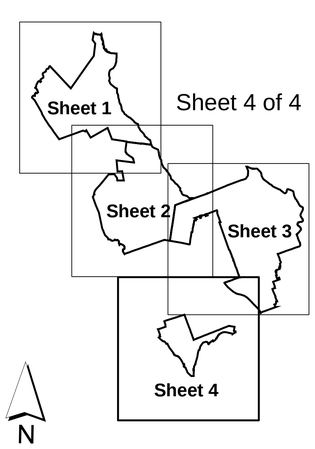

N

SCALE: 1:4,000

50 25 0 50 100 150 200 250 Metres

LOCALITY: BELLA VISTA

Road Classification

1	Access Way	3.5 - 6 - 1m (Open Space Side)
2	Access Place	3.5 - 7.5 - 3.5m
3	Access Street	3.5 - 8.5 - 3.5m
4	Collector	3.5 - 9.5 - 3.5m

LEGEND

- TCD — Town Centre Density
- LCD — Local Centre Density
- CD — Cluster Density
- Proposed Road
- Roundabouts
- Arterial Road
- Sub-Arterial Road
- Collector Street
- Cycle Paths
- Road Closure
- Public Transport (Bay, Sign & Seat)
- Foothpath Links
- Crossing Threshold
- Public Transport (Shelter & Bay)
- 4 Metre Road Widening for Provision of Open Space Link
- 10 Metre Road Widening for Provision of Greenway Link
- Sheet Boundary

DRAWN BY	B. CLISSOLD	DATE 20/10/2006
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE 20/10/2006
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THE HILLS SHIRE COUNCIL
THE HILLS DEVELOPMENT CONTROL PLAN 2012

Part D Section 5 Map Sheet 4 of 4
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The Hills Development Control Plan (DCP) 2012

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Part D Section 6
Rouse Hill Regional Centre

D6

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1. INTRODUCTION

This Section of the DCP must be read in conjunction with Part A – Introduction of this DCP.

1.1 BACKGROUND

Refer to Sydney Regional Environmental Plan No. 19 – Rouse Hill Development Area (SREP 19).

1.2 LAND TO WHICH THIS SECTION OF THE DCP APPLIES

This Section of the DCP applies to land commonly referred to as the Rouse Hill Regional Centre as shown edged heavy red in Figure 1 below [**Note.** the boundary may vary according to landownership].

1.3 RELATIONSHIP TO OTHER PLANS, POLICIES AND DOCUMENTS

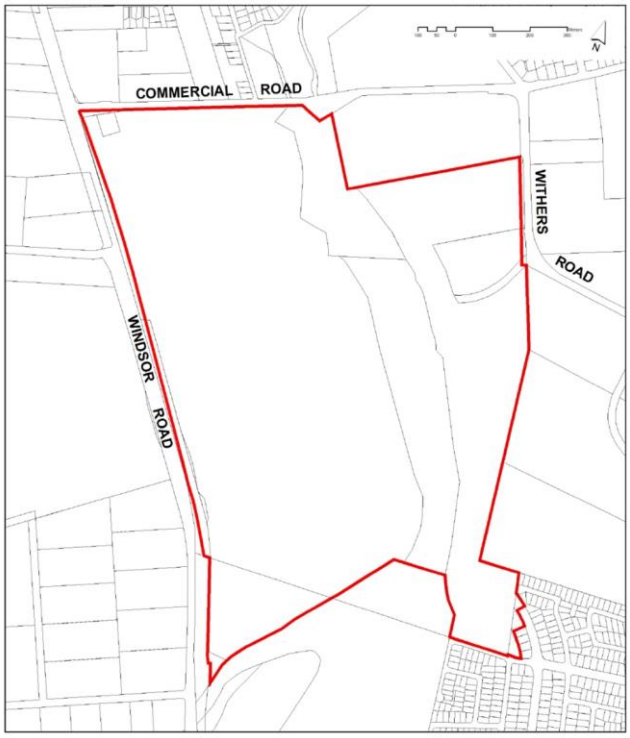
The provisions contained within this Section of the DCP apply to the Rouse Hill Regional Centre except to the extent that they are inconsistent with an approved Masterplan for the site.

Any development occurring on flood controlled land must refer to Part C Section 6 – Flood Controlled Land.

1.4 VISION

A regional scale, multi-functional centre will be developed that provides employment opportunities, shopping, commercial services, leisure activities, community facilities and open space. A "living" Centre will be created by incorporating medium density housing within and adjoining the Centre. This will ensure activity within the Centre continues into the evening. As a result, amenity and safety will be enhanced, and the viability of business activity and public transport use will be improved.

Figure 1 – Rouse Hill Regional Centre Site



1.5 OBJECTIVES OF THIS SECTION OF THE DCP

The objectives of this Section of the DCP are:

(i) *To provide a clear vision for the Centre.*

(ii) *To identify opportunities and constraints so as to maximise benefits which might arise from development of the Centre whilst protecting and enhancing the natural features of the site.*

(iii) *To provide key principles to guide design of each of the main elements of urban structure within the Centre.*

(iv) *To outline the requirements for Stage 1 of the Centre's development.*

(v) *To require the developer of the Centre to prepare a Masterplan based on the principles in this Plan.*

(vi) *To establish ongoing arrangements to secure sustainable planning and management of the Centre.*

(vii) *To promote innovation and creativity in the development of the Centre.*

(viii) *To create an environment that discourages and prevents crime.*

1.6 STRUCTURE OF THIS SECTION OF THE DCP

Figure 2 illustrates how this Section of the DCP is structured. The Centre can be considered as comprising of seven main elements: urban structure, activities, access and movement, public realm, urban form, housing and special places. This Section of the DCP is structured on the basis of these elements. For each element there are one or more principles and a rationale is given to support these principles. A statement of outcomes clarifies what implementation of the principles should achieve. Performance criteria and performance measures provide detailed guidelines on how the principles can be met. (Note: Performance criteria are means by which the quality of design is to be achieved. Performance measures are compulsory numeric standards or minimum requirements.)

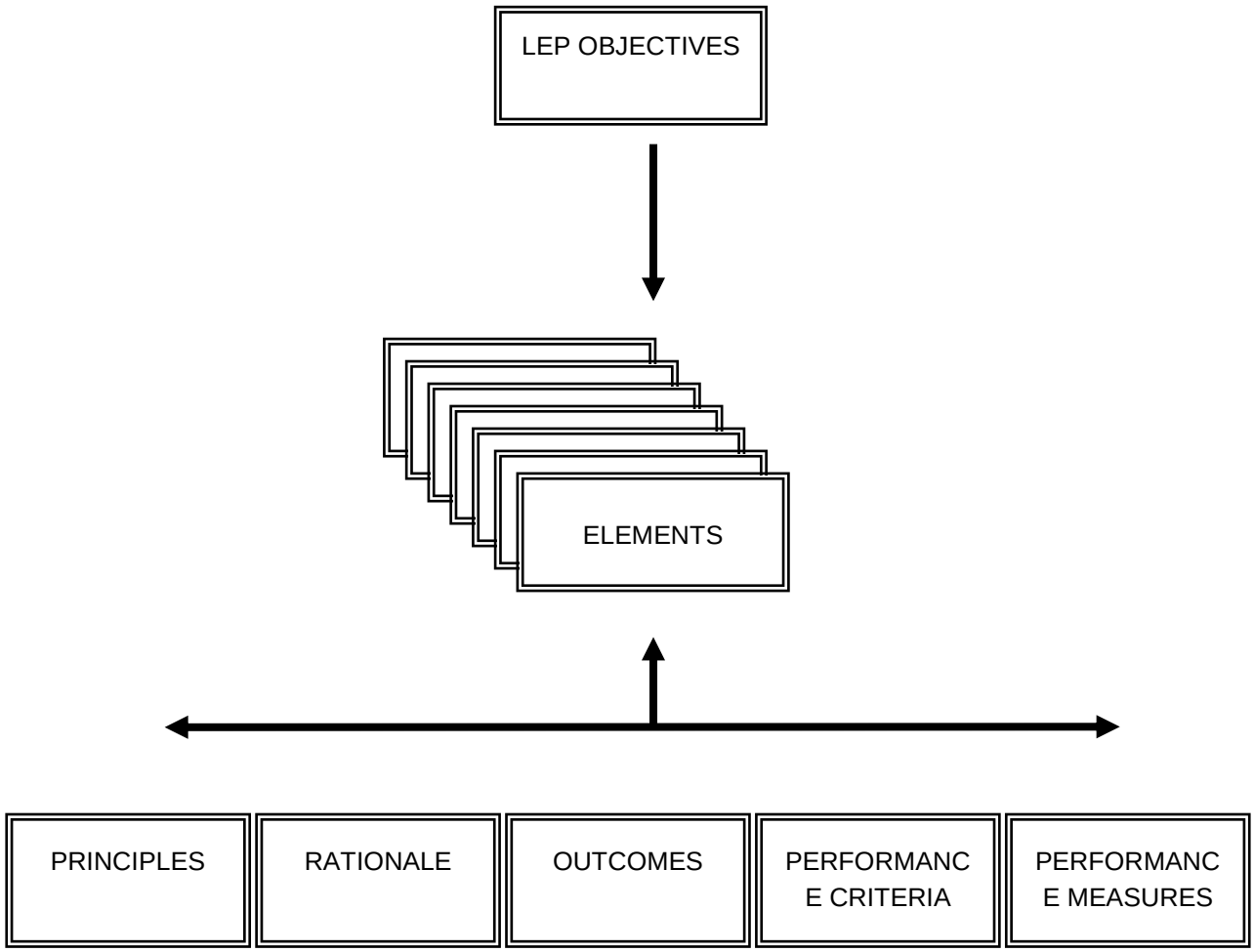


Figure 2 – Structure of this Section of the DCP

1.7 PRINCIPLES

The principles relate to each of the seven elements of this DCP and represent mandatory requirements to be met by developers of the Centre.

Urban Structure

- A dense mixed use core supported by the maximum amounts of nearby housing and unified by coherent built up streetscapes.
- A high level of regional transport accessibility with clear, stable and permanent links.
- A sustainable relationship between the urban area and its restored natural setting.

Activities

- Multi-functional use.
- A distribution of activities that relates to the regional access routes, internal streetscapes and open space systems.
- A range of medium density and high density housing which forms an integral part of the Centre.

Access and Movement

- Efficient planning and management of private and public transport.
- Direct access to commercial areas whilst protecting adjacent residential areas from excessive through traffic.
- Facilitate access by car for customers, while at the same time increasing public transport use.

Public Realm

- Integrated planning, development and management of the riparian corridor, local and district parks, and urban public spaces.

Urban Form

- The urban form is determined by those elements which govern the internal layout of the Centre. Simple rules allow for a degree of flexibility, while ensuring clear functionality and legibility for users.
- Prevention of crime through environmental design.

Housing

- Higher density housing within and adjacent to the commercial core.

Special Places

- The public transport interchange, main street/Civic Way and central park/tributary 3 must have a high standard of visual and user amenity.

1.8 DEVELOPMENT OUTCOMES

It is expected that the Centre could grow to encompass at least 130,000m^2 of retail floor space and 70,000m^2 of commercial/mixed use floor space, with flexibility to respond to changes in the staging and market needs. Community uses will form an integral part of its facilities, and be fully integrated into the layout. The Centre will have a system of roads and parking which will enable it to grow from a district centre with surface parking to a mature development with public parking structures. High quality public transport, with safe and convenient interchange facilities, will be available from stage 1 of the Centre's development.

The four major spatial components of the Centre will be:

- core area which primarily contains commercial uses, speciality retail, supermarkets, discount stores, leisure activities, public transport interchange, public parking structures, housing etc.
- the Northern Frame, which is primarily intended for a mix of land uses. It is to accommodate long-term change; and intensification and mix of use including bulky goods, and a range of innovative commercial, retail and residential typologies. The area will evolve over time and allow for expansion and support the core area.
- open space and public realm.
- adjoining area consists primarily of community facilities, education, housing and businesses that do not conflict with residential amenity.

The core of the Centre will be focused around a traditional, tree lined, main street and Civic Way which together join the primary functions of the centre. Public settings within the urbanised areas of the Centre reflect a regional scale in keeping with their role as locations for outdoor leisure activities associated with the commercial core.

The Northern Frame will have a setting of tree lined streets, generous surface car-parking and easy access. Retail and commercial uses in the Northern Frame will be lower in height than the core and should form a continuum of the north-south active

street, Civic Way. Housing within the Northern Frame will generally be, but need not exclusively be incorporated in high quality mixed use developments, taking maximum advantage of a lively and convenient urban setting.

Residential areas will all be designed in an integrated framework to ensure the relationships between dwellings and their relationship to the site, local facilities, and infrastructure are considered, and potential benefits maximised. A variety of housing types, sizes, densities and designs will cater for a broad range of housing needs. The environment will be safe and well landscaped, with development which adds interest and variety to the streetscape.

The urban design of the Centre is fixed by a few broad principles, leaving the detail to be further developed at the Master Planning stage. The principles reflect the desirability of achieving a sense of "urbanity within a landscaped setting", to be achieved by building streetscapes which have a feeling of containment and a liveliness of building forms and architecture. This built environment should closely relate to the topography and landscape of the site.

The core area consists of blocks developed to provide a continuity of street frontages. The size of blocks (and hence the interval between local streets and service lanes) is to be as small as possible, within the constraints of layouts for larger scale retail trading areas. Provided access and parking requirements are met, development limits are set only by building heights, which require a minimum of two storey development throughout the core. Above two stories, taller buildings are allowed to specified heights and in specified locations. The height limits reflect the desirability of achieving both variety and a measure of consistency in the streetscape, as well as of achieving adequate penetration of sunlight into streets.

Outside the core area and Northern Frame, the aim is that streets below the arterial level should also add an appropriate scale of urbanity (related to the width of the streets) to the Centre.

The site topography created by the tributaries of Caddies Creek will be used to integrate the urban and natural settings. Caddies Creek will be rehabilitated and restored to protect its ecological qualities as well as providing a regional scale facility for passive recreation and leisure activities. Landscaping design for the creek will be integrated with measures to treat urban stormwater (eg. using macrophyte ponds and wetlands). Pedestrian and cycle linkages will be provided to surrounding areas.

1.9 IMPLEMENTATION

The applicant must prepare a Masterplan, detailed Development Guidelines and Management Plan for the Centre, which are to be incorporated into this Section of the DCP for the Regional Centre (see Figure 3).

The **Masterplan** must cover the whole of the area to which this Plan applies and be prepared in accordance with this Plan.

Detailed Development Guidelines must accompany the Masterplan. The Guidelines set out the manner in which the principles of this Section of the DCP will be implemented. Detailed development guidelines govern each subsequent development application.

A **Management Plan** must be prepared in conjunction with Council to ensure the efficient ongoing management of all aspects of the Centre.

Due to the nature and scale of the development, there are a number of requirements from other authorities that the developer must satisfy. An indication of those requirements is given in Schedule 1 – Clearances by Authorities, although this is not an exhaustive list.

1.9.1 DEVELOPER CONTRIBUTIONS

Applicants should refer to Council's Section 94 Contributions Plan No.8 Kellyville/Rouse Hill.

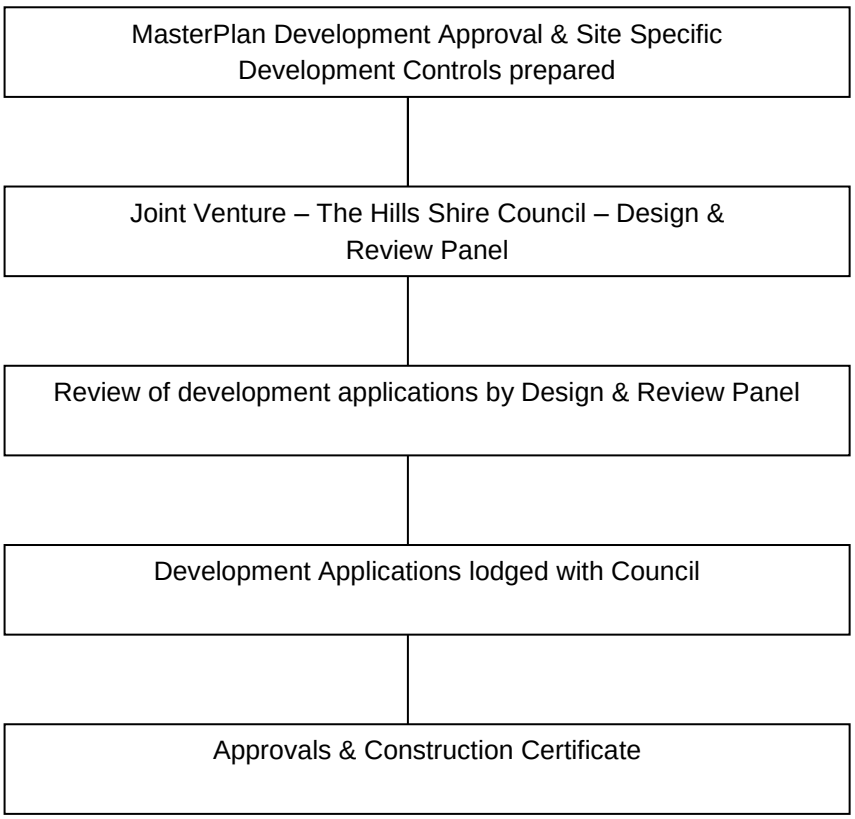


Figure 3 – Development Approval Process

2. ELEMENTS OF THE PLAN

In order to ensure an efficient development with high quality urban design, the main elements of the urban structure are to be incorporated into a Masterplan.

This section sets out the principles for each element, their rationale, expected outcomes, performance criteria and measures.

2.1 URBAN STRUCTURE

PRINCIPLES

- A dense mixed use core supported by the maximum amounts of nearby housing and unified by coherent built up streetscapes.
- A high level of regional transport accessibility with clear, stable and permanent links.
- A sustainable relationship between the urban area and its topography and restored natural setting.

RATIONALE

Key attributes of a multi-functional centre are enhanced by a compact mixed use development with a high level of regional accessibility and an attractive and sustainable relationship to its setting.

The variety of functions in the Centre should be linked:

- visually by adopting a consistent built-up character for streetscapes; and
- functionally by fronting activities onto streets.

In the public and commercial life of the centre, the emphasis is that the public areas have the primary role of integrating and linking all commercial and community activities in the Centre.

The commercial success of the Centre depends on high quality access. Fixing the location of the road and public transport system will reinforce efficient land use arrangements, and ensure that local environments with a pedestrian/residential focus are protected from through traffic.

The relationship between the site and the Centre needs to provide for:

- Establishing interconnected landscape and vegetation corridors.
- Visual amenity and a clear identity for the Centre (particularly from major approach roads).
- High amenity settings for parkland development close to the Centre.
- Protection of Heritage settings.
- The edges of the Centre relate to the site:
  - NorthWest - Commercial Road and the adjoining landscape treatment provides a transition from the Centre to the residential area to the northwest;
  - SouthEast - Caddies Creek forms the southeast edge of the Centre;
  - NorthEast - The Caddies Creek corridor forms the eastern edge of the Centre. The urban form in the northeast portion of the centre (i.e. north east of the Main Street) relates to this significant landscape feature; and
  - SouthWest - Windsor Road forms the southwest edge to the Centre. The built form provides a strong urban edge to the Centre i.e. taller buildings are located towards this edge.

The principles of Council's adopted "Designing Safer Communities – Safer by Design Guidelines" dated June 2003 should be addressed with each development application including the four principles: natural surveillance, access control, ownership and maintenance.

PERFORMANCE CRITERIA

a) Compact Core
   - A compact mixed use area with short pedestrian movements should maximise space for nearby non-retail uses. This can best be achieved by concentrating retailing in several levels. All retailing fronts public streets; closed malls are not permitted.
   - Place all parking in structures or in basements, and group higher density housing within and adjacent to the core area.

b) Regional Transport Accessibility:
   - High quality, direct and clear access by private and service vehicles should link the core to the arterial road network.
   - A public transport interchange should be permanently located adjacent to the core area and integral with its development.

c) Relationship to the Natural Setting:

- Use topographic features to generate the urban structure and incorporate prominent topographical features as special places.
- Locate all building above the trunk drainage 100 year flood line, although the detailed flood line boundary may vary eg. Tributary 3.
- The centre should present an image of a “city in a park”.
- Retain and incorporate remnant vegetation and mature vegetation where possible into the new landscape.
- Regenerate the Caddies Creek riparian corridor and link to the urbanised area via greenways such that Caddies Creek and Tributary 3 form the basis of the open space network.
- Maintain, enhance, protect and incorporate all heritage structures and landscapes.

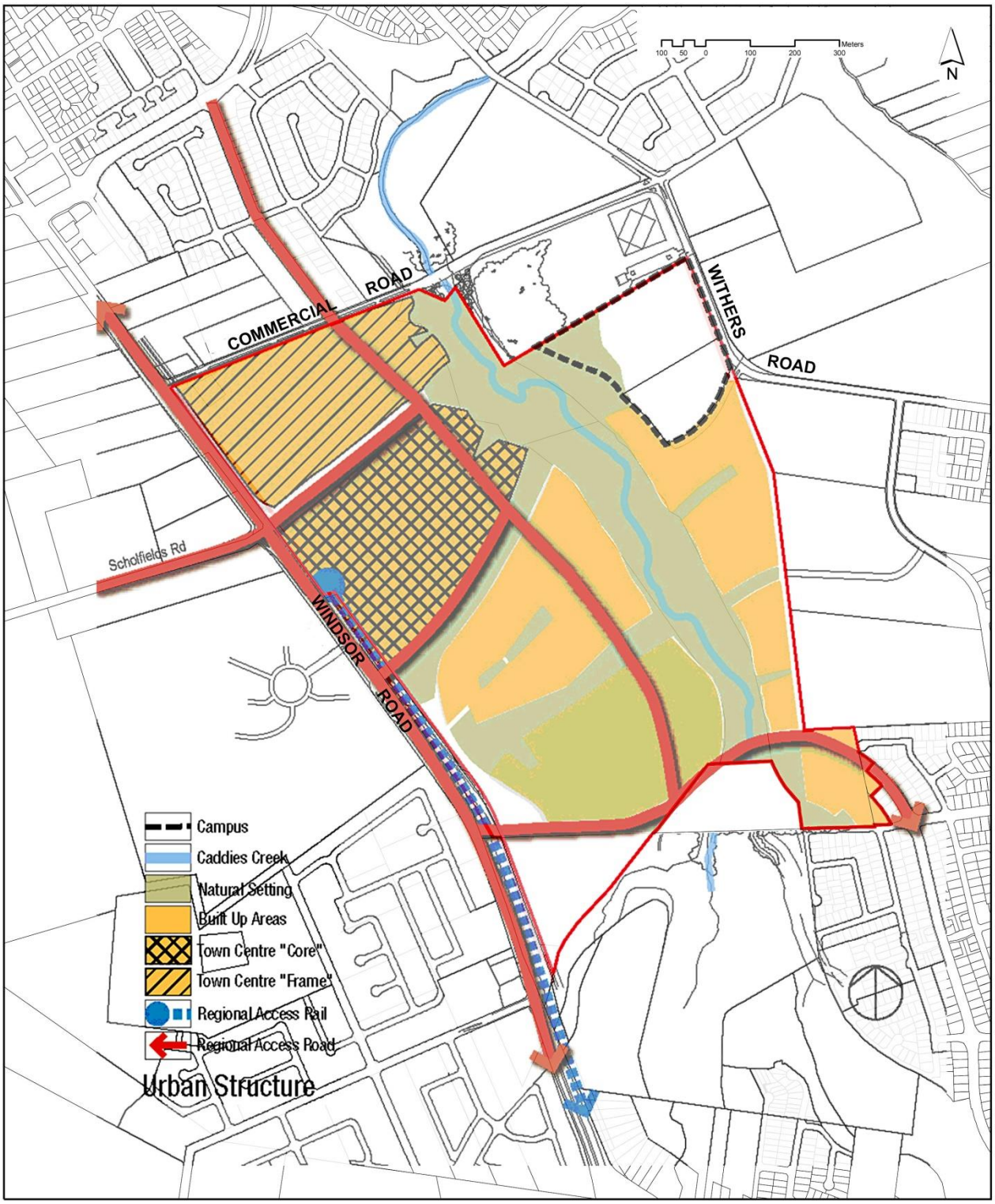


Figure 4 – Urban Structure

2.2 ACTIVITIES

PRINCIPLES

- A distribution of activities that relates to the regional access routes, internal streetscapes and open space systems
- To provide a range of medium and high density housing which forms an integral part of the Centre

RATIONALE

- The distribution of activities further refines the main zoning system, to reflect the intention that:
  - high traffic generating uses cluster close to Windsor Road and the transit interchange;
  - parking is linked to a main street around which retail activities are focused; and
  - activities bordering the open space system foster living and recreation uses, to produce low key, smaller scale development.
- Housing supports Centre activities and transit use. Maximising densities will meet social needs in the Shire and assist the Shire in achieving urban consolidation objectives

OUTCOMES

- Intensive traffic generating uses are clustered close to Windsor Road
- Direct access is achieved from the public transport interchange to a main street, which is the focus of major retail specialty shopping
- Residential, mixed use, community and recreation activities relate the intensively developed core to Caddies Creek
- The maximum amount of housing is provided in the Centre

PERFORMANCE CRITERIA	PERFORMANCE MEASURES
Bulky Goods Retailing Locate bulky goods retailing in the northwest portion of the Centre fronting Windsor Road. Locate Offices adjacent to the future rail station area and along Windsor Road.	Space for these uses is not to be alienated by surface parking.
Commercial The Commercial component of the Regional Centre can contain offices and other commercial uses, within the building envelopes indicated in this Section of the DCP or as otherwise indicated in built form guidelines submitted with a Level 2 DA. Provide separate entrances for commercial uses.	For developments, which increase the total employment of the Centre above 5000 employees, a traffic study must be provided.
Community Facilities Community uses will include public facilities provided by Council and may include some commercial recreation uses. It is a desirable requirement that at Stage 1 the development of the centre includes a commercial indoor recreation facility.	Include community uses in Stage 1 and agree their scope and site development requirements with Council.
Institutional Provide a serviced school(s) site(s) on Withers Road/Commercial Road as per the requirements and approval of the Department of Education.	

PERFORMANCE CRITERIA	PERFORMANCE MEASURES
Provide a range of learning facilities within town centre.	
Mixed Use Locate residential, retail, commercial, entertainment community and other uses within the core and Northern Frame (where possible fronting and south of Tributary 3 open space). Locate residential uses throughout the core area and Northern Frame (specifically between Civic Way and Caddies Creek). Ensure a mix of dwelling types within the core, within the Northern Frame and within each residential development.	
Residential It is an objective to maximise the amount of residential development associated with the commercial core area. Provide a range of housing types. A range of dwelling sizes (in terms of number of bedrooms) is required in all residential developments to encourage a housing mix, which addresses different housing needs.	Residential development is desirable in the core from an early stage of development.
Retail Provide a regional scale centre, which can service a Main Trade Area of 140,000 people (a size currently forecast to be reached around the year 2025).	Main retail areas are desirably concentrated between Tributary 3 and Schofields Road. The size of site indicated for the retail area is flexible. The retail areas of the centre should be planned to accommodate up to 130,000m^2 (GLA) of floor space. Retail shopping malls are not permitted except for short arcades with specialty shops linking the main street to larger stores. Locate retail activities north of Tributary 3. Concentrate retail activities along the Main Street/Civic Way and Civic Way North. As far as practical, concentrate retailing by adopting building layouts that place stores on both the ground and first floor levels. In buildings facing streets, commercial or residential uses must be provided above retailing.

2.3 ACCESS AND MOVEMENT

PRINCIPLES

- Provide efficient planning and management of private and public transport.
- Secure direct access to commercial areas whilst protecting adjacent residential areas from excessive through traffic.
- Facilitate access by car for customers, while at the same time increasing public transport use.

RATIONALE

The commercial success of the Centre means that it must meet consumer needs for high vehicle access to services by private car, at least in the early stages of the Centre. At the same time, the Centre has to function in a metropolitan environment in which there is a pressing need to limit car use for commuting to jobs in the Centre, as well as for longer distance travel.

OUTCOMES

- Road Hierarchy
  - A clear hierarchy of roads provides efficient customer and service access whilst protecting residential environments.
- Fixed and Variable Roads
  - Elements of the road hierarchy which service the main land use zones within the Centre are fixed as mandatory features; and
  - Flexibility is allowed for the developer to locate all minor streets, provided that the principle of achieving a main street centre is achieved and linkages to the surrounding road network are via the fixed roads and not directly from Windsor Road.
- Public Transport
  - A public transport interchange is provided which can be fully integrated with a future rail system;
  - The interchange is associated with the Centre development from the beginning; and
  - Public transport is to be accessible at all hours of the night.
- Parking
  - Parking arrangements enhance access at minimal cost, and foster the use of public transport.
- Pedestrian and Cycleway Circulation
  - A clear system of pedestrian and cycleway circulation is provided to connect major destination points both within and adjoining the Centre.
- Safety
  - The principles of Council's adopted "Designing Safer Communities – Safer By Design Guidelines" dated June 2003 should be addressed with each development application including the four principles: natural surveillance, access control, ownership and maintenance.

2.3.1 ROAD HIERARCHY

PRINCIPLES

- Establish a clear hierarchy of different road types which cater for different types of traffic movement.
- All streets have defined functions. Typical street cross sections are shown in section 2.5.3.

RATIONALE

- A hierarchy of roads allows for heavy traffic movement originating from the surrounding region to have direct access to locations close to destinations. This allows minor streets to carry internal circulating traffic. These features enhance the legibility and ease with which people can use the Centre.

OUTCOMES

- Streets are differentiated in function, providing efficient and clear access, whilst protecting local environments from through traffic.
- Provision of four types of roads and streets, which organise the Centre.

Arterial Roads: Are external to the site and provide regional access. They include Windsor Road, which will provide public transport access into the Centre, and provision for a future Schofields Road bypass on Commercial Road.

Sub Arterial Roads: Provide access to the Centre from arterial roads. They include White Hart Drive (west of Civic Way) extension and Sanctuary Drive.

The Main Street: Provides the main address to Centre functions. Refer also to section 2.6 Special Places.

Civic Way: Similar to Main Street, provides a major address to Centre and community facilities and links the southern neighbourhoods to the Northern Frame through the Town Centre.

Local Roads/Streets: Provide access to retail and commercial areas and to the diversity of activities within them. These streets will accommodate the local traffic within the Centre.

Local Roads/Streets: Refer to Table 2 for detailed characteristics for the following road and street types:

- **Major, or Collector Roads or Streets** collect traffic from the residential streets and town centre minor streets and lanes and carry higher volumes of traffic. A reasonable level of residential amenity and safety is to be maintained by restricting traffic volumes and vehicle speeds. Vehicle speeds on collector streets should be controlled by street alignment and intersection design.
- **Residential Streets** vary in character. They are typically narrow, accommodating on-street parking. They are limited in length and/or are frequently crossed to ensure a high level of connectivity and appropriate traffic volumes. Types of residential streets respond to orientation, housing density, and address open spaces.
- **Residential Lanes and Mews** provide service and garage access to the rear of higher density residential lots, removing the need for kerb cuts and garages on associated residential streets, and allowing for more efficient, narrower lots.
- **Residential Esplanades** are pedestrian dominated carriageways, enabling delivery, taxi and emergency services access to the "front door" of houses, where the lot has rear lane garage access. They provide a low order access between residential streets, and permit continuous pedestrian access along the edges of significant open spaces.
- **Town Centre and North Village Service Lanes and Alleys:** Provide vehicular and pedestrian access, through mixed use precincts, and to parking areas near shops and residences.

PERFORMANCE CRITERIA

a) Direct access to commercial sites in the core from arterial and sub-arterial roads is not permitted.

b) The main street could provide a traffic route for local buses and set down and short stay parking. Traffic calming measures should be employed to achieve low vehicle speeds.

c) Local streets serving retail and commercial areas may vary in location. Local streets in residential areas must relate to housing layouts and provide a sense of contained urban scale, achieved by minimising street widths and siting houses within 3 – 6m of front boundaries. A local street must also separate developments from open space.

d) In commercial areas service lanes should be designed so as to discourage their use as short-cut routes. Ensure service lanes include measures to calm traffic. Provide special paving to define safe pedestrian linkages between parking and shopping areas.

e) An acoustic report prepared by a suitably qualified consultant is to be submitted with all residential development applications for land adjacent to existing or proposed Arterial/Sub-arterial roads or public transport corridors and should comply with the Environmental Protection Authority publication 'Environmental Criteria for Road Traffic Noise' (May, 1999).

f) In regard to roads that cross natural drainage channels, the construction of bridges with piered approaches is preferred to culverts in order to maintain stream corridor function. Any works within, or alterations to, natural drainage systems will require the necessary approvals of the NSW Office of Water and Department of Environment Climate Change and Water.

g) Direct vehicular access to Arterial and Sub-arterial roads will not be permitted where alternate access is available. Access will not be restricted to any property from Arterial or Sub-Arterial roads until such time as alternate access is available.

h) Roads and streets should occur along and adjacent to public open space or drainage lands. Where roads and streets front open space or drainage land the costs associated

with their construction is the responsibility of the developer.

i) Street networks are to conform to the requirements set out in Table 2: Characteristics of Street Types.

j) At least 90 percent of dwellings are to be located within 400m safe direct walking distance from an existing or proposed bus stop.

k) When travelling from any dwelling to the most convenient collector street or higher order road generally no more than three turns should be required.

l) The driving distance from any dwelling to the nearest collector or higher order street is a maximum of 700 metres.

m) Street and road junctions are to be spaced as set out in Table 1.

n) The street network is to be designed to limit target street speeds to those specified in Table 2. This may be done by limiting street leg length, and providing appropriate slow points at the end of each leg. Slow points may be provided by a variety of mechanisms including street junctions, introduction of sharp bends and surface obstructions. Speed may also be restrained by a continuous series of bends, or by a combination of approaches.

Table 1 – Minimum Junction Spacing

ROAD TYPE	TYPICAL AVERAGE JUNCTION SPACING (METRES)	MINIMUM INDICATIVE STAGGERED JUNCTION	TRAFFIC VOLUMES (VEHICLES PER DAY)
Access Place	NA	NA	<300
Access Street	40	40	300 to 2000
Collector Street	40	40	2000 to 3000 (minor) 3000 to 6000 (major)
Sub-Arterial	150	200	5000 to 15000
Arterial	500	200	10,000 and over

Table 2 – Characteristics of Street Types

STREET TYPE	MAXIMUM TRAFFIC VOLUME(1)	MAXIMUM NUMBER OF DWELLINGS	DESIGN SPEED KM.HR(2)	CARRIAGEWAY WIDTH (M) (3)	VERGE WIDTHS	ROAD RESERVE	FOOTPATH REQUIRED
Access Way (Fronting open space)	100 veh/d	10	15	6.0m(4)	3.5m*	10.5	No
Access Place	300 veh/d	30	30	7.5	3.5m*	14.5	No
Access Street	2000 veh/d	200	40	8.5m	3.5m*	15.5	Yes 1.2m wide One side only
Collector	3000 veh/d with access to lots	1000	50 (20 at ped/cycle crossings)	9.5m	3.5m*	16.5m	Yes 1.2m wide Both sides

i) For single dwelling allotments apply traffic generation rate of 10 veh/day per lot (equivalent to approximately 1 veh/day in the peak hour) unless a lower rate can be demonstrated. Lower rates can be applied to multi-unit dwellings based on locally derived rates.
ii) See Council's Design Guidelines for Subdivisions and Developments for specific operating speeds.
iii) Widening required at bends to allow for wider vehicle paths (using Austroads Turning Templates).
iv) Maximum length of carriageway is 80 metres.

*Verges may also require an additional widening requirement for the provision of a pedestrian/cycleway path.

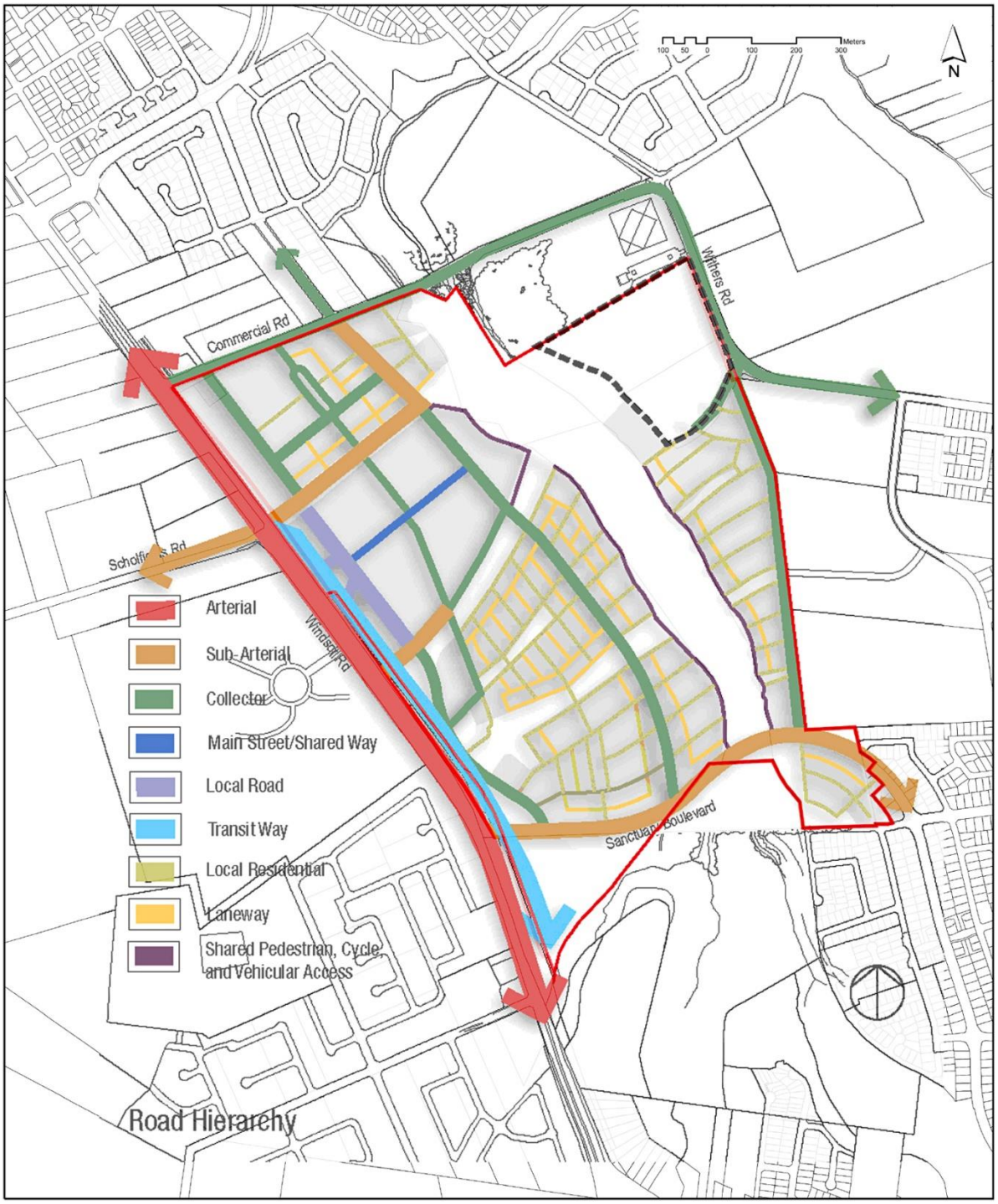


Figure 5 – Road Hierarchy

2.3.2 LOCATION AND CROSS SECTIONS OF "FIXED" STREETS

PRINCIPLE

- To fix the location of the major streets linking the main components of the Centre to the areas surrounding the Centre, whilst leaving the location of minor streets flexible.

RATIONALE

The LEP fixes the location of the roads above and this Section of the DCP sets down the location of streets which serve the main land use zones. As the layout of blocks will vary in response to the needs of different developers, (or at different stages in development of the Centre), the location of local streets is left flexible. A main street is a requirement of the DCP. The location of the main street is at the discretion of the developer.

OUTCOMES

- Fixed arterial and sub-arterial roads are constructed in defined locations and vertical geometry (as per the performance measures)
- Streets that are not fixed are located to suit developers' needs.

PERFORMANCE CRITERIA	PERFORMANCE MEASURES
General All north south streets parallel to Windsor Road shall have a vertical alignment close to horizontal minimising cut and fill. All east west cross streets follow the topography and rise or fall as necessary to minimise cut and fill.	To conform with Council's Engineering Guidelines
Fixed Roadways The Sub Arterial and Arterial Roads are fixed in location, cross section and vertical alignment. A Main Street is required as set out in this Section of the DCP. The location of all other streets is flexible.	The fixed roads are to be laid out and conform to the design control levels set out in Maunsell McIntyre's Report "Preliminary Report on the Engineering Aspects of the Rouse Hill Regional Centre", Nov. 1999. Conformity with the objectives of blocks.
Signalised intersection locations and their levels are identified. Design plans for signals on intersections with Windsor Rd are to be submitted to the RMS for concurrence.	Refer to "Preliminary Report on Engineering Aspects of Proposed Rouse Hill Regional Centre" prepared by Maunsell McIntyre, Nov. 1999.
Non Fixed Streets and Lane Ways Non-fixed streets and lane ways are to be designed according to the typical sections contained in Section 2.5.3. Civic Way should bridge over Tributary 3.	See Special Places provisions in this Section of the DCP. Provided that the natural gully is retained, commercial uses may be incorporated in the bridge feature.

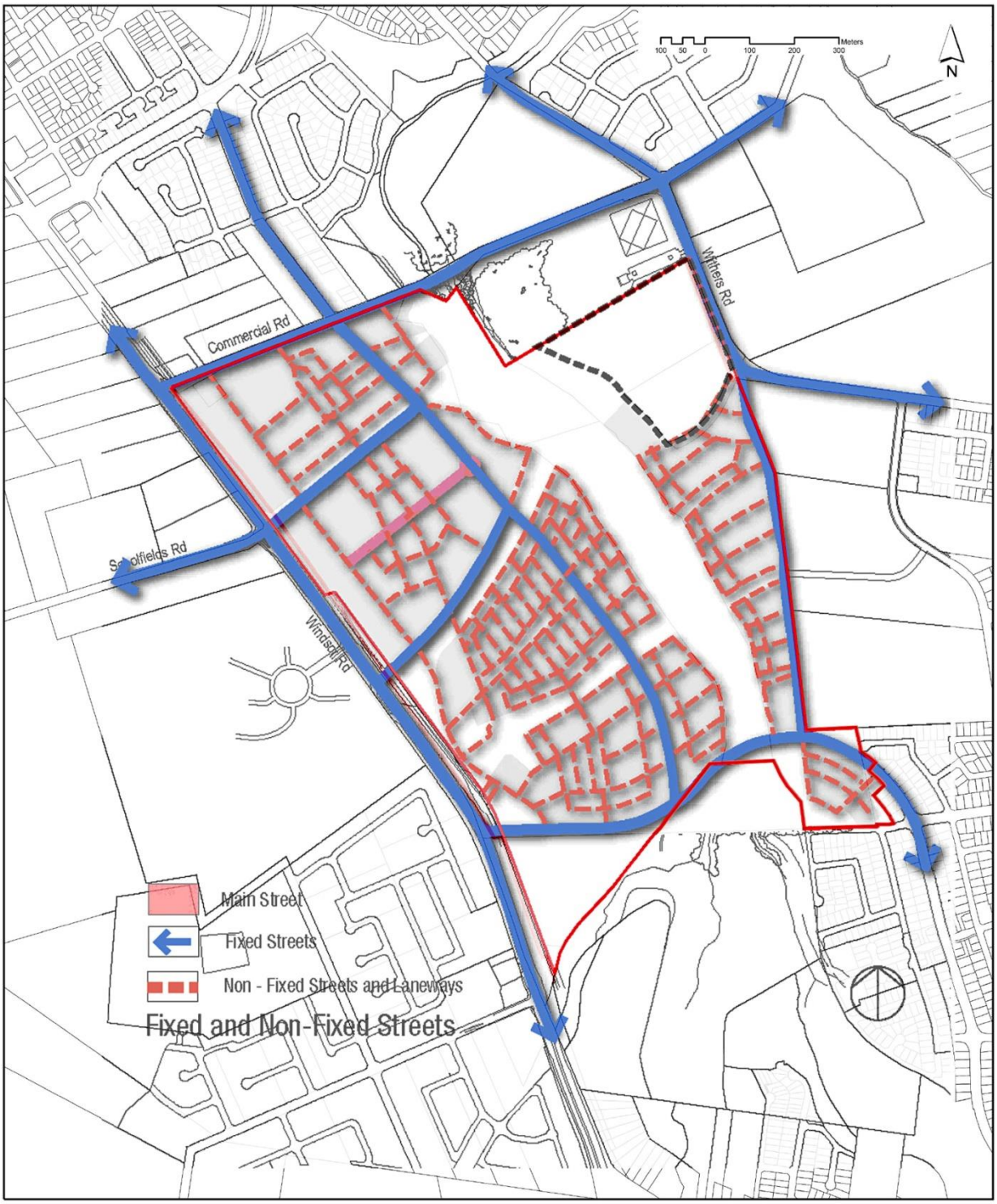


Figure 6 – Fixed and Non-Fixed Streets

2.3.3 PUBLIC TRANSPORT

PRINCIPLES

- To increase opportunities for choice in mode of transport.
- To provide local bus, transitway and rail interchange requirements within a single facility which forms a focus for all public transport services within surrounding regions.

RATIONALE

- Public transport should be accessible and located close to destinations such as retail offices and community facilities within the Centre.
- Safe, convenient, high frequency public transport options should be developed from the earliest stages of development of the Centre.
- The level of public transport access should keep pace with the staged expansion of development.
- Levels of parking provision for various uses and mixed uses are to be assessed in an ongoing way as the Centre develops and in a way which satisfies the key objectives of Action for Air. (Environment Protection Authority).

OUTCOME

- Public transport needs are met and increased usage results.

PERFORMANCE CRITERIA	PERFORMANCE MEASURES
Accommodate bus movement within the street network arrangement which separates through and local traffic	
Provide a regional line haul bus route as illustrated on Figure 7 (Bus Interchange and Railway Station Arrangement) Provide a bus interchange facility in line with the opening of Stage One of the Centre	Bus Interchange Layout is to conform to the principles set out in the Maunsell McIntyre Report. It must have the potential to link with a rail link and to conform to detailed guidelines established with the MOT and RMS.
Provide a local bus route to/across/or along the Main street with bus stop at regular and convenient intervals	
Passenger waiting areas should not intrude or disrupt pedestrian circulation on footpaths	
Allow for a heavy rail easement adjacent Windsor Road as illustrated on Figure 7.	

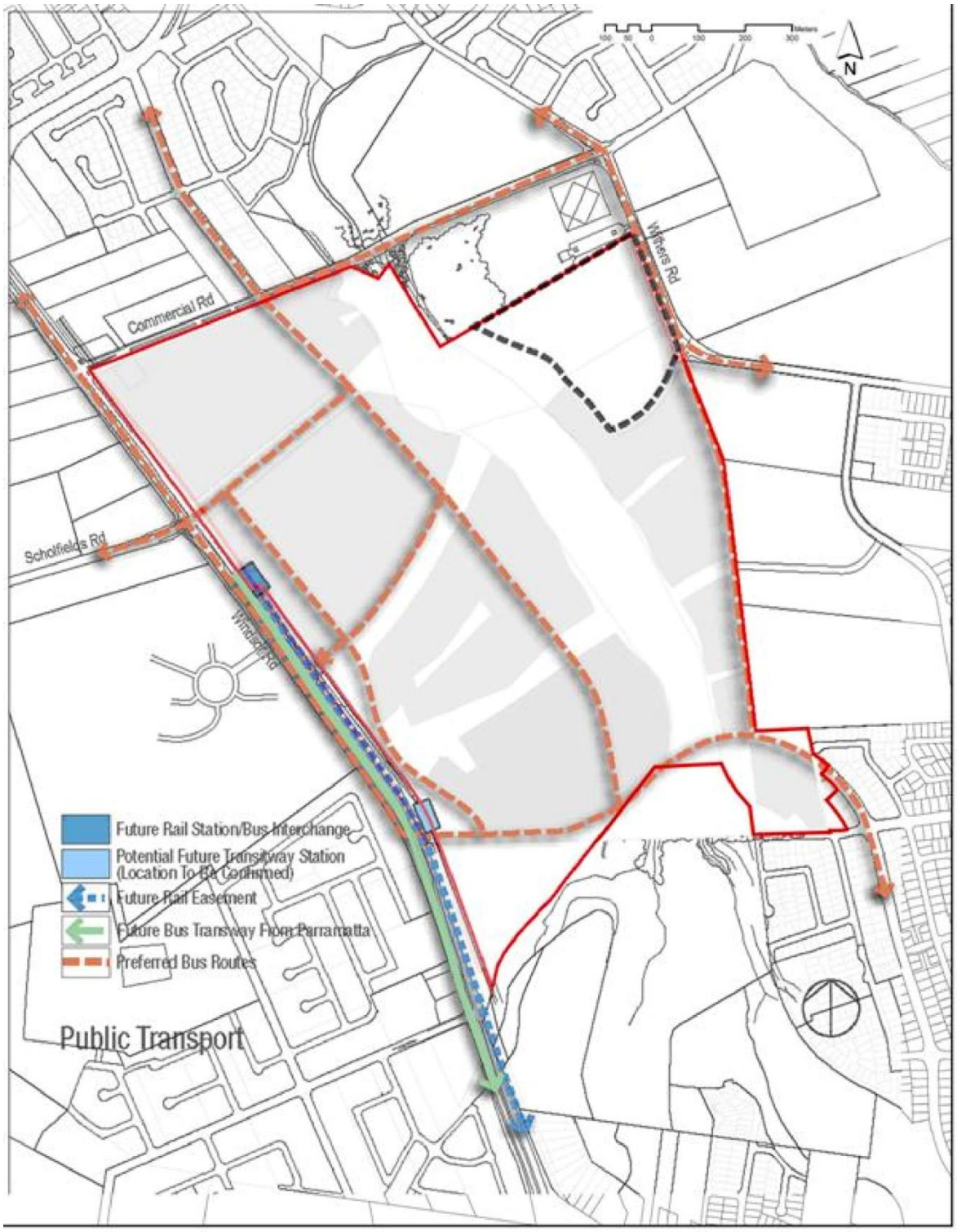


Figure 7 – Public Transport

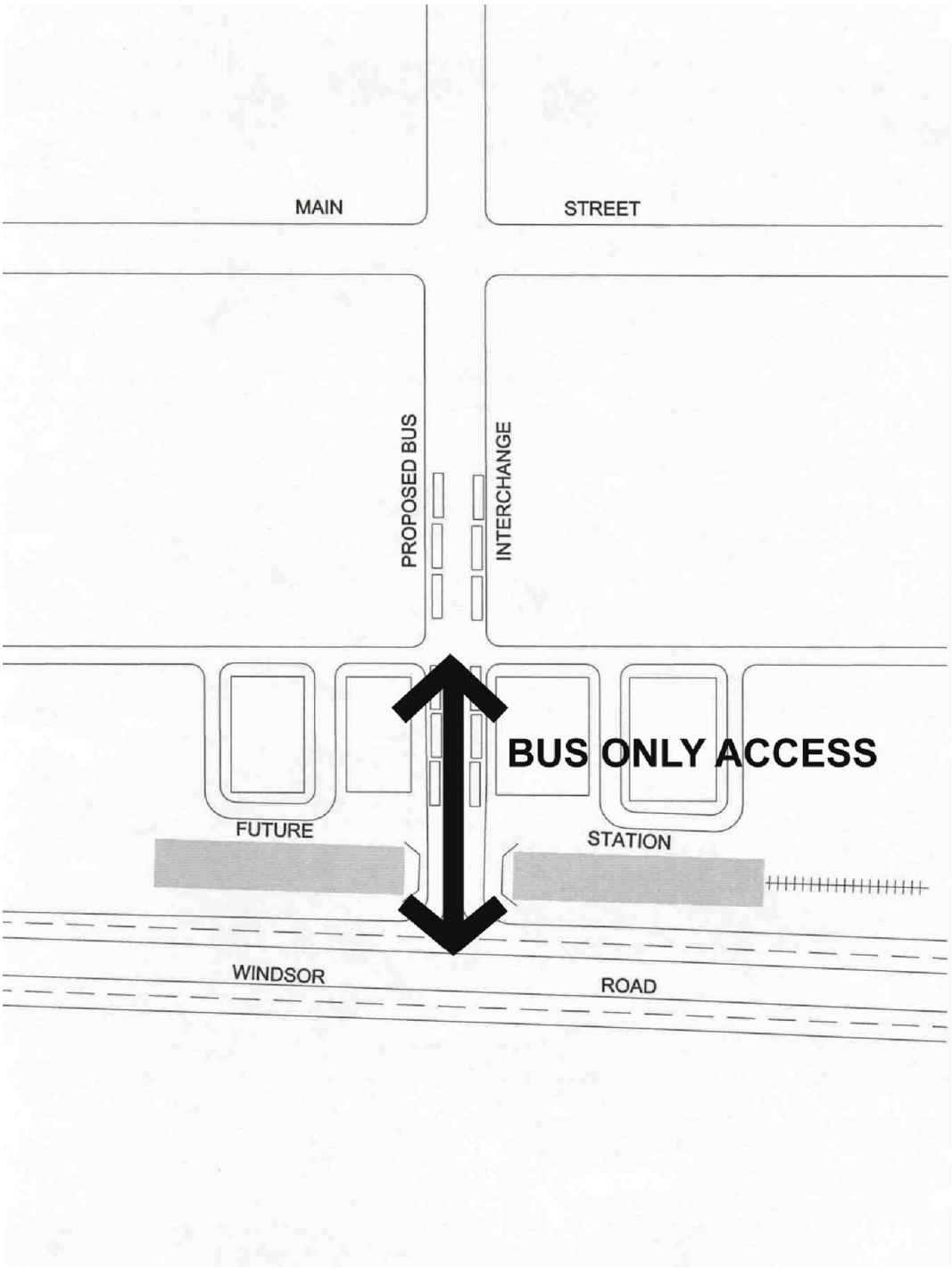


Figure 8 – Indicative Concept For Bus Interchange and Railway Station Arrangement

(details to be confirmed by MOT)

2.3.4 SURFACE PARKING AND PARKING STRUCTURES

PRINCIPLES

- Ensure efficient customer access to the Regional Centre whilst maximising the use of public transport.
- Minimise the amount of space and costs associated with parking provision.

RATIONALE

- Sufficient parking should be provided to encourage customers to use the Regional Centre. At the same time, the use of the car for commuting should be constrained to levels which ensure that as many people as possible travel by public transport.
- The amount of car parking should be rationalised by allowing flexibility to convert commuter parking areas to short-stay operations during times of peak trading demand.
- It is desirable to provide all parking (other than minimal essential operational parking) in publicly accessed car-parks and to ensure effective management of parking supply.
- Parking should be located close to destinations and provide safe, direct access for customers.
- The layout of the core area should allow costs of parking provision to be deferred by progressively staging the introduction of parking structures as an integral element within the core area.
- The provision of residential parking should be met within residential blocks.

OUTCOMES

- On-street parking is provided in appropriate locations.
- On-street parking outside retail frontages is limited in use to short stay purposes.
- The bulk of customer parking is provided in publicly accessible and managed off-street locations. Customer parking is located in surface or parking structures planned to achieve the least possible distance to destinations, and has easy and safely traversed pedestrian paths. Pedestrian paths from public car parks allow permanent public access to street footpaths. Parking layouts are dimensioned and located within the street system in a manner which facilitates efficient access and management.
- Areas of surface parking should be planned to allow later conversion to development sites or parking structures.
- Flexibility is achieved in the amount and usage of long-stay parking. The provision of commuter parking is limited to levels which maximise the use of public transport. Long-stay parking areas are linked to customer (short-stay) parking areas in a manner which facilitates the conversion of a proportion of long-stay parking to short stay use during periods of peak trading demand. All long-stay parking is provided in a manner which allows the introduction of pay parking.
- Parking is an integral element of the urban setting. In the core area, all off-street parking is provided in above-ground or basement structures. Parking structures facing access streets are separated from street frontages by other development. The separation and form of development is as set out in Section 2.5 which stipulates the principle of access to parking from local streets located parallel to the main street/Civic Way.

The residential controls set out the relevant conditions for those areas.

PERFORMANCE CRITERIA	PERFORMANCE MEASURES
General	
The amount of parking required at each stage must contain within that stage the potential to meet parking demand required at full development of the centre. Temporary overspill of parking onto vacant lands will be subject to agreement and will apply to Stage 1 only.	Provide all parking dimensions in accordance with Australian Standards for parking.
	Structures for Parking to begin when the centre for retail development is over 20,000m^2 in size. Actual standard of provision to be agreed with Council prior to DA's for each stage. Parking structures should have an efficient size and layout, with safe pedestrian and vehicle access.
	Locate all driveways approximately 30 metres from major intersections.
	Rear lanes should be the main point of vehicular access for parking and servicing.
	Shared driveways between adjacent properties is permitted and encouraged.
	Accommodate all parking requirements for subsequent stages on land within that stage.
If partial build out of a stage is proposed, then a plan showing full build out and associated parking at existing rates of provision is to be provided at each stage.	No parking or service entries should generally exceed more than 6 metres in width along building frontage.
Retail and Commercial Activities Commuter parking demands should be constrained to promote the use of public transport. Parking areas should be located at the rear of the buildings or below ground. Parking structures can only front a limited number of streets specified in the Block Controls (refer section 2.5.1.).	Based on further public transport targets, Ministry of Transport (MOT) will advise the developer of the Regional Centre of appropriate rates for parking provisions. As an initial guide the following rates will apply to the preparation of the Master Plan. These will be regularly adjusted by the Centre Management Committee in consultation with MOT. **Retail:** Stage 1: 18.5 m^2 Following completion of Stage 1, the parking provision in the Centre as a whole will be reviewed by Council to levels in line with mode split targets to be agreed with MOT. **Commercial :** Stage 1: 25 m^2 Following completion of Stage 1, the parking provision in the Centre as a whole will be reviewed by Council to levels in line with mode split targets to be agreed with MOT.
Residential Activities Provide covered off street parking predominantly	**Residential** 1 bedroom unit 1 space

PERFORMANCE CRITERIA	PERFORMANCE MEASURES
below, to the rear of, or within buildings. Separate residential parking areas from parking designated for other uses where surface or structure parking is shared.	2 bedroom unit 2 space 3 bedroom unit 2 spaces Visitor parking 2 spaces per 5 dwellings (up to 60 units) 1 space per 5 dwellings (60 or more units) Locate garages at or behind the front building lines to enhance the amenity of the streetscape. Other than for single dwellings, entries and exits from garages onto a public street should be in forward motion. Integrate garages into the structure of the building. Match garage design with the adjoining structure in terms of design, materials, colours and construction. Locate surface parking behind building line and screen from view.

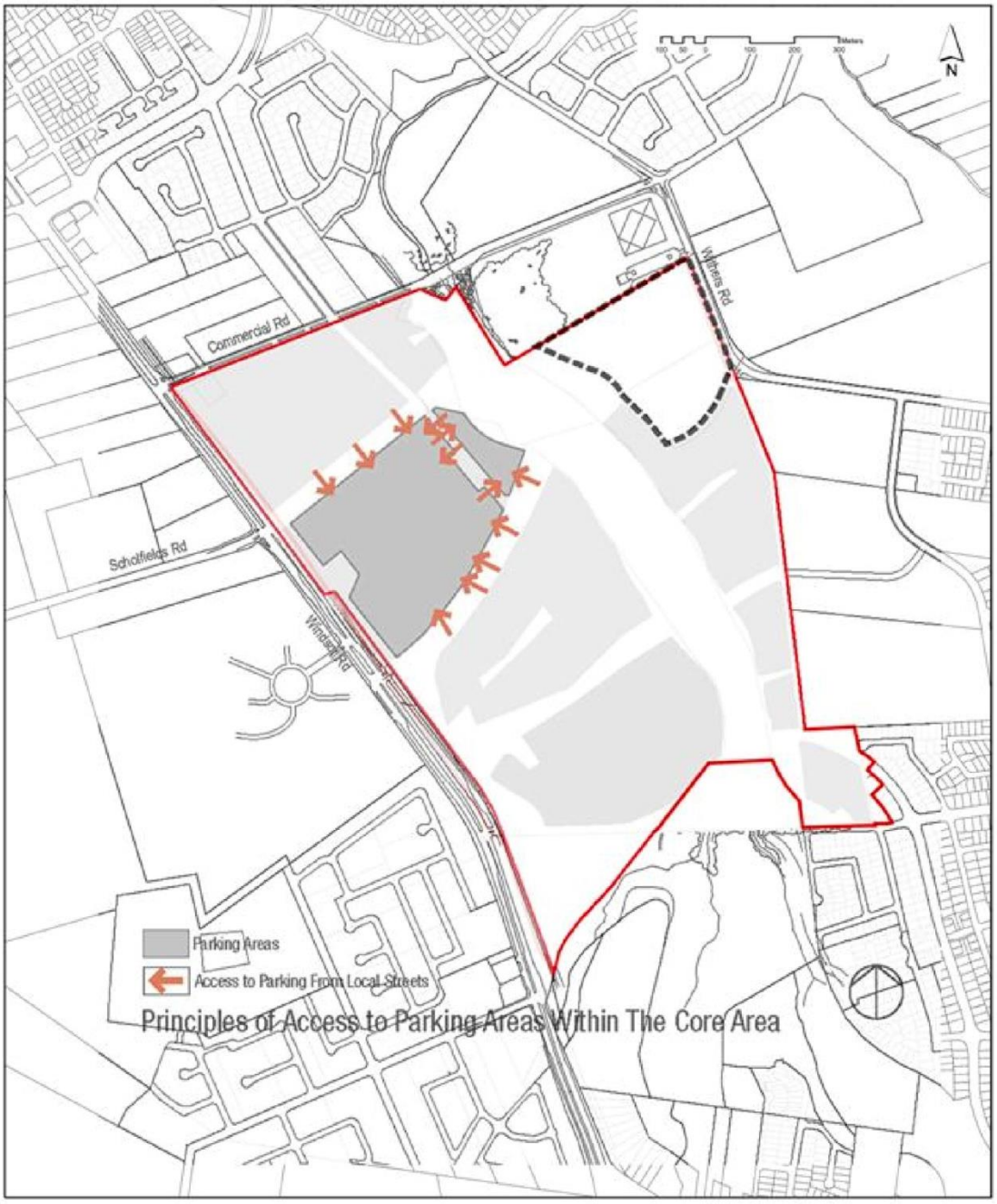


Figure 9 – Principles of Access to Parking Areas in the Core

2.3.5 PEDESTRIAN AND CYCLEWAY CIRCULATION

PRINCIPLE

- To provide a clear system of pedestrian and cycleway circulation within the Centre, linking to open space and other adjacent areas.

RATIONALE

- The pattern, efficiency and legibility of pedestrian circulation is critical to the success of a vibrant Centre.
- Streets and footpaths are the main pedestrian activity areas. The type and form of activities fronting the street affects their design.
- Access ways within the Centre should link with routes which provide easy access to open space and adjacent areas.

OUTCOMES

- High amenity pedestrian areas are achieved.
- The main street/Civic Way provides for both movement and leisure.
- All footpath systems in the Core provide for safe movement and street crossings.
- The cycle route system links with the main cycleway system provided by Council outside the site.

PERFORMANCE CRITERIA:

a) Provide a system of public street footpaths focussed on a main street. Design pedestrian areas which respond to adjacent uses, and use minor streets to link with parking and employment areas. Provide dedicated pedestrian routes that connect the centre to the surrounding areas. Overhead or underground pedestrian links between blocks of retail development separated by public streets will not be permitted.

b) Provide dedicated cycle routes to Council standards that connect the centre to the surrounding areas. Specifically, provide connections to:
   - Stanhope Gardens to the south-west;
   - Adjoining playing fields;
   - Council's Open Space Strategy – Kellyville/Rouse Hill Recreation Plan
   - Residential areas in the Blacktown local government area.

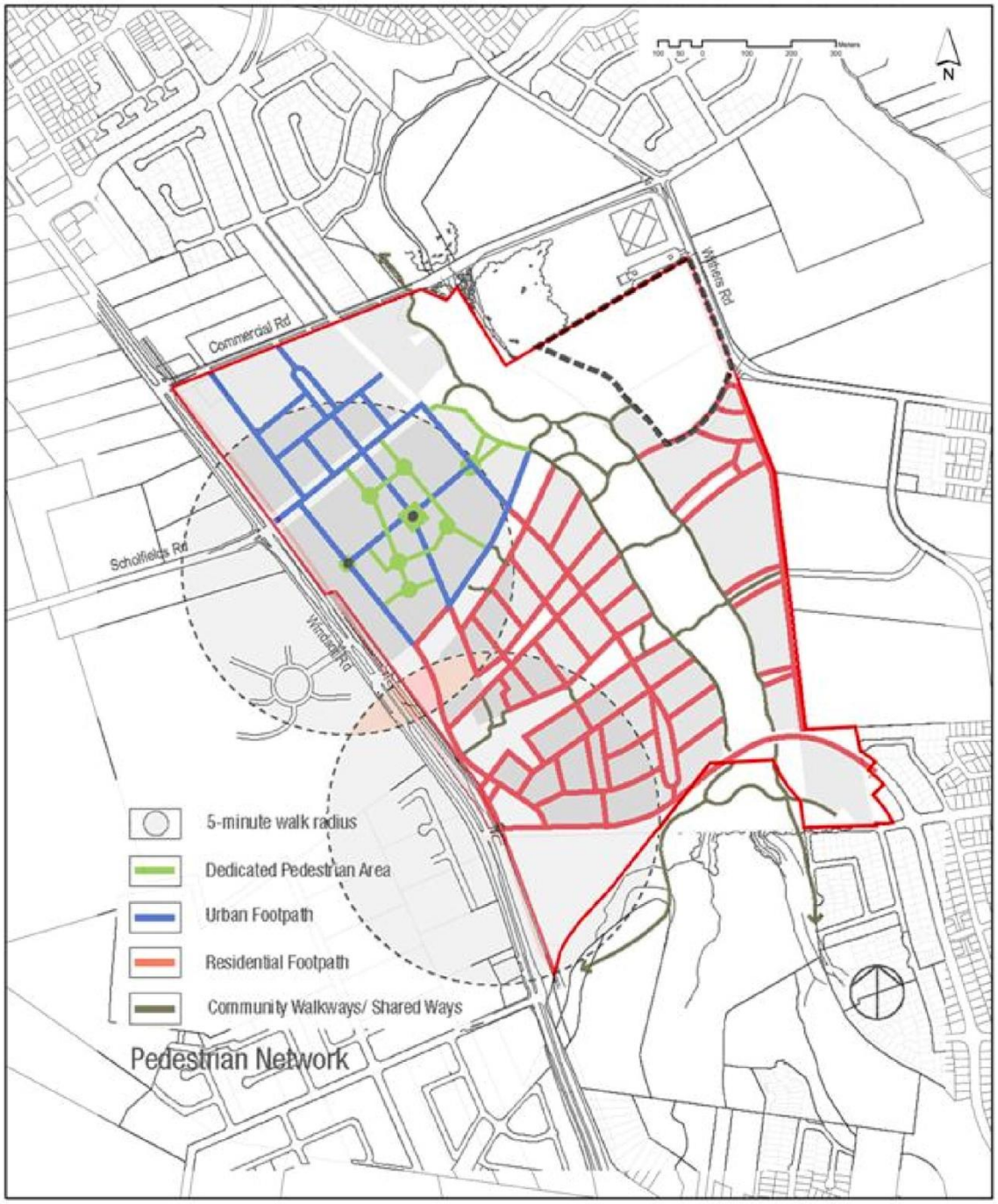


Figure 10 – Pedestrian Circulation

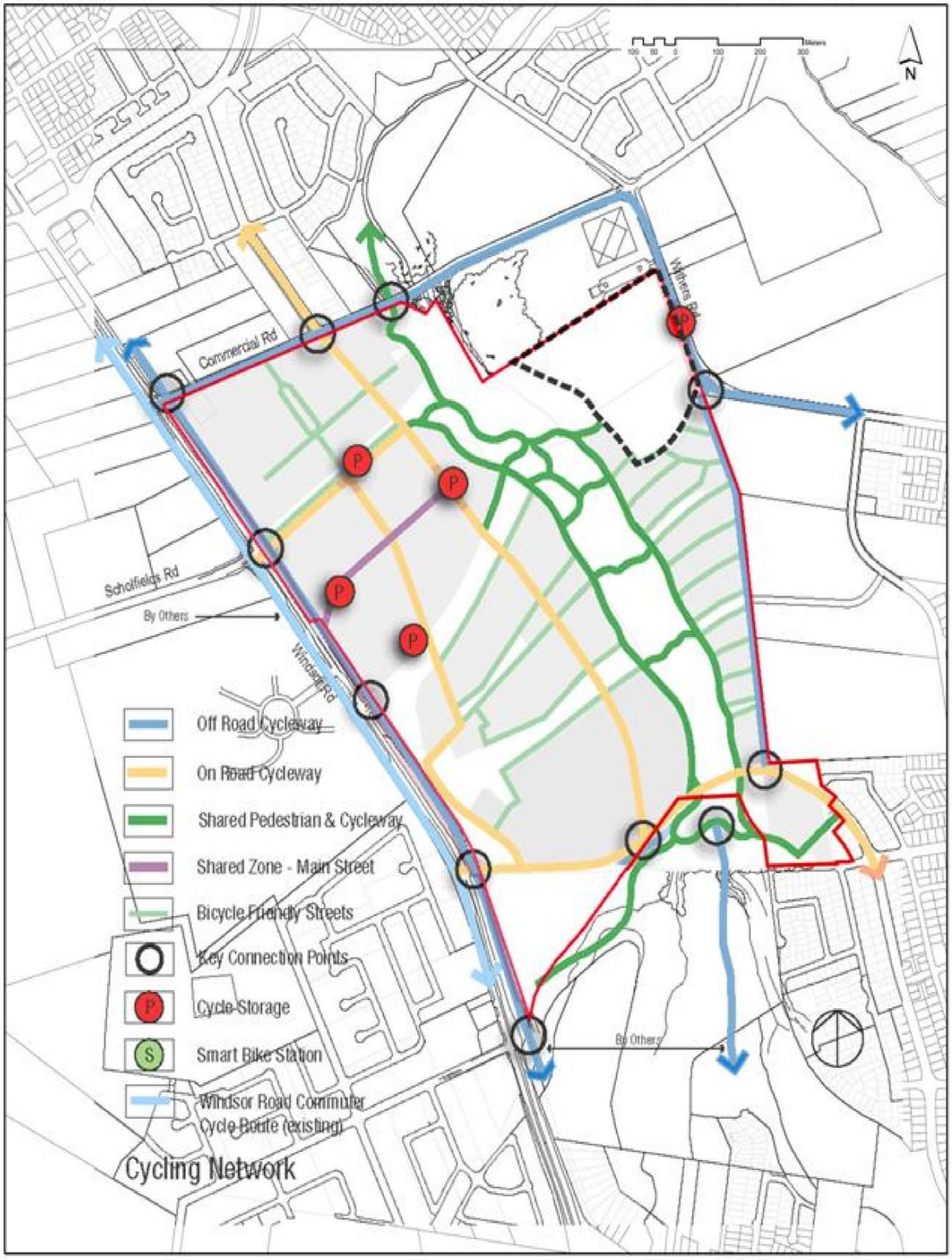


Figure 10A – Cycling Network

2.4 PUBLIC REALM

PRINCIPLE

- Integrated planning, development and management of the riparian corridor, local and district parks, and urban public spaces.

RATIONALE

The quality of the Centre as a man made entity adjacent to a degraded riparian corridor requires action at both planning and management levels to:

- Restore the natural setting, enhancing sustainability/biodiversity;
- Minimise adverse impacts created by urban waste, especially stormwater; and
- Enhance the use and enjoyment of urban spaces by landscape design.

OUTCOMES

- The urban and natural elements of the public realm are planned, designed and managed to achieve memorable, high quality, and sustainable relationships.
- Natural Open Space System
  - i) The riparian corridor and related parklands achieve a functional drainage system allied to conservation and restoration of natural habitats.
  - ii) Public parklands relate to the riparian corridor.
  - iii) Linkages between the riparian corridor and public parklands are created by developing cycleways, pedestrian routes and greenways.
- Urban Landscape Character
  - i) Areas of hard and soft landscaping are provided in public streets and places to enhance their use and enjoyment, and link the Centre with its natural setting.
- Private Open Space
  - i) The quality and placement of private open space enriches the public spaces of the Centre.
- Safety
  - i) The principles of Council's adopted "Designing Safer Communities – Safer By Design Guidelines" dated June 2003 should be addressed with each development application including the four principles: natural surveillance, access control, ownership and maintenance.

2.4.1 NATURAL OPEN SPACE SYSTEM

PRINCIPLES

- Create a memorable landscape setting for the Regional Centre.
- Protect and enhance existing natural and man made features.
- Create a system of accessible, safe and well located parks with connecting links to the riparian corridor and surrounding residential areas.
- Establish an interconnected network of spaces, rather than a series of unrelated open spaces
- Maintain the integrity of the drainage function.

RATIONALE

- The natural setting of Caddies Creek should be enhanced by the integration of open spaces with the built form of the Centre, to create a continuous visual setting.
- The open space should form a number of focal points in the Centre by providing settings and spaces designed for a range of activities.

OUTCOMES

- Multiple use of a restored riparian corridor is achieved in ways that are consistent with its trunk drainage function and open space function, and the corridor is effectively buffered from the environmental impact of urban stormwater runoff.

PERFORMANCE CRITERIA	PERFORMANCE MEASURES
Develop a clear and distinguishable open space hierarchy comprising a variety of experiences and needs. Develop a series of distinctive open spaces throughout the Centre. Design space to accommodate a range of active and passive uses. Ensure all of the open space is accessible. **Parkland** Maintain Caddies Creek Corridor as part of a continuous linear park. See the Landscape Management Strategy. **Parks** Provide parks in accordance with Council's requirements. Consistent with Council's Section 94 Kellyville/Rouse Hill Contribution Plan No 8, a minimum of two local parks of up to approximately 4000m^2 each are to be provided in residential areas of the Regional Centre.	The planning, restoration, conservation development and management of the open space and related floodway requirements shall conform to the Caddies Creek Landscape Management Strategy, and Maunsell McIntyre Engineering Report – Stormwater Drainage and Water Quality. Council will be responsible for acquiring, developing and maintaining only land zoned for public open space (including 2 local parks, the location of which is to be determined). Sydney Water approval is required for any proposed activities within the trunk drainage corridor.

2.4.2 URBAN LANDSCAPE CHARACTER

PRINCIPLES

- The public spaces within the Centre shall have consistent landscaping which contributes to the amenity of the Centre and integrates with adjacent natural areas.

RATIONALE

- A consistent approach to streetscapes and street tree planting, pavements and street furniture contributes to the legibility and visual appearance of the Centre.
- High quality street tree plantings are the major factor which determines the quality of public spaces.

OUTCOMES

- The landscaping of streets and public spaces is of high quality.
- The layout underpins the structure of the Centre, while also providing a distinctive identity for local spaces.
- Street landscapes relate to the natural setting.

PERFORMANCE CRITERIA

a) Build upon the existing landscape qualities of the site and district.

b) Vary the landscape character of the streets according to the intended role in the Centre and the proposed activities.

c) Minimise the use of different pavement types.

d) Use variations to make special places such as entrances, gateways special features etc.

e) Locate street furniture to add to the legibility of the Centre.

f) Ensure the footpaths can accommodate a range of activities. Street cross sections, pedestrian pavement widths, and street tree planting should maximise pedestrian amenity under different seasonal conditions.

Streets

- Street and laneway cross sections should be consistent with the attached illustrations. Refer figures 23-30.
- Use streets, lanes and pedestrian ways to connect spaces.

Arterial Roads

- Should be designed as parkways with a strong landscaped setback from the road kerb lines. Maintain a minimum of 10 metre setback along all Arterial Roads, with the exception of Commercial Road (Refer to section 2.5.2).

Sub-arterial Roads

- Should be designed as a tree lined Boulevard as illustrated in Figures 11, 25 and 26. These streets should contain median strips, minimal carriage ways and regularly spaced street trees in the verge.

The Main Street and Civic Way

- Refer Special Places in section 2.6.

Local Streets

- Should be urban in character. Street trees should be used and set within a green strip adjacent to the footpath.

North-South Streets

- Use street trees and other planting material.

East-West Streets

- Extend the riparian landscape character of Caddies Creek into the Regional Centre along Tributary 3 and the east west streets; refer to Figure 26

Streets Adjoining Public Open Space

- Should have generous mown grass verges and regularly spaced street trees. These streets should not have median strips. The carriage ways should be kept as narrow as possible.

Parks

- Refer to the Caddies Creek Landscape Management Strategy. Include a local/heritage park, possibly adjacent to Mungerie House, and a reserve for protection of Aboriginal artefacts in the riparian zone (location fixed).

Landscape Design Guidelines for Specific Elements

- Refer to section 2.6 Special Places.

PERFORMANCE MEASURES

The detailed guidelines, including materials and landscape specifications; together with typical designs, shall be prepared as part of the Master Plan submission.



Figure 11 – Urban Landscape Character

2.4.3 PRIVATE OPEN SPACE

PRINCIPLES

- Ensure that each dwelling has private outdoor space.
- To develop shared or communal spaces with facilities for recreation and leisure, and relate these spaces to street landscapes.

RATIONALE

- Gardens, terraces and courtyards are necessary to improve amenity for occupants, and their placement adds to the amenity of the public street realm.

OUTCOMES

- Good site design that places private open space in ways which contribute to the visual quality and richness of the public spaces in the Centre.

PERFORMANCE CRITERIA	PERFORMANCE MEASURES
In the residential neighbourhood: Provide private and communal open space for each dwelling. This may be provided as balconies, decks, roof top terraces or gardens.	Balconies should be incorporated into the building envelopes. A minimum depth of 2 metres is suggested, provided 1.5 metres of solar access to all units in a development is maintained.
Where possible, provide each ground level dwelling unit with a private outdoor garden delineated by perimeter fences or planting to reinforce the streetscape.	
Locate private open space within each residential development site for resident recreation and leisure.	Provide a minimum private or communal open space per dwelling of 20 sq. metres.
Provide suitably established in-ground plantings or raised planters in private terraces, courts or gardens to enhance residential amenity, increase privacy and reduce overlooking.	Ensure that all buildings submit site landscape designs which integrate and contribute to the quality of public streets.

Refer to Section 3 – Residential Development Control for detailed requirements.

2.5 URBAN FORM

PRINCIPLES

- The urban form is described by those elements which govern the internal layout of the centre. This should be expressed as simple rules that allow a degree of flexibility, while at the same time ensuring clear functioning and legibility for users.

RATIONALE

- Clear forms of street layout and building blocks are common features of towns. Efficient and memorable layouts have a simplicity of arrangement of both these elements.

OUTCOMES

- Blocks and Streets
  - i) The disposition of activities within adjacent blocks relate in function, and also provide a clear relationship to footpaths at street frontages
  - ii) Efficient parking and servicing arrangements are achieved and high safety and convenience levels provided to users of the Centre
- Building Height
  - i) Within blocks there is a diversity of building form and scale allied to high visual quality and amenity of streetscapes.
- Street Cross Sections
  - i) The cross section of streets is consistent with that that defined in this Section of the DCP.
- Safety
  - i) The principles of Council's adopted "Designing Safer Communities – Safer by Design Guidelines" dated June 2003 should

be addressed with each development application including the four principles: natural surveillance, access control, ownership and maintenance.

2.5.1 TOWN CENTRE BLOCKS AND STREETS

PRINCIPLES

- Blocks must be built to provide built-up frontages to surrounding streets, with the frontages being made up of buildings of a compatible scale within each block. At the ground floor level, uses must open on to streets and be of a nature that enlivens the pedestrian environment within streets.

RATIONALE

- A multi-functional centre can function best when all its elements are connected by public streets.
- The Block is the basic element which organises buildings and relates them to streets. It has more uniform characteristics within the core area, where good circulation is facilitated by adopting a street grid arrangement of blocks of similar size, arranged in a grid pattern. To further facilitate pedestrian and vehicle circulation, and to ensure that it takes place on the outside edges of blocks, each block has a limitation on its maximum size.
- With all circulation focussed on public streets which are always open, there is greater scope to integrate entertainment, leisure, and community uses into shopfront locations, where their use and enjoyment is more assured than would be the case if they were disposed to locations outside the main retail areas.
- In the core area, the separation of street frontages into separate constructional elements will allow for building frontages to be changed or even redeveloped over time without severely disrupting the continuity of street frontages.

OUTCOMES

- The size of blocks is limited to allow circulation on public streets to permeate easily throughout the centre.
- The size of blocks may vary, provided that the resulting regular layout of streets allows ease of circulation.
- Pedestrian circulation within blocks link clearly to destinations.
- Within the core, larger scale retail and parking functions are contained within a frame of smaller scale buildings, with the outside frontages of the blocks forming a continuous street frontage. This provision is mandatory on the main street, but is open to some discretion on other streets. The maximum length of any building front along the street is generally 30m.
- Specialty shops should face the street frontages of blocks or pedestrian rights of way.

PERFORMANCE MEASURES

The diagrams which follow illustrate the outcomes, and specify those elements of the layouts which are mandatory, and those that are flexible in their application.

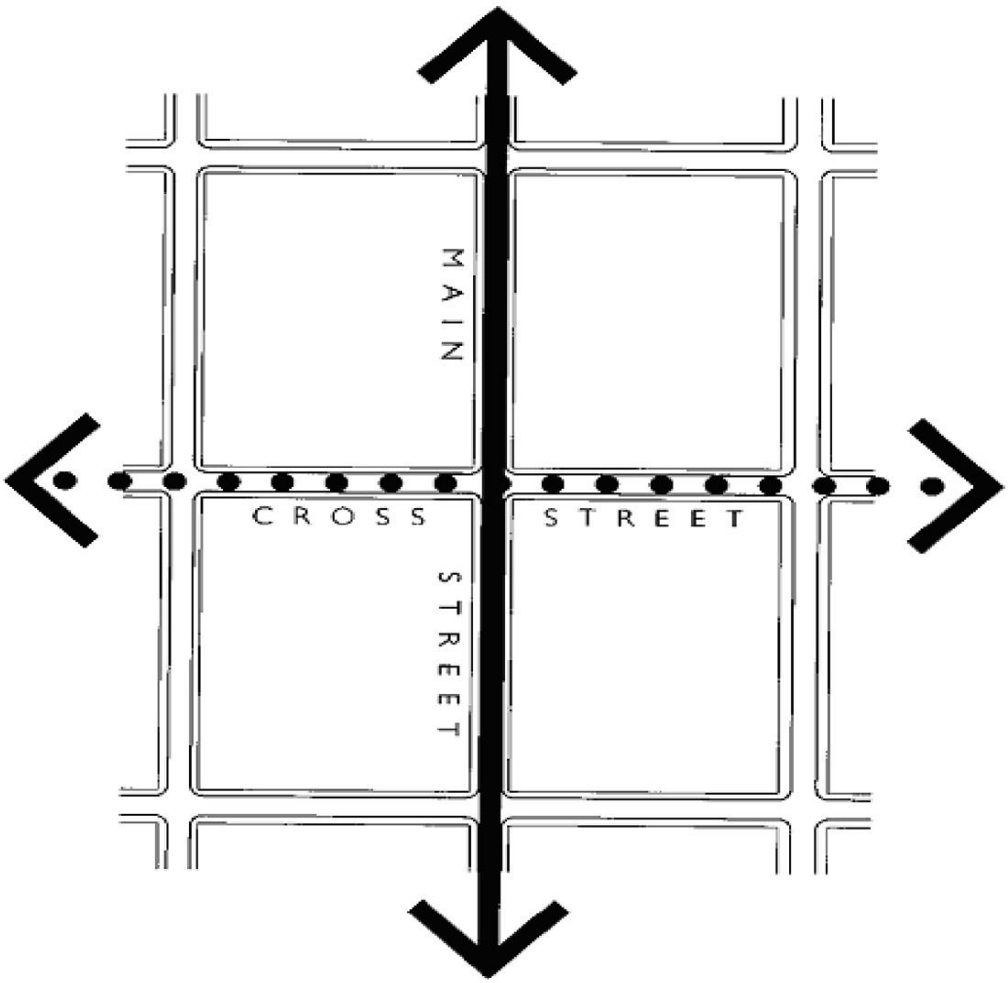


Figure 12 – Street Pattern and Hierarchy

PERFORMANCE GUIDELINE 1. STREET PATTERN AND HIERARCHY
• The street pattern will approximately make a grid, modified to reflect the topography • The street pattern of the town centre is to be organised around a Main and Cross Streets including Civic Way

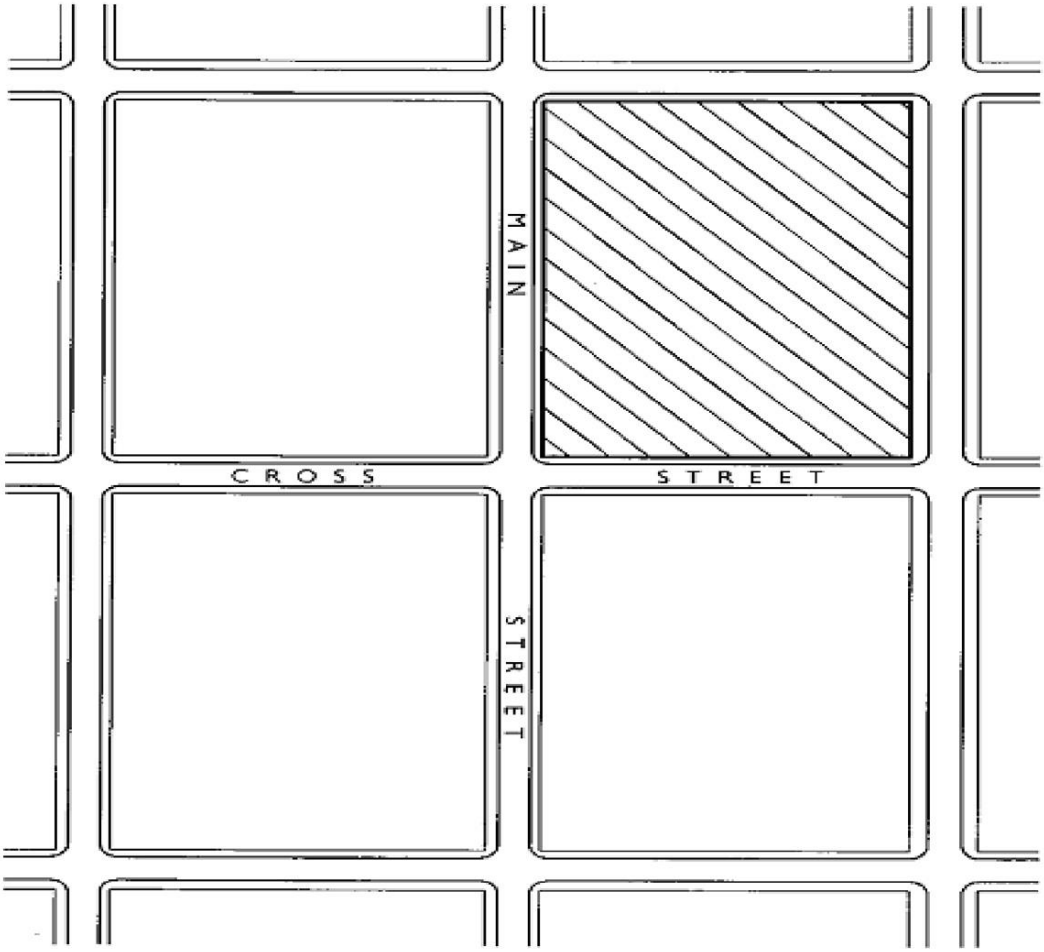


Figure 13 – Block Definition

PERFORMANCE GUIDELINE 2. BLOCK DEFINITION
• Local streets include all streets in the town centre with the exception of service streets and alleys • A block is defined by local streets

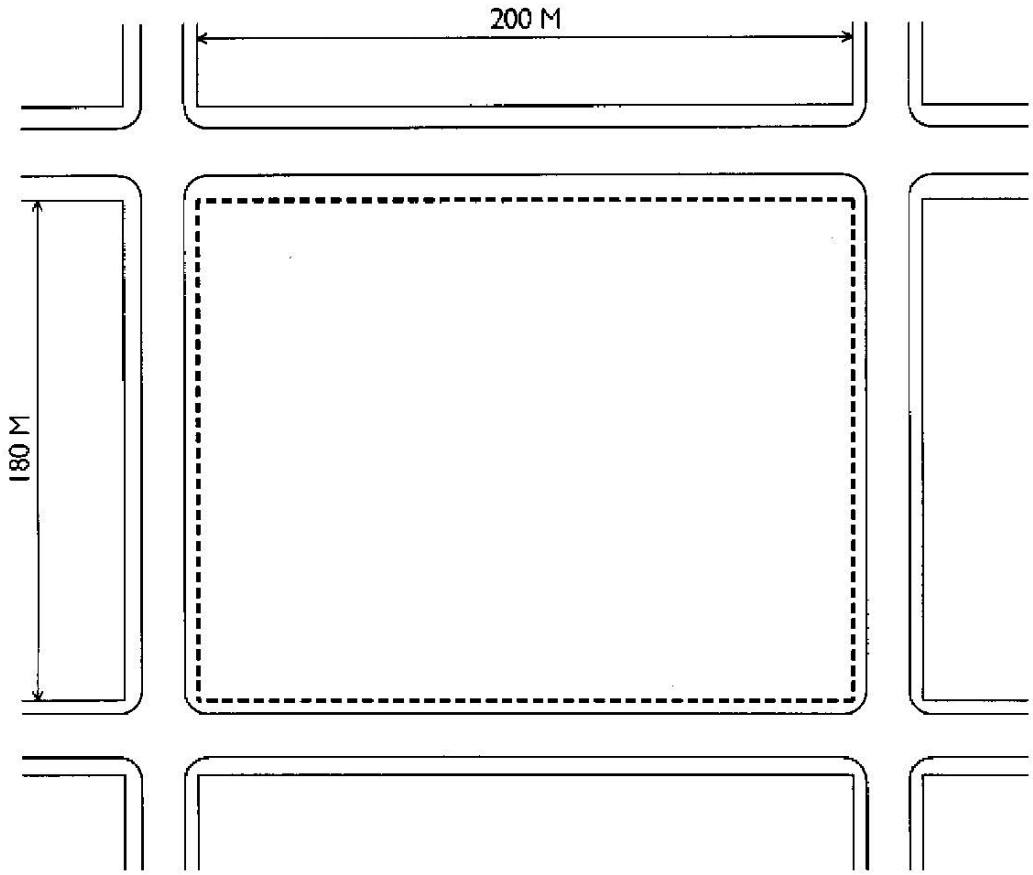


Figure 14 – Standard Block Size

PERFORMANCE GUIDELINE 3. BLOCK SIZE
• The maximum size of a block with retail and commercial uses is 200 x 180 metres

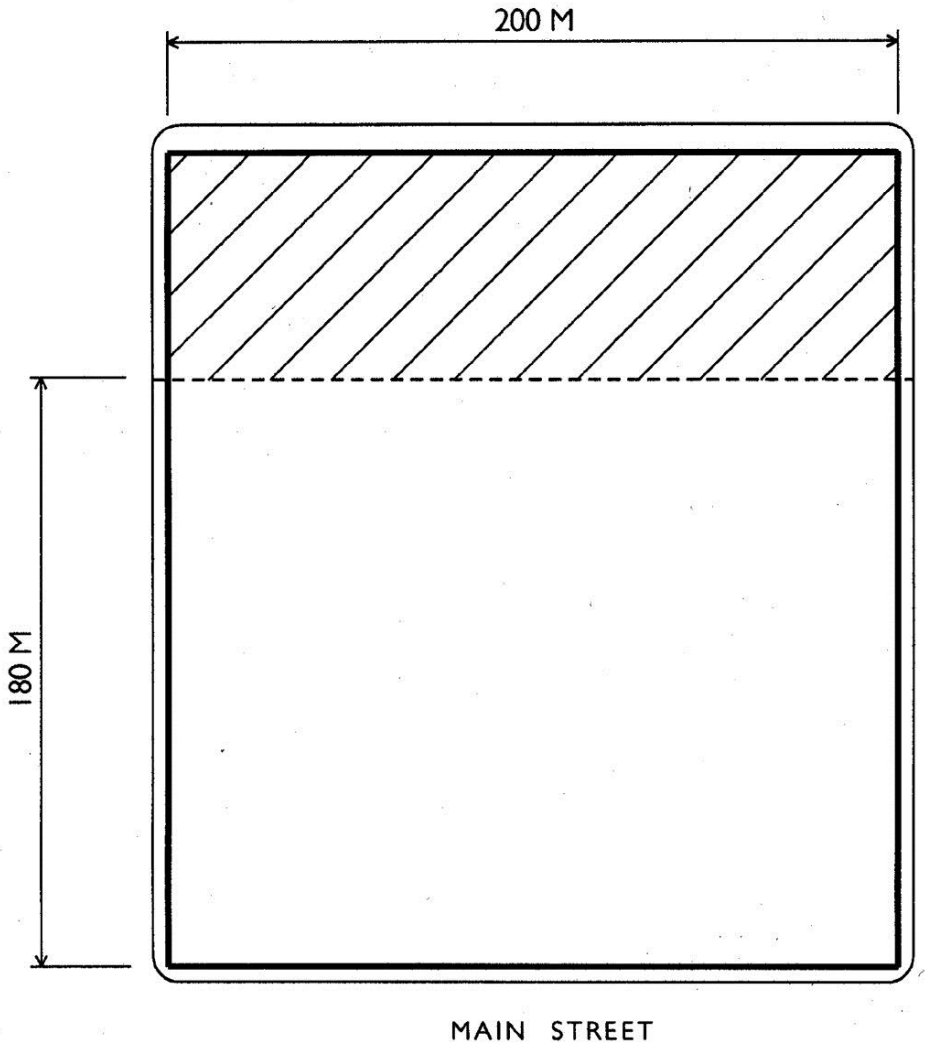


Figure 15 – Alternative Block Size

PERFORMANCE GUIDELINE 4. BLOCK SIZE (CONTINUED)

- The depth of a block (retail/commercial) may be increased to form a mixed-use block accommodating residential and/or community uses
- The maximum block dimensions may be exceeded where the block includes a mix of uses, beyond that of commercial and retail. The specific exceptions to the maximum block dimensions, where a mix of uses are accommodated, are:

  SE Block

  Average depth from main street <200 metres

  Average depth from cross street <220 metres

  SW Block

  Average depth from main street <240 metres

  Average depth from cross street <200 metres

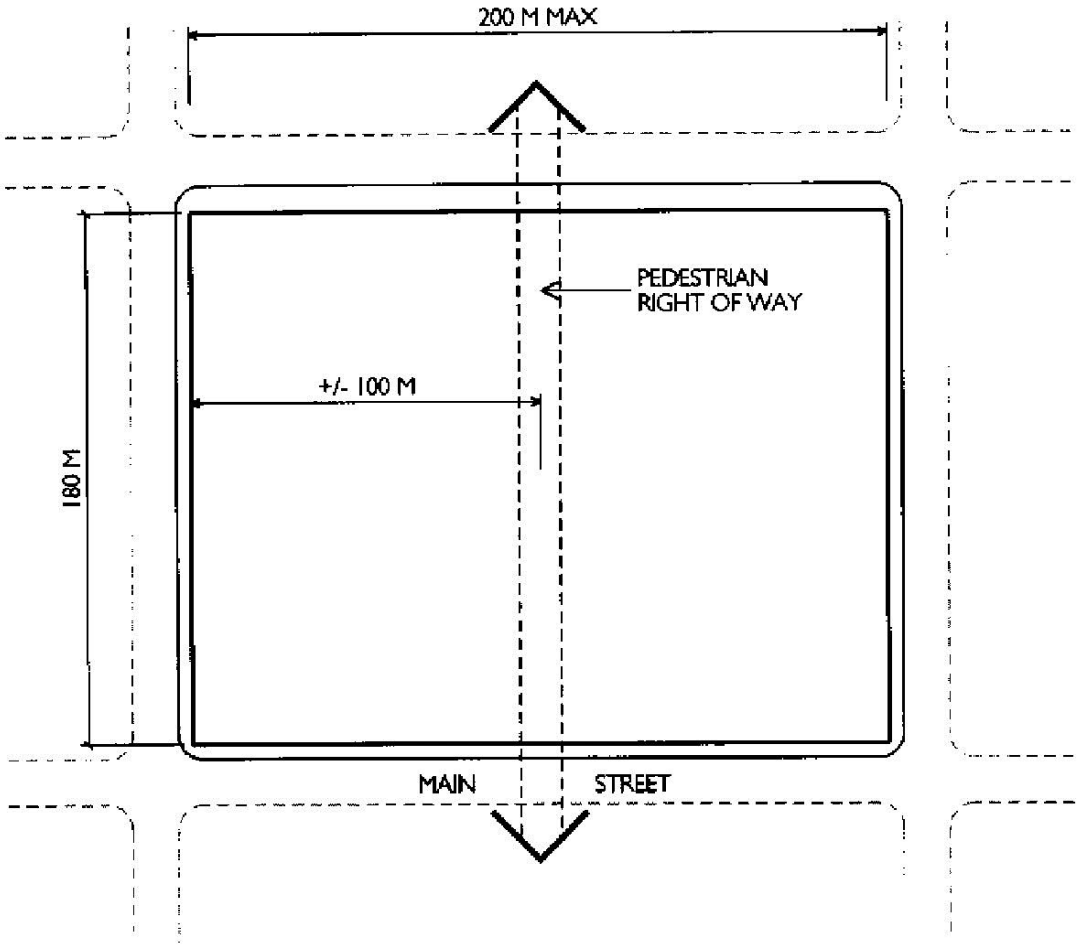


Figure 16 – Pedestrian Right of Ways Must be Provided

PERFORMANCE GUIDELINE 5. BLOCK SIZE (CONTINUED)
• A high quality pedestrian right of way leading to the main street and with 24 hour public access should be provided where block width exceeds 120 metres

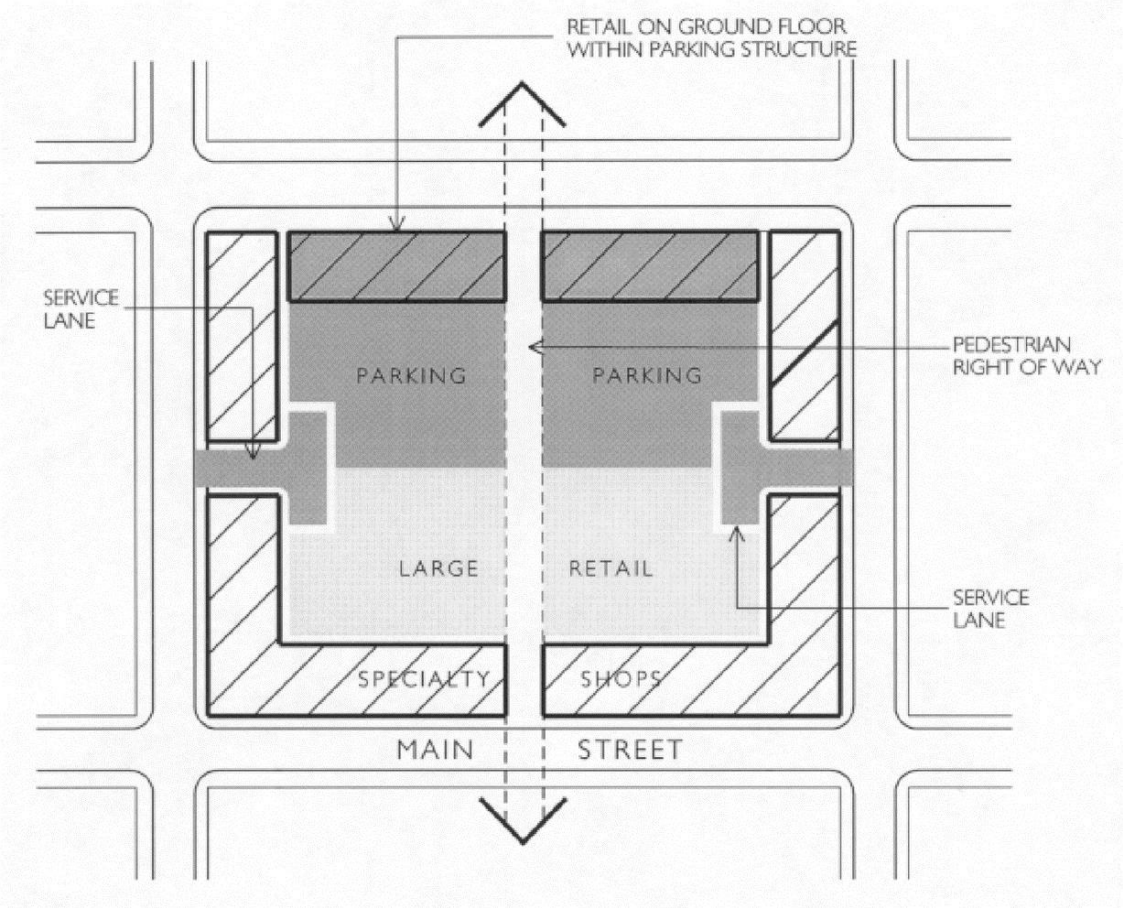


Figure 17 – Service Lanes

PERFORMANCE GUIDELINE 6. BLOCK LANES
• Service access should not cross pedestrian right of way

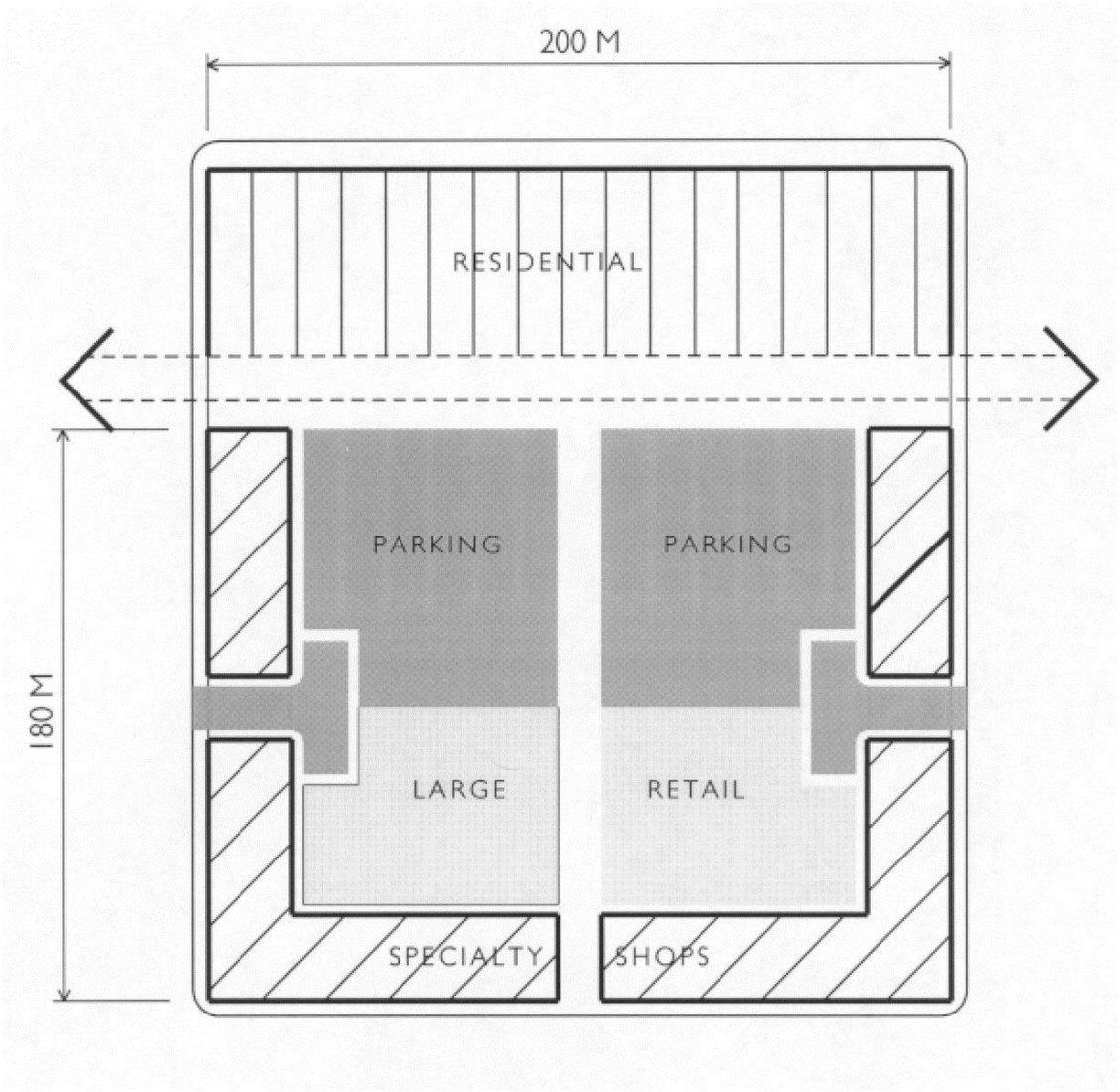


Figure 18 – Block Lanes

PERFORMANCE GUIDELINE 7. BLOCK LANES (CONTINUED)
• If residential is incorporated in the block, a laneway should be provided separating it from other uses

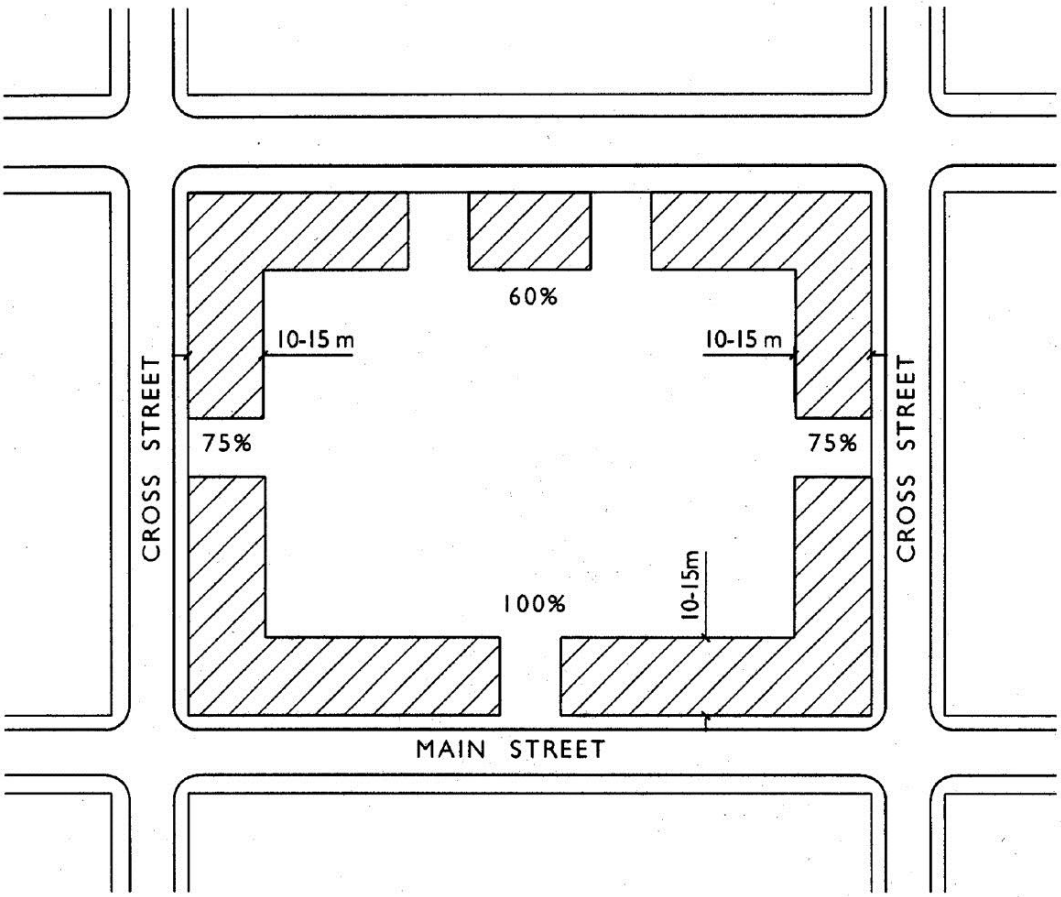


Figure 19 – Block Frontage

PERFORMANCE GUIDELINE - 8. BLOCK FRONTAGE
• Each block should have active ground floor frontage to all primary streets • The degree of frontage varies with the importance of the street: ➢ Main street -100% (excluding pedestrian right of way) ➢ Parallel to main street - 60% ➢ Perpendicular to main street – 75%

2.5.2 BUILDING HEIGHT

PRINCIPLES

- Define building height limits to provide for a variety of building functions, to achieve a strong presence of the centre from approach roads, and a lower scale of development facing Caddies Creek.

RATIONALE

- The centre should have a strong visual identity from regional approach routes. At the same time, the relationship of the built up areas to Caddies Creek is best achieved by having lower scale development front this feature.

OUTCOMES

- Building heights are to be consistent with the built form guidelines applying to the Town Centre Core and Northern Frame.
- Tall buildings are placed in the core at the intersection of Main St and Civic Way.
- A variety of building heights within the Town Centre Core and Northern Frame.
- The building height in residential neighbourhoods is between one and four stories.

PERFORMANCE MEASURES

The diagrams which follow set out these relationships, but cannot be rigorously applied until a developer has been selected and a masterplan approved. A feature of the masterplan submission is to require that developers submit detailed guidelines for the application of building height controls in development applications. Where built form guidelines have been prepared as part of a Level 2 DA for a precinct, those guidelines prevail over the following diagrams (Figures 20 to 22).

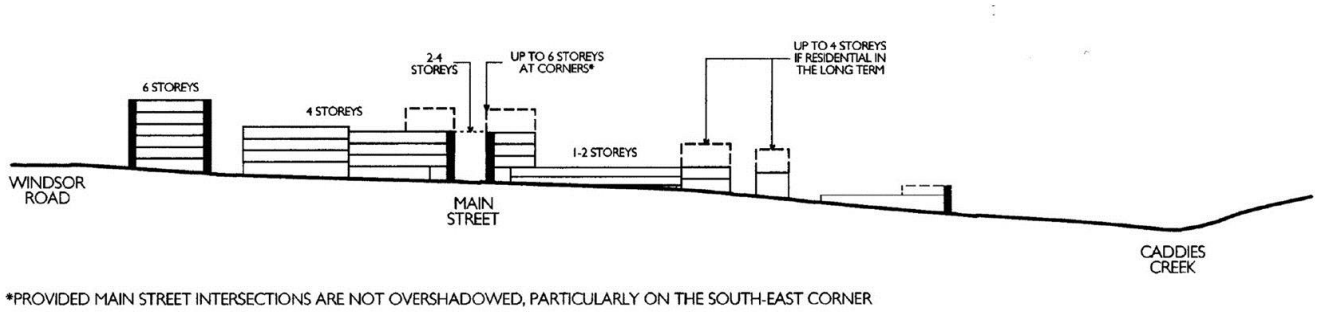


Figure 20 – Section Through Site

PERFORMANCE GUIDELINE 1. BUILDING HEIGHTS –SECTION

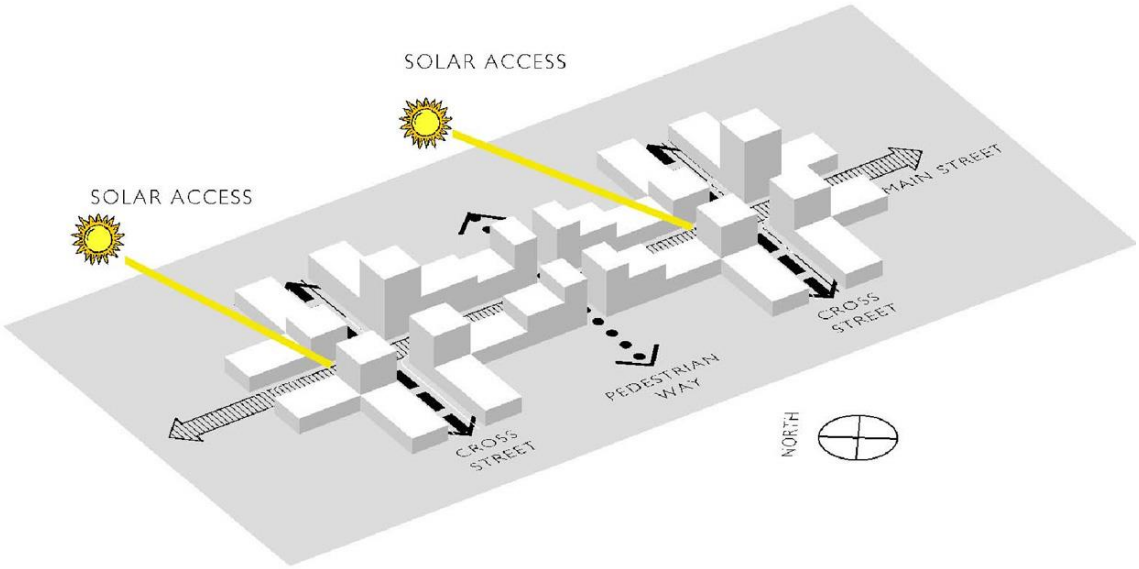


Figure 21 – Building Height Axonometric

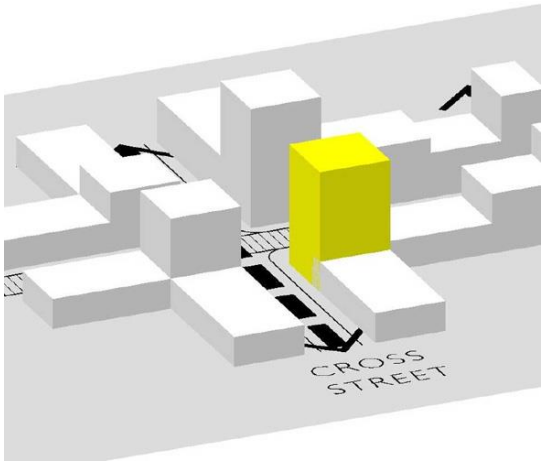


Figure 22 – South–West Corner of Main Street Intersections

PERFORMANCE GUIDELINE 1. BUILDING HEIGHTS (CONTINUED.)

- Build all buildings to street alignment with the exception of buildings with frontage to Commercial Road, where an 18 metre building setback is required to facilitate the possible future upgrading of Commercial Road.
- Vary building heights (between 2-4 storeys) to allow solar access to the main street.
- Use taller buildings (generally 6 stories but up to a maximum of 9 storeys).
- 50% of the Main Street's south-western footpath shall be in sunlight between 12pm and 2pm.

Buildings located at the south-west corners of intersections along the main street should be designed to optimise solar access for the ground and first floors.

2.5.3 STREET SECTIONS

The sections in the following figures indicate mandatory street widths and landscaping.

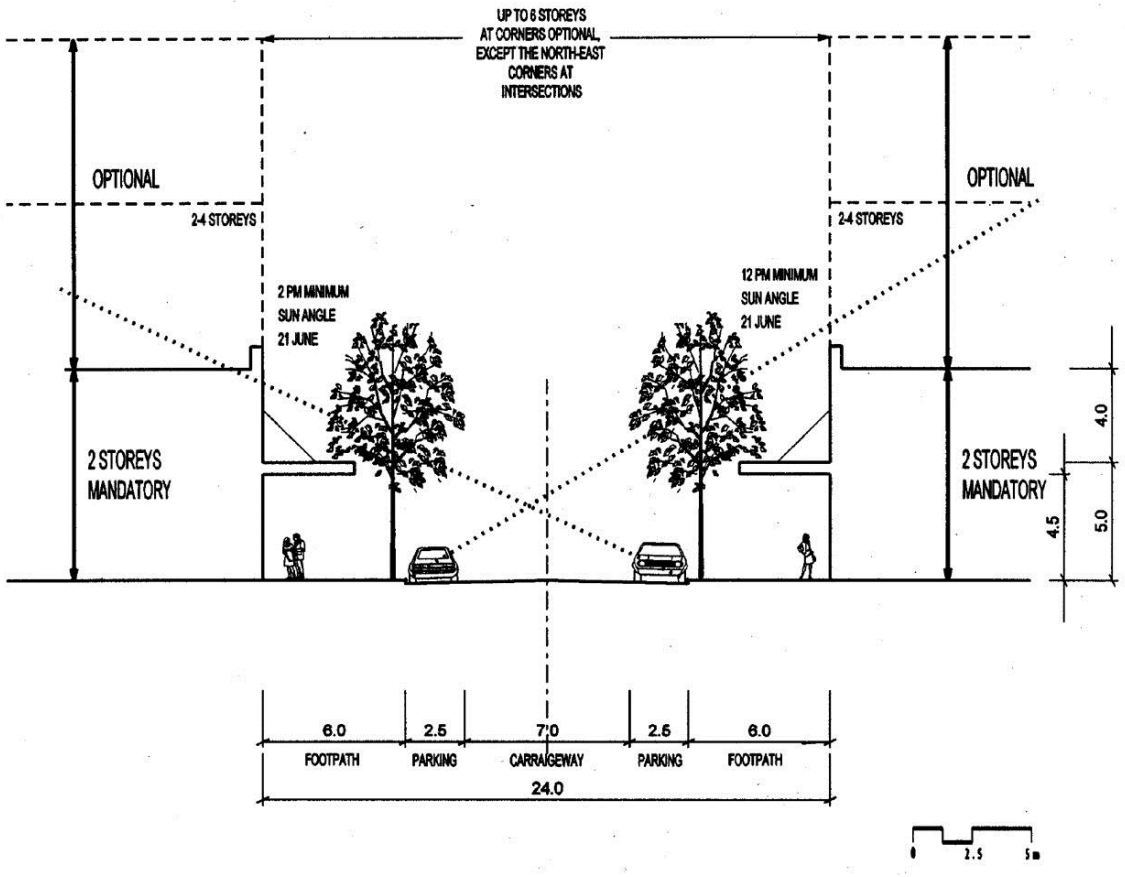


Figure 23 – Main Street Looking North West

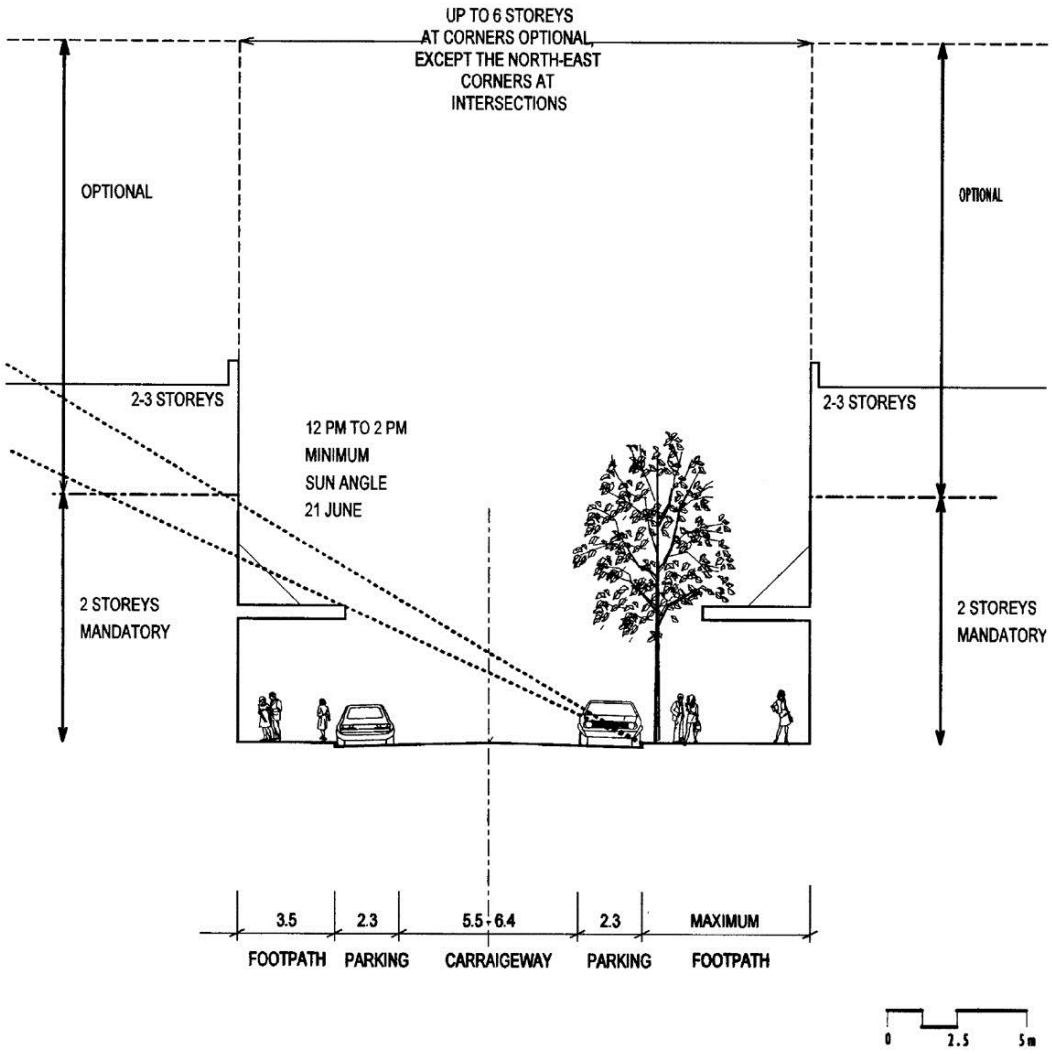


Figure 24 – Streets Perpendicular to Main Street Looking North East

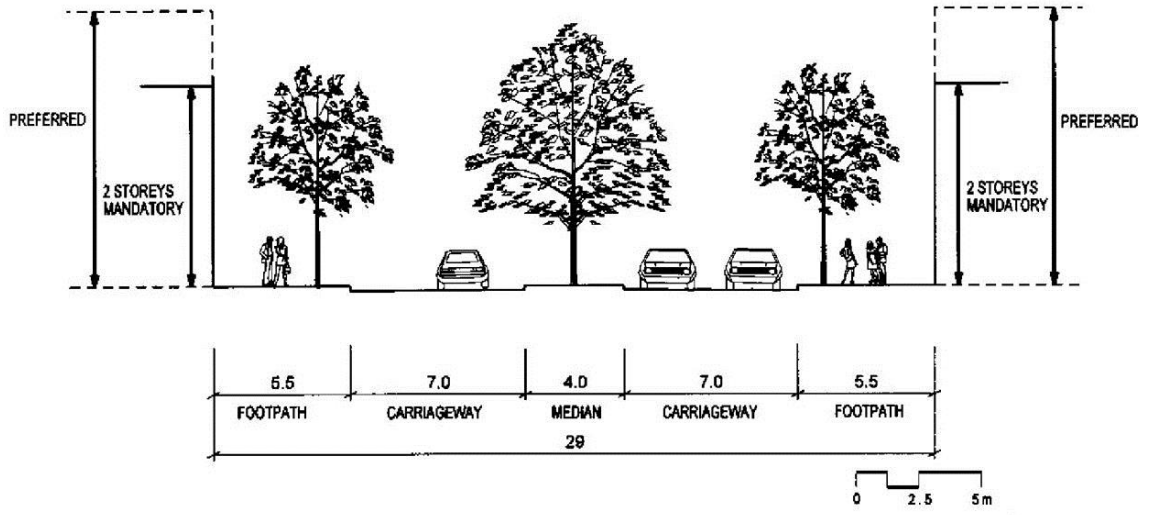


Figure 25 – Schofields Road

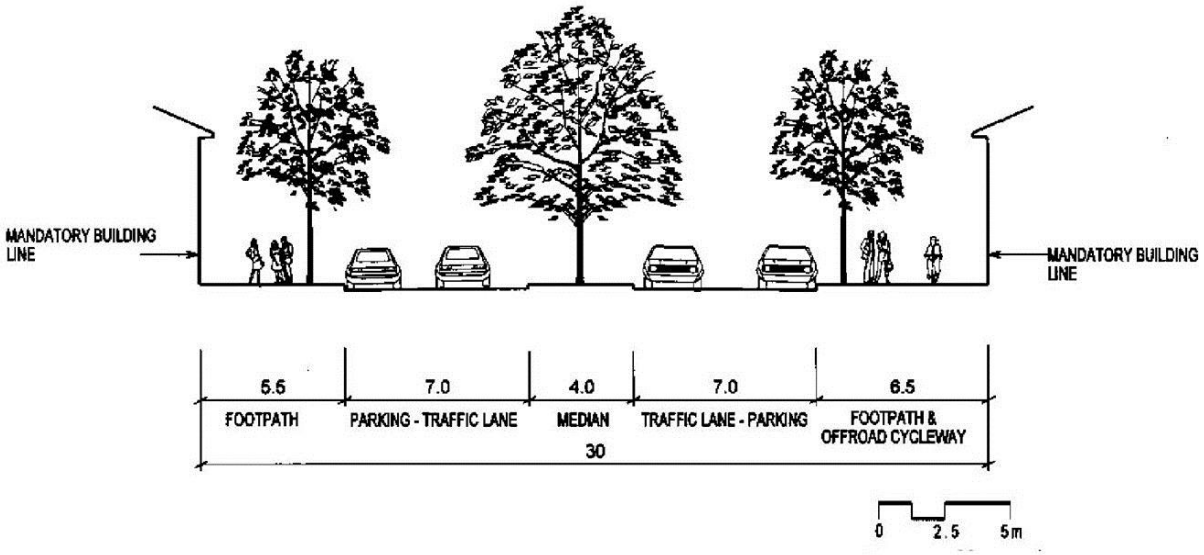


Figure 26 – Sanctuary Drive

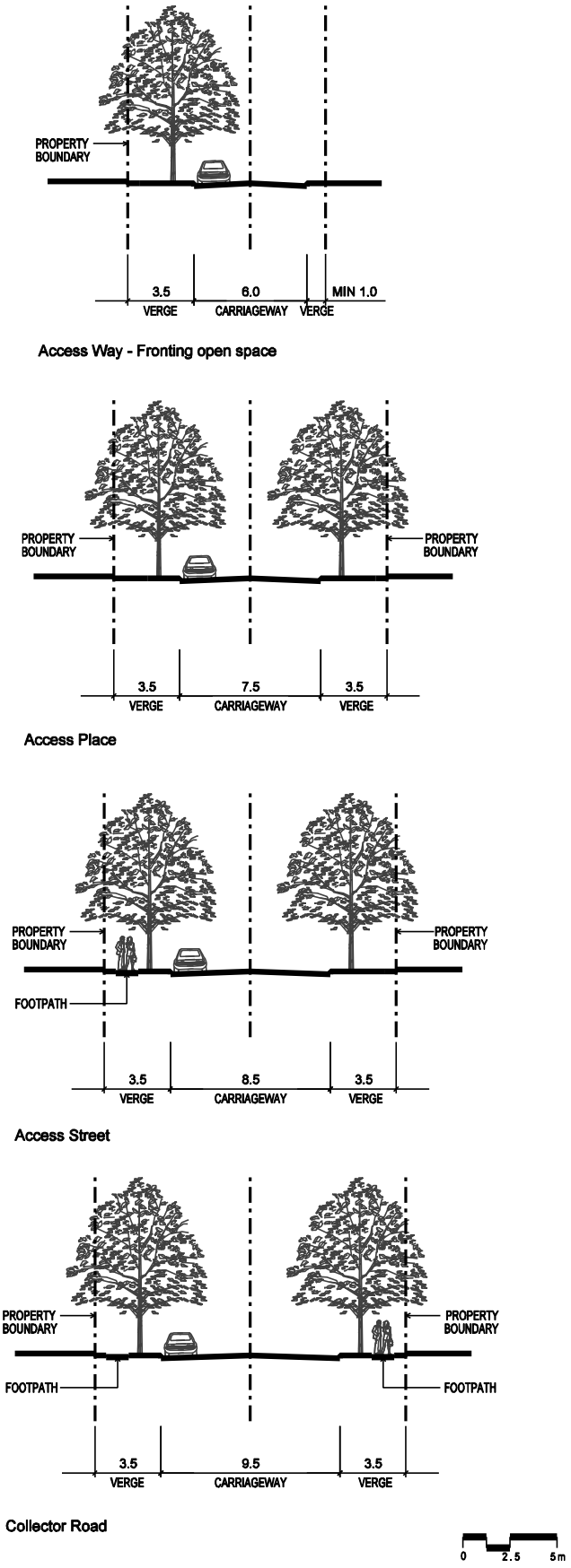


Figure 27 – Residential Streets

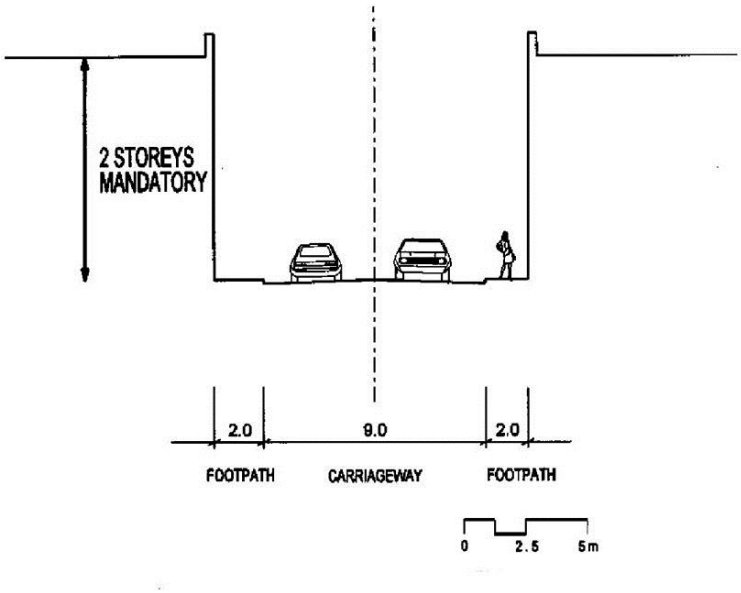


Figure 28 – Service Streets

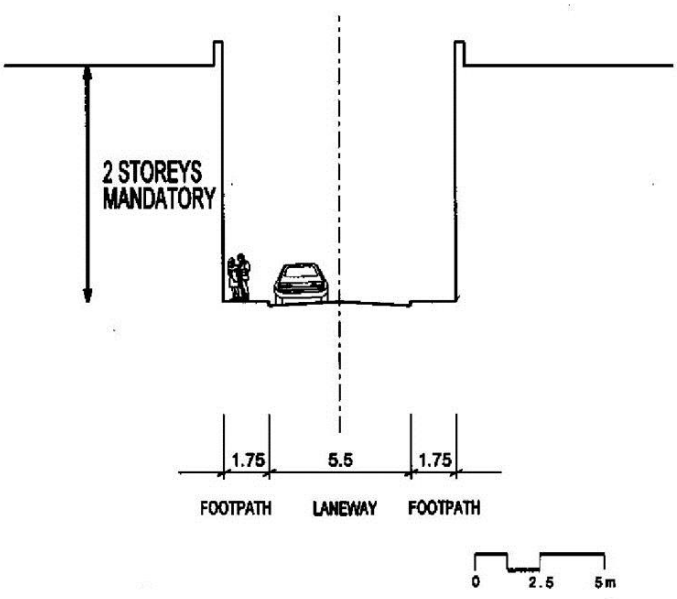


Figure 29 – Laneway

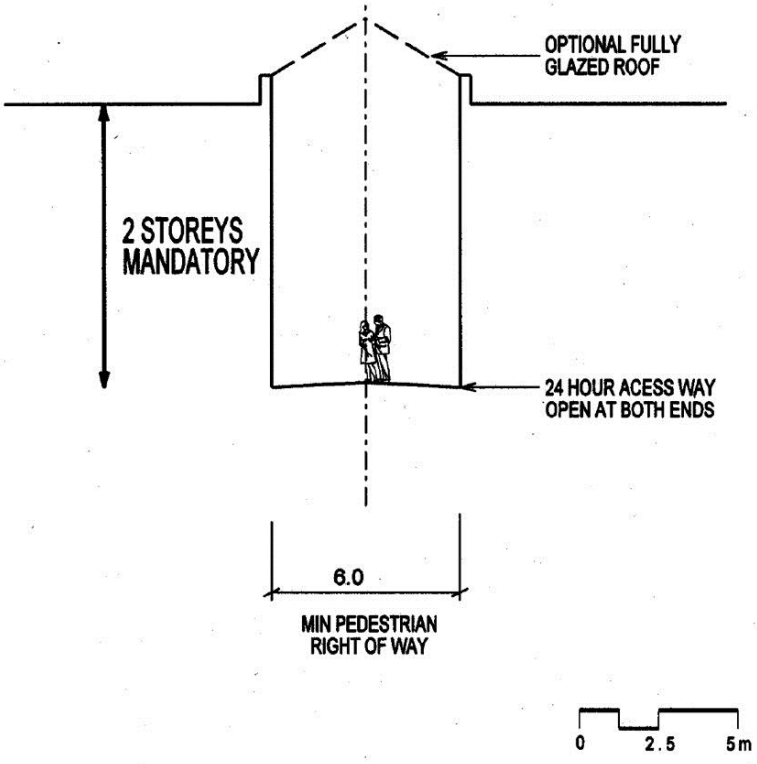


Figure 30 – Pedestrian Right of Way

2.6 SPECIAL PLACES

PRINCIPLES

- The public transport interchange, Main Street/Civic Way, and central park/Tributary 3 (discretionary element) must have a high standard of visual and user amenity.

RATIONALE

- The successful integration of planning, and the quality of design of the major public spaces of the Centre are critical to its success. For these reasons, a more detailed indication of their quality and standards has been prepared and should be regarded as a mandatory minimum level expected in Master Plans.

OUTCOMES

- The Main Street/Civic Way, a Central Park possibly developed in conjunction with Tributary 3, and a public transport interchange form special places in the public realm of the Regional Centre. These places are intensely used, and have become a focus of public activity and pride. Typical designs of the Main Street and a possible treatment of Tributary 3 illustrated at Figures 47-50 show how these places could meet public expectations for quality and functionality. The detailed plans and sections are included to illustrate various different treatments of the Main Street and Tributary 3. The illustrations are accepted as a benchmark for quality design, both in attention to detail and in the quality of materials employed. The final design for all elements shall form part of the masterplan submission.

Safety

- The principles of Council's adopted "Designing Safer Communities – Safer by Design Guidelines" dated June 2003 should be addressed with each development application including the four principles: natural surveillance, access control, ownership and maintenance.

The public **transport interchange** is a main address to the Centre, and its security and amenity are enhanced by being fully integrated into the streetscapes of the Centre.

The **main street** provides the shopfront of the retail area and is the principle spine of pedestrian circulation which links together the functions of the Centre. The main street has a clear identity based on the dominance of trees, paving and shopfront activities. An important cross axis is Civic Way which links community activities area and crosses the main street providing access to, and linking the northern and southern villages.

The **central park/Tributary** 3 is a discretionary element which may form the link between the urban settings of the core and the natural environment of Caddies Creek. It may provide a quiet respite from the bustle of main street, filter urban stormwater, and act as a landscape element to underpin the image of a "Centre in a park".

Small pedestrian spaces enrich the centre and provide identifiable spaces for rest or entertainment.

2.6.1 THE MAIN STREET/CIVIC WAY

PRINCIPLES

- The Main Street/Civic Way should have a high standard of layout and quality of materials and finishes.

RATIONALE

- The Main Street, Civic Way and Civic Way North together form the heart of the Regional Centre, connecting and supporting the civic, cultural, entertainment, leisure and commercial activities. Civic Way has been considered in three distinct character sections.
- Civic Way North will be a pedestrian street connecting to Civic Way to the south via the Town Green. It will have active retail frontages.
- The retail core of the Main Street, and Civic Way between Rouse Hill Drive and Tributary 3, will be the focal area of pedestrian activity. This area is highly urban in character.
- South of Tributary 3 the street should have a landscape quality with wide medians and tall trees. This treatment will increase amenity for residential uses, provide a visual linkage to Civic Way, and relate in character to the Centre.

The main street and Civic Way is set out under three headings – its form, its connections to other areas, and the expected standards of public amenities.

Typical detail plans have been included at the end of this Section of the DCP.

2.6.1.1 BUILT FORM OF MAIN STREET AND CIVIC WAY

PRINCIPLES

- To ensure the Main Street is the focus of shopping and pedestrian activities within the Regional Centre.

RATIONALE

- The Main Street provides the "public domain" which links all the stages and activities in the Centre. It should be open at all times, except for special events and connects to and supports the civic, entertainment, leisure and commercial activities of the Centre. It is the heart of the Centre.

OUTCOME

- An actively used and well loved public place.

PERFORMANCE MEASURES	PERFORMANCE CRITERIA
The Main Street cross section is shown (in Fig 23). Included are a number of 'fixed' and discretionary elements, which secure solar access and character.	2 storey minimum height for street fronting buildings. Main Street to conform to the detail guidelines in this Section of the DCP.
There are to be no kerb crossings at any point for service access to retail outlets.	
The Main Street must have at least 70% of its frontages in any stage occupied by retail frontages with shop floors directly accessed from the street. No single shop shall have a main street frontage of more than two facades (60 metres).	
The Main Street/Civic Way should accommodate the local bus services with slow traffic speeds and on-street parking.	Traffic calming measures are to be introduced (signs, speed humps, road narrowing etc.)
Where buildings on corners are set back, fronting development is limited to uses which enhance the use and enjoyment of corner sites.	
To provide visual interest and enhance potential for later redevelopment, buildings facing the main street should ideally vary in height, facade width and architectural treatment. As a guide, buildings should have a maximum façade of 30 metres.	Detail Guidelines to form part of masterplan.
Street paving is to continue into setback areas or small places including small scaled pedestrian places.	

2.6.1.2 CONNECTIONS FROM MAIN STREET/CIVIC WAY

PRINCIPLES

- To create clear physical and visual connections to other parts of the Town Centre, and to significant points outside site.

- Provide a public space to form a forecourt to the community precinct.

RATIONALE

- Retain a meaningful setting for the public domain within the context of the site and the region.
- Provide a continuous public realm that connects all parts of the Regional Centre and provides pedestrian links to residential areas and open space.

OUTCOMES

- Users of the Centre can easily find their way to subsidiary destinations outside the main street.
- Small pedestrian spaces, special tree plantings, street lighting, signs and consistent paving treatments are used to identify cross routes.

PERFORMANCE CRITERIA

a) Provide continuous and convenient pedestrian connections, including mid block connections, to allow free pedestrian movement along and across the Main Street.

b) Provide a public space to form a forecourt to the community precinct.

c) Connect important focus points of the Regional Centre public realm - particularly public transport nodes, community buildings and the main street. Such connections should be clearly indicated through design treatments to enhance legibility, such as marking major retail entries and street intersection points by introducing small pedestrian places.

d) Acknowledge the significance of Mungerie House and its relationship to Civic Way through street character and planting.

e) Provide a positive visual and pedestrian connection from the main street to Tributary 3, to create links to the open space network. Design of the Main Street/Civic Way should acknowledge the important crossing of Tributary 3 with a well-designed bridge, depending on the relationship of the Main Street/Civic Way and Tributary 3 and where they intersect.

f) Maintain views down side streets leading to the main street. Choice and placement of trees should consider long range views, and views to Caddies Creek corridor.

g) Use tree planting to emphasise topography. Tall trees on the high point will positively mark the street within the Regional Centre area.

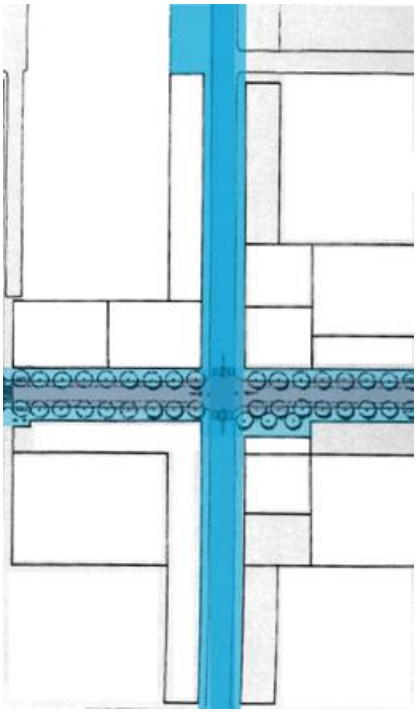


Figure 31 – Connect Focus Points

2.6.1.3 PEDESTRIAN AMENITY – MAIN STREET/CIVIC WAY

PRINCIPLES

- To create a pleasant, safe and comfortable environment for pedestrians.
- To ensure accessibility for all users.
- To provide equity of access, meeting the needs of the disabled.

RATIONALE

- To encourage pedestrian use of the Main Street/Civic Way and create a space that functions as the heart of the public realm, design should emphasise the needs of pedestrians over those of cars. Pedestrian comfort and convenience will be paramount, with the needs of the disabled integrated into the normal streetscape.

OUTCOMES

- High levels of pedestrian use of spaces for movement and activities, allied to excellence in personal safety and security are achieved.

PERFORMANCE CRITERIA

a) Pedestrian Amenity

- The physical comfort in terms of sun, shade and protection from rain provided by the use of awnings should be supplemented by trees which provide shelter and shade.
- Allow a minimum 2.5 metre unobstructed space along the street to accommodate people walking at a variety of pace, and to comfortably accommodate wheelchairs.
- Provide stopping places, such as small plazas and squares along the street. These places provide reference points for the pedestrian, and should provide opportunities to meet, talk, eat etc. Refer to criteria in People Streets and Spaces – Pedestrian Amenity and Solar Access; Lesiuk and Associates.

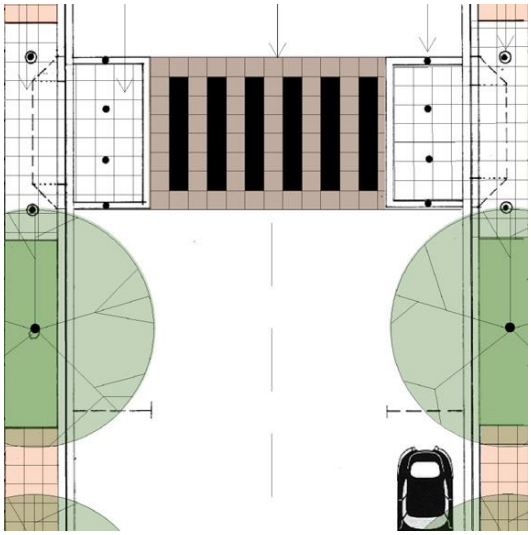


Figure 32 – Pedestrian Crossing

b) Street Furniture

- Furniture and lights should be positioned at the street edge, outside the main pedestrian flow.
- Provide seating at a maximum spacing of 100 metres in the main pedestrian areas. Seating should include units with arms to assist the mobility of people with disabilities. Position seats for winter sun and summer shade. Provide adequate seating at bus stops.
- Provide adequate levels of lighting along Main Street and Civic Way to encourage use of the street at night. Design of lighting should take into account spill from shop fronts, using units that have a pedestrian scale.

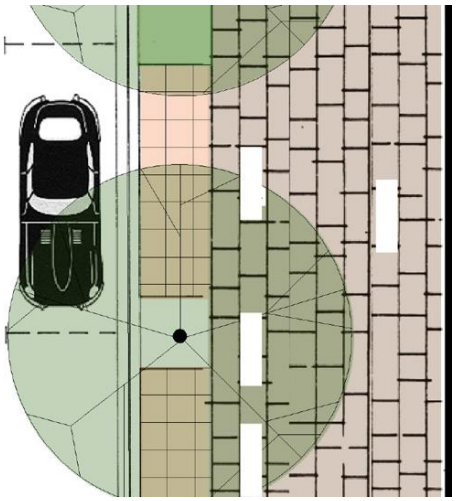


Figure 33 – Clear Space

c) Safety

- Provide a clear path of travel across intersections. Position kerb ramps directly in the line of travel. Kerb ramps should be generously sized, and include provisions for the blind and partially sighted such as tactile indicators and a contrast in tonal intensity.
- Requirements for the disabled should be designed to best practice, rather than strictly adhering to minimum standards, and should be fully integrated with general streetscape design.
- A pedestrian refuge will be required at crossing points. The refuge should be generously scaled to allow for a number of people.
- Pedestrian crossings should be clearly defined with a zebra crossing.

d) Geometry

- A formal, urban streetscape is normally created by a grid of symmetrical, straight lines parallel to and at right angles to the built edge and/or roadway.
- Align street elements, including kerb extensions, pedestrian refuges and medians with the built edge. This will result

in a more urban form that emphasis the pedestrian environment of the footpath rather than engineered, vehicle dominated forms more suited to arterial roads.

- Reinforce the formality of the street geometry by regular placement of trees, lights and furniture.
- Utilise a consistent kerb radius, suited to minimum turning speeds, at all intersections and pedestrian crossing points. Minimum radius at intersections should be 3 metres, going up to 6 metres maximum where necessary to accommodate bus movement.
- In order to achieve homogeneity, the layout of the street should be bold and uncomplicated, with few variations in geometry, colour and furniture.

2.6.1.4 TRIBUTARY 3

PRINCIPLE

- Use Tributary 3 to link the urban and landscape settings in a manner which promotes human use and sustainability of natural systems. This is a discretionary element.

RATIONALE

- Tributary 3 links the core area to the district open space of Caddies Creek. As an integral part of the setting of a regional centre, the park must cater to users of the commercial core, and to the residential areas within the regional centre and beyond. It must meet the needs of those employed in the retail and commercial areas, shoppers, residents and visitors to the centre.
- Tributary 3 is presently a degraded watercourse that flows into Caddies Creek. The watercourse can be restored as a natural watercourse. It has a major functional role to play in the detention of flood flows, and improvement of the quality of urban runoff.
- Landscape design should reinforce this link by providing a transitional landscape, which recognises the cultural qualities and civic amenity of the Main Street and the strong natural setting of Caddies Creek. A central park element should mark the intersection of Tributary 3 and Civic Way, and may be associated with buildings fronting Civic Way which bridges the tributary.
- The following sections set standards for the functional and aesthetic requirements for the design of Tributary 3. They are subdivided into matters concerning civic amenity, stormwater and landscape character. These sections should be read in conjunction with the Caddies Creek Landscape Management Strategy, (Nov 99.), which sets out detailed principles and strategies for stormwater management, restoration of the riparian zone, and open space and recreation.

OUTCOMES

- A functional and creative outcome for Tributary 3 is achieved, linking the urban spaces in the Centre to Caddies Creek by well utilised pedestrian paths.

2.6.1.5 CIVIC AMENITY

PRINCIPLE

- Provide a civic focus for the town centre that allows for a variety of community activities.

RATIONALE

- The Regional Centre needs a central park for staging community events. The civic space should be easily accessible, highly visible and well connected to the Main Street/Civic Way and network of streets and open spaces that form the public realm.

OUTCOME

- Members of the public identify with and use the Central Park.

PERFORMANCE CRITERIA

a) Provide an open gathering space suitable for crowds and the staging of events close to Main Street. This area must be visible from the Main Street so as to have an obvious connection. This area must be designed to accommodate events such as open-air concerts.

b) Ensure easy pedestrian access from the Main Street and side streets including access for the disabled.

c) Provide adequate lighting in the main civic area and in connections to Main Street. At least one

well-lit path should be provided through the length of the Tributary 3 to allow safe passage at night.

d) There is discretion to allow some commercial activities to bridge across Tributary 3.

e) Design for casual surveillance through the parkland- avoid areas hidden by tall shrubbery.

f) Provide a continuous pedestrian/cycleway through the parkland, which connects the urban core to Caddies Creek. This path should have connections to streets in every block.

g) Allow a variety of recreational activities in the body of the park including picnicking, walking and cycling, passive observation etc. Activity should be carefully planned around the objectives of restoration and preservation of natural riparian zones.



Figure 34 – Civic Amenity

2.6.1.6 LANDSCAPE CHARACTER

PRINCIPLE

➢ To provide a transition from the urban environment of the core to the natural environment of Caddies Creek, and enhance the landscape character of the Regional Centre.

RATIONALE

➢ The character of the Regional Centre is dominated by the visual strength of the remnant Cumberland Plain forest and the riparian landscape of Caddies Creek. The urban nature/character of the Commercial Centre of the main street presents contrast to this landscape. Tributary 3 has the potential to mediate between the two landscapes through design, and to provide visual connections across Windsor Road.

OUTCOME

➢ The riparian and urban landscapes merge seamlessly with each other.

PERFORMANCE CRITERIA

a) Provide a positive transitional space at the meeting of Civic Way and Tributary 3, which utilises both the materials of the urban and natural environments. This area should be well-detailed and constructed with high quality finishes, which reflect the character of Civic Way and Main Street.



Figure 35 – Caddies Creek



Figure 36 – Wetland

One option may include recreating a natural riparian zone along the ponds and watercourses of Tributary 3, which employs indigenous riparian vegetation. This zone should be designed to encourage wildlife, and be protected through appropriate uses along its

length. See the Landscape Strategy for Caddies Creek for detailed guidelines.

Planting strategies should maximise the use of native, preferably indigenous species to enhance the landscape setting established by Caddies Creek, and promote environmental sustainability. Non invasive exogenous and exotic species may be used to provide seasonal colour and diversity, particularly in the most intensely used civic space. Landscape design should build on the intrinsic natural form of indigenous vegetation communities, with trees in grass and low understorey in preference to classical or gardenesque landscape styles.

Provide a variety of spatial experiences throughout the parkland, to add interest and enhance the sense of journey.

Fixtures and finishes throughout the parkland of Tributary 3 should be durable and appropriate to the character of the space.

2.6.2 SMALL PEDESTRIAN SPACES

PRINCIPLE

- To provide small pedestrian spaces in the Centre.

RATIONALE

- A significant element enriching the urban setting is provided by small-scale pedestrian spaces linked to, but withdrawn from, the moving pedestrian traffic along street frontages.
- Small pedestrian spaces can function as:
  - Entry spaces to major activities (eg Public Library);
  - Special retail areas;
  - Outdoor restaurants; and
  - Mini-parks or rest spaces.
- Small-scale pedestrian spaces must be adjacent to streets, and may be used to link to other similar spaces or to special functions such as the transport interchange.

OUTCOMES

- Public spaces that people identify with and use.

PERFORMANCE CRITERIA

a) Small pedestrian spaces are those:
   - Having an area of between 25 and 200m^2 in size,
   - That have their orientation laid out to maximise desirable solar access; that is, where they lie off North-South oriented streets, spaces should lie to the west of the street and have their longer dimension lying in an East-West direction. Where they lie off East-West oriented Streets, they should lie off the South side of streets with maximum exposure to the North.
   - To enhance security, small pedestrian spaces must be easily visible from adjacent streets, and well lit at night.
   - Spaces should contribute to a "sense of place" or location by each having a unique visual and functional identity, (eg "water garden" restaurant square).

2.6.3 PUBLIC TRANSPORT INTERCHANGE

PRINCIPLE

- To provide for a public transport interchange which is integrated into the streetscapes of the Centre and which operates in an effective and efficient manner.

RATIONALE

- Public transport use is enhanced when interchange between different modes is easy, and when users feel secure.

OUTCOME

The design of the interchange is agreed with by the Ministry of Transport (MOT), fully integrated in the Centre, and its initial bus facilities are operational when Stage 1 opens.

Performance Criteria:	Performance Measures:
Provide interchange facilities funded by MOT as part of the construction of the Centre and integrated with surrounding development.	Complete the bus/transitway elements of the interchange at the time stage 1 development opens.
Ability to phase in a rail station without disruption to ongoing bus/transitway operations. People should find the interchange easy to use.	Interchange Plan agreed with MOT. Acceptance of a "user friendly" facility, which is integrated into the fabric of streets and adjacent uses.

2.7 STORMWATER

PRINCIPLES

- To prevent stormwater and flood damage to properties.
- To contain nuisance flows to a level which is acceptable to the community, and ensure street system operates adequately during and after major storm events.

RATIONALE

- Promote environmentally sustainable stormwater management for the Regional Centre and enhance the quality of Caddies Creek, in keeping with the requirements of various regulatory bodies and increasing community expectations.

OUTCOME

- Stormwater quality standards are met.

PERFORMANCE CRITERIA

a) Reference should be made to the Preliminary report on Engineering Aspects of the Proposed Rouse Hill Regional Centre (Maunsell Mc Intyre Dec 99) Rouse Hill Regional Centre Working Paper on Water Quality (Maunsell Mc Intyre Dec 99).

b) Detailed design to be advanced in Master Plan.

c) The minor drainage systems minimum design standard is to capture and convey flows produced by a 10 year Average Recurrence Interval design storm.

d) Trapped sag points are not to be created.

e) Drainage reserves or Local Drainage Links are required to discharge gaps flows (the difference between the 100 year ARI storm event and half design pipe flow, allowing for blockage, maximum pipe design 100 year ARI) from all ARI runoffs to the generally accepted maximum of the 100 year ARI storm event.

f) Local Drainage Links are to be a minimum of 5 metres in width, greater if required for drainage purposes. The Developer is required to supply the land, all associated drainage works including energy dissipation, erosion control planting, pathways and tree planting.

g) Drainage facilities are to be standard acceptable to Council.

h) All drainage pits shall have access from the ground surface. Buried junction pits shall not be permitted.

i) All pipes to be dedicated to Council are to be located within public land.

j) The drainage system is to be designed by a qualified person in accordance with the requirements of the responsible drainage authority.

k) All owners of properties adjoining Trunk Drainage land are required to contact Council and Sydney Water to confirm the inundation line prior to the lodgement of subdivision applications.

l) All drainage designs, excluding minor drainage systems, are to comply with Council's Design Guidelines Subdivisions/Developments. Design criteria are to be confirmed by Council.

m) Any discharge to, or construction within Sydney Water Trunk Drainage Land will require the approval of Sydney Water.

n) Provision of measures for minimising runoff from the site such as landscaping, street techniques and road runoff treatment.

o) Water Quality

- Soil erosion and sediment control measures are to be provided for all developments in

accordance with Council's 'Works Specification, Subdivisions/Developments' and the Department of Housing manual 'Managing Urban Stormwater: Soils and Construction'.

- Any discharge to, or construction within Sydney Water drainage land will require the approval of Sydney Water.
- Natural vegetation shall be maintained wherever possible.
- Natural drainage channels are to be retained wherever possible.
- Soil and Water Management Plans are to be submitted with all residential subdivisions and are to be designed in accordance with The Hills Shire Council's 'Works Specification, Subdivisions / Development' and the Department of Housing manual, 'Managing Urban Stormwater: Soils and Construction'.

3. RESIDENTIAL CONTROL PLANS

AIMS AND OBJECTIVES OF THIS SECTION OF THE DCP

This section of the Development Control Plan outlines the development standards, objectives and controls for residential development within the Rouse Hill Regional Centre (Figure 1).

Residential and mixed use development within these precincts is required to comply with the provisions of this Section of the DCP.

Depending upon the type of development proposed, the provisions of the following Sections of the DCP may also apply:

- Part B Section 2 - Residential
- Part B Section 4 - Multi Dwelling Housing
- Part B Section 5 - Residential Flat Buildings
- Part C Section 6 – Flood Controlled Land

In the event of any inconsistency between this Section of the DCP and any other Section of the DCP, the provisions of this Section of the DCP shall prevail only to the extent of the inconsistency.

DESIRED RESIDENTIAL CHARACTER

The Rouse Hill Regional Centre is a new model for residential communities, based on the integration of a range of urban activities and infrastructure to build a vibrant and diverse community.

The planning provides a catalyst for housing innovation targeting new and emerging niche markets, innovation, flexibility and sustainable residential outcomes.

Incorporating diverse housing for a range of ages, socio-economic groups, and lifestyles, residential precincts have direct access to a vibrant and well designed mixed use town centre which supports the broader objectives of the Rouse Hill Regional Centre Strategy by delivering a range of learning, sustainability, design, and affordability outcomes.



Figure 37 – Precincts to which residential controls apply

3.1 REGIONAL CENTRE HOUSING DEVELOPMENT CONTROLS

PRINCIPLES

- Create efficient, liveable and sustainable housing development in distinct precincts.
- Promote residential development which protects existing mature trees, landscape elements, cultural resources and areas of environmental sensitivity, thereby maintaining the scenic and landscape quality and character of the locality.
- Provide high quality medium and high density housing close to or with direct access to the commercial core.
- Maximise residential densities.
- Provide integrated forms of housing development and mixed use development opportunities.

Performance criteria are set out separately in the sections which follow.

3.1.1 SITE ANALYSIS

PERFORMANCE CRITERIA

a) Applications for residential development including subdivision, multi dwelling housing and residential flat buildings are to be accompanied by a site analysis, which should address the site and its surrounds and include:
   - a plan describing the site;
   - calculation of built upon area;
   - a statement explaining how design and development has regard to the site analysis;
   - demonstrate how allotment locations and dimensions respond to topography, site constraints and achieve solar orientation;
   - demonstrate consideration of social and environmental factors; and
   - identification of trees and/or bushland to be protected.

3.1.2 DENSITY PER HECTARE

PERFORMANCE CRITERIA

a) Housing within the Rouse Hill Regional Centre shall comply with the following density:

Precinct	Minimum Density	Maximum Density
Northern	30 dwellings / Hectare	60 dwellings / Hectare
Southern	30 dwellings / Hectare	60 dwellings / Hectare
Eastern	15 dwellings / Hectare	30 dwellings / Hectare
Central	30 dwellings / Hectare	60 dwellings / Hectare
Town Centre Core and Northern Frame	40 dwellings / Hectare	No maximum subject to overall density limits

Notes.

- Net residential density: The number of dwellings on the land occupied by dwellings plus internal private or public streets (including all collector and access streets.) All open space and other non residential uses are excluded.
- The density standard is an average, which applies across all development subject to the same development application, such that each individual building proposed within a single application may be higher or lower than the density requirements.

3.1.3 MIXED USE

PERFORMANCE CRITERIA

a) Housing within the southern, central and northern precincts may include compatible commercial or other uses provided that:
   - residential amenity is not affected;
   - commercial uses relate to uses in adjacent blocks, and face streets; and
   - site servicing provisions are met.

3.1.4 SUBDIVISION AND ALLOTMENT SIZES

PERFORMANCE CRITERIA

a) The subdivision of land should be consistent with the minimum lot size pursuant to The Hills Local Environmental Plan 2012.

b) For detached housing development, all dwellings on allotments with a grade of 6% or greater should be of a split level design with a ground floor level no greater than 1 metre above the existing ground level at any one point. A restriction as to user to this effect may be imposed on any such allotments.

3.1.5 SITE FRONTAGE

PERFORMANCE CRITERIA

a) Different housing types are suited to different lot widths. The following minimum frontage widths are recommended for the different housing types:

- Detached & Semi Detached Dwellings — 9.5 - 18 metres
- Housing as per Clause 4.1B of The Hills LEP 2012 — 7 - 9 metres (6 metres where rear loaded)
- Residential Flat Buildings — 20 metres

3.1.6 BUILDING HEIGHT

PRINCIPLES

- Achieve a variety of building forms and building heights that contribute to the urban structure of the Rouse Hill Regional Centre and assist in establishing an attractive streetscape.

PERFORMANCE CRITERIA

a) Building heights shall be consistent with the maximum building heights pursuant to The Hills Local Environmental Plan 2012.
b) Taller building sections to be designed/detailed so facades present well and no difference in quality regardless of orientation.
c) Buildings within the 70 metre curtilage of Mungerie House shall be one storey.
d) Residential floor to ceiling heights shall be 2.7 metres on ground/living spaces and 2.55 metres on upper levels/bedrooms.
e) Non Residential floor to ceiling heights shall be 3.3 - 4.6 metres on ground level and 2.7 - 3.3 metres above ground level.

3.1.7 BUILDING SETBACKS

PRINCIPLES

- Setbacks to the front, rear and side of lot boundaries define the built area and the non-built area. They allow solar access to open space areas, generally minimise impacts on adjacent parcels and contribute to reducing bulk to the streetscape, reduce the impact of garages, and allow for landscape spaces within each allotment to address the streetscape. Continuous landscaped areas within each parcel of land can increase privacy and amenity of individual allotments.

PERFORMANCE CRITERIA

a) Detached, Semi-Detached & Attached Dwellings

Front Setback	3 metres
Garage setback to front boundary	5.5 metres*
(*or 1.5m behind front building line)	
Side Setback	
Detached/Zero Lot Line:	
Lot width less than 11m	1 metres
Lot width 11 – 13.5m	1.2 metres
Lot width greater than 13.5m	1.5 metres
Attached with service courtyard on side boundary	1.2 metres
Side setback to corner	2 metres
Garage setback to corner	2.5 metres**
(**or 0.5m behind side building line)	
Rear Setback	
Ground floor	4 metres
Upper floors:	
Lot depth less than 30m	5 metres
Lot depth 30m or greater	7 metres
Garage setback to rear lane	0.5 metres
Secondary dwellings above rear garages	Nil setback

- Articulation to the front building line is required and is permitted up to 1.5 metres for:
  - Lot width less than 11 metres - max 40% of length of dwelling facade.
  - Lot width 11 metres or greater - max 50% of length of dwelling facade.
- Articulation to the side (corner) setback on a corner lot permitted up to 1 metre for max 40% of length of dwelling facade.
- Articulation to the rear building line permitted up to 1.5 metres for max 40% of length of dwelling facade.
- Minimum distance between rear building lines of dwellings shall be 8 metres.

b) Residential Flat Buildings

Front Setback	
Ground floor predominantly residential:	
Building height up to 5 storeys	3 metres
Building height 5 storeys or greater	5 metres
Ground floor predominantly retail or commercial:	
Building height up to 5 storeys	1 metres
Building height 5 storeys or greater	3 metres
Side Setback	
Boundary to adjoining lot	1.5 metres
(Not applicable if no shared boundary)	
Rear Setback	
Boundary to adjoining lot	4 metres
(Not applicable if no shared boundary)	
Setback to Tributary 3	4 metres

- All street and open space frontages are considered 'primary' frontages.
- Courtyards and gardens can be built to the boundary.
- Articulation to the front building line is permitted for 1 metre up to 5 storeys and 3 metres for 5 storeys or greater for ground floor predominantly residential.
- Articulation to the front building line is permitted for 1.5 metres up to 5 storeys where ground level retail or commercial workspaces are provided.
- Adjoining residential flat buildings must comply with buildings separation controls.
- Building separation:
  - Minimum separation between buildings is 12 metres.
  - Space between must be capable of extensive landscaping.
- Max linear length of any residential flat building is 50 metres.

3.1.8 BUILDING APPEARANCE, ARTICULATION, ORIENTATION & DESIGN

PRINCIPLES

- Buildings should be designed and built for the local climate, environment and lifestyle, and reflect the Rouse Hill Regional Centre architectural design direction for the creation of modern Australian housing. There are several key features that reflect the contemporary modern Australian lifestyle and will contribute to the creation of comfortable and attractive homes.
- Building articulation can be generated through the expression of separate parts of the building: entries, stairs, walkways, verandahs, balconies, screens, sunshading. Articulation can also be generated through design solutions to environmental conditions of orientation, noise, breezes, views.

PERFORMANCE CRITERIA

- All buildings should follow the street alignment and be set at right angles to the street.
- Buildings should be designed to address the street and private open spaces with the majority of windows directed to the front (street) of the lot, to private open spaces and in a direction which provides optimal solar access to internal spaces.
- Building entries shall be clearly articulated and clearly visible from the primary street.
- Clear separate path to be provided from street and/or driveway to front door.
- Only one side wall can run full length of the dwelling without articulation.
- Rear articulation shall include a blade wall incorporated into the building design for the purpose of increasing privacy by interrupting

views between internal rooms of dwellings that share a common rear boundary.
- Corner buildings shall be articulated to reinforce the intersection and address both street frontages.
- Building elements such as balconies, recessed terraces, verandahs, awnings, bay windows, pergolas, sun shading etc. required on all buildings.
- Articulation shall be integrated with the building design and its massing.
- Balconies should complement the general appearance of the building. Balconies can extend 800mm outside the building line.
- Windows of habitable rooms should be directed to the front/rear of the site.
- Modulation should be incorporated with the façade design rather than fixtures to the façade.
- Communication devices, solar collectors etc. to be integrated into the design of the building.
- The principles of Council's adopted "Designing Safer Communities – Safer by Design Guidelines" dated June 2003 should be addressed with each development application including the four principles: natural surveillance, access control, ownership and maintenance.

a) Residential Flat Buildings
   - Residential Flat Buildings should address the alignment of all adjacent streets.
   - All facades to be designed and detailed to be viewed from all directions (same level of quality as public streets and open spaces).
   - Perimeter walls to be articulated with balconies as punctuations within the perimeter wall.
   - Base of buildings to be expressed and relate to retail/commercial uses.
   - For retail/commercial uses, provide continuous protection via awning or colonnade for pedestrians at base level. In these locations buildings may be built on boundary to provide activation along street.
   - Lighting under awnings/within colonnades required.
   - Ground floor dwellings shall address and have direct entry points on the street whilst maintaining privacy to private open spaces. A maximum 1 metre grade can separate ground floor from street.
   - Courtyard walls that front public open space to be minimum 25% transparent and match the character of the building.
   - Minimise corridors/circulation space and avoid dormant areas with little or no natural surveillance.
   - Cross ventilation: at least 50% of building.

3.1.9 APARTMENT LAYOUT AND DESIGN

Refer to Part B Section 5 - Residential Flat Buildings.

3.1.10 STORAGE

PRINCIPLES

- The requirement for adequate storage within residential flat buildings for items beyond basic household items allows residents to participate in a broader range of activities and hobbies.

PERFORMANCE CRITERIA

a) Residential Flat Buildings
   - Storage areas in addition to kitchen cupboards and bedroom wardrobes to be provided in secure locations either in dwelling or lockable garage.
   - Volume of storage:
     - Studio/1 bed: $6m^3$
     - 2 bed: $8m^3$
     - 3+ bed: $10m^3$
   - Other:
     - Secure locations.
     - Easy access for bicycle parking to encourage regular use.

3.1.11 ROOF DESIGN

PRINCIPLES

- Roof design greatly contributes to the variety and diversity of housing in a streetscape. Roof design of dwellings, shading and screening devices are to be responsive to orientation and weather patterns.

PERFORMANCE CRITERIA

a) A variety of roof forms are encouraged.

b) Roof styles are to be predominantly hipped, gable, skillion or flat style. Roof forms are not to be excessive or cause loss of amenity.

c) Appropriate use of eaves, pergolas, screens, awnings, and louvers to provide protection to the north/east/west facing windows.

d) Designed to manage summer/winter solar exposure.

e) Elevated roofs to have operable windows for ventilation/release of warm stale air.

f) Eaves shall extend a minimum of 450mm from face of the building to provide adequate protection.

g) Minimum pitch to traditional roof forms is 22.5 degrees, minimum pitch to skillion roofs is 10 degrees.

3.1.12 DRIVEWAYS

PRINCIPLES

- Provide attractive streetscapes by limiting the impact of driveways and cross overs along streets and street corners to emphasise pedestrian and cycle safety.

PERFORMANCE CRITERIA

a) Detached, Semi-Detached & Attached Dwellings
   - 500mm landscape strip to be provided along length of driveways
   - Cross Overs:
     - Single garage: 3 metres
     - Double garage: no greater than 4.5 metres
     - To be same material as footpaths
     - To be designed to The Hills Shire Council specification
   - Driveways must abut footpaths so footpath is continuous.
   - Shared driveways:
     - Access to two lots - minimum 5 metres, min 4 metres pavement and 0.5 metre landscaped verge on either side
     - Access to greater than 2 lots - minimum 6 metres, minimum 5 metres pavement and 0.5 metres of landscaped verge on either side
   - Driveway crossings to flare to 5 metres at the kerb.
   - Driveways in multi dwelling housing developments which do not connect between 2 roads shall end in a landscaped feature to any fence.

b) Residential Flat Buildings
   - Buildings of 4 or more storeys may have access to basement car parking via an opening in the front façade of the building. Vehicle access to car parking spaces for apartment buildings up to 3 storeys is to be via one shared entry/exit driveway along the side of the building.
   - Entry & exit from garages onto a public street should be in a forward direction. Pedestrian and vehicular access should be separated.

3.1.13 CAR PARKING

PRINCIPLES

- Provide carparking for multi dwelling housing and residential flat buildings at rates which recognise the close proximity of public transport, shops and other facilities and that the rear loading will facilitate greater on street parking for visitors.

PERFORMANCE CRITERIA

a) Multi Dwelling Housing/Housing as per Clause 4.1B of The Hills LEP 2012
   - 1-3 bed: 1 space/dwelling
   - 4+ bed: 2 space/dwelling
   - Visitor parking:
     - None required for rear-loaded developments
     - Where lots do not have rear lanes, visitor parking may be provided in front of garages

b) Residential flat buildings
   - Designed in accordance with AS2890 – Parking Facilities - Off Street Car Parking
   - Off-street parking:
     - 1 bed: 1 space/dwelling
     - 2 bed: 1.5 spaces/dwelling
     - 3 + bed: 2 spaces/dwelling
   - Visitor parking:
     - 2 space/5 dwellings for developments with up to 60 units.

- 1 space/5 dwellings for developments with 60 or more units.

➢ Bicycle parking: 1 space/5 dwellings
➢ Under/semi-underground parking preferred if above ground must be behind the building line and screened from view.
➢ Maximum projection above ground: one metre.

3.1.14 GARAGE DESIGN

PRINCIPLES

➢ Ensure garages do not dominate the primary street frontage and incorporate measures to reduce dominance when provided to rear lanes.

PERFORMANCE CRITERIA

a) Allotments with a frontage less than 12 metres facing a primary street shall have a single garage of no more than 3.5 width nor extend across more than 50% of the property frontage, whichever is the lesser (unless rear loaded).

b) Where a double garage is proposed a minimum of three of the design features below must be adopted:
   ➢ Upper floor element projected forward of the garage to cast shadow and take prominence.
   ➢ Colours and textures to ensure garage door subservience.
   ➢ Verandah or pergola provided across the face of the garage.
   ➢ Utilisation of vertical elements to mitigate the horizontal emphasis of the garage.

c) Entrance to be orientated away from primary street frontage to face side boundary on corner lots or rear lane when provided.

d) Staggered garages whereby one garage is setback from adjoining garage.

e) Where studio accommodation is located above a garage accessed by a rear lane, mews or car court, the garage door shall be recessed from the line of the studio above.

f) Materials and colours should relate to existing or proposed buildings.

3.1.15 SOLAR ACCESS

PRINCIPLES

➢ Buildings should be designed to optimise solar access to habitable rooms, private open spaces and public open spaces.
➢ Buildings are to be designed to minimise overshadowing of neighbouring buildings and open spaces during the winter months.
➢ Encourage dwellings that optimise passive solar design opportunities to ensure daylight access to habitable rooms.
➢ Use direct solar access and shading to reduce the running costs of dwellings while incorporating natural ventilation strategies required for cooling and dispelling stale air.
➢ Create dwellings that achieve a high quality energy efficient living and working environment.

PERFORMANCE CRITERIA

a) Detached, Semi-Detached & Attached Dwellings
   ➢ Dwellings to comply with BASIX.
   ➢ Buildings should be designed to optimise solar daylight access to habitable rooms, private open spaces and public open spaces. – particularly living rooms.
   ➢ Typically living areas located to allow 3 hrs solar access on 21 June.
   ➢ At least one room within dwelling should be designed to allow maximum penetration of winter sun and screen summer sun (not necessarily same room).
   ➢ Provide appropriate sun protection to windows – overhangs, blades, screens, landscaping.
   ➢ Incorporate natural cross ventilation through use of operable openings in walls facing two different (preferably opposite directions).
   ➢ Gas boosted solar water heaters are the preferred water heating method.
   ➢ Grid connected PV panels, preferably on the highest part of roof is encouraged to supplement electricity demands of dwellings.
   ➢ Any air conditioning systems should be energy efficient with minimum standard being inverter split system.

b) Residential flat buildings

- 70% of dwellings to receive min 3 hrs solar access to a living area and private open space between 9am and 3pm on 21 June.
- < 10% with southerly aspect and achieve min NatHERS Thermal Comfort rating of 5.5 star.
- Main windows require solar control and suitable shading.
- North facing windows should incorporate horizontal shading devices: eaves, verandas, pergolas, awnings, external blinds.
- Shading elements should be integrated into overall design – window size, external shading devices, vertical blinds, blade walls, thick vegetation.
- All apartments to comply with SEPP 65.

3.1.16 LANDSCAPING

PRINCIPLES

- Provide landscape areas for planting of screening and decorative trees, site amenity, open space, ground water recharge, site drainage management and other landscape outcomes.
- High quality landscaping and open space (including private open space) is required to each dwelling to enhance the visual appeal, improve environmental performance and increase liveability for residents.

PERFORMANCE CRITERIA

a) Detached, Semi-Detached & Attached Dwellings
   - Minimum 40% of lot area shall be provided for soft landscaping and open space.
   - To be gardens, lawns, trees and other vegetated soft landscaping, including incidental paths, paving and retaining walls.
   - Includes driveways and hard stand areas.
   - Does not include pools, sheds & gazebos.

b) Residential flat buildings
   - Minimum 30% of site excluding buildings & driveways.
   - Terraces/balconies within 1 metre of natural ground level can be included in landscaped area, including common open space above parking.
   - All setbacks and above ground car parking to be landscaped & maintained.
   - Landscape treatments to harmonise with building design.
   - Use of native species is encouraged.
   - Landscaping should consider safety.
   - Rooftop gardens, terraces, courtyards to provide an equal mix of landscaping/hard paving.
   - At least 25% or 50m² (whichever is greater) ground level open space is to be provided on natural ground.

3.1.17 OPEN SPACE (PRIVATE AND COMMON)

PRINCIPLES

- Ensure that all dwellings have access to private, comfortable and useable open spaces. Private spaces that directly adjoin the public domain are to contribute positively to the quality of the public domain. Useable external private open space must be related to the needs of individual residents for leisure, recreation, outdoor entertaining and service/storage functions. Courtyards, terraces, balconies and the like can contribute to the character of streetscapes, buildings and the amenity of residents.
- Common open space to be provided for residential flat buildings in accessible areas with good amenity.

PERFORMANCE CRITERIA

a) Detached, Semi-Detached & Attached Dwellings
   - Private Open Space shall be provided to each dwelling in the following minimum percentages:
     - Minimum 23% of lot area for lots up to 400sqm.
     - Minimum 20% of lot area for lots 400sqm and larger.
   - Minimum dimensions of primary private open space shall be 4 metres x 6 metres.
   - Minimum secondary private open space: 3 metres.
   - 50% of required private open space shall receive 3 hours of solar access between 9am and 3pm on June 21 (exception may be considered if in specific circumstances

the compliance would unduly affect functionality or liveability).

- A maximum of 15m^2 of private open space can be provided in the form of balconies.
- An area of primary open space to be directly accessible from indoor living space and within 500mm of finished floor level.
- Primary open space at ground level to be separate and screened from the public realm.
- Secondary dwellings require a minimum 6m² area, with a minimum dimension of 2 metres (all can be provided at upper level).
- Primary open space on upper levels to include privacy measures from adjacent dwellings.
- Maximum 50% portion of private open space on ground level can be roofed or covered - no roof to encroach into setback area beyond normal eaves.
- Gazebos, play equipment, swimming pools, and spas not permitted to count towards primary open space.
- Courtyards in the front setback area are allowed if adequate privacy through planting, fencing or screens whilst maintaining surveillance and streetscape.
- No common open space required.

b) Residential flat buildings

- Open space can be partially provided in the form of courtyards, gardens and balconies.
- Private Open space:
  - Private open space must be accessible from living areas of dwelling units:
    - Ground level dwellings to have a minimum width 4 metres and a minimum depth of 3 metres.
    - Above ground level dwellings to have a minimum area 8 m² with a minimum depth 2 metres.
  - The design of residential flat buildings shall comply with SEPP 65 and therefore a minimum of 70% of private open space will achieve a minimum of 3 hours of solar access between 9am and 3pm on June 21.
- Common Open Space:
  - A minimum of 10m² of open space per dwelling unit (including courtyards, gardens and balconies) is to be provided.
  - Minimum dimension to be: 4 metres on ground level and podium levels, 3 metres for balcony & roof terraces.

3.1.18 FENCING AND COURTYARD WALLS

PRINCIPLES

- Fencing and courtyard walls are to establish and support the character of the street. The location and design of fencing and courtyard walls is to enable the efficient use of front garden spaces.
- Fencing and courtyard walls adjacent to the public realm including streets and open spaces is to be a positive contribution to the streetscape character through the use of quality materials, appropriate detailing and the inclusion of landscaping.

PERFORMANCE CRITERIA

a) Detached, Semi-Detached & Attached Dwellings

- Front Fencing:
  - Front fencing is to be constructed to complement the design of the building.
  - Its purpose is to provide a uniform low edge defining the private and public space.
  - Front fencing is required where there are three or more dwellings within a development.
  - Fencing can be in the form of hedges, timber pickets, landscape (i.e. shrubs), or masonry piers with infill panels (open or closed).
  - Fence height is a maximum of 1.2 metres above adjoining nature strip/footpath.
  - Courtyard walls that front public open space are to be 25% transparent.
  - The portion of the fence that is partially transparent can be achieved through planting or a construction method such as slats, pickets etc.
  - Where there is a level change, the fencing to public parks and streets is to comply.

- Side and Rear Boundary Fencing

- Fencing to side and rear boundaries is to be 1.8 metres high.
- Materials of the side or rear fencing are to be typically either masonry or timber.
- Side fencing between lots is to stop a minimum of 1 metre back from the line of the front of the building façade immediately adjacent.
- Front fencing, if desired, can return to meet the side fencing along the boundary. This return can only be 1.2 metres high, not tapered and built to the same standard as the fence on the front boundary.
- When the primary private open space is located on a street or open space frontage, this space should be typically 0.5 – 1 metre higher than the adjacent public realm.

➢ Corner Lots

- Courtyard walls are to be provided on the boundary to protect private open spaces whilst maintaining address and surveillance of the street.
- 1.8 metre high courtyard walls to side boundaries of corner lots are to be no more than 50% of the length of the allotment.
- Side courtyard walls are to stop a minimum of 4 metres back from the line of the front of the building façade immediately adjacent.
- Front fencing is required and can return to meet the side fencing along the boundary.

3.1.19 DESIGNING FOR PRIVACY

PRINCIPLES

➢ Achieve a development with a high quality living environment that maximises the visual and acoustic privacy of the occupants and neighbouring properties through siting, building planning, location of openings and building materials.

PERFORMANCE CRITERIA

a) Detached, Semi-Detached & Attached Dwellings

➢ Second /third storey habitable room windows within 4.5 metres of side boundary to have permanent privacy measures.
➢ Second /third storey habitable room windows within 5 metres of rear boundary of a 25 metre deep lot to have permanent privacy measures.
➢ Upper storey habitable rooms within 7 metres of rear boundary of 30 metre deep lot to have permanent privacy measures.
➢ Direct overlooking of main habitable areas and private open spaces of adjacent dwellings should be minimised through building layout, window and balcony location, design and the use of screening devices.
➢ Acceptable privacy measures include landscaping, alternative window arrangements, external louvers, treated glass etc.
➢ Dwellings adjacent to Tributary 3 and Windsor Rd will require acoustic reports to be submitted with Level 3 DAs.

b) Residential flat buildings

➢ At least 1 semi-private balcony per dwelling being a minimum area 8m^2 and minimum 2 metres deep.
➢ Minimise direct overlooking of main internal living areas and private open space through building design, window locations and size, landscaping and screening.

c) Acoustic Privacy

➢ Buildings located in proximity to main roads or railways shall design for noise.
➢ Development must be designed so as to mitigate potential interface impacts between future development and the railway corridor. This will include measures to mitigate noise and visual impacts such as:
  - Use of noise resistant wall, ceiling, floor and roof material;
  - Site planning;
  - Location of habitable rooms away from the noise sources;
  - Use of triple glazing; and
  - Use of fencing porches and walls as noise buffers.

- Consider locating potential noise sources within common open space, service areas, driveways, road and rail locations.
- Achieve criteria in SEPP (Infrastructure) 2007.

3.1.20 WASTE MANAGEMENT

PRINCIPLES

- Provide domestic waste management systems that allow for ease of use by occupants and ease of service by collection contractors.
- Provide waste storage areas that ~~is~~ are integrated with the design of the development.
- Assist in achieving Federal and State Government waste minimisation targets.
- Implement appropriate practices during construction to minimise waste and maximise opportunities for recycling.

PERFORMANCE CRITERIA

a) Detached, Semi-Detached & Attached Dwellings

- Waste collection and separation facilities to be provided for each dwelling – waste storage cupboard in kitchen for 1 days waste and sufficient to enable separation of recyclables.
- Waste storage facilities to be provided on site and waste removed at regular intervals and not less frequently than once per week (garbage) and fortnightly (recycling).
- Bins on site should not be visible from primary street frontages.
- Storage areas shall be adequate for:
  - 1 x 240 litre garbage bin.
  - 1 x 240 litre recycle bin.
- Bins must be able to be wheeled to the street kerb over flat or ramped surface (maximum grade 7%) and not over steps, landscape edging or gutters.

Waste management requirements for multi dwelling housing are to be in accordance with Part B Section 4 – Multi Dwelling Housing.

Waste management requirements for residential flat buildings are to be in accordance with Part B Section 5 – Residential Flat Buildings.

b) During Construction

- A waste management plan should be submitted to address the following:
  - Avoid oversupply of waste materials and organise collection of waste.
  - Use of prefabricated components.
  - Re-use of materials and use of recycled materials.
  - Appropriate work staging.
  - Appropriate disposal of asbestos, hazardous and intractable wastes.

4. DEVELOPMENT CONTROL COMPLIANCE CHECKLISTS

RESIDENTIAL DEVELOPMENT – DETACHED, SEMI-DETACHED & ATTACHED DWELLINGS

CONTROLS	COMPLIES	COMMENT
3.1.1 SITE ANALYSIS		
3.1.2 DENSITY		
3.1.4 SUBDIVISION		
3.1.5 SITE FRONTAGE		
3.1.6 BUILDING HEIGHT		
3.1.7 SETBACKS Front Side Rear		
3.1.8 BUILDING APPEARANCE, ARTICULATION & ORIENTATION		
3.1.11 ROOF DESIGN		
3.1.12 DRIVEWAYS		
3.1.13 CARPARKING		
3.1.14 GARAGE DESIGN		
3.1.15 SOLAR ACCESS		
3.1.16 LANDSCAPING		
3.1.17 OPEN SPACE		
3.1.18 FENCING AND COURTYARD WALLS		
3.1.19 PRIVACY		
3.1.20 WASTE MANAGEMENT		

RESIDENTIAL DEVELOPMENT – RESIDENTIAL FLAT BUILDINGS

CONTROLS	COMPLIES	COMMENT
3.1.3 SITE ANALYSIS		
3.1.4 SUBDIVISION		
3.1.5 SITE FRONTAGE		
3.1.~~7~~6 BUILDING HEIGHT		
3.1.7 SETBACKS Front Side Rear		
3.1.8 BUILDING APPEARANCE, ARTICULATION & ORIENTATION		
3.1.9 APARTMENT LAYOUT & DESIGN		
3.1.10 STORAGE		
3.1.11 ROOF DESIGN		
3.1.12 DRIVEWAYS		
3.1.13 CAR PARKING		
3.1.14 GARAGE DESIGN		
3.1.15 SOLAR ACCESS		
3.1.16 LANDSCAPING		
3.1.17 OPEN SPACE		
3.1.18 FENCING & COURTYARD WALLS		
3.1.19 PRIVACY		
3.1.20 WASTE MANAGEMENT		

The Hills Development Control Plan (DCP) 2012

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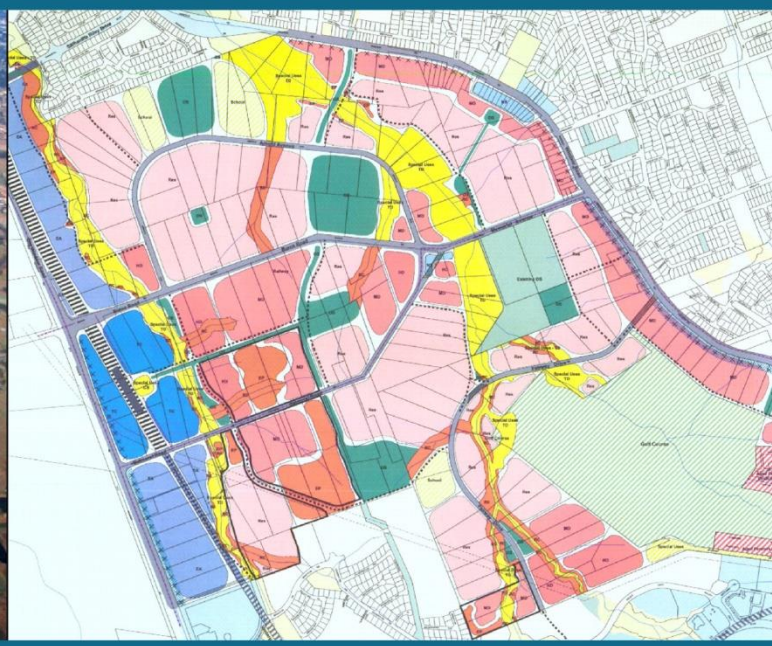
THE HILLS Sydney's Garden Shire





Part D Section 7
Balmoral Road Release Area

D7

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APPENDIX A - ROADS AND MARITIME SERVICES STRATEGIC DESIGN PLAN FOR THE UPGRADE OF MEMORIAL AVE

1. INTRODUCTION

This Section of the DCP must be read in conjunction with Part A – Introduction of this DCP.

1.1 LAND TO WHICH THIS SECTION OF THE PLAN APPLIES

This Section of the Development Control Plan consists of this written document and one accompanying map (referred to as the "BRRA map"), and applies to land within the Balmoral Road Release Area (BRRA) as outlined by a bold black line shown on the BRRA map and in Figure 1.

1.2 AIM AND OBJECTIVES OF THIS SECTION OF THE DCP

The aim of this Section of the DCP is to identify Council's objectives for development within the BRRA and provide relevant controls to ensure the vision and objectives are achieved.

Vision

"To create a high quality, integrated and ecologically sustainable urban environment integrated with good public transport accessibility, open space, community facilities and employment opportunities."

OBJECTIVES

Council's objectives for development within BRRA, in addition to those specified in Part A of this DCP are:

(i) To create sustainable residential neighbourhoods consisting of a mix of housing types including single detached dwellings, dual occupancies, multi dwelling housing, shop top housing and residential flat buildings; and

(ii) To support those residential neighbourhoods and the future population with a range of urban support uses/services including employment areas, transport, public open space, commercial, educational and utility services; and

(iii) To protect, rehabilitate and conserve areas of environmental sensitivity or significance.

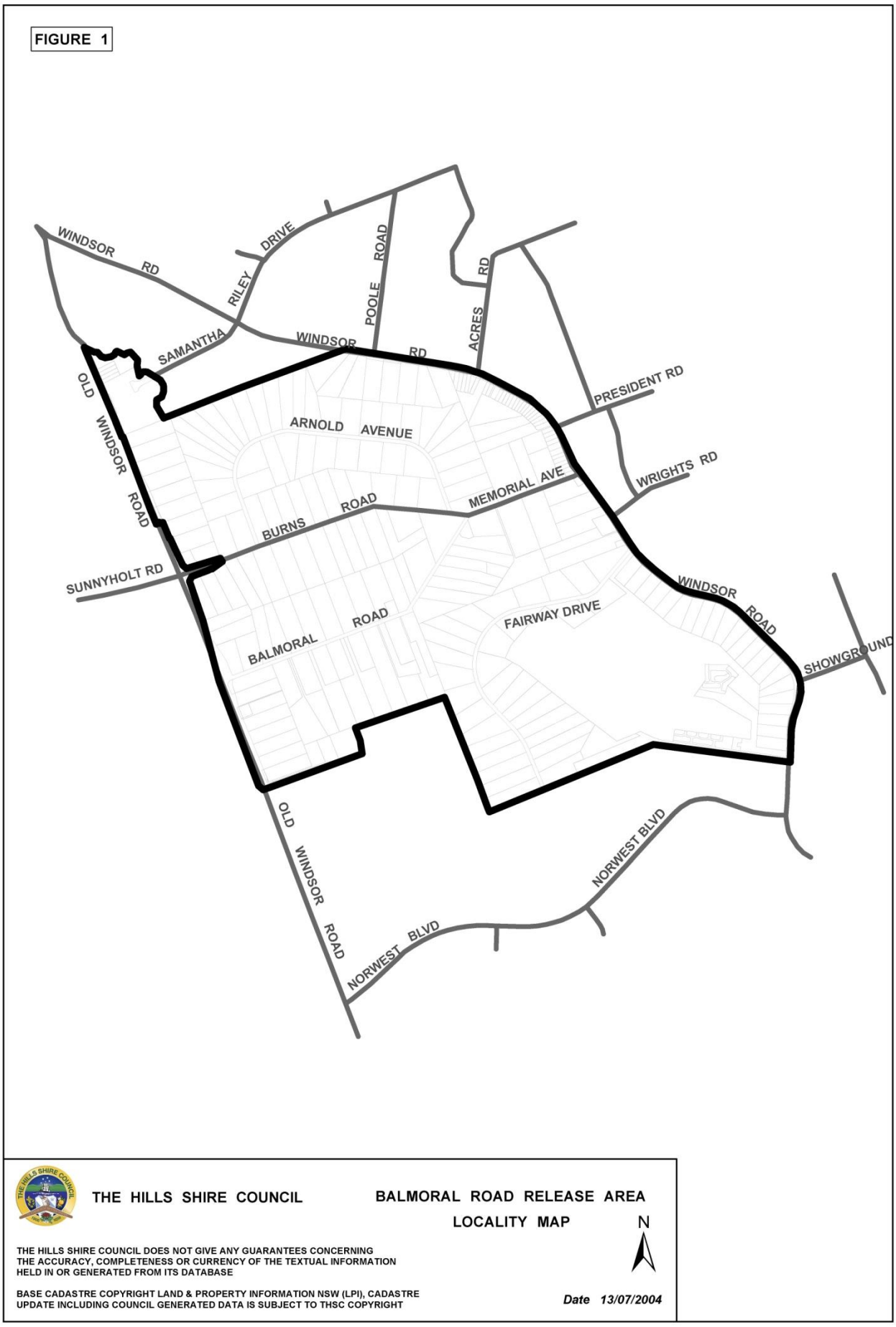


Figure 1 Land to which this plan applies

2. OBJECTIVES AND DEVELOPMENT CONTROLS

Objectives and development controls for development in the Balmoral Road Release Area are set out in the following sections.

In addition to those documents listed in Section 1.4 of Part A - Introduction, this Balmoral Road Release Area Section of the DCP is to be read in conjunction with relevant clauses contained within other Sections of this DCP including:

- Part B Section 2 – Residential
- Part B Section 4 – Multi Dwelling Housing
- Part B Section 5 – Residential Flat Buildings
- Part B Section 6 – Business
- Part B Section 7 – Industry
- Part C Section 1 – Parking
- Part C Section 2 – Signage
- Part C Section 3 – Landscaping
- Part C Section 6 – Flood Controlled Land

2.1 DEVELOPMENT CONTROL PLAN MAP

OBJECTIVE

(i) To ensure that the release area develops in an orderly and co-ordinated manner consistent with the identified land use structure and current zoning framework.

DEVELOPMENT CONTROL

(a) Applications for development, particularly subdivision, should conform to the land use structure and pre-planned road layout as shown on the accompanying development control plan map.

SUBMISSION REQUIREMENTS

- All residential subdivision development applications that propose to create residue parcels of land for future subdivision shall include a plan demonstrating how these residue lots are to be subdivided in accordance with DCP requirements and consideration of site constraints.

2.2 SITE ANALYSIS

OBJECTIVES

(i) To encourage a comprehensive approach to site planning, design and assessment of development.

(ii) To facilitate assessment of how future buildings relate to their immediate surroundings and to each other.

(iii) To facilitate development of a design that minimises the negative impacts on the amenity of adjoining development in accordance with Council's ESD objective 7.

(iv) To ensure development is compatible with land capability

(v) To minimise adverse impacts on the environment in accordance with Council's ESD objectives 3 and 4.

DEVELOPMENT CONTROLS

(a) Development should be designed to respect site characteristics such as topography, drainage, soil, landscapes, flora, fauna, salinity and bushfire hazard.

(b) Disturbance to existing natural vegetation and landforms is to be minimised and disturbance to watercourses, wetlands and overland flow paths should be avoided.

(c) Development on land adjoining bushland reserves should incorporate measures (such as setbacks and buffers) to prevent any impact on the reserves.

(d) Development should be sited on the area of land requiring minimal earthworks.

(e) Development should be sited away from steep slopes (particularly those containing natural vegetation) so that, where possible, these features can be kept in a natural state.

SUBMISSION REQUIREMENTS

- Site Analysis Plan
- For subdivision applications the Site Analysis must include:
  - A statement explaining how design and development has regard to the site analysis carried out above;

- Demonstration of how lot and dwelling locations and dimensions respond to topography, site characteristics and achieve solar orientation; and
- The results of the tree survey/assessment and identification of trees and/or bushland to be protected and/or removed.

- For all applications proposing more than one dwelling, the site analysis must include:
  - Site Analysis;
  - Site Plan;
  - A statement explaining how design and development has regard to the Site Analysis; and
  - A demonstration of how lot and dwelling locations and dimensions respond to topography, site constraints and achieve solar orientation.
- Applications for all other development types are to include a Site Analysis plan.

2.3 DEVELOPER CONTRIBUTIONS

(a) Applicants should refer to Council's Section 94 Contribution Plan No. 12 - Balmoral Road Release Area.

(b) All land required for urban development within the Balmoral Road Release Area will be required to make land release contributions to the State government towards regional transport infrastructure. This is in accordance with the Department of Planning Interim Land Release Contribution Policy (Oct 2003) or as amended.

All applicants should consult with the Department of Planning to determine the current contribution rate applicable to any development proposal, obtain a Certificate from the Director General of the Department of Planning and provide the Certificate to Council prior to determination of a development application.

3. SUBDIVISION – ALL ZONES

3.1 TREE AND BUSHLAND PROTECTION

OBJECTIVES

(i) To ensure significant bushland is substantially retained and protected and that development enhances and complements this bushland.

(ii) To conserve and protect the biodiversity of the release area including habitats of threatened flora and fauna species and communities.

(iii) To ensure through appropriate protection mechanisms that development and subdivision adjacent to bushland do not detrimentally affect the continued survival of that bushland.

(iv) Provide a basis for increasing lot areas and altering lot shapes to enable the retention of trees and bushland.

DEVELOPMENT CONTROLS

Where it is likely that mature trees will be removed either through the creation of a residential lot or through its subsequent development Council will require:

(a) The lot boundaries to be rearranged to ensure mature tree(s) are retained

SUBMISSION REQUIREMENTS

- Prior to submission of a development application for the purposes of subdivision, the applicant is to prepare an Arborist Report utilising the services of a qualified arborist. This report will ensure an understanding of the condition of existing trees, which will assist in analysing the site opportunities, and is to be submitted at subdivision application stage. The Arborist Report must incorporate a survey of all trees as defined under Council's Tree Management Plan and all bushland, as defined by SEPP 19 - Bushland in Urban Areas.
- The Arborist Report must also include:
  - A rating of the condition of all existing trees, their health, aesthetic value and life expectancy as a basis for ascertaining their value for retention;

- Definition of tree protection zones and measures consistent with the requirements outlined below;
- Details indicating the position of trees/bushland in relation to lot boundaries, proposed roads and building platforms; and
- Identification of trees and bushland to be retained or removed following subdivision.

The Arborist Report may also include any other vegetation that the arborist considers may contribute to the landscape if retained, particularly where the survey includes bushland or regenerating bushland.

- Details of those trees or bushland nominated for removal or retention and any proposed protection measures are to be submitted with the subdivision application and shown on the Site Analysis plan.

  Protection mechanisms must include:

  - Protective fencing is to be provided around trees and bushland to be retained to prevent damage. Fences are to be constructed at the drip-line of existing vegetation as a minimum to prevent damage within the drip-line/protection zone by limiting access into it (Refer to Figure 2).
- Applications should include a Flora and Fauna Assessment in accordance with Section 5A of the Environmental Planning & Assessment Act, 1979. If there is likely to be significant effect on threatened species, populations, or ecological communities or their habitats a Species Impact Statement will be required.

  Where threatened species or communities are identified and are to be conserved the following actions should be undertaken:

  - Protection measures in accordance with the requirements of the relevant recovery plan under the Threatened Species Conservation Act;
  - Identification on site of the extent of the community to be retained;
  - Plan of management for the land outlining how the land is proposed to be managed in the future; and
  - The provision of chain wire/protective fencing (min 1.2 metres in height) round areas where rare flora and fauna are to be retained and fencing to remain in place for the duration of the subdivision and building construction.
- Applicants may be required to submit a Species Impact Statement (SIS) for development likely to significantly affect threatened species, populations and ecological communities. Reference should be made to the requirements of the Environmental Planning & Assessment Act, 1979 and the Threatened Species Conservation Act, 1995.
- Any new tree plantings are to be consistent with the tree species selection shown on Council's Street Tree Planting map (Refer to section 4.2 and Figure 4). Refer to Part C Section 3 – Landscaping for appropriate street tree planting on Access Streets.

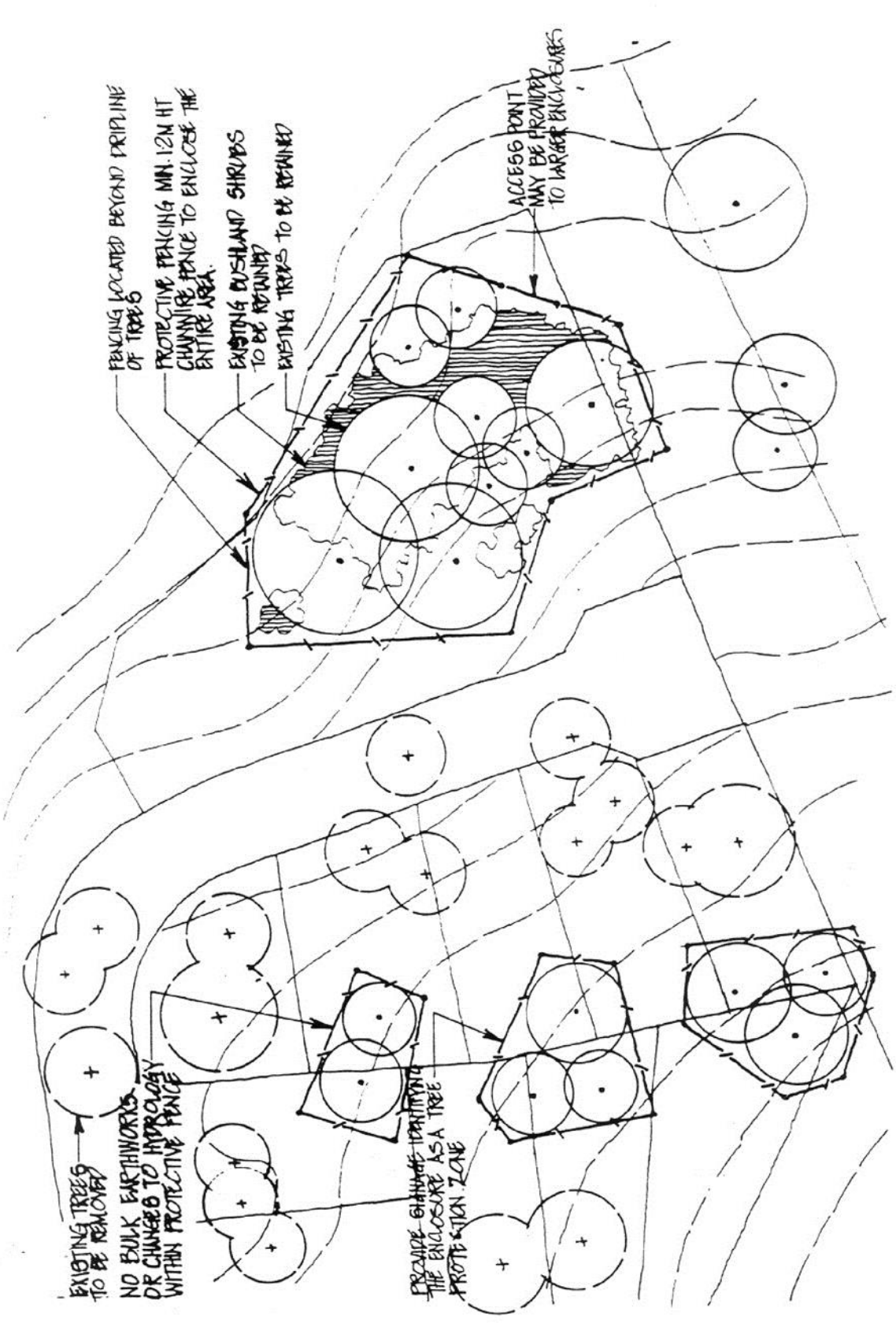


Figure 2 Tree survey/assessment

3.2 RESIDENTIAL DEVELOPMENT SITES

3.2.1 DWELLINGS

3.2.1.1 MINIMUM LOT SIZE

(a) Refer to Clause 4.1 *Minimum subdivision lot size* in The Hills Local Environmental Plan 2012.

3.2.1.2 MINIMUM LOT DEPTH, WIDTH AND VEHICULAR ACCESS

OBJECTIVES

(i) To provide lots of a size conducive to residential living, having regard to any development constraints or environmental qualities of that land.

(ii) To ensure lots have sufficient area to provide adequate access, open space, a sufficient building platform and attractive presentation to the street.

DEVELOPMENT CONTROLS

(a) Minimum depth: 30 metres

(b) Minimum frontage: 18 metres

(c) For irregular-shaped lots the average width shall not be less than the minimum frontage.

(d) For battle-axe-shaped lots and lots served by a right-of-way, the minimum lot size, excluding the access corridor, shall not be less than the minimum lot size identified in The Hills Local Environmental Plan 2012; and

(e) The minimum width for the battle-axe handle on battle-axe-shaped lots is:

Number of lots to be accessed	Minimum Width
One lot	4 metres
2 to 4 lots	6 metres
Greater than 4 lots	Public road

(f) Allotments fronting roads adjacent to land zoned RE1 Public Recreation or SP2 Infrastructure (Trunk Drainage) are to address the road as the primary frontage.

(g) Development of land for the purpose of residential development should not render any allotment adjoining the site of the proposed development incapable of development for the purpose of residential development because the allotment would not meet the identified minimum lot size in The Hills Local Environmental Plan 2012 minimum lot depth and width.

(h) Council may accept dedication of residential zoned land located adjacent to land zoned SP2 Infrastructure (Trunk Drainage) to address the issue of residential land separated by an access road.

3.2.1.3 BUILDING PLATFORM

OBJECTIVE

(i) To ensure lots have a suitable area for the erection of a dwelling and associated structures, free of constraints or restrictions.

DEVELOPMENT CONTROLS

(a) The lot must be capable of providing a building platform of at least 20 metres by 15 metres clear of any restrictions or building line setbacks. The building platform shall be sited in an accessible and practical location suitable for residential building construction.

(b) Suitable graded vehicle access shall be provided from a public road to the identified building platform in accordance with Councils minimum driveway requirements.

SUBMISSION REQUIREMENT

- The subdivision plans must clearly indicate where the building platforms can be located on each lot and indicate the proposed access paths to the platforms, free of any restrictions or building line setbacks.

3.2.1.4 RESTRICTION ON ACCESS

OBJECTIVE

(i) To ensure that public lands are not compromised by uncontrolled and informal

pedestrian, bicycle and vehicular access from adjoining residential lots.

DEVELOPMENT CONTROL

(a) No residential lot created in the R2 Low Density Residential zone shall be permitted to have direct pedestrian, bicycle or vehicular access to any existing or future public land other than to a public road that is not a classified road. "Public land" in this case includes public open space, greenway links, trunk drainage and local drainage areas.

3.2.1.5 SUBDIVISION EARTHWORKS

OBJECTIVE

(i) To minimise topsoil and vegetation removal and "land-shaping" on land where residential subdivisions are being constructed.

DEVELOPMENT CONTROLS

(a) Earthworks shall be minimised to locations where the construction of roads require earthworks to be undertaken.

Such earthworks may extend into the proposed allotments for the purpose of providing suitable vehicle access to the identified building platform referred to in section 3.2.1.3.

(b) Vegetation and topsoil are not to be removed or disturbed in areas outside of the above areas of proposed construction.

(c) All proposed public open space areas are to be fenced and are not to be disturbed or used for any purpose during the construction of a subdivision. Fencing specifications are provided in section 7.1(g).

SUBMISSION REQUIREMENTS

- Subdivision applications must provide a plan showing the existing pre-development and proposed finished ground levels to enable an assessment of the extent of earthworks proposed and assessment of the relationship between the finished road levels and proposed building platform levels.

3.2.2 MULTI DWELLING HOUSING / RESIDENTIAL FLAT BUILDINGS

3.2.2.1 MINIMUM LOT DIMENSIONS AND ROAD PATTERN

In addition to the minimum lot size for multi dwelling housing and residential flat building, developments are required to demonstrate compliance with the road pattern shown on the BRRA map.

3.2.2.2 MINIMUM LOT WIDTH & LOT ROAD FRONTAGE

OBJECTIVE

(i) To ensure that development lots have sufficient areas to provide adequate access, parking, landscaping and building separation.

DEVELOPMENT CONTROLS

(a) Minimum width for multi dwelling housing is 30 metres (average).

(b) Minimum road frontage for multi dwelling housing is 28 metres

(c) The maximum lot size for residential flat buildings is 5000m^2.

3.2.2.3 RESTRICTION ON ACCESS

OBJECTIVE

(i) To ensure that public lands are not compromised by uncontrolled and informal pedestrian, bicycle and vehicular access from adjoining residential lots.

DEVELOPMENT CONTROL

(a) No development lot created in the residential zones shall have direct pedestrian, bicycle or vehicular access to any existing or future public land other than to a public road that is not classified road unless Council consent is granted. "Public land" in this case includes public open space, greenway links, trunk drainage and local drainage areas.

4. ROADS

4.1 LOCAL ROAD HIERARCHY

OBJECTIVES

(i) To provide an acceptable level of access, safety and convenience for all street and road users within the release area, while ensuring acceptable levels of amenity, and minimising the negative impact of traffic.

(ii) To provide a legible and permeable movement network for pedestrians and cyclist along streets and paths to points of attraction within and adjoining any development.

(iii) The road network is to be based on a hierarchy of five local road/street types, as shown in Figure 3, and includes:

- *Access Street: is a street providing local residential access with shared traffic and pedestrian use;*
- *Collector Road: is a road that collects traffic from access streets and carries higher volumes of traffic. A reasonable level of amenity and safety is to be maintained by restricting vehicle speeds through traffic-calming devices and intersection design;*
- *Enhanced Collector Road: is a collector road that has a wider pavement to facilitate bus movements;*
- *Employment Area: is a road specifically designed and located to provide access to the proposed employment areas; and*
- *Arterial Road: carry major regional traffic flows and are largely the responsibility of the State Government.*

The specific objectives of locating roads adjacent to open space, trunk drainage and other public areas are:

(iv) To facilitate the orientation of lots and dwellings to front the open space and drainage areas.

(v) To enhance the outlook, setting and amenity of subdivisions adjoining open space, drainage areas and other public areas.

(vi) To increase pedestrian accessibility to those public areas.

(vii) To promote passive surveillance of publicly accessible areas thereby increasing safety.

DEVELOPMENT CONTROLS

(a) The street and road network should conform to the pre-planned road layout as shown on the accompanying development control plan map.

(b) Internal intersections are to be T-junctions, roundabouts or controlled by other appropriate traffic management treatments to slow and control traffic.

(c) An Acoustic Report prepared by a suitably qualified consultant is to be submitted with all development applications for land adjacent to existing or proposed arterial roads or bus transit way and should comply with the Department of Environment Climate Change and Water publication "Environmental Criteria for Road Traffic Noise" (May, 1999).

(d) For roads that cross natural drainage lines, the construction of bridges with raised approaches is preferred to culverts in order to maintain stream corridor function. Any works within, or alterations to, natural drainage systems will require the necessary approvals of the Office of Water as well as consideration of the Fisheries Management Act 1944 for dredging or reclamation works.

(e) Roads constructed across waterways are to be designed and constructed with reference to the Department of Primary Industries preferred waterway crossing design documented in "Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossing" (NSW Fisheries 2003).

(f) Where culverts are required to be constructed across natural drainage lines, light wells are to be provided in the centre of the road.

(g) Direct vehicular access to arterial roads will not be permitted where alternate access is available. Access will not be restricted to any property with existing access from arterial roads until such time as alternate access is available.

(h) Wherever shown on the BRRA map and wherever else possible, roads are to be located along and adjacent to public open space, drainage lands or other public lands. Where roads front open space, drainage land or riparian corridor land, the costs associated with their construction is the responsibility of the developer.

(i) Driveway access should be avoided within 30 metres of signalised intersections.

(j) Street networks are to conform to the requirements set out in Table 1: Street Types.

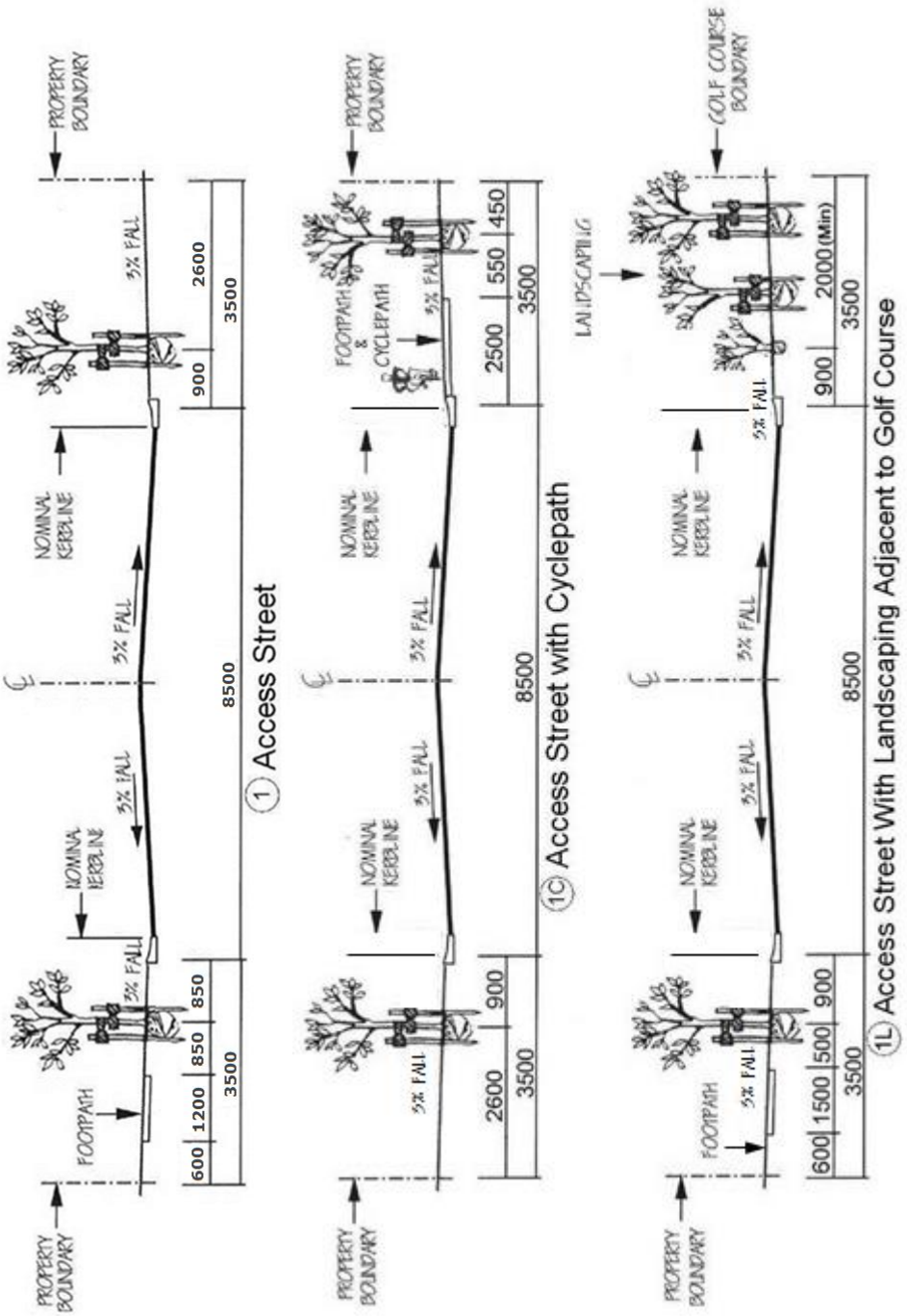


Figure 3 Road hierarchy

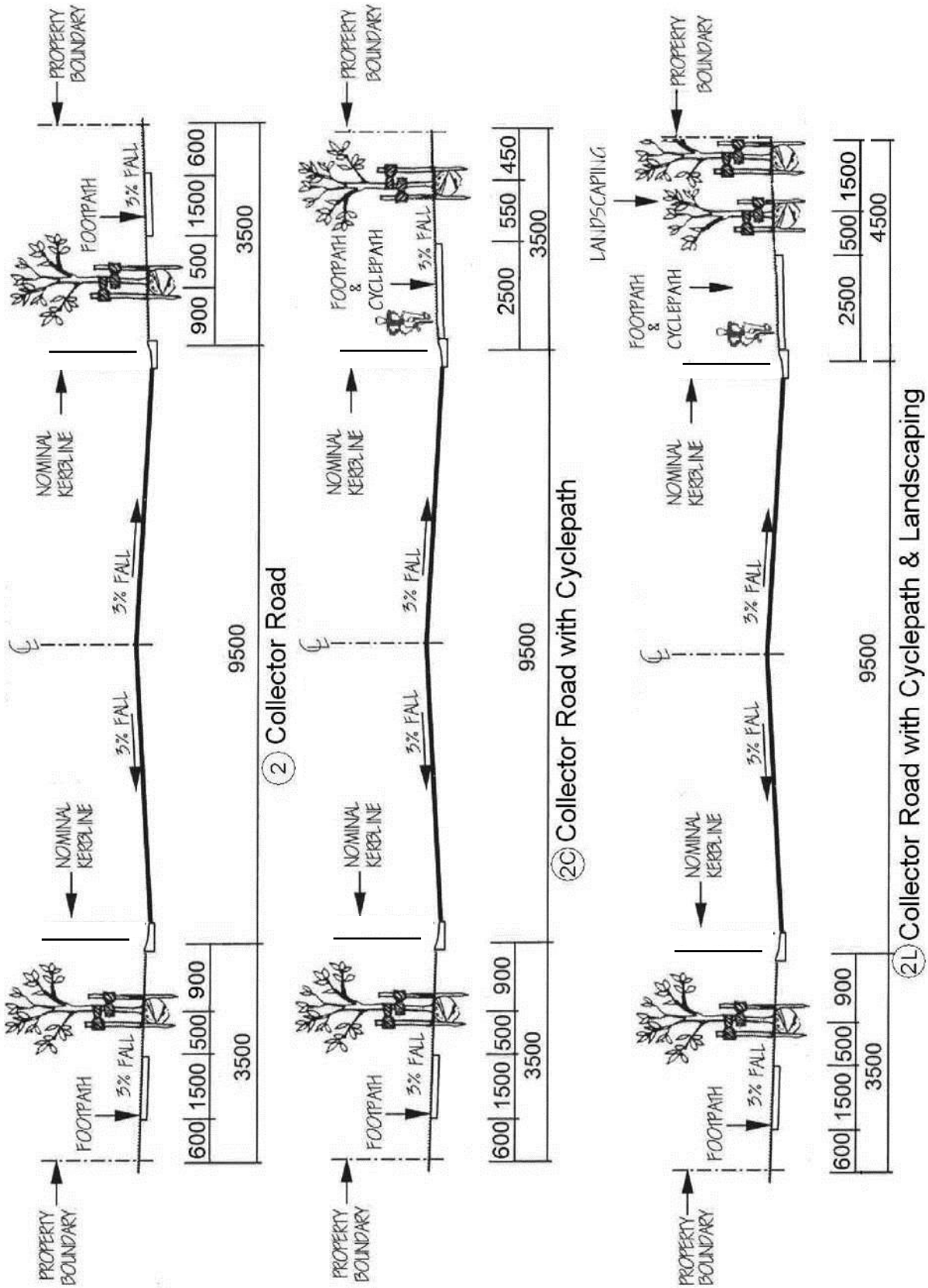


Figure 3 Road hierarchy (cont.)

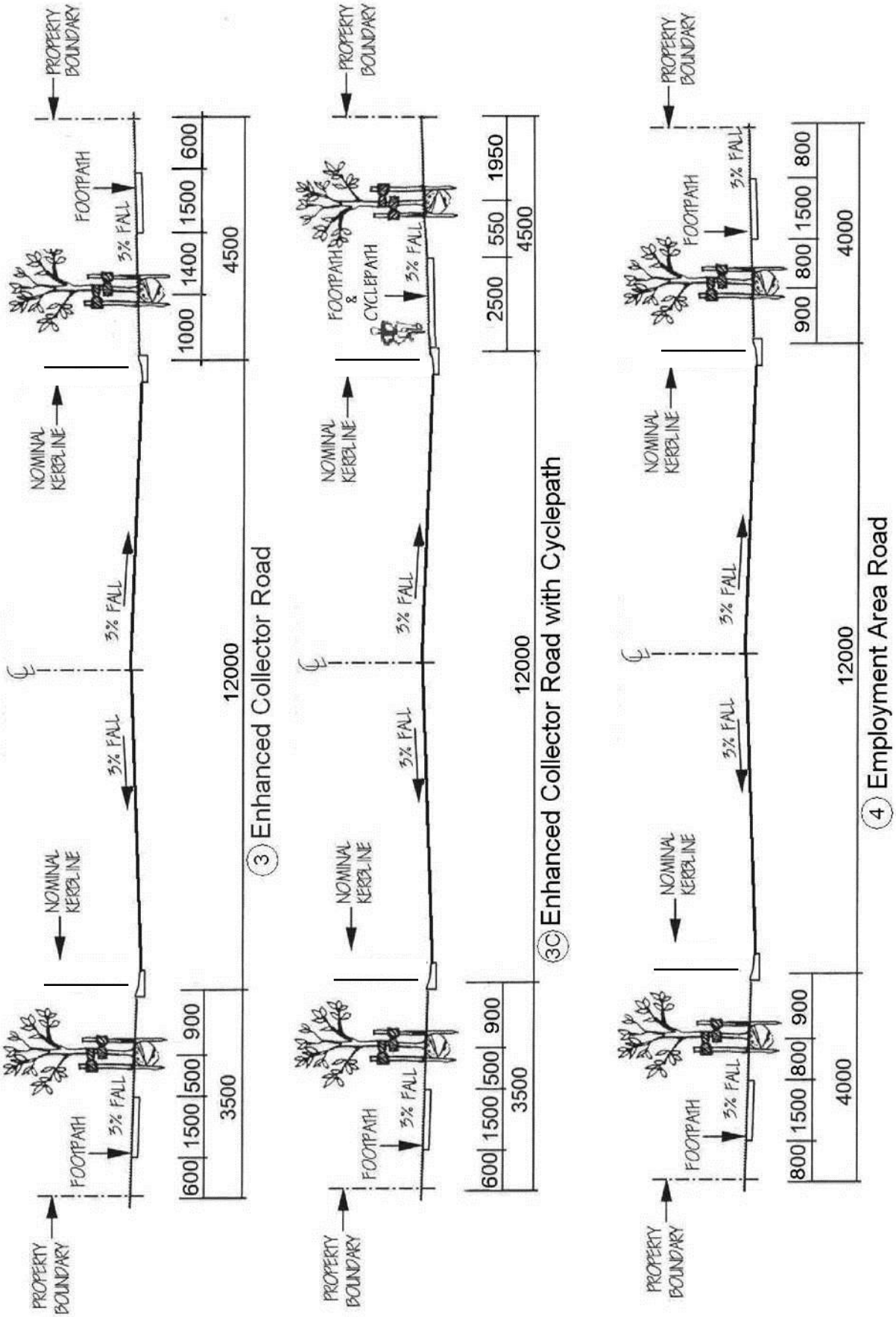


Figure 3 Road hierarchy (cont.)

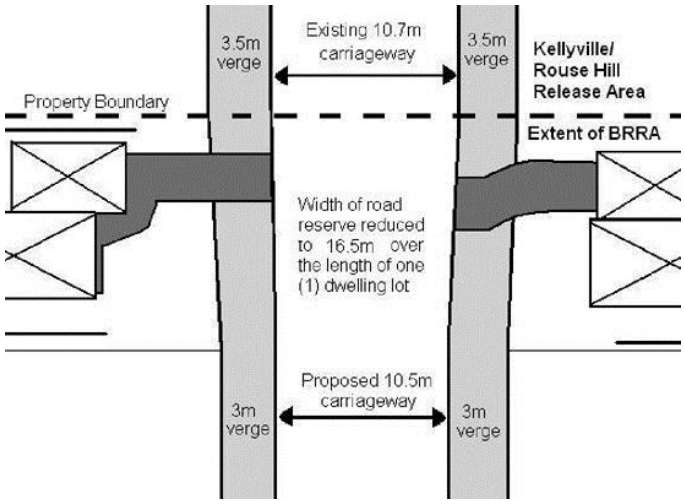
Table 1 Street types

No	Street Type	Carriageway Width (metres)	Verge Widths	Road Reserve	Footpath Required
	Access Street	8.5 metres	3.5 metres	15.5 metres	1.2 metres one side
1	Access Street with cyclepath	8.5 metres	3.5 metres	15.5 metres	2.5 metres one side
2	Collector Road	9.5 metres	3.5 metres	16.5 metres	1.5 metres one side
2*	Collector Road	10.5 metres	3.0 metres	16.5 metres	1.5 metres one side
2c	Collector Road with cyclepath	9.5 metres	3.5 metres	16.5 metres	1.5 metres one side and 2.5 metres other side
2L	Collector Road with cyclepath and landscaping	9.5 metres	3.5 metres/4.5 metres	17.5 metres	1.5 metres one side and 2.5 metres other side**
2V	Collector Road	9.5 metres	6.5 metres/4.1 metres	20.1 metres	1.5 metres one side and 2.5 metres other side***
3	Enhanced Collector Road	12.0 metres	3.5 metres/4.5 metres	20 metres	1.5 metres both sides
3c	Enhanced Collector Road with cyclepath	12.0 metres	3.5 metres/4.5 metres	20 metres	1.5 metres one side and 2.5 metres other side
4	Employment Area Road	12.0 metres	4 metres	20 metres	1.5 metres both sides

* **Note.** Carriageway width to be constructed at 10.5 metres as a continuation of existing pavement width in Gainsford Drive with a transition distance of one lot (see diagram below).

** **Note.** Includes 1 metre wide verge required on one side of carriageway to accommodate 2 metre wide landscaping adjacent to Castle Hill Country Club Golf Course and 2.5 metre cyclepath.

*** **Note**. Northern verge width adjacent to Castle Pines and Castle Hill Country Club Golf Course to be constructed at 6.5 metres. The full upgrade of Spurway Drive between Stone Mason Drive and Fairway Drive including 2.5 metre cyclepath along the full length within the southern verge to be at the Developer's expense.



Design of Collector Road 2* Transitioning from Existing Collector Road

4.2 ROAD DESIGN AND CONSTRUCTION

OBJECTIVES

(i) To ensure sufficient carriageway and verge widths are provided to allow streets to perform their designated functions within the street network and to accommodate public utilities and drainage systems.

(ii) To encourage the use of streets by pedestrians and cyclists, and to allow cars, buses and other users to proceed safely without unacceptable inconvenience or delay.

(iii) To provide street geometry that is consistent with the needs of the street function, physical land characteristics and safety.

(iv) To encourage efficient and orderly development by providing for partial and temporary road construction.

DEVELOPMENT CONTROLS

(a) Any development connecting to Memorial Avenue is to have regard to the Roads and Maritime Services Strategic Design Plan (draft concept) for the upgrade of Memorial Avenue as contained in Appendix A.

(b) On collector roads that function as two-way bus routes, a travelled way allowing unobstructed movements in both directions is required. Safety at bus stops, particularly the overtaking of stationary buses, is also an important design consideration. Speed control through design is a fundamental principle of this Section of the DCP. The alignment and geometry of all collector roads are to be designed for the efficient and unimpeded movement of buses.

(c) On access streets there will be only light traffic and the travelled way should allow for unobstructed movement in one lane as well as passing opportunities.

(d) The design of the carriageway is to discourage motorists from travelling above the intended speed by reflecting the functions of the street in the network. In particular the width and horizontal and vertical alignment is not to be conducive to excessive speeds.

(e) Roundabouts, street cross falls, longitudinal gradient, vehicle-turning movements and sight distances are to comply with Council's Design Guidelines Subdivisions/Developments (June 1997)

(f) Carriageway widths for each type of street are to be as specified in Table 1: Street Types.

(g) Minimum verge widths for each street type and footpath links are to be as specified in Table 1: Street Types.

(h) Any allotment created on Lot 1 DP 261750 adjacent to Memorial Avenue is to be accessed via a minimum 4 metre wide access handle constructed parallel to Memorial Avenue from the proposed cul-de-sac road. Access to allotments immediately adjoining Memorial Avenue is prohibited from the enhanced collector road.

(i) Construction of roads and footpath/cycle paths fronting Open Space or Trunk Drainage as shown on the BRRA map are at the developer's expense.

(j) No retaining walls are to be constructed along the edge of roads fronting future or existing public open space, drainage areas or riparian corridor land.

(k) Street trees are to be provided in all subdivisions and will be required to be planted at the time of subdivision construction. Street trees will be protected with tree guards and a 12-month bond will be imposed for each tree.

(l) Street tree planting is to be provided to all streets with a spacing of between 7 and 10 metres, with a minimum of one tree per lot frontage. Corner lots will have a minimum of two street trees and normally three trees. The location of street trees must complement proposed driveway locations.

(m) Street tree planting will only be permitted, within roads that are to be dedicated to Council as public road.

(n) Street tree species must be in accordance with Council's Street Tree Planting map as shown in Figure 4. Refer to Part C Section 3 – Landscaping for appropriate street tree species along 'Access Streets'. Also refer to Part C Section 3 – Landscaping for general guidance on street tree planting.

(o) All enhanced collector roads are to be planted with a consistent species of tree in order to provide a boulevard treatment of the streetscape.

(p) All plans documenting proposed street tree planting must indicate the location of Sydney Water sewer and water pipes including where they enter a public road reservation.

(q) Landscape works in roundabout islands may include low-maintenance groundcover planting and native grasses with a mature height of up to 0.5 metres as well as clear-stemmed tree planting. A metered water supply point and subsurface drainage is required in all small island planter beds.

(r) Access streets located adjacent to arterial roads are to include landscape treatment of the verge adjoining the arterial road. Road verges provide opportunities for unifying the appearance and landscape character of the area and should be provided as a continuous design feature along the length of the arterial road.

(s) Partial width road construction is permitted subject to the following criteria being satisfied:

- The site(s) located opposite the proposed partial road are zoned for residential use and are not in public ownership or identified for acquisition, that is, the site(s) opposite are not zoned for Open Space, Trunk Drainage, Transport Corridor or Educational Establishment;
- A minimum trafficable road width of 6.0m is provided to cater for two-way traffic, and a 3.5m verge on one side as a minimum;
- The development potential of all adjoining allotments is maintained. The proposed development shall not, in the opinion of the consent authority, render any allotment adjoining or opposite the site of the proposed development incapable of development for the purpose of residential development because the allotment would not meet minimum DCP or LEP development standards;
- The safety of all road users including service and passenger vehicles, pedestrians and cyclists is not compromised by the proposed partial road construction; and
- The final road configuration is consistent with the pre-planned road layout and road type as shown on the accompanying development control plan map.

  Note. In some circumstances where proposed partial width roads straddle existing boundaries, the alignment of the road may need to be slightly offset to ensure the partial road is wholly contained on the applicant's land.

(t) Temporary public roads are permitted subject to the following criteria being satisfied:

- The temporary public road is to be constructed upon a minimum of two (2) residential development lots, except as provided for below;
- The temporary public road is not to be constructed upon land zoned for Business, Open Space, Trunk Drainage, Transport Corridor or Educational Establishment, except where the land zoned Open Space is in private ownership. Where a temporary public road is proposed to be constructed on private land zoned Open Space, the applicant will be required to enter into an

agreement with Council that the temporary public road be removed and the land reinstated when alternate road access becomes available;

- A minimum trafficable width of 6.0m is provided to cater for two-way traffic with 3.5m wide verges on both sides;
- The allotment layout associated with temporary public road construction does not result in the creation of undevelopable residue allotments;
- The temporary public road does not compromise the safety of all road users including service and passenger vehicles, pedestrians and cyclists;
- The temporary public road is to be constructed to a standard in accordance with BHSC Design Guidelines for Subdivisions/Developments (section 5.07); and
- The final road configuration is consistent with the pre-planned road layout and road type as shown on the accompanying development control plan map.

SUBMISSION REQUIREMENTS

Partial Width Roads

- An engineering design for the partial and full width road works must be submitted including details of any necessary drainage and service utility provision requirements.
- A traffic safety report prepared by an appropriately experienced professional must be submitted demonstrating how the partial road proposal provides for the safe usage of all road users including service and passenger vehicles, pedestrians and cyclists.

Temporary Roads

- An engineering design for the proposed road works, as well as plans demonstrating the future road configuration after closure of the temporary road must be submitted including details of any necessary drainage and service utility provision requirements.
- A traffic safety report prepared by an appropriately experienced professional must be submitted demonstrating how the temporary road proposal provides for the safe usage of all road users including service and passenger vehicles, pedestrians and cyclists.
- Written evidence demonstrating that an attempt to cooperate with adjacent landowners has been undertaken must be submitted. Such evidence could be in the form of letters and responses (if applicable).

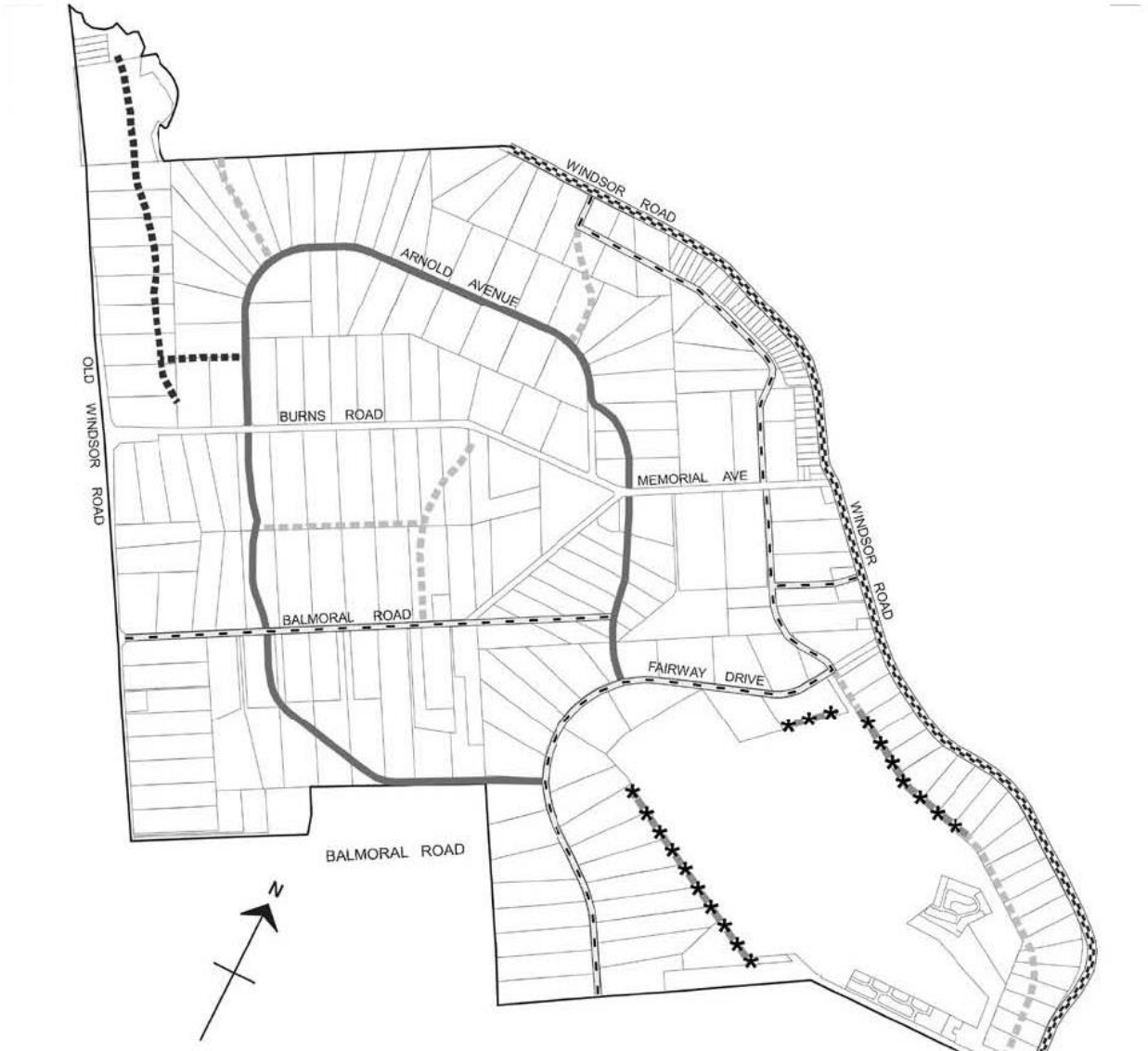


Figure 4 Street tree planting

5. STORMWATER

5.1 STORMWATER MANAGEMENT

OBJECTIVES

(i) To prevent stormwater and flood damage to properties arising from the subdivision and development of land.

(ii) To ensure that stormwater quality and quantity issues are addressed at the point source.

(iii) To ensure that stormwater is treated as a valuable resource.

(iv) To contain nuisance floods to a level that is acceptable to the community and to ensure that the street system operates adequately during and after major storm events.

DEVELOPMENT CONTROLS

(a) The minor drainage systems minimum design standard is to capture and convey flows produced by a 10-year Average Recurrence Interval (ARI) design storm.

(b) Trapped sag points are not to be created.

(c) Drainage reserves or local drainage links are required to discharge gap flows (the difference between the 100 year ARI storm event and half design pipe flow, allowing for blockage, maximum pipe design 100 year ARI) from all ARI runoffs to the generally accepted maximum of the 100-year ARI storm event.

(d) Local drainage links within subdivisions are to be a minimum of 5 metres in width designed in accordance with details indicated in Figure 5. The developer is required to dedicate to Council at no cost to Council, the land, all associated drainage works, erosion control planting, pathways and tree planting. Details are to be submitted with the engineering designs.

(e) Drainage facilities are to be of a standard acceptable to Council.

(f) All drainage pits shall have access from the ground surface. Buried junction pits shall not be permitted.

(g) All pipes to be dedicated to Council are to be located within public land.

(h) The drainage system is to be designed by a qualified person in accordance with the requirements of the responsible drainage authority.

(i) All owners of properties adjoining trunk drainage land are required to contact Council or Sydney Water to confirm the inundation line prior to the lodgement of subdivision applications.

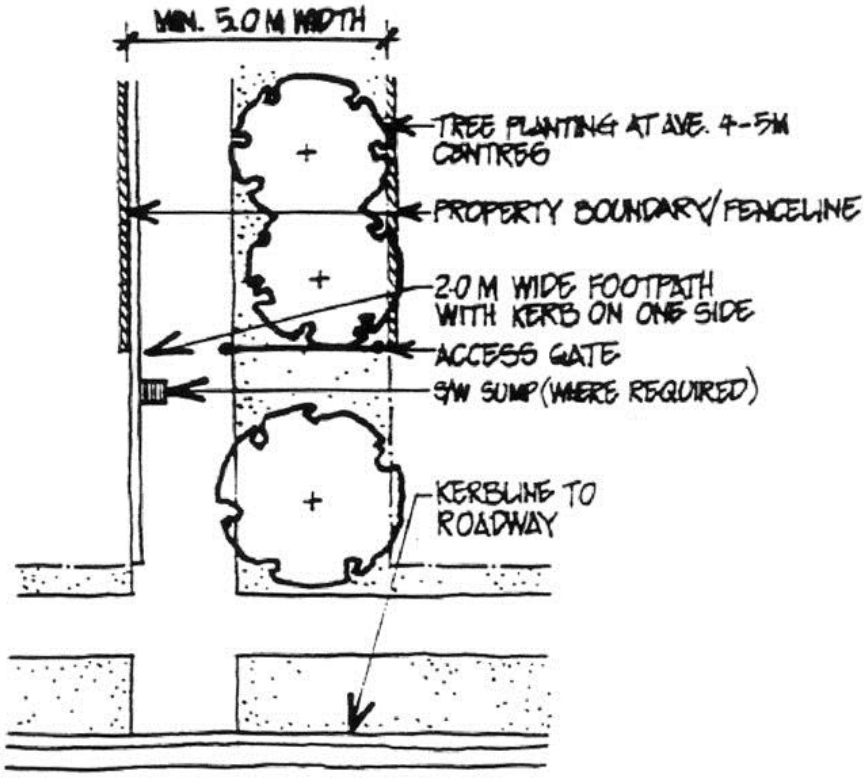
(j) Identification of the 1 in 100 year level of inundation are to be detailed on the 88B Instrument accompanying the final plan of subdivision calculated at Australian Height datum (AHD) and certified by a Registered Surveyor.

(i) All drainage designs, excluding minor drainage systems, are to comply with Council's Design Guidelines Subdivisions/Developments (June 1997). Design criteria are to be confirmed by Council.

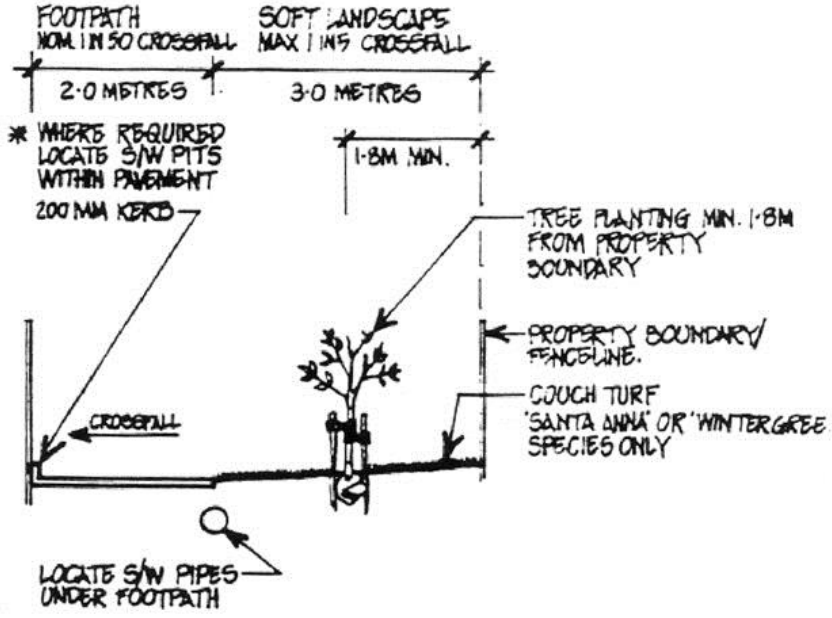
(j) Any discharge to, or construction within Sydney Water trunk drainage land will require the approval of Sydney Water.

(k) Individual connections into Sydney Water or Council's trunk drainage land is not permitted. Subdivision plan should therefore minimise the number of connections.

(l) All residential, employment and commercial developments will be required to provide rainwater tanks. Specific details for each type of land use are provided in section 8.



PLAN VIEW



SECTION VIEW

Figure 5 Local drainage links

5.2 STORMWATER QUALITY

The importance of soil and water management for developing urban areas and established urban systems has increased significantly over the last decade. With the advent of industry standards, legislation and community expectations, the regulation of erosion and sedimentation controls is now required throughout the urban development industry.

The water quality discharging from the BRRA can have a significant impact upon water quality in the lower Hawkesbury-Nepean River system. The development of the release area presents an opportunity to implement Total Catchment Management principles.

The trunk drainage system for the release area is an integrated system, owned and managed by Sydney Water. The proposed system will consist of dry detention basins and the natural creek system.

OBJECTIVES

(i) To protect downstream waters during construction activities within the release area.

(ii) To assist in the long-term protection and enhancement of stream health.

Note. Specific development standards relating to stormwater quality will be added to this Section of the DCP in the near future.

6. PROVISION AND LOCATION OF UTILITIES

The provision of utilities is usually controlled by several separate authorities and in general, no formal attempts are made to combine installation or maintenance tasks other than agreements of the preferred location of each service within the street reserve, or within common easements. This Section of the DCP seeks to promote shared trench practices.

Advantages of shared trenches include:

- Elimination of a number of single trenches each with its own construction, settlement and reinstatement problems;
- Accurate location of services for possible repair or maintenance;
- Less conflict between services as depth relativities are known;
- More efficient use of construction equipment;
- Reduced verge and footpath disturbance enables earlier site development.

OBJECTIVES

(i) To maximise the opportunities for shared (common) trenching and reduce constraints on landscaping within road reserves.

(ii) To ensure the provision of public utilities is undertaken in accordance with the requirements of both Council and the relevant servicing authority.

DEVELOPMENT CONTROLS

(a) Gas and water services may be located in a shared trench on one side of the street and electricity power and telephone located in a shared trench on the other side of the street. The BRRA is also to be serviced with a recycled water supply, which will require an increase in Sydney Water's service allocation.

(b) The Council requires underground electricity reticulation and telecommunications for all urban development.

(c) Council will require as a condition of any development consent that any existing aboveground electricity reticulation service be relocated underground with the exception of main transmission lines.

(d) Where agreement to develop shared trench practices cannot be met, or location of services are unable to be limited to one side of the road, the alignment of services shall be to a standard acceptable to Council.

(e) Council requires the provision of street tree planting within all verge areas and service authorities are expected to cooperate to ensure this is achieved.

(f) Utilities and services are to be supplied and constructed in accordance with the requirements of the relevant authority.

(g) Details of the location of all sewer reticulation mains are to be supplied to Council for assessment of environmental and property considerations.

(h) Pipes and conduits through bushland areas and areas with significant vegetation cover are to be avoided. Where it cannot be avoided, pipes are to be laid by hand with the aid of small machinery, causing minimal disturbance to vegetation and exposed rock outcrops.

(i) Development is to have a water supply for fire-fighting purposes in accordance with the NSW Rural Fire Service's "Planning for Bushfire Protection 2006" or as amended.

(j) Concurrence from the relevant electricity authority is required for all development applications where the property is affected by electricity easements.

(k) Road verge widths are to be in accordance with Table 1.

7. PUBLIC RECREATION, TRUNK DRAINAGE AND RIPARIAN CORRIDORS

7.1 PUBLIC RECREATION

OBJECTIVE

(i) To ensure that land identified on the BRRA map for public open space is adequately protected during the subdivision and dwelling construction stage.

DEVELOPMENT CONTROLS

(a) Proposed plans of subdivision are required to set aside the area of land for public open space identified on the BRRA map.

(b) The maximum gradient of cycle-paths is not to be greater than the adjacent road pavement and is required to provide adequate sight distances at crossings.

(c) Where local public pathway links are required they are to be a minimum 5 metres width. All local public pathway links are to be constructed by the developer and the land dedicated to Council at no cost to Council.

(d) No retaining walls are to be constructed adjacent to existing or proposed open space parks, open space links, riparian corridors or trunk drainage land.

(e) No filling is permitted within proposed open space areas, open space links riparian corridors or trunk drainage land.

(f) This development control plan requires the provision of a minimum 2 metre high, temporary chain-wire fence round proposed open spaces with access provided by a lockable gate, at the developer's expense.

(g) Details of fence construction are to be provided by the proponent with the submission of the engineering designs.

(h) The fence must be sited in such a way as to limit access into the open space area, ensuring protection of the area for the duration of subdivision and building construction.

8. BUILDING DESIGN – ALL ZONES

The following development control provisions relate to the development of land for buildings in all zones.

8.1 DWELLINGS

The provisions of Part B Section 2 – Residential Development will also apply and should therefore be read in conjunction with the following.

8.1.1 BUILDING SETBACKS

OBJECTIVES

(i) To provide setbacks that complement the streetscape and protect the privacy and sunlight to adjacent dwellings in accordance with ESD objective 7.

(ii) To ensure that new development is sensitive to the landscape setting, site constraints and desired future character of the street and locality.

(iii) To ensure that the appearance of new development is of a high visual quality and enhances the streetscape.

DEVELOPMENT CONTROLS

(a) Minimum classified road frontage setback: 10m.

(b) Minimum non-classified primary road frontage setback: 6m

(c) Corner Lots: Primary road: 6 metres

Secondary road: 4 metres

(d) Minimum side setback from classified road: 10 metres.

(e) Rear building setback: 4 metres (1 storey)

Rear building setback: 6 metres (2 or more storeys).

8.1.2 Site Coverage

Objectives

(i) To maximise the provision of private open space.

(ii) To avoid the creation of drainage and salinity problems, through minimising the amount of impervious area in accordance with Council's ESD objective 3.

(iii) To facilitate spatial separation between buildings.

(iv) To provide adequate landscaped area.

(v) Maintain the character of existing areas by retaining vegetation.

Development Controls

(a) Maximum site coverage:

- Single storey	65%*
- Two storey or more	60%*

*The maximum site coverage calculations must include areas containing garage, carports, outbuildings, decks, patios, tennis courts, driveways, swimming pools, paved areas but excludes rainwater tanks.

(b) Where dwellings achieve the minimum side setback requirements on both sides of the dwelling, the second storey of the dwelling is to be either:

- setback a minimum of 1 metre from the ground floor on at least one side of the dwelling, for a minimum distance of half the length of the first floor; or
- a proportion of 85% in size than the ground floor to enable reduced bulk and scale of the dwelling and enhanced solar access and articulation between buildings.

Dwellings are to demonstrate architectural merit through skilful massing and composition of the building's elements, height, proportion, roof design and window/door/garage openings to create an integrated whole of building design which looks aesthetically appealing from all angles and which relates to its site and topography.

8.1.3 Building Form And Height

Objectives

(i) To ensure the height of dwellings is compatible with adjoining residential development and the overall streetscape.

(ii) To minimise the impact of overshadowing, loss of privacy on adjoining properties and open space areas.

(iii) To minimise bulk and scale of residential development.

(iv) To provide articulation in building form and design.

Development Control

(a) Refer to Clause 4.3 *Height of buildings* of The Hills LEP 2012.

8.1.4 Cut And Fill

Objectives

(i) To ensure that dwellings are designed with regard to the site conditions and minimise the impact on landform.

(ii) To reduce the risk that potentially saline soils may affect dwellings.

(iii) To maintain topsoil and endemic plant species seed bank.

Development Controls

(a) Maximum filling above natural ground level: 0.5 metres.

(b) Maximum cut below natural ground level: 0.5 metres.

(c) Where a proposed dwelling design requires cut or fill in excess of 0.5 metres, the dwelling shall be redesigned and alternative designs, such as split level, and timber floor construction will be employed.

(d) Where site conditions warrant, Council will consider dwelling designs that provide for cut in excess of 0.5 metres for the creation of a single,

in-ground two car garage with maximum dimensions of 6 metres by 6 metres excluding stairway access to dwelling or storage requirements.

8.1.5 CORNER LOTS

OBJECTIVES

(i) To ensure that dwellings sited on corner lots take advantage of their visually prominent location whereby the design addresses both street frontages.

(ii) To ensure that the dwelling façade along the secondary street frontage provides architectural relief to the streetscape.

DEVELOPMENT CONTROLS

(a) On corner lots a minimum of three of the following design elements are to be included along the secondary frontage:
- Verandahs;
- Gables;
- Vertical elements to reduce the horizontal emphasis of the façade;
- Entry feature or portico;
- Balcony/window boxes or similar elements;
- Landscaping/fencing compatible with the frontage status of the elevation; and
- Windows.

(b) The following features are not to occur along either façade:
- Blank walls without relief;
- Windows or doors of utility rooms exposed to view; and
- Hot water services, air conditioning machinery or similar utility installations.

(c) Fencing on each road frontage boundary will be limited to a maximum of 25% of the length of that boundary. Any such fencing will be located a minimum of 1 metre behind the closest wall of the building to that boundary (See Figure 6).

8.1.6 STORMWATER MANAGEMENT

OBJECTIVES

(i) To ensure that stormwater is utilised as a resource.

(ii) To control stormwater and to ensure that dwelling developments do not increase down stream drainage flows or adversity impact adjoining and downstream properties.

(iii) To ensure that stormwater does not detrimentally impact on the health of streams and the integrity of water courses is protected and enhanced in accordance with Council's ESD objective 4.

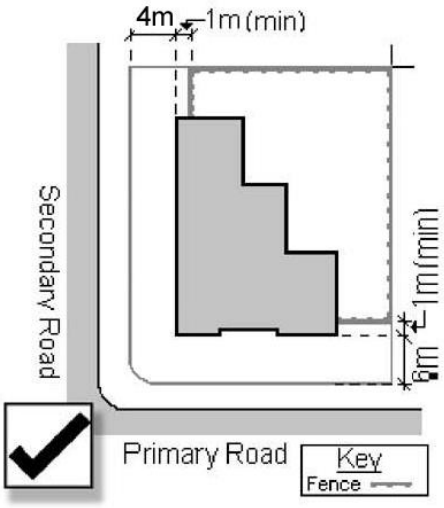
(iv) To provide for the disposal of stormwater from the site in an efficient, equitable, environmentally sensitive way in accordance with Council ESD objective 3.

DEVELOPMENT CONTROLS

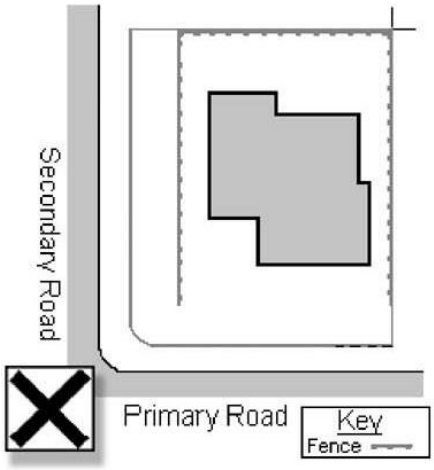
(a) Each dwelling shall have a minimum 9,000 litre rainwater tank (or equivalent volume of multiple above-ground tanks) connected to its guttering.

(b) The rainwater tank may be connected to laundries as well as being available for outdoor use including filling of swimming pools.

(c) The rainwater tank is to have an overflow pipe connected to the stormwater drainage system.



SET BACKS FOR CONER SITES AND STREET FRONTAGE TREATMENT



DESIGN ADDRESSES ONLY ONE FRONTAGE WITH SURROUNDING HIGH FENCES



VERTICAL ELEMENT THAT HELPS TO DEFINE THE CORNER



DESIGN SUCCESSFULLY ADDRESSES BOTH STREET FRONTAGES



DESIGN SUCCESSFULLY ADDRESSES BOTH STREET FRONTAGES



FAILS TO ADDRESS THE SECONDARY STREET FRONTAGE WITH BLANK WALL AND HOT WATER SERVICE LOCATED ALONG THE SECONDARY STREET FACADE

Figure 6 Corner lots

8.2 MULTI DWELLING HOUSING

The following development control provisions relate to the development of land for multi dwelling housing. The provisions of Part B Section 4 – Multi Dwelling Housing of this DCP will also apply and should therefore be read in conjunction with the following.

8.2.1 STORMWATER MANAGEMENT

OBJECTIVES

(i) To control stormwater and to ensure that town house developments do not increase downstream drainage flows or adversely impact adjoining and downstream properties.

(ii) To ensure the integrity of watercourses is protected and enhanced in accordance with Council's ESD objective 4.

(iii) To provide for the disposal of stormwater from the site in efficient, equitable and environmentally sensible ways in accordance with Council's ESD objective 3.

DEVELOPMENT CONTROLS

(a) The development controls in section 5.17, Part B Section 4 – Multi Dwelling Housing and Appendix B of this DCP shall apply except for the following changes to the requirement of Appendix B.

(b) The minimum storage capacity of this system must be 3,000 litres per proposed dwelling;

(c) Rainwater tanks may be connected to laundries as well as being available for outdoor use including filling of swimming pools; and

(d) No reticulated water back-up system is to be connected to the tanks.

8.3 RESIDENTIAL FLAT BUILDINGS

The following development control provisions relate to the development of land for residential flat buildings. The provisions of Part B Section 5 – Residential Flat Buildings of this DCP will also apply and should therefore be read in conjunction with the following.

8.3.1 BUILDING HEIGHTS

Refer to Clause 4.3 *Height of buildings* of The Hills LEP 2012.

8.3.2 DENSITY

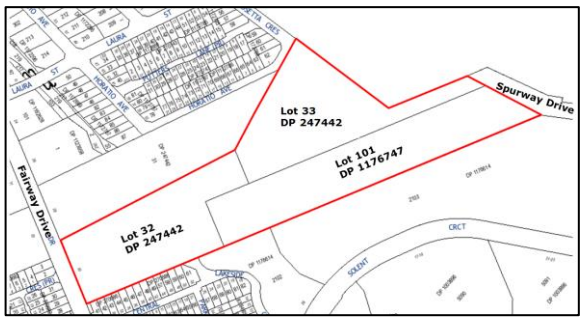
The following control applies to any future development for the purpose of residential flat buildings on land at 30 Fairway Drive, Kellyville (Lot 32 DP 247442), Lot 33 DP 247442 Spurway Drive, Kellyville (Lot 33 DP 247442) and RMB 47 Spurway Drive, Baulkham Hills (Lot 101 DP 1176747). The density controls applying to residential flat development on any other land within the Balmoral Road Release Area are contained within Part B Section 5 – Residential Flat Buildings of this DCP.

OBJECTIVES

(i) To ensure that residential flat building development does not place unreasonable demand on planned infrastructure and facilities within the Balmoral Road Release Area.

DEVELOPMENT CONTROLS

(a) The maximum combined yield of any future development on the site highlighted on the following map shall not exceed 1,300 residential units.



8.3.3 STORMWATER MANAGEMENT

OBJECTIVES

(i) To control stormwater and to ensure that residential flat buildings do not increase downstream drainage or adversely impact adjoining and downstream properties.

(ii) To ensure the integrity of watercourses is protected and enhanced in accordance with Council's ESD objective 4.

(iii) To provide for the disposal of stormwater form the site in efficient, equitable and environmentally sensible ways in accordance with Council's ESD objective 3.

DEVELOPMENT CONTROLS

(a) The development controls in section 5.19, Part B Section 5 – Residential Flat Buildings and Appendix B of this DCP shall apply except for the following changes to the requirements of Appendix B:

(b) The minimum cumulative storage capacity of this system must be 20,000 litres per residential flat building;

(c) The tanks are to be used for external uses only other than for laundry purposes; and

(d) A reticulated water back-up system is not to be connected to the tanks.

8.4 B7 BUSINESS PARK ZONE

8.4.1 INDUSTRIAL AND COMMERCIAL BUILDINGS

The following controls in this section apply to both industrial and commercial buildings and uses.

Unless otherwise provided for in this Section of the DCP, Part B Section 7 – Industry will apply to industrial buildings irrespective of section 1.1 (land to which this Section of the Plan Applies) of Part B Section 7 – Industry.

Unless otherwise provided for in this Section of the DCP, Part B Section 6 – Business will apply to commercial buildings irrespective of section 1.1 (Land to which this Section of the Plan Applies) of Part B Section 6 - Business.

OBJECTIVES

(i) Provide for the special requirements of industry and business, particularly in the areas of advanced technology, computer facilities and communications.

(ii) To provide commercial services for employment and residential areas.

8.4.1.1 BUILDING SETBACKS

(a) Minimum building setback to classified road: 20 metres

(b) Minimum building setback to non-classified road: 20 metres

(c) Corner lots primary non-classified road frontage setback: 20 metres

(d) Secondary non-classified road frontage: 10 metres

(e) Side property boundaries: 10 metres

8.4.1.2 FLOOR SPACE RATIO

Refer to Clause 4.4 *Floor space ratio* of The Hills LEP 2012.

8.4.1.3 HEIGHT

Refer to Clause 4.3 *Height of buildings* of The Hills LEP 2012.

8.4.1.4 SITE COVERAGE

OBJECTIVE

(i) To ensure that building are kept to a satisfactory scale in relation to the land upon which they are built.

DEVELOPMENT CONTROL

(a) The maximum site coverage: 50%

8.5 EXHIBITION VILLAGE

These provisions set out specific requirements and variations that apply to exhibition villages located within the Balmoral Road Release Area.

OBJECTIVES

(i) To facilitate the orderly development of exhibition villages;

(ii) To ensure the range of housing options that will suit a variety of lot sizes responds to the streetscape, privacy, solar access and landscaping; and

(iii) To ensure that exhibition village developments provides an appropriate interface with adjoining development in the Balmoral Road Release Area.

8.5.1 BUILDING SETBACKS

This clause applies to a dwelling house and any carport, garage, balcony, deck, patio, pergola, alfresco dining areas, terrace or verandah that is attached to the dwelling house (a ***building***).

Classified Road Frontages (10 metre Landscape Corridor)

(b) Buildings will be considered within the 10m Landscape Corridor providing acoustic and visual treatment is incorporated into the design to limit the impact of a Classified Road on any bedrooms and other habitable areas within the building.

(c) A minimum 3m wide landscape buffer shall be provided between any temporary parking area and the residential development, and shall remain in place after the cessation of exhibition village and removal of the temporary parking.

Note. Refer to -

- Department of Planning Guidelines – Development near Rail Corridors and Busy Roads for information on Acoustic Treatment of Residences; and
- Australian Standard 3671 – Road Traffic Noise Intrusion – Building Siting and Construction.

Non-classified Road Frontages

(d) Minimum non-classified primary road frontage setback: 4.5m (5.5m to garage). An articulation zone of 1.0m may be provided.

(e) Corner Lots:

- Primary road: 4.5m (5.5m to garage) with articulation zone as above.
- Secondary road: 2m (lots < 600m^2) or 3m (lots > 600m^2).

(f) Where a lot (corner or otherwise) shares a street frontage with land outside the boundary of the exhibition village, the front and side setbacks shall be an average of the minimum setback allowed by this control, and the setback of the adjoining dwelling, or, should the adjoining site be vacant, the minimum setback permitted by the relevant setback controls in this Section of the DCP.

(g) Minimum Rear Setback (including a Classified Road):

- 1 storey - 4m
- 2 storeys - 6m (4m to single storey component).

(h) Side Setback:

- Any point of a building, that has a height of 3.8m or less on its building line from natural ground level at that point must have a setback from the side boundary nearest to that point of at least 900mm;
- Any point of a building that has a height of more than 3.8m on its building line from natural ground level at that point must have a setback from the side boundary nearest to that point of at least the sum of:
- 900mm, and
- A distance that is equal to one-quarter of the additional building height above 3.8m.

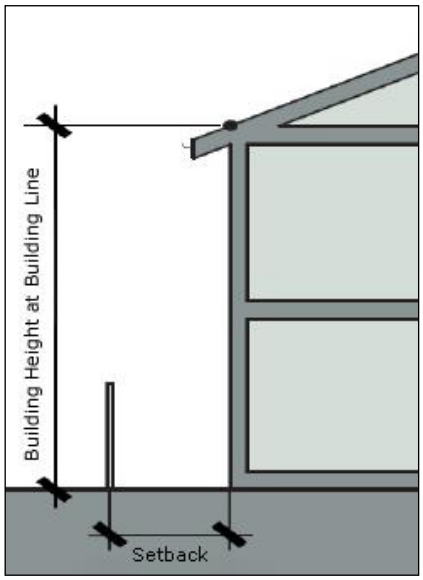


Figure 7 Building Height at Building Line

- Notwithstanding the above, for the Homeworld V exhibition village, Lots 210, 213 & 239 are permitted to have a zero (0m) side setback. Development on Lots 209, 214 and 238 shall provide for a 1m wide easement for access and maintenance in favour of lots 210, 213 and 239 in accordance with the 88B instrument.

8.5.2 SITE COVERAGE (LOT SIZE OF <450M^2)

(a) The site coverage of the dwelling house and all ancillary development on a lot must not be more than:

- For single storey dwellings, 60 per cent of the area of the lot; and
- For two storey dwellings, 50 per cent of the area of the lot.

(b) For the purpose of calculating the site coverage in subclause (a), the area of any of the following is not included:

- an access ramp,
- that part of an awning, blind or canopy that is outside the outer wall of a building,
- a balcony, deck, patio, pergola, terrace or verandah attached to the dwelling house that is not enclosed by a wall higher than 1.4m above the floor level,
- an eave,
- a driveway,
- a farm building,
- a fence or screen,
- a pathway or paving,
- a rainwater tank that is attached to the dwelling house,
- a swimming pool or spa pool.

(c) The landscaped area of the lot must not be less than:

- For single storey dwellings, 30 per cent of the area of the lot; and
- For two storey dwellings, 35 per cent of the area of the lot.

(d) For the purpose of calculating the landscaped area in subclause (c), the landscaped area means a part of a site used for growing plants, grasses and trees, but does not include any building, structure or hard paved area.

8.5.3 STORMWATER MANAGEMENT

Each dwelling shall be fitted with a rainwater tank, in accordance with the size specified for each individual lot in the 88B instrument.

8.6 MEMORIAL AVENUE VILLAGE CENTRE, KELLYVILLE

This Section of the Development Control Plan applies to land at the junction of Memorial Avenue, Hector Court and Severn Vale Drive as show in Figure 8 below.

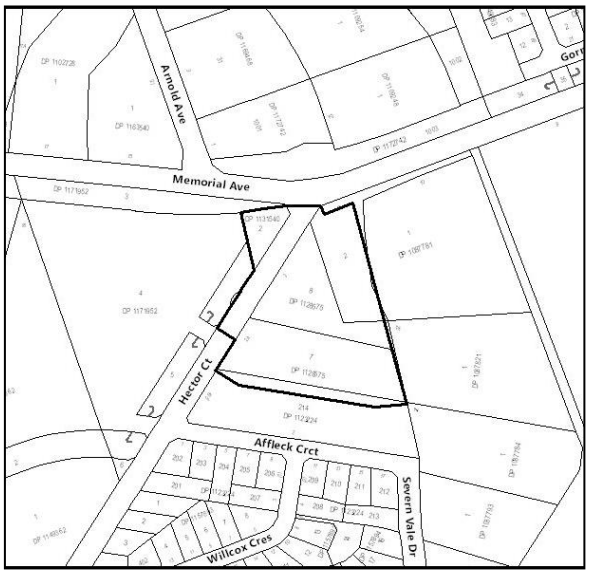


Figure 8 Memorial Avenue Village Centre location

This Section is to be read in conjunction with other relevant Sections of The Hills DCP including Part D Section 7 – Balmoral Road Release Area and Part B Section 6 – Business.

Village centres are an important part of the overall hierarchy of centres in the Shire. The objectives of such centres is to provide a range of retail and other uses to meet the weekly convenience shopping needs of residents. The scale of such centres is to be in keeping with surrounding residential character. The village centre environment should provide residents with a place to meet. It should be easily walkable, located close to dwellings and accessible by public transport.

The following objectives and controls aim to promote retail/commercial development that focus on creating a vibrant and connected village centre.

8.6.1 SITE REQUIREMENTS

OBJECTIVE

(i) To provide for orderly and cohesive development of the village centre in a manner that prevents isolation of business zoned land.

DEVELOPMENT CONTROLS

(a) The village centre is to be developed as a single amalgamated site, incorporating the entire land zoned B2 Local Centre as outlined in Figure 8.

(b) Consent may not be granted to an application that isolates an area of land that is not capable of

being developed in a manner that achieves a cohesive outcome for the centre.

(c) Where a development application seeks to develop only part of the village centre land evidence will need to be submitted to demonstrate:

- All reasonable attempts have been made to secure the entire land; and
- Land not included in the development proposal will not be isolated and is capable of being developed in a manner that achieves a cohesive outcome for the centre.

8.6.2 FUNCTION AND USES

OBJECTIVES

(i) To develop and promote a vibrant, mixed use village centre that provides a range of low-medium scale retail and business uses which serve the daily and weekly convenience needs of the local population.

(ii) To ensure that the street environment is active and inviting and emphasizes the pedestrian where practicable and possible.

DEVELOPMENT CONTROLS

(a) Provision of a range of supporting commercial uses is encouraged within the village centre such as child care, health care, ATM.

(b) Retail uses are to be located on ground level and primarily fronting Severn Vale Drive. A reduced setback to a minimum of 2 metres will be considered to activate the Severn Vale drive frontage.

(c) Ground level uses must provide active frontages with facades glazed in a 'shop front' manner. The following are also encouraged in these locations:

- Café or restaurant
- Outdoor dining
- Active office uses such as reception on ground floor.

8.6.3 ACCESSIBILITY

OBJECTIVES

(i) To ensure that safe and efficient vehicular access is provided in a timely manner in line with development of the retail centre.

(ii) To integrate the centre with adjoining residential development, open space, pedestrian and cycleway linkages to encourage a range of users and local activity.

DEVELOPMENT CONTROLS

(a) The development connecting to Memorial Avenue is to have regard to the Roads and Maritime Services Strategic Design Plan (draft concept) for the upgrade of Memorial Avenue as shown below and in Appendix A:

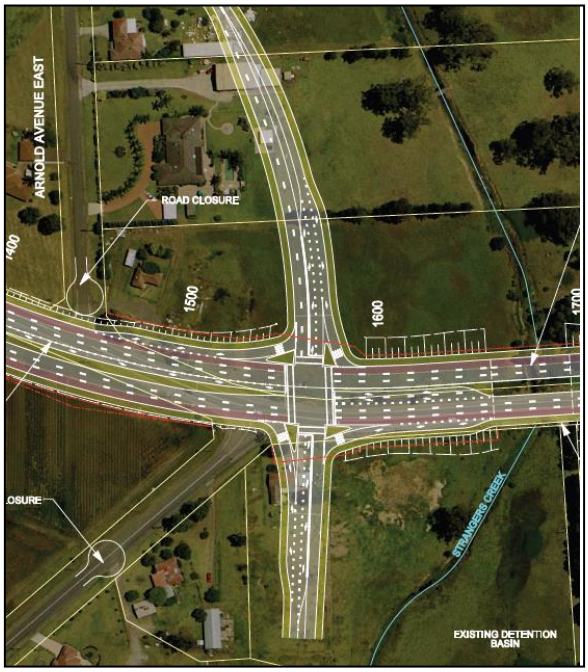


Figure 9 Extract RMS Strategic Design Plan in vicinity of village centre.

(b) The development is required to demonstrate that adequate arrangements have been made to the satisfaction of Council and the Roads and Maritime Services to assist the provision of traffic signals at the Memorial Avenue and Severn Vale Drive intersection.

(c) A pedestrian connection is to be established through the development between Hector Court and Severn Vale Drive. The development is also to incorporate pedestrian connection to the open

space link alongside Hector Court and the cycle way link alongside the storm water management land to the east.

8.6.2 PUBLIC DOMAIN

OBJECTIVES

(i) To develop a centre with a strong local identity influenced by features of the site.

DEVELOPMENT CONTROLS

(a) A central space should be incorporated into the design to encourage social interaction.

(b) Development shall capitalise on views across the site, particularly to Kellyville Memorial Park.

(c) Public domain elements such as street trees, paving, street furniture, lighting and signage are to be consistent and create local character.

9. SPECIAL PROVISIONS

9.1 DEVELOPMENT WITHIN VICINITY OF NORTH WEST RAIL LINK CORRIDOR

(a) The following controls and requirements will apply to all land and developments within 60 metres of the proposed North West Rail Corridor (rail alignment); and any development or land use that may have a detrimental impact on the rail corridor or may be detrimentally impacted upon by the rail corridor.

(b) All development shall comply with rail noise and vibration attenuation standards as provided in "Consideration of Rail Noise and Vibration in the Planning Process: Interim Guidelines for Councils" (State Rail Authority, November 2003) with submission of an acoustic report prepared by a suitably qualified consultant.

(c) Proposed development incorporates appropriate noise attenuation measures.

(d) Proposed development incorporates appropriate vibration minimisation measures.

(e) The design and location of the development is such that it will not interfere with the operation of the rail line and associated facilities.

(f) The development is designed and constructed to accommodate settlement caused by future excavation of the rail corridor.

(g) The development shall disposes of its stormwater in an appropriate manner without interfering with the operation of the rail corridor and associated facilities.

(h) The placement of buildings and structures should enable continued access for maintenance of the rail facilities.

(i) Balconies and windows in proposed developments must be designed to prevent objects being thrown onto any rail facility. Balcony and window design should meet relevant Australian Standards and the Rail Corporation NSW Electrical Standards. Noise sensitive uses (i.e. bedrooms) should be located away from the noise source.

(j) Stormwater diversion onto the rail corridor will not be permitted unless prior approval has been obtained from Rail Corporation NSW. Drainage from developments adjacent to the rail corridor must be adequately disposed of or managed.

(k) All developments shall be designed so that they do not result in the rail alignment and tunnel being impacted upon owing to basement conflicts, particularly in the Employment Areas and the Transit Centre Precinct.

(l) Any development proposed within 60 metres of the rail corridor must be designed so that they:

- Do not affect the rail corridor and its structures through foundation design; and
- Are not affected by the operation of the rail corridor through the establishment of noise- and vibration-sensitive uses.

(m) All building foundation designs will be in accordance with the requirements of the Department of Planning.

(n) All proposed development, including infrastructure and utilities, are to be designed to accommodate settlement that may be caused by future excavation of the corridor. The criteria to be adopted are:

Beneath Structure/Facility	Maximum Settlement	Maximum Angular Distortion

Buildings Low or non-sensitive buildings (i.e. < 2 levels and car parks.	30mm	1 in 350
High or sensitive buildings (i.e. > 3 levels and heritage buildings	20mm	1 in 500
Roads and Parking Areas	40mm	1 in 250
Parks	50mm	1 in 250
Identified Utilities	To be determined by relevant authorities	To be determined by relevant authorities.

The above criteria should be confirmed with Rail Corporation NSW.

9.2 LAND ADJOINING EXISTING GOLF COURSE

(a) Any development proposed on land immediately adjoining the existing golf course shall address the issue of safety (golf balls). This applies to all land within a development regardless of whether or not that land will become public land as a result of that development.

(b) Any development proposed on land immediately adjoining the existing golf course requiring landscape as shown on the BRRA map, is to provide landscaping for a depth of 2 metres from edge of property boundary towards the road carriageway in accordance with Figure 4 - Street Tree Planting requirements.

(c) All land downstream of the existing golf course shall make adequate provision for receiving stormwater from the golf course.

(d) Any residential development proposed within the noise attenuation buffer as identified on the development control plan map as 50 metres adjacent to the existing golf course car park and club house is to include suitable noise attenuation mechanisms to comply with the Department of Environment and Climate Change standards. An acoustic report is to be submitted demonstrating suitable internal noise levels to a maximum level of 50dB(A) are achieved.

9.3 EXCISION OF EXISTING DWELLINGS

Council will permit the excision of existing dwellings:

(a) On any existing property other than those identified in:

- A Cumberland Plain Woodland Development Site; or
- The Transit Centre Development Site.

(b) Where the excised lot does not include any land that is to be acquired by Council or dedicated to Council.

(c) Where the proposed excision does not hinder the implementation of the development control plan map.

(d) Where the excised lot complies with any applicable minimum or maximum development controls in relation to lot area, width, depth and road frontage.

(e) Where satisfactory arrangements for the provision of services and public road vehicular access to the proposed lot are made.

9.4 SALINITY

(a) The Balmoral Road Release Area has been identified as an area of moderate to high potential for soil salinity. All subdivision and development applications must be accompanied by a soil salinity assessment report that is consistent with the advice contained in Department of Land and Water Conservation's, (now Department of Water and Energy), publications "Site Investigations for Urban Salinity" and "Building in a Saline Environment" produced in 2002.

9.5 LAND IN VICINITY OF EXISTING RETIREMENT VILLAGE

(a) Any development within the area identified on the DCP map as upstream of the existing Castle Pines Retirement Village shall be required to provide on-site stormwater detention facilities. These facilities will be such that post-development 1-in-100-year stormwater flows are

no greater than the predevelopment 1-in-100-year stormwater flows.

(b) In addition, any development on land adjoining the boundary of the Castle Pines Retirement Village in the area shown on the DCP map will specifically address the issues of privacy and overshadowing of the village in the development's design.

9.6 NOISE ATTENUATION

(a) Any residential development proposed within the noise attenuation buffer identified on the BRRA map within 50 metres of B2 Local Centre or B1 Neighbourhood Centre zoned lands is to submit an acoustic report prepared by a suitably qualified person and include noise attenuation mechanisms if required to comply with the Department of Climate Change standards.

9.7 LANDSCAPE CORRIDORS

(a) A landscape corridor is shown on the BRRA map and shall only be used for landscaping and passive private open space purposes.

(b) No signs of any type or for any purpose will be permitted within the landscape corridors.

(c) Masonry sound-attenuation walls will be permitted, but will be set back a minimum of two metres from the boundary.

(d) No structures other than as described in (c) above will be permitted within the landscape corridor.

9.8 PUBLIC ROAD CLOSURES

(a) Where the BRRA map proposes that an existing public road reservation be closed and the land developed Council shall not grant consent to the development of any adjoining land unless it is satisfied the proposed road closure will not be isolated and the closed road's development potential constrained.

(b) Where Council determines that the land's development potential will be constrained it shall require the land to be included in the development of the adjoining land.

9.9 ABORIGINAL HERITAGE

(c) Council shall require all subdivision development applications to include an Aboriginal Cultural/ Archaeological Assessment. The heritage assessment shall be prepared by a suitably qualified person.

(d) Where the Aboriginal Assessment identifies a site as significant, submission of a letter from the relevant Aboriginal Lands Council is required expressing support or recommendations for the subdivision proposal.

9.10 LAND ADJOINING WINDSOR ROAD

(e) Existing properties fronting Windsor Road and zoned R3 Medium Density Residential shall have alternate public road access arrangements made available as shown on the BRRA map.

9.11 LAND ADJOINING OLD WINDSOR ROAD

(f) A high standard of landscaping and fencing is to be provided on land adjacent to Old Windsor Road.

9.12 WASTE MANAGEMENT

(g) Applications for development consent shall be accompanied by a Waste Management Plan in relation to the proposed development.

9.13 LAND AT 6 MCCAUSLAND PLACE, KELLYVILLE

This section of the Development Control Plan applies to land at 6 McCausland Place, Kellyville (Figure 10).

The controls within this section apply in addition to other relevant controls within Part B Section 5 – Residential Flat Building of this DCP, Part B Section 4 – Multi Dwelling Housing of this DCP and controls within this DCP, however where there is any inconsistency the provisions of this section shall apply.



Figure 10 The site

The objectives and development controls outlined in this section aim to:

(i) Facilitate a high quality residential mixed development that incorporates both a residential flat building and townhouses that responds appropriately to its context in terms of built form and scale.

(ii) Ensure that the future development provides amenity to residents within and surrounding the site.

9.13.1 Site Layout

Objectives

(i) To achieve a site layout that maximises the development opportunity whilst delivering ample, quality open spaces.

(ii) To ensure the residential flat building is developed on the south east corner of the site.

(iii) Ensure a suitable interface is provided between the development and lower scale residential interface.

Development Controls

(a) The location of the future residential flat building shall be generally in accordance with Figure 11.

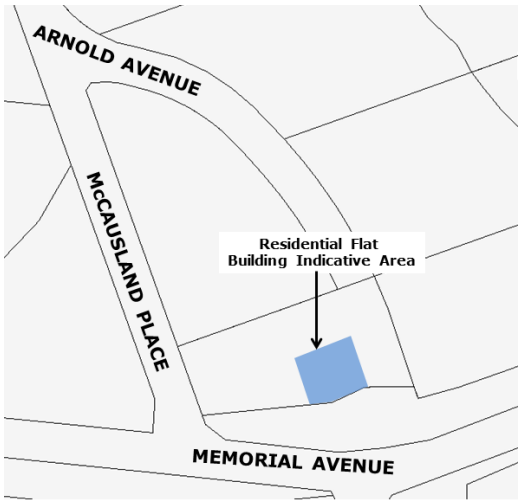


Figure 11 – Location of residential flat building development

9.13.2 Built Form

Objectives

(i) *To promote an attractive residential development that transition from the residential flat building at the south east corner of the site and two (2) storey townhouses located on the remainder of the site.*

Development Controls

(a) Development shall consist of a four (4) storey residential flat building situated on the south east corner.

(b) The bulk and scale of the development is to be minimised through the use of setbacks and a transition of height from the south east corner down to the northern boundary.

9.13.3 Building Heights

Objectives

(i) To enable building heights that respond to surrounding development, particularly lower density forms of residential development.

(ii) To minimize the bulk and scale of a development when viewed from surrounding residential areas.

Development Controls

(a) Development of a residential flat building should have a maximum of four (4) storeys.

(b) Development of multi dwelling housing should have a maximum of two (2) storeys.

9.13.4 DENSITY

OBJECTIVES

(i) To ensure townhouses and residential flat building development does not over-tax existing services and facilities.

(ii) To provide opportunities for suitable housing form that is compatible with the existing surrounding development.

DEVELOPMENT CONTROLS

(a) Refer to Part 7 Additional Local Provision under The Hills Local Environmental Plan 2012.

9.13.5 COMMON OPEN SPACE

OBJECTIVES

(i) To provide recreational opportunities for all residents of the development

(ii) To ensure access to common open spaces is efficient from both townhouses and residential flat buildings.

DEVELOPMENT CONTROLS

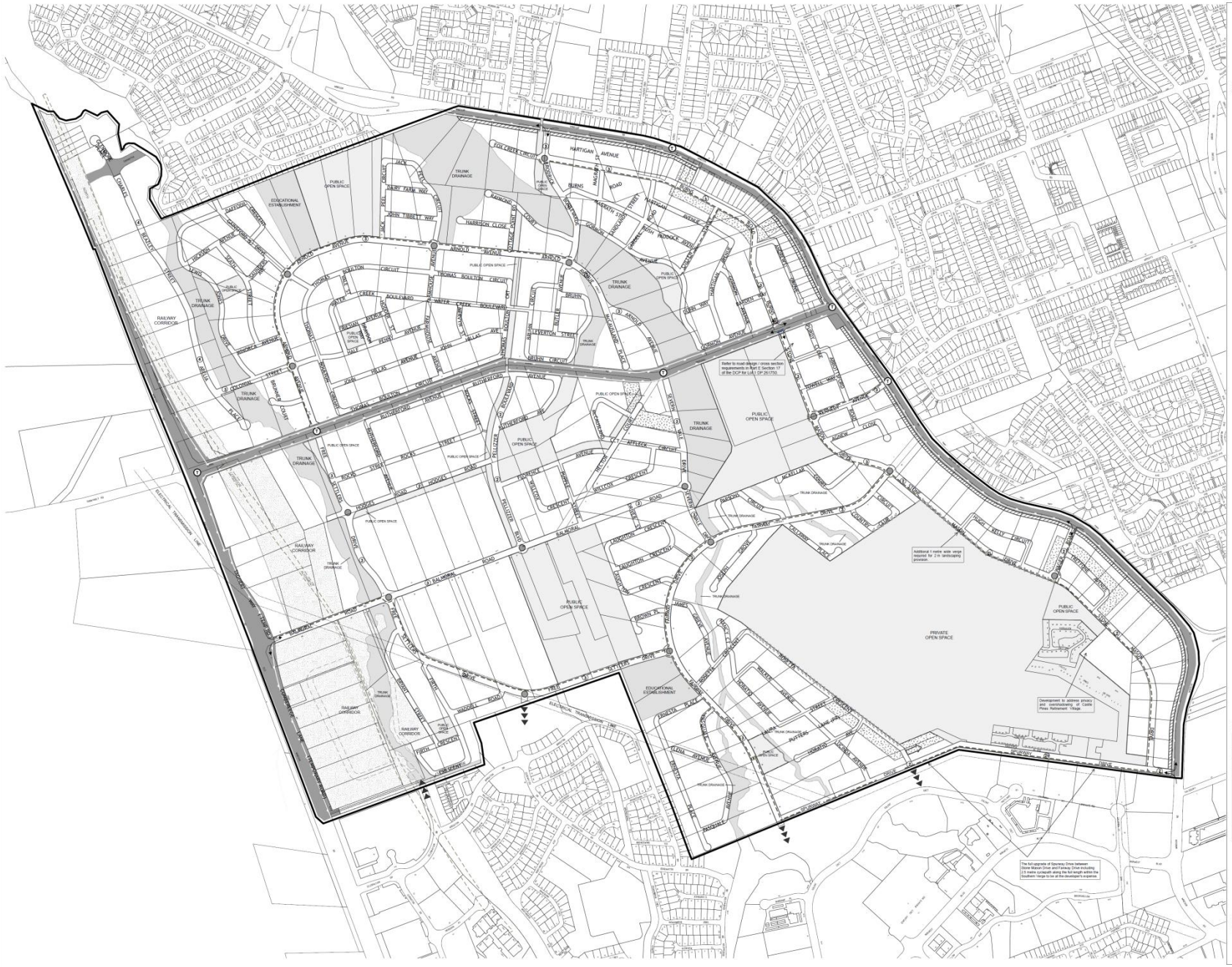
(a) The total common area space is to be a minimum of 550m^2.

(b) Common open space areas should be accessible to all residents of the site.

9.13.6 UNIT LAYOUT AND DESIGN

Refer to Part B Section 5 – Residential Flat Building of this DCP.

Refer to Part B Section 4 – Multi Dwelling Housing of this DCP.



THE HILLS DEVELOPMENT CONTROL PLAN 2012

Draft - Part D Section 7 BALMORAL ROAD RELEASE AREA

N

SCALE: 1:4,000

50 25 0 50 100 150 200 250 300 350

Metres

LEGEND

- Railway Corridor
- Trunk Drainage
- Educational Establishment
- Classified Road
- Open Space (Public or Private)
- New DCP Roads
- Proposed Road
- Electrical Transmission Line
- Development Site
- Railway Alignment
- Cycleway
- Environmental Protection
- Landscape
- Landscape Corridor (10 m)
- Noise Attenuation (50 m)
- Access Denied
- Roundabout
- Pedestrian Bridge
- Traffic Lights
- Traffic Movement
- Road Continues
- BRRA Boundary
- Proposed future access
- Cycleway Crossing
- Pedestrian Link (5 m)

ROAD CLASSIFICATION

	Access Street	15.5m	3.5 - 8.5 - 3.5
3	Collector Road	16.5m	3.5 - 9.5 - 3.5
2*	Collector Road	16.5m	3.0 - 10.5 - 3.0*
2	Collector Road with cyclepath & landscaping	17.5m**	3.5 - 9.5 - 4.5**
2	Collector Road	20.0m	6.5** - 9.5 - 4.1
3	Enhanced Collector Road	20.0m	4.5 - 12.0 - 3.5
4	Employment Area Road	20.0m	4.0 - 12.0 - 4.0

* **Note:** Carriageway width to be constructed at 10.0 metres as a continuation of existing pavement width in Garnet Drive with a transition distance of one lot.

** **Note:** Includes 1 metre wide verge required on one side of carriageway to accommodate 2 metre wide landscaping adjacent to Castle Hill Country Club Golf Course and 2.5 m cyclepath.

*** **Note:** Northern verge width adjacent to Castle Pines & Castle Hill Country Club Golf Course to be constructed at 6.5 metres.

DRAWN BY	B. CLISSOLD	DATE: 11/03/2014
SUPERVISING DRAFTSPERSON	B. CLISSOLD	DATE: 11/03/2014
PLANNING OFFICER	N. CARLTON	DATE: 11/03/2014
FILE No.	FP 171	

STATEMENT OF RELATIONSHIP WITH OTHER PLANS.

This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012

Date of Adoption: 28/07/2015
Minute No: 367
Came into Force: 29/04/2016

NOTE
THIS DEVELOPMENT CONTROL PLAN MAY BE SUBJECT TO AMENDMENT BY SUBSEQUENT LOCAL ENVIRONMENTAL PLANS. ANY PERSON USING THIS PLAN SHOULD CONTACT COUNCIL SO AS TO ENSURE THAT ANY INFORMATION SHOWN HAS NOT BEEN SUBJECT TO AMENDMENT.

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DATE OF BASE MAPS: 16 October, 2006

APPENDIX A

ROADS AND MARITIME SERVICES
STRATEGIC DESIGN PLAN FOR THE UPGRADE OF MEMORIAL AVENUE



Roads and Maritime Services
Strategic Design Plan for the upgrade of Memorial Avenue
Draft concept – subject to further detail design



Roads and Maritime Services
Strategic Design Plan for the upgrade of Memorial Avenue
Draft concept – subject to further detail design

The Hills Development Control Plan (DCP) 2012

www.thehills.nsw.gov.au

THE HILLS Sydney's Garden Shire



Part D Section 8
Norwest Town Centre
Residential Development

D8

In Force 17 July 2020

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1. INTRODUCTION

This Section of the DCP must be read in conjunction with Part A – Introduction of this DCP.

1.1. LAND TO WHICH THIS SECTION OF THE DCP APPLIES

This Section of the plan applies to properties at Peninsula Way, Central Park Avenue, Lakeside Crescent and 36-40 Solent Circuit, Baulkham Hills. It constitutes the residential component of the Norwest Business Park Town Centre, and is referred to in this Section as the Norwest Town Centre Residential Development. Figure 1 on the following page shows the location of the site.

1.2. AIMS AND OBJECTIVES OF THIS SECTION OF THE DCP

The aim of this Section is to identify the built form parameters for a mix of housing styles.

Council's primary objectives for residential development along Solent Circuit, in the Norwest Business Park are to:

(i) Encourage a high standard, aesthetically pleasing, and functional residential estate of various densities that sympathetically relates to existing and future adjoining development.

(ii) Encourage innovative and imaginative designs with particular emphasis on the integration of buildings, landscaped areas and community recreational uses.

(iii) Ensure residential development incorporates the principles of Ecological Sustainable Development.

1.3. NORWEST PLANNING AND DESIGN REVIEW PANEL

The site comes under the provisions of the Norwest Master Scheme dated 2nd September 1992 which requires all land owners to consult with the Norwest Planning and Design Review Panel and obtain approval from the Body Corporate of the Norwest Association Limited prior to lodgement of a development application.

Council has in place a design review panel for development within the Norwest Business Park. The Norwest Planning and Design Review Panel consists of Senior The Hills Shire Planners, Mulpha Norwest Limited representatives and external expert advisors.

Applicants should provide evidence that consent has been granted by the Norwest Association Limited for submission of the development application.

2. NORWEST TOWN CENTRE RESIDENTIAL PRECINCT

Site Vision Statement

The Norwest Town Centre Residential Development aims to provide a choice of housing to meet the needs of different people and to cater for a variety of lifestyle expectations.

It is also strives to offer alternative dwelling types to those currently available at Norwest.

In keeping with the extensive structured open space network of the Business Park, the new residential area is to be designed as a collection of buildings within a parkland setting.

Views from buildings within the site to adjacent open spaces including Norwest Lake are to be maximised.

Buildings are to incorporate a palette of materials and construction techniques that not only respond to existing buildings adjacent to the site, but also create a unique identity for this residential community.

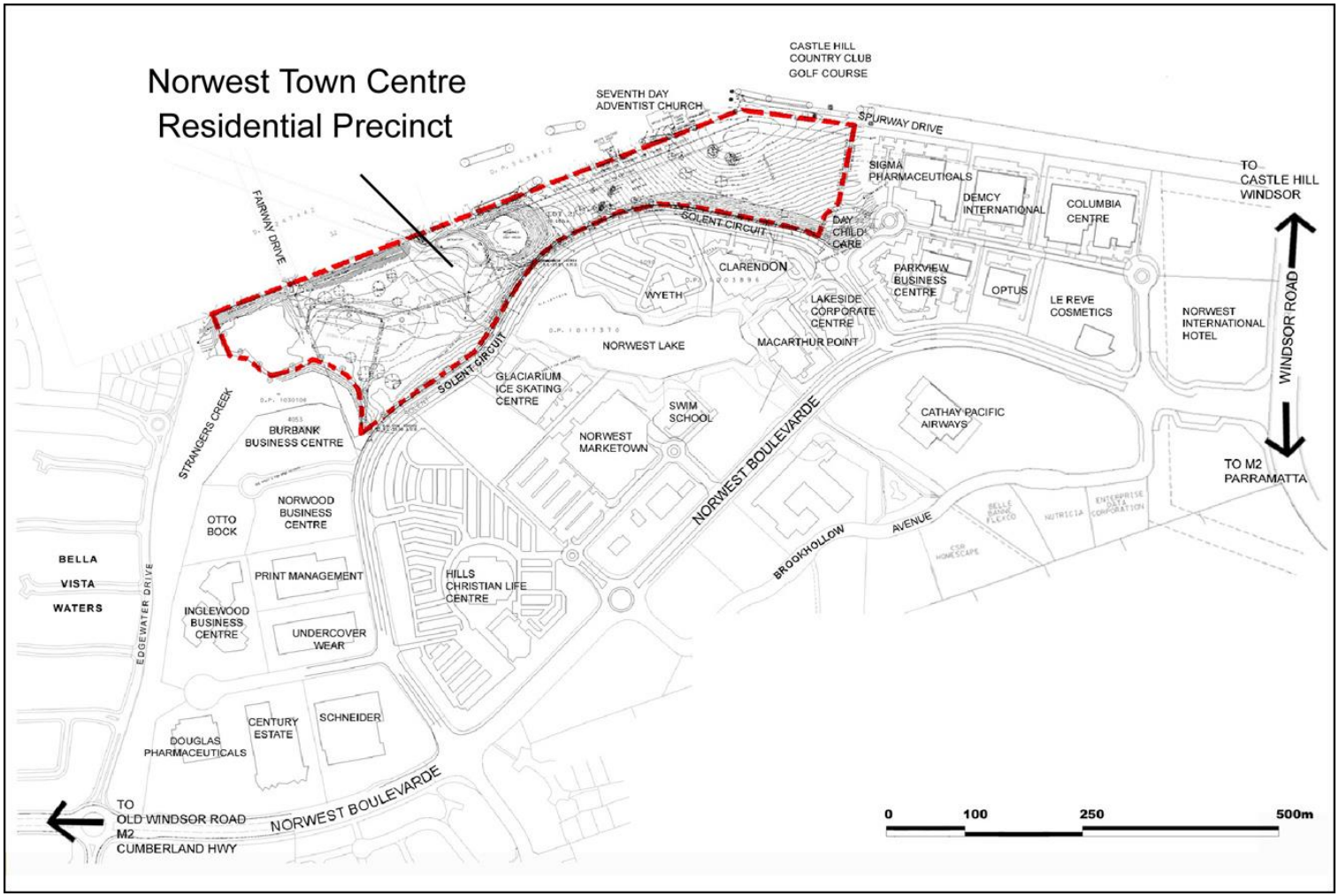

Figure 1 – Location of subject site

The existing and proposed buildings of the Town Centre, in association with Norwest Lake, provide a central focus and landmark for the Business Park and create a strong identity for the Town Centre.

The Norwest Town Centre Residential Development must respect and respond to the scale and character of the commercial buildings in the Town Centre whilst providing a continuity of building forms which is sympathetic to the adjacent residential areas (existing and proposed).

The new residential buildings are to illustrate a subtle transformation of architectural types from the large scale, simple, modern Town Centre commercial buildings to the eclectic detached dwellings within Bella Vista Waters.

Residential buildings adjacent to the commercial buildings of the Town Centre are to be large scale to complement the existing buildings but are to be articulated to create smaller scale components. They are to possess a level of detail and warmth that provides a high quality residential appearance and promotes a sense of ownership by residents.

3. OBJECTIVES AND DEVELOPMENT CONTROLS

The site has been divided into three precincts by the existing wetland detention basin and the Fairway Drive Road reservation that will connect into the Balmoral Release Area.

Figure 2 on the next page shows the three precincts. The three precincts are:-

- East Precinct
- Central Precinct
- West Precinct

In addition to those policies, guidelines and documents specified in Section 1.4 of Part A – Introduction, this Norwest Town Centre Residential Development Section is to be read in conjunction with other relevant Sections including:

- Part B Section 4 – Multi Dwelling Housing.
- Part B Section 5 – Residential Flat Buildings.
- Part C Section 1 – Parking.
- Part C Section 3 – Landscaping.
- Part C Section 6 – Flood Controlled Land
- Part D Section 5 – Kellyville/Rouse Hill Release Area; and
- Norwest Master Scheme dated 2nd September, 1992.

In the event of any inconsistency between this Section of the DCP and any other Section, the provisions of this Section shall prevail to the extent of the inconsistency.

3.1. DENSITY CONTROLS

The maximum dwelling density permitted within the East Precinct is 216 dwellings per hectare. This density should be distributed with 168 dwellings per hectare in East Precinct area A and 226 dwellings per hectare in East Precinct area B as shown in Figure 3 in Appendix 1.

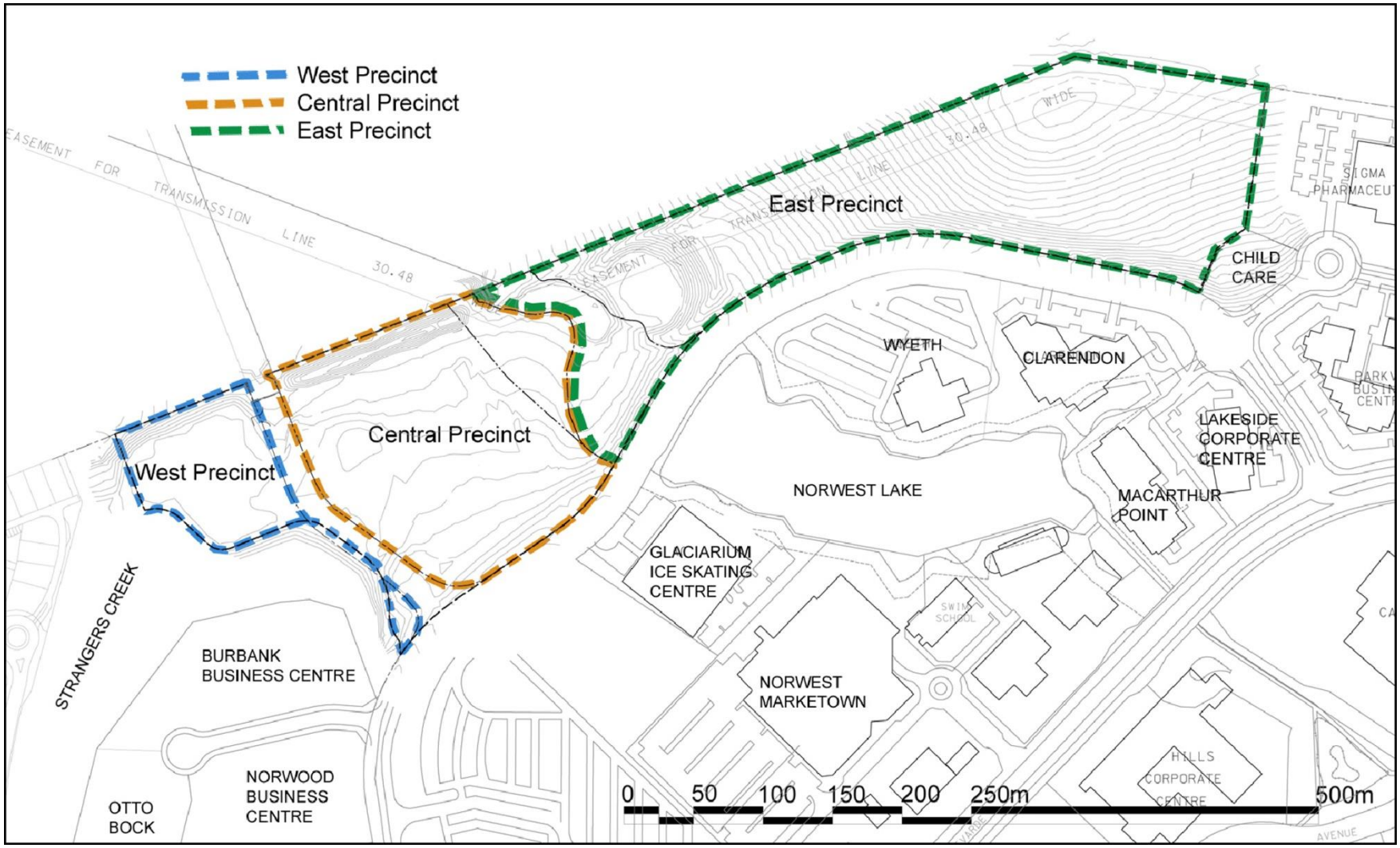

Figure 2 – Location of subject site precincts

3.2. EAST PRECINCT

3.2.1. DESIRED FUTURE CHARACTER STATEMENT

The East Precinct is to provide residential flat buildings in a landscaped parkland setting. The density of residential flat buildings is to reflect the scale of the commercial buildings located in the Norwest Business Park adjoining Solent Circuit.

Setbacks are to complement the Norwest Business Park setting and contribute to the landscaped character while allowing flexibility in the siting of buildings. The setbacks of proposed buildings are to minimise adverse impacts such as overshadowing and privacy on adjacent and adjoining properties.

Residential flat building heights are to ensure that buildings reflect the scale and height of the adjoining business park development appropriate for a Specialised Centre with a railway station. Residential flat buildings have been sited to minimise overshadowing of adjoining properties and communal open space areas. Residential flat buildings have been placed (following the topography of the site) to provide transition in building scale and to provide natural ventilation, solar access, outlook to residential flat buildings and year round sunlight to communal open spaces.

Communal open space for residents is to be provided in a parkland setting in addition to private open space being an extension of the main living areas of individual residential units. This open space should enhance the quality of the built environment by providing opportunities for landscaping in a parkland setting as well as provide a visual and active focus for the new residential community created through this development. All Communal open space areas are to accommodate appropriate facilities such as picnic and barbecue areas, children's play area and grassed areas for passive recreational use. Consideration should be given to the provision of a community building with recreational facilities such as a swimming pool, gymnasium and functional space to allow for resident meetings.

Car parking is to be sufficient and convenient for residents and visitors to residential flat buildings. Vehicles should be able to enter and leave residential flat buildings in a simple, safe and efficient manner.

Streetscapes are to be resident and visitor friendly in a landscaped setting associated with a street hierarchy that promotes a safe pedestrian and vehicular environment.

3.2.2. BUILT FORM CONTROLS

A. SITE PLANNING

OBJECTIVES

(i) To achieve coherent site planning and development that relates to the natural contours of the site and contributes to the character of the area.

(ii) To provide for the effective management of common open spaces within the development.

PERFORMANCE CRITERIA

Nil

DEVELOPMENT CONTROLS

(a) Future development is to be located generally in accordance with Figure 3 in Appendix 1.

(b) Within East Precinct Area A (as shown in Figure 3, Appendix 1) the overall site coverage shall be a maximum of 50% of the site area.

(c) Within East Precinct Area B (as shown in Figure 3, Appendix 1) the overall site coverage shall be a maximum of 30% of the site area.

B. RESIDENTIAL FLAT BUILDING SIZE

OBJECTIVES

(i) To ensure that individual residential units are of a size suitable to meet the needs of residents.

(ii) To ensure the layout of residential units is efficient and achieves a high level of residential amenity.

PERFORMANCE CRITERIA

a) Residential flat buildings are to satisfy the Design Quality Principles listed in State Environmental Planning Policy No.65 – Design Quality of Residential Flat Development.

DEVELOPMENT CONTROL

(a) Internal layouts and size of residential units are to be in accordance with the development controls contained within Part B Section 5 – Residential Flat Buildings.

C. SETBACKS

OBJECTIVES

(i) To provide setbacks that complements the landscape setting of the Norwest Business Park.

(ii) To provide privacy for future residents within a parkland setting.

(iii) To minimise overshadowing of communal open space areas.

PERFORMANCE CRITERIA

a) Setbacks are to complement the Norwest Business Park setting and contribute to the landscaped character of the precinct while allowing flexibility in the siting of buildings.

DEVELOPMENT CONTROL

(a) The setbacks for the East Precinct shall be in accordance with the minimum setbacks outlined in Table 2 below.

Table 2 Setbacks

Solent Circuit	10 metres
North boundary	14 metres
East boundary	12 metres
West boundary	*(xii) metres*

(b) The internal setbacks for the proposed residential flat buildings located in the East Precinct shall be in accordance with the minimum setbacks outlined in Table 3.

Table 3 Internal setbacks

Main entry road	8 metres
Access street	4 metres
Between buildings (balcony to balcony)	8 metres

D. RESIDENTIAL FLAT BUILDING HEIGHT

OBJECTIVES

(i) To ensure that residential flat buildings reflect the height and scale of the Norwest Business Park and respond to the site's topography.

(ii) To minimise overshadowing of adjoining properties and communal open space areas.

PERFORMANCE CRITERIA

a) Building heights are to encourage a transition of scale from the lower scale Bella Vista Waters Residential Estate and West Precinct to the larger scale buildings on the eastern side of the Norwest Town Centre.

DEVELOPMENT CONTROLS

(a) The maximum number of storeys shall be in accordance with Figure 4 in Appendix 1.

(b) The maximum building heights allowable on the site shall be measured vertically from natural ground level. Basement parking shall protrude no more than one metre above natural ground level.

E. OPEN SPACE

OBJECTIVES

(i) To provide open space for recreation and for use by the future occupants of the new buildings.

(ii) To enhance the quality of the built environment by providing opportunities for landscaping in a parkland setting.

(iii) To provide private open space that forms an extension of the residential flat building for the enjoyment of residents.

(iv) To provide functional common open space areas for informal recreational use by future residents.

PERFORMANCE CRITERIA

a) Open space is to have regard to such requirements as solar access, outlook, privacy and the provision of common open space facilities.

b) Each dwelling shall provide an area of useable private open space, or private courtyard area, which has direct access from the dwelling.

DEVELOPMENT CONTROLS

Landscaped Area

(a) A minimum of 50% landscaped area shall be provided over the entire precinct.

(b) A minimum of 70% landscaped area shall be provided within area B (as shown in Figure 3, Appendix 1).

Private Open Space

(c) For residential flats at ground level, opportunity must be made available for courtyards where the topography permits. All ground level courtyards must have a minimum area of $24m^2$ and a minimum dimension of 4 metres. Courtyards are to be located directly in front of the dwelling's main living area and be capable of accommodating outdoor dining facilities and/or furniture.

(d) Design techniques are encouraged to protect the privacy of ground floor courtyards from overlooking by above ground units, ground level communal areas and accessways.

(e) Usable open space above ground floor is to be in the form of balconies adjacent to the main living area of the residential flat. Balconies are to have a total minimum area of $10m^2$ with a minimum depth of 2.4 metres for balcony areas directly outside the main living area of residential flat. Balconies must be capable of accommodating outdoor dining facilities and/or furniture.

Common Open Space

(f) To provide for the recreational needs of residents, common open space areas are to be provided in the locations as shown in Figure 5, Appendix 1.

F. CAR PARKING AND ACCESS

OBJECTIVES

(i) To provide sufficient and convenient parking for residents and visitors.

(ii) To ensure that vehicles may enter and leave the residential flat buildings in a safe and efficient manner.

(iii) To provide a legible and permeable road network.

PERFORMANCE CRITERIA

a) Car parking shall be located underground where practicable to minimise the height of buildings above natural ground level.

b) Visitor parking is to be located in easily accessible and identifiable areas.

c) Adequate provision shall be made for service vehicles' access and service areas.

DEVELOPMENT CONTROLS

(a) Refer to Part C Section 1 - Parking.

3.3. CENTRAL PRECINCT

3.3.1. DESIRED FUTURE CHARACTER STATEMENT

The Central Precinct will comprise lower scale residential flat buildings, interspersed with groupings of multi dwelling housing and small lot housing.

Development in this precinct will maintain the high quality landscaping that flows through from the parkland setting established in the Norwest Business Park.

Residential flat buildings will flank the Norwest Lake frontage of the precinct, the northern end of Fairway Drive (fronting the West Precinct) and the public open space (wetland park) between the Central Precinct and the East Precinct. Multi dwelling housing will front Solent Circuit, the southern end of Fairway Drive and the north and south boundaries of the neighbourhood park. Small lot housing will front the northern boundary to the Central Precinct.

The density of development will reflect a transition of scale between the larger residential flat buildings located in the East Precinct and the smaller scale small lot housing, multi dwelling housing and residential flat building in the West Precinct.

Setbacks to Solent Circuit, the wetland basin, Fairway Drive and the northern boundary are to complement the Norwest Business Park and parkland setting.

Multi dwelling housing, residential flat buildings and small lot housing setbacks to proposed internal streets are to ensure adequate provision for landscaping, vehicle parking for residents, and private open space at ground level.

Building heights are to create a transition of scale between the higher densities in the East Precinct and the lower density multi dwelling housing, small lot housing and residential flat buildings in the West Precinct.

Residential flat buildings are to step down in height to provide a transition in building scale and to ensure adequate solar access to the private and communal open spaces within the Precinct. The multi dwelling housing and small lot housing are to be of a high design quality to ensure a good visual amenity when viewed from within the Norwest Business Park and surrounding areas.

A neighbourhood park is to be provided for residents in this precinct. This shall be in a parkland setting with informal and formal open space with a children's playground, picnic and barbecue facilities.

Resident car parking for residential flat buildings, where practical is to be provided below ground to reduce building heights or screened from view to enhance residential amenity whilst visitor parking will be provided on grade and integrated into the landscaped areas.

Resident car parking for the multi dwelling housing and small lot housing component should be provided above ground in a traditional garage configuration and is to be accessed from a shared pedestrian friendly neighbourhood road to provide a safe environment for residents.

Visitor parking for the multi dwelling housing and small lot housing component is to be located at finished ground level between the garage façade and street frontage. Visitors will be provided with on-street parking spaces for residential flats that are specifically integrated within the site's landscaped areas.

Multi dwelling housing and small lot housing development is to be of high visual quality, demonstrating good internal layout and external design.

Building materials are to promote an integrated, visually harmonious and attractive development that complements the Norwest Business Park surrounds and the nearby emerging Bella Vista Waters residential precinct. Colours and materials used are to be visually pleasing and not be out of character with the locality.

3.3.2. BUILT FORM CONTROLS

A. SITE PLANNING

OBJECTIVE

(i) To achieve coherent site planning and development that relates to the natural contours of the site and contributes to the character of the area.

PERFORMANCE CRITERIA

Nil

DEVELOPMENT CONTROLS

(a) Future development to be located generally in accordance with Figure 6 in Appendix 2.

(b) The site coverage shall be a maximum of 60% of the site area. The Central Precinct is a development in accordance with Part D Section 5 – Kellyville Rouse Hill Release Area (Section 4 Housing as per clause 4.1B of The Hills LEP 2012).

B. DWELLING SIZE

OBJECTIVES

(i) To ensure that dwelling types are of a size suitable to meet the needs of residents.

(ii) To ensure the layout of dwelling types are efficient and achieve a high level of residential amenity.

DEVELOPMENT CONTROL

(a) Internal layout and size of residential flats are to be in accordance with the development controls contained within Part B Section 4 – Multi Dwelling Housing and Part B Section 5 – Residential Flat Buildings.

C. SETBACKS

OBJECTIVES

(i) To provide setbacks that complement the landscape setting of the Norwest Business Park.

(ii) To provide privacy for future residents within a parkland setting.

(iii) To minimise overshadowing of communal open space areas.

PERFORMANCE CRITERIA

a) Residential flat building setbacks to Solent Circuit, the wetland basin and Fairway Drive should complement the Norwest Business Park setting.

b) Multi dwelling housing and small lot housing setbacks should ensure adequate provision for landscaping, vehicle parking and private open space.

DEVELOPMENT CONTROLS

(a) The setbacks for the Central Precinct shall be in accordance with the minimum setbacks outlined in Table 4 below.

Table 4 Setbacks

Residential Flat Buildings	
Solent Circuit	10 metres
Fairway Drive	6.0 metres
Eastern boundary (Wetland park)	4.5 metres
Multi Dwelling Housing	
Solent Circuit	4.5 metres
Fairway Drive	4.5 metres
Access Street	4.5 metres
Small Lot Housing	
Northern boundary	3.0 metres
Fairway Drive	4.5 metres

(b) The internal setbacks of the proposed residential flat buildings, multi dwelling housing and small lot housing shall be in accordance with minimum setbacks outlined in Table 5.0.

Table 5 Internal setbacks

Residential Flat Buildings	
Main entry road	4.5 metres
Access Street	4.5 metres
Side boundary	4.5 metres
Multi Dwelling Housing	
Main garage to primary street	5.5 metres
Side boundary (intermediate lot)	0.0 metres
Side boundary (end lot)	1 metre
Side boundary (corner lot)	4.5 metres
Rear boundary	3.0 metres

Small Lot Housing	
Main garage to primary street	5.5 metres
Access Street	4.5 metres
Side boundary (zero setback for garage and laundry)	.09 metres

D. BUILDING HEIGHT

OBJECTIVES

(i) To provide a transition in building scale, building heights should step down where adjoining multi dwelling houses and small lot housing.

(ii) To minimise overshadowing of adjoining properties and communal open space areas.

PERFORMANCE CRITERIA

a) Building heights are to encourage a transition of scale from the multi dwelling housing and small lot housing in the West Precinct and larger scale residential flats in the East Precinct.

DEVELOPMENT CONTROLS

(a) The maximum number of storeys are to be in accordance with Figure 7 in Appendix 2.

(b) The maximum building heights allowable on the site shall be measured vertically from natural ground level. Basement parking shall not protrude more than one metre above natural ground level.

E. OPEN SPACE

OBJECTIVES

(i) To provide open space for recreation and for use by the future occupants.

(ii) To enhance the quality of the built environment by providing opportunities for landscaping in a parkland setting.

(iii) To provide private open space that forms an extension of the dwelling for the enjoyment of residents.

(iv) To provide functional common open space for informal recreational use by future residents.

PERFORMANCE CRITERIA

a) Open space is to have regard to such requirements as solar access, outlook, privacy and the provision of common open space facilities.

b) Each dwelling shall provide an area of useable private open space, or private courtyard area, which has direct access from the dwelling.

DEVELOPMENT CONTROLS

Landscaped Area

(a) A minimum of 40% landscaped area shall be provided over the precinct.

Private Open Space – Residential Flat Buildings

(b) For residential units at ground level, opportunity must be made available for courtyards where the topography permits. All ground level courtyards must have a minimum area of $24m^2$ and a minimum dimension of 4m. Courtyards are to be located directly in front of the dwelling's main living area, and be capable of accommodating outdoor dining facilities and/or furniture.

(c) Usable open space above ground floor is to be in the form of balconies adjacent to the main living area of the residential units. Balconies are to have a total minimum area of $10m^2$ with a minimum depth of 2.4 metres for balcony areas directly outside the main living area of residential units. Balconies must be capable of accommodating outdoor dining facilities and/or furniture.

Private Open Space – Multi Dwelling Housing and Small Lot Houses

(d) For multi dwelling housing and small lot housing, ground floor private open space should be provided off main living areas and be designed to provide for outdoor furniture and dining facilities, perimeter screen landscaping and a lawn area capable of accommodating a clothes line.

(e) Design techniques are encouraged to protect the privacy of ground floor courtyards from

overlooking by above ground units, ground level communal areas and access ways.

(f) Private open space for multi dwelling housing is to have a minimum of 50m^2. One part of the private open space area is to have a minimum area of 24m^2 with a minimum dimension of 4 metres and be contiguous with the living area of the dwelling for which it is provided.

(g) If useable open space is provided above ground floor for multi dwelling houses in the form of balconies it is to have minimum area of 10m^2 and a minimum depth of 2.4 metres for balcony areas directly adjacent to the dwelling's main living room. Balconies must be capable of accommodating outdoor dining facilities and/or furniture.

(h) Private open space for small lot housing is to have a minimum area equivalent to 20% of the allotment area and a minimum dimension of 2.0 metres. One part of the private open space area is to have a minimum area of 24m^2 with a minimum dimension of 4 metres and be contiguous with the living area of the dwelling for which it is provided.

Common Open Space

(i) To provide for the recreation needs of residents in residential units, multi dwelling housing, common open space areas in the form of a neighbourhood park are to be provided as shown in Figure 8 in Appendix 2.

F. CAR PARKING AND ACCESS

OBJECTIVES

(i) To provide sufficient and convenient parking for residents and visitors.

(ii) To ensure that vehicles may enter and leave the dwellings in a safe and efficient manner.

PERFORMANCE CRITERIA

a) Car parking shall be located underground where practicable for residential flat buildings to minimise the height of buildings above natural ground level or, if located at grade, be screened from view to minimise the visual impact.

b) Resident car parking for multi dwelling housing and small lot housing can be either provided below ground or above ground in a traditional garage configuration.

c) Visitor parking shall be located within easily accessible and identifiable areas.

d) Adequate provision shall be made for service vehicles.

DEVELOPMENT CONTROLS

Car parking

(a) All car parking areas and spaces shall be designed in accordance with Part C Section 1 - Parking.

(b) For multi dwelling housing and small lot housing, visitor car parking is to be made available on the individual dwelling driveway within the building line, between the garage and the primary street frontage. Visitor parking may also be provided in designated on street parking bays which are integrated with the site's landscape design.

(c) Generally, resident car parking for residential flat buildings is to be provided below natural ground level and visitor parking will be provided on grade to minimise the impact of above ground parking on the site.

(d) Satisfactory provisions should be made for service vehicles, such as furniture removal vehicles to be able to service each residential flat building and circulate through the site.

Driveways

(e) A street hierarchy system is to be provided in accordance with the street network plan shown in Figure 9 Appendix 2.

(f) The design and configuration of access ways and driveways shall be in accordance with Part C Section 1 - Parking.

3.4. WEST PRECINCT

3.4.1. DESIRED FUTURE CHARACTER STATEMENT

The West Precinct will consist of small lot housing, multi dwelling housing and residential flat buildings. Small lot housing will front Strangers Creek. Multi dwelling housing will be located along the northern boundary and the residential flat building block will front Fairway Drive.

Small lot housing will complement the emerging Bella Vista Waters residential area using a mix of building materials such as masonry, stone, render and timber.

Small lot housing and multi dwelling housing are to consist of modulated facades for visual interest to break up horizontal and vertical elements. This will be assisted with varying roof forms.

The residential flat building will reflect both the low scale vernacular architectural language at Bella Vista Waters as well as the commercial buildings in the Norwest Business Park.

The density of development will complement the 2 storey character of the emerging Bella Vista Waters residential area within a neighbourhood landscaped setting.

The residential flat building will form the transition between the low scale 2 storey residential buildings and the taller buildings to the east of Fairway Drive and the Norwest Business Park.

It is important that private open space creates a strong indoor/outdoor spatial relationship to maximise amenity for residents.

A small access street will service the small lot housing and a portion of the visitor car parking provision for the residential flat building and multi dwelling housing. The remaining visitor car parking spaces may be provided within the basement. It will be tree-lined, and provided with a footpath and verge planting. Multi dwelling housing resident car parking is to be provided below ground level and accessed from Fairway Drive generally in accordance with the access plan for the site.

A small neighbourhood pocket park is to be provided with a small children's playground and seating to provide a focus point in the street.

3.4.2. BUILT FORM CONTROLS

A. SITE PLANNING

OBJECTIVE

(i) To achieve coherent site planning and development that relates to the natural contours of the site and contributes to the character of the area.

PERFORMANCE CRITERIA

Nil

DEVELOPMENT CONTROLS

(a) Future development to be located generally in accordance with Figure 11 in Appendix 3.

(b) The site coverage shall be a maximum of 60% of the site area. The West Precinct is an integrated housing development in accordance with Part D Section 5 – Kellyville / Rouse Hill Release Area.

B. DWELLING SIZE

OBJECTIVES

(i) To ensure that dwelling types are of a size suitable to meet the needs of residents.

(ii) To ensure the layout of dwelling types are efficient and achieve a high level of residential amenity.

DEVELOPMENT CONTROLS

(a) Refer to Part B Section 4 – Multi Dwelling Housing and Part B Section 5 – Residential Flat Buildings.

C. SETBACKS

OBJECTIVES

(i) To provide setbacks that allow for landscaped frontages and rear private open space.

(ii) To provide privacy for future residents and solar access.

PERFORMANCE CRITERIA

a) Setbacks should ensure adequate provision for landscaping, vehicle parking and private open space.

b) Setbacks for the West Precinct will allow for landscaped frontages and rear private open space for the enjoyment of residents. Side setbacks will allow for adequate building separation, and a mixture of landscaping and fencing to provide a sense of privacy and security.

DEVELOPMENT CONTROLS

(a) The setbacks for the West Precinct shall be in accordance with the minimum setbacks outlined in Table 6 below.

Table 6 Setbacks

Multi dwelling housing	
Fairway Drive North boundary	4.5 metres
• to face of dwelling: • to face of basement carpark:	7.5 metres 2.5 metres
Access Street	4.5 metres
Small lot housing	
Fairway Drive	4.5 metres
Waterfront boundary	3.0 metres
Residential flat building	
Fairway Drive	6.0 metres

(b) The internal setbacks of the proposed residential flat buildings, multi dwelling housing and small lot housing shall be in accordance with the minimum setbacks outlined in Table 7.0.

Table 7 Internal setback

Multi dwelling housing	
Access Street	3.0 metres
Side boundary (intermediate lot)	0.0 metres
Side boundary (end lot)	1.0 metre
Side boundary (corner lot)	4.5 metres
Small lot housing	
Main garage of primary street	5.5 metres
Side boundary (zero setback for garage and laundry)	0.9 metres
Residential flat buildings	
Main entry road	4.5 metres
Side boundary	3.5 metres
(northern) Access street	4.5 metres

D. BUILDING HEIGHT

OBJECTIVES

(i) To complement the emerging Bella Vista Waters residential estate, the building heights should be no greater than 3 storeys.

(ii) To minimise overshadowing of adjoining properties and open space areas.

PERFORMANCE CRITERIA

a) Building heights are to complement the lower scale of development in the emerging Bella Vista Waters residential estate but also reflect the vision of the Norwest Town Centre Residential Development as the transition between the traditional residential developments to the west and the commercial developments at the Norwest Business Park.

DEVELOPMENT CONTROLS

(a) The maximum number of storeys shall be in accordance with Figure 12 in Appendix 3.

(b) The maximum building heights allowable on the site shall be measured vertically from natural ground level. Basement parking shall not protrude more than one metre above natural ground level.

E. OPEN SPACE

OBJECTIVES

(i) To provide open space for recreation and for use by the future occupants of new dwellings.

(ii) To enhance the quality of the built environment by providing opportunities for landscaping in a parkland setting.

(iii) To provide private open space as an extension of the dwelling for the enjoyment of residents.

(iv) To provide functional common open space areas for informal recreational use by future residents.

PERFORMANCE CRITERIA

a) Open space is to have regard to such requirements as solar access, outlook, privacy

and the provision of common open space facilities.

b) Each dwelling shall provide an area of useable private open space, or private courtyard area, which has direct access from the dwelling.

DEVELOPMENT CONTROLS

Landscaped Area

(a) A minimum of 40% landscaped area shall be provided over the entire precinct.

Private Open Space

(b) Ground floor private open space should be provided off main living areas and designed to accommodate outdoor furniture, perimeter screen landscaping and a courtyard area capable of accommodating a clothes line.

(c) The privacy of ground floor private open space is to achieved via the design of the development.

(d) Private open space for multi dwelling housings is to have a minimum of $50m^2$. One part of the private open space area is to have a minimum area of $24m^2$ with a minimum dimension of 4 metres and be contiguous with the living area of the dwelling for which it is provided.

(e) If usable open space is provided above ground floor for multi dwelling housing and residential flat buildings in the form of balconies it is to have a minimum area of $10m^2$ and a minimum depth of 2.4 metres for balconies directly adjacent to the main living room. Balconies must be capable of accommodating outdoor dining facilities and/or furniture.

(f) Private open space for small lot housing is to have a minimum area equivalent to 20% of the allotment area and a minimum dimension of 2 metres. One part of the private open space area is to have a minimum area of $24m^2$ with a minimum dimension of 4 metres and be contiguous with the living area of the dwelling for which it is provided.

Common Open Space

(g) To provide for the recreational needs of residents, a common open space is to be provided in the form of a neighbourhood pocket park as shown in Figure 13 in Appendix 3.

F. CAR PARKING AND ACCESS

OBJECTIVES

(i) To provide sufficient and convenient parking for residents and visitors.

(ii) To ensure that vehicles may enter and leave the dwellings in a safe and efficient manner.

PERFORMANCE CRITERIA

a) Car parking may be located underground where practicable to minimise the visual impact of garages. Where parking is provided above ground it should be located in a traditional garage or carport arrangement which is integrated with the design of the dwelling and which provides an effective screen to the dwelling's main street presentation.

b) Resident car parking for the multi dwelling housing, small lot housing and residential flat buildings can be either provided below ground or above ground in a traditional garage configuration.

c) Visitor parking may be provided on the dwelling driveway within the front setback area, within designated on-street parking bays or underground within a basement.

d) Adequate provision shall be made for service vehicles.

DEVELOPMENT CONTROLS

Car parking

(a) Refer to car parking rates for residential flat buildings.

(b) All car parking areas and spaces shall be designed in accordance with Part C Section 1 – Parking.

(c) Resident car parking for multi dwelling housing can be provided either within a basement parking configuration or at finished ground level within a traditional garage arrangement. Visitor parking for multi dwelling houses and residential flat buildings will be provided either at finished ground level within dedicated on-street parking bays which are integrated with the site landscape design or within a basement configuration.

(d) Car parking for the small lot housing is to be in the form of a traditional garage and outdoor visitor spaces are to be located in the setback area between the garage and the primary street frontage of dwellings.

(e) Where visitor car parking spaces are proposed within the basement of residential flat buildings or multi dwelling housing they shall be made accessible at all times.

Driveways

(f) A street hierarchy system is to be provided in accordance with the street network plan shown in Figure 14 of Appendix 3.

(g) The design and configuration of access driveways shall be in accordance with Part C Section 1 - Parking.

4. GENERAL DEVELOPMENT STANDARDS

4.1. ADAPTABLE HOUSING

In order to provide for disabled people and the aging population, residential flat buildings must be capable of adaptation so as to accommodate residents who may have special needs, declining mobility and sight. This is in addition to being appropriately designed for everyday pedestrian use.

OBJECTIVES

(i) To ensure that developments provide appropriate and improved access and facilities for all persons (consistent with the provisions of Australian Standard AS1428.1-1998).

(ii) To ensure designers/developers consider the needs of people who are mobility impaired and to provide greater than the minimum requirements for access and road safety.

(iii) To ensure that building design does not prevent access by people with disabilities.

(iv) To incorporate design measures that are appropriate for people with disabilities.

PERFORMANCE CRITERIA

a) Development to provide housing for a cross section of the community.

b) All development applications for residential flat buildings and multi dwelling housing should be accompanied by a report prepared by a suitably qualified Access Consultant addressing access and mobility provisions within the development.

DEVELOPMENT CONTROLS

(a) All residential units required under this Section to be adaptable dwellings and those which cannot be directly accessed from ground level are to be served by a lift.

(b) Units with a lowest floor level within 1.5 metres of the natural ground must be accessible to the front door of each unit.

(c) At least one unit in each residential flat building with less than 20 units, or 5 percent of the units in any development of 20 or more units, must be either:

- An accessible unit to AS 1428 Part 2, suitable for occupation by a wheelchair user; or
- Meeting Class B adaptability provisions under AS 4299.

Each unit so provided above shall have an accessible car parking bay complying with AS 2890 for people with a disability, and be accessible to a pick-up and drop-off point. An accessible route between the unit's dedicated car parking spaces and unit shall be provided.

(d) All stairs intended for circulation between levels, whether external or internal, shall comply with AS 1428 Part 1, if they are located on common property.

(e) At least 10% of toilets (but not less than 1 male and 1 female toilet) provided on the common property must be wheelchair accessible.

(f) At least one entry to any common facilities on the common property must be wheelchair accessible.

(g) An accessible pick-up and drop-off point can be located on the public road (with Council or RMS permission) or on the site, but it must allow for vehicles up to a coaster size bus to pick up and drop off.

(h) Residential units are to be designed to permit adaptation of units so that they can change to

meet future needs. Design features that might be included are:

- Lightweight or non-load bearing walls that can be removed to re-configure rooms.
- Wall panels that can be easily removed to connect adjoining residential units and cater for larger extended families.

Development applications should address provisions contained in Council's - *Making Access For All Guidelines 2002*.

4.2. SITE FACILITIES

OBJECTIVES

(i) To provide site facilities which are adequate and conveniently located for resident needs.

(ii) To ensure facilities are practical, attractive and easily maintained.

PERFORMANCE CRITERIA

a) Rubbish and recycling bin enclosures, letter boxes, and other site facilities should be adequate in size, durable, weather proofed and visually integrated with the development. Their location is to have regard to the protection of residential amenity, vehicle service access, visual impact and residential access.

DEVELOPMENT CONTROLS

Storage Facilities

(a) Storage for residential units is to be in accordance with Part B Section 5 – Residential Flat Buildings.

(b) Storage for multi dwelling housing and small lot housing is to be provided at a rate of $10m^3$ per dwelling within a lockable garage not encroaching into the parking space, and with a minimum base area of $5m^2$ and a minimum width of 2 metres.

Laundry Facilities

(c) All residential units are to be provided with internal laundry facilities and internal drying facilities.

(d) Laundries for multi dwelling housing and small lot housing shall be provided to each dwelling with a permanent or collapsible clothes line provided in a conveniently accessible courtyard.

Waste and recycling bins

Waste management requirements for multi dwelling housing are to be in accordance with Part B Section 4 – Multi Dwelling Housing.

Waste management requirements for residential flat buildings are to be in accordance with Part B Section 5 – Residential Flat Buildings.

Waste Management Planning

(e) Demolition and construction works must maximise the reuse and recycling of building/construction materials in accordance with Council's ESD objectives and State and Federal Government waste minimisation targets.

(f) All asbestos, hazardous and/or intractable wastes are to be disposed of in accordance with Workcover Authority and EPA requirements.

(g) All Development Applications are to be accompanied by a Waste Management Plan that demonstrates appropriate project management and construction techniques for ensuring waste minimisation including the re-use of waste on-site and off-site recycling.

A Waste Management Plan template is available from Council's website at www.thehills.nsw.gov.au and in Appendix A of this DCP.

Mail Boxes

(h) Mail boxes are to be generally incorporated into front fences, landscaped areas or integrated with individual building entry design.

(i) Mail boxes should be in close proximity to the pedestrian entrance of all housing types, and be easily identifiable for ease of use.

(j) The location of mail boxes and mail drop-off points will need to be confirmed with Australia Post.

Air Quality

(k) To improve the air quality of the locality, the installation of wood heaters is not permitted.

4.3. BASIX

All development applications will be required to demonstrate that they meet the BASIX targets.

More information on BASIX can be found at the following website: www.basix.nsw.gov.au

4.4. FENCING

OBJECTIVE

(i) To ensure that fencing does not detract from the overall amenity of the area.

PERFORMANCE CRITERIA

a) Fencing to the front street must not obstruct the opportunity for passive surveillance of public and private domain.

DEVELOPMENT CONTROLS

Front Boundary

(a) Front boundaries are to be defined through the use of hedging, plant massings, fencing or a combination of these elements.

(b) Multi dwelling housing and small lot housing fronting Solent Circuit and the internal road network within the Central and West Precincts shall have vertical fencing elements.

(c) The height of the fence is to be 1- 1.5 metres.

(d) Fencing is to incorporate natural stone or masonry piers with a rendered or bag washed and painted finish. Fencing may have a base of natural stone or masonry construction with a rendered or bag washed and painted to match piers. Piers and base as solid elements are to comprise less than 40% of the fence.

Side boundary

(e) Side boundaries to integrated small lots and multi dwelling housing are to be defined with lap and cap timber fencing. Fencing to be solid to 1.8 metres high or solid to 1.5 metres high with a 300mm partial screen to a total height of 1.8 metres. Side fencing is to be tapered down to meet the height of the front fence or returned to the face of the dwelling.

(f) Fencing is to have a natural or stained finish.

(g) Side boundaries to residential unit ground floor courtyards are to be defined by masonry walls with a finish and colour to complement those of the building.

Rear boundary

(h) Fencing to rear boundaries is to be as described above (side boundary, point i) or to be timber palisade to a height of 1.5 metres to provide for passive surveillance.

(i) Fencing to have a natural or stained finish.

4.5. ACCESS, SAFETY AND SECURITY

OBJECTIVE

(i) Site and dwelling layouts are to ensure safe and convenient passage for residents and visitors.

PERFORMANCE CRITERIA

a) Consideration should be given to the needs of residents in regards to prams, wheelchair access and people with disabilities.

b) Footpaths, landscaped areas and driveway designs are to provide opportunities for surveillance and allow for the safe movement of residents and visitors.

c) Residential flat buildings and multi dwelling housing are to have adequate lighting in common and access areas.

DEVELOPMENT CONTROLS

(a) Stairs and ramps are to have reasonable gradients and non-slip even surfaces. Refer to Australian Standard 1428.1 – 1988 Design for Access and Mobility and supplementary AS 1428.2 – 1992.

(b) Access to dwellings is to be direct and without unnecessary barriers. For example, use ramps instead of stairs/steps, consider the height and length of handrails and eliminate changes in level between ground surfaces.

(c) Development applications should address provisions contained in Council's "Safer by Design Guidelines" 2002.

(d) Private areas in a development are to be clearly recognisable.

4.6. SOLAR ACCESS

OBJECTIVES

(i) To ensure reasonable access to sunlight for living spaces within buildings and open space areas around dwellings.

(ii) To ensure adjacent open spaces, living spaces in dwellings, and public places are not deprived of reasonable access to sunlight.

PERFORMANCE CRITERIA

a) All dwellings are to be orientated to promote direct sunlight. Buildings should be sited to allow adequate provision for access of direct sunlight into dwellings, private open space and communal open space.

b) Living areas of dwellings shall be orientated towards the north wherever possible.

c) Small lot housing and multi dwelling housing should be sited to maximise the amount of direct sunlight available to private open space.

d) Where winter solar access is not optimum the use of double-glazing, high performance glass or heavyweight curtains and pelmets is strongly encouraged.

e) Windows to living areas or bedrooms are to have suitable overhangs, shading, or other solar controls to avoid summer overheating and are to be integrated into the overall elevation design.

f) The use of horizontal shading devices (for north facing windows) including eaves, verandahs, pergolas, awnings and external horizontal blinds to allow low winter sun whilst providing shade from high summer sun is strongly encouraged.

g) Where relevant, development applications should have regard to the requirements contained in the Australian Model Code of Residential Development (AMCORD) and Better Urban Living – Guidelines for Urban Housing in NSW.

DEVELOPMENT CONTROLS

Common Open Space

(a) Common open space areas must receive at least 4 hours of sunlight between 9am and 3pm in midwinter.

Residential Flat Buildings

(b) Living rooms and private open spaces for at least 70% of residential units should receive a minimum of 3 hours direct sunlight between 9am and 3pm in midwinter.

Multi Dwelling Housing and Small Lot Housing

(c) Multi dwelling housing and small lot housing developments are to be designed to ensure at least 80% of dwellings have a private open space that receives direct sunlight to 50% of the private open space area for a minimum of 2 hours between 9am and 3pm in midwinter.

4.7. VISUAL AND ACOUSTIC PRIVACY

OBJECTIVES

(i) To limit views into adjoining private open spaces and living rooms.

(ii) To protect residents from external noise.

(iii) To contain noise between dwellings without unreasonable transmission to adjoining dwellings.

PERFORMANCE CRITERIA

a) The effective location of windows and balconies is preferred to the use of screening devices, high sills or obscured glass. Where these are used, they should have minimal negative effect on resident or neighbour amenity.

b) Direct views from the living rooms of dwellings into private open space or the interior of other dwellings should be obscured with landscaping, architectural detail and building design (refer to AMCORD).

c) Where minimum separation distances cannot be practically met, windows should be placed to minimise direct viewing between dwellings.

d) In general, dwellings are to be designed to limit the potential for noise transmission to living and sleeping areas of adjacent existing and future developments. Consideration should be given to minimising noise emissions from air conditioners, driveways and the like. This can

be achieved by complying with the Building Code of Australia requirements.

DEVELOPMENT CONTROLS

(a) Minimise direct overlooking of main internal living areas and private open space of dwellings both within and of adjoining development through building design, window locations and sizes, landscaping and screening devices.

(b) Consider the location of potential noise sources within the development such as common open space, service areas, driveways, road frontage and provide appropriate measures to protect acoustic privacy by the careful location of noise sensitive rooms (bedrooms, main living areas) and double glazed windows.

(c) The location of the plant and equipment for residential flat buildings should be designed so that the noise level does not exceed the background noise level. This is to reduce background noise level creep.

(d) In regards to the multi dwelling housing and small lot housing, ideal positions or specifically designed positions for any air conditioners should be provided in the plans at development application stage.

(e) Air conditioners shall be located a minimum of three metres from any property boundary and must not exceed 5dB(A) above the background noise level or alternatively if there is no other option and the air conditioner is located within three metres of any property boundary it must not exceed the background noise level.

(f) Private areas in a development are to be clearly recognisable.

4.8. PUBLIC ROADS

OBJECTIVE

(i) To provide public thoroughfares within the locality that will assist with traffic management.

PERFORMANCE CRITERIA

a) Extension of Fairway Drive and main East Precinct Access into the Balmoral Road Release Area will provide additional public thoroughfares into the Norwest Business Park. Currently the land is in private ownership and the long term use of the roads for public use must be recognised.

b) In recognition of the Fairway Drive and main East Precinct access extension being used as public thoroughfares, the roads are to be dedicated to the Hills Shire Council as a public road and at no cost to Council.

DEVELOPMENT CONTROLS

(a) Fairway Drive is to be designed and constructed as a Enhanced Collector road as defined in Part D Section 7 – Balmoral Road Release Area. The extension of Fairway Drive is to be constructed from the Northern Boundary of Lot 301 DP 819129 to the intersection of Solent Circuit as shown in Figure 10 in Appendix 4.

(b) The extension of the main East Precinct access road is to be designed and constructed as an Access Street as defined in Part D Section 7 – Balmoral Road Release Area and located as shown in Figure 10 in Appendix 4.

4.9. GEOTECHNICAL

OBJECTIVE

(i) To ensure the possibility of soil movement or slip does not adversely affect proposed development.

DEVELOPMENT CONTROLS

(a) All development applications submitted to Council shall be accompanied by geotechnical appraisal report from a suitably qualified experienced Geotechnical Engineer.

(b) The geotechnical appraisal report must satisfy Council that the possibility of soil movement or slip will not affect the proposed development of the site and outline recommendations to ameliorate any geotechnical impacts.

4.10. PEDESTRIAN AND CYCLEWAY LINKAGES

OBJECTIVES

(i) To consider the needs of the residents with particular consideration to access requirements, safety and security.

(ii) To ensure that appropriate pathways, with high levels of pedestrian amenity are provided for residents in the locality along identified desire lines.

DEVELOPMENT CONTROLS

(a) Pedestrian and cycleway linkages are to be generally in accordance with Figure 12 in Appendix 5.

4.11. STORMWATER MANAGEMENT

This section adopts the objectives of and development controls in Section 3.17: Stormwater Management of Part B Section 5 – Residential Flat Buildings and must be considered in any development application. Additional supplementary objectives and performance criteria are included below.

OBJECTIVES

(i) To control stormwater runoff and minimise discharge impacts on adjoining properties and into natural drainage system before, during and after construction.

(ii) To prevent flood damage to the built and natural environment, inundation of dwellings and stormwater damage to properties.

(iii) To ensure that proposed development does not adversely affect the operational capacity of the downstream stormwater system.

(iv) To encourage reuse, recycling and harvesting of stormwater to reduce wastage of water.

(v) To encourage a reduction in water consumption.

PERFORMANCE CRITERIA

a) Drainage systems are to be designed and constructed in accordance with the design guidelines set out in "Design Guidelines for Subdivisions and Developments" published by Baulkham Hills Shire Council and "Australian Rainfall and Runoff" published by Institution of Engineers, Australia (1987).

b) Where a site adjoins natural creeks or watercourses, all residential development shall be clear of the 100 year ARI flood extents.

c) On-site detention systems, where required, are to be designed in accordance with (i) above.

d) Water Sensitive Urban Design elements are to be designed and constructed in accordance with the "Water Sensitive Urban Design Technical Guidelines for Western Sydney" published by the Upper Parramatta River Catchment Trust (May 2004).

4.12. TRUNK DRAINAGE

OBJECTIVE

(i) To embellish the existing drainage system.

PERFORMANCE CRITERIA

a) The open space pedestrian links within the centre of the development should build upon the continuation of the trunk drainage corridor from the Balmoral Road Release Area through to the Norwest Town Centre.

b) Pedestrian linkages to the Balmoral Road Release Area SP2 Infrastructure (Trunk Drainage) area should be provided.

c) The open space component of the development along the drainage line should be returned to a natural riparian corridor.

DEVELOPMENT CONTROLS

(a) Plant species to be provided in the riparian corridor are listed in Appendix 6.

(b) Trunk drainage corridor to be embellished in accordance with Figure 13 in Appendix 7.

5. REFERENCES

Norwest Master Scheme, 2nd September 1992

The Hills Local Environmental Plan 2012

State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development

Better Urban Living – Guidelines for Urban Housing in NSW

Safer by Design Guidelines (2002)

Making Access for All Guidelines (2002)

APPENDIX 1 - EAST PRECINCT MAPS

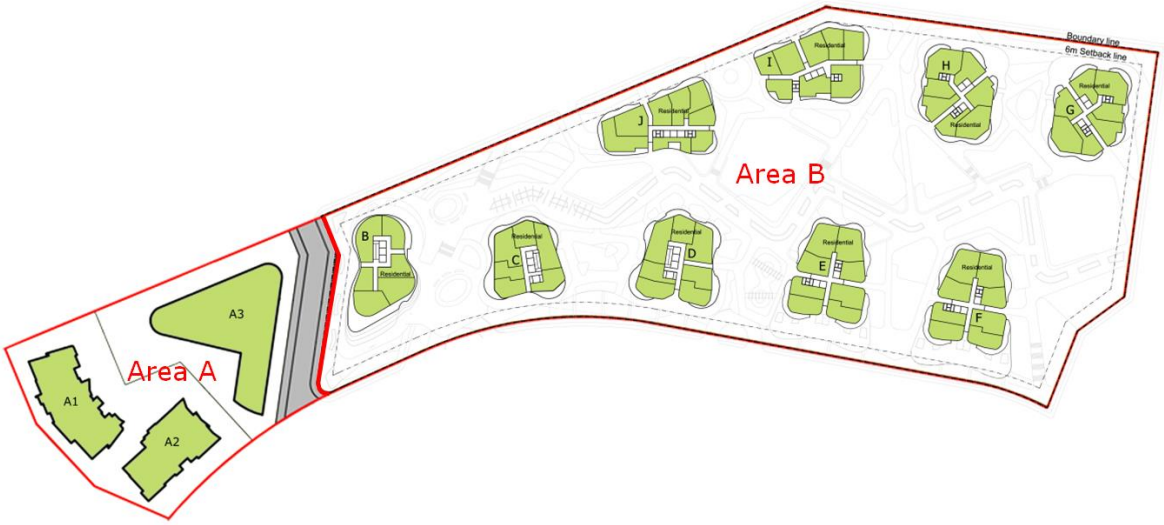

Figure 3 East precinct building layout plan

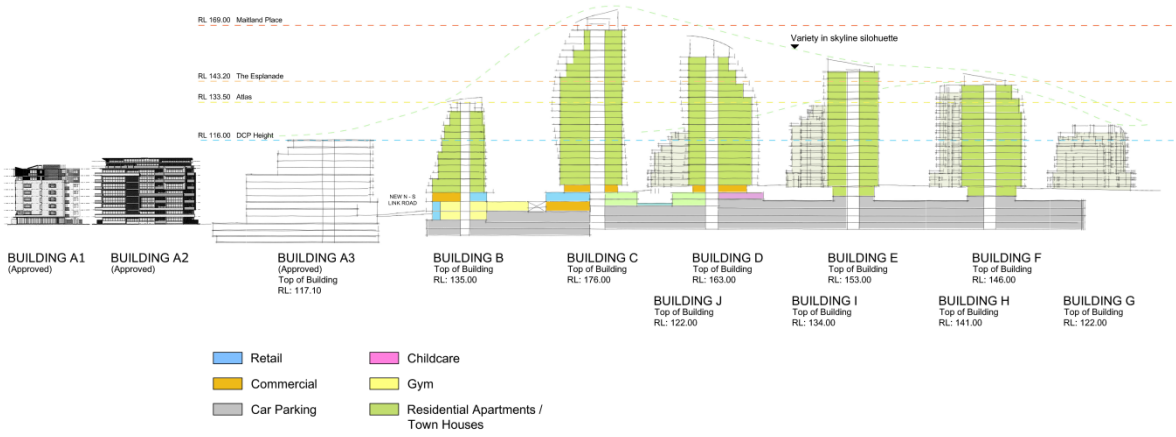

Figure 4 East precinct building height plan

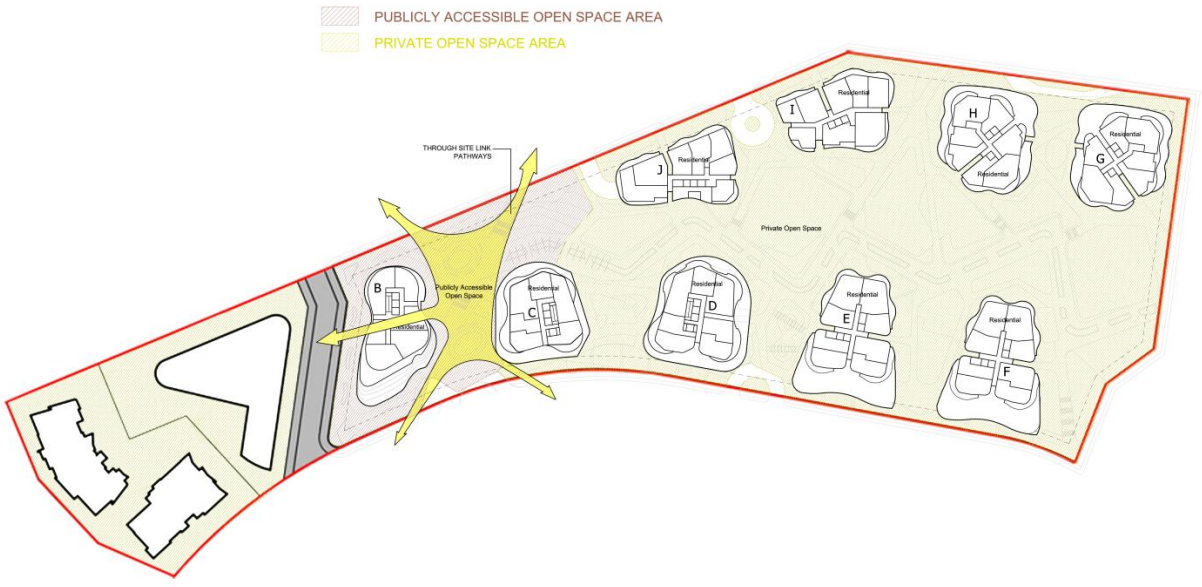

Figure 5 East precinct common open space plan

APPENDIX 2 - CENTRAL PRECINCT MAPS

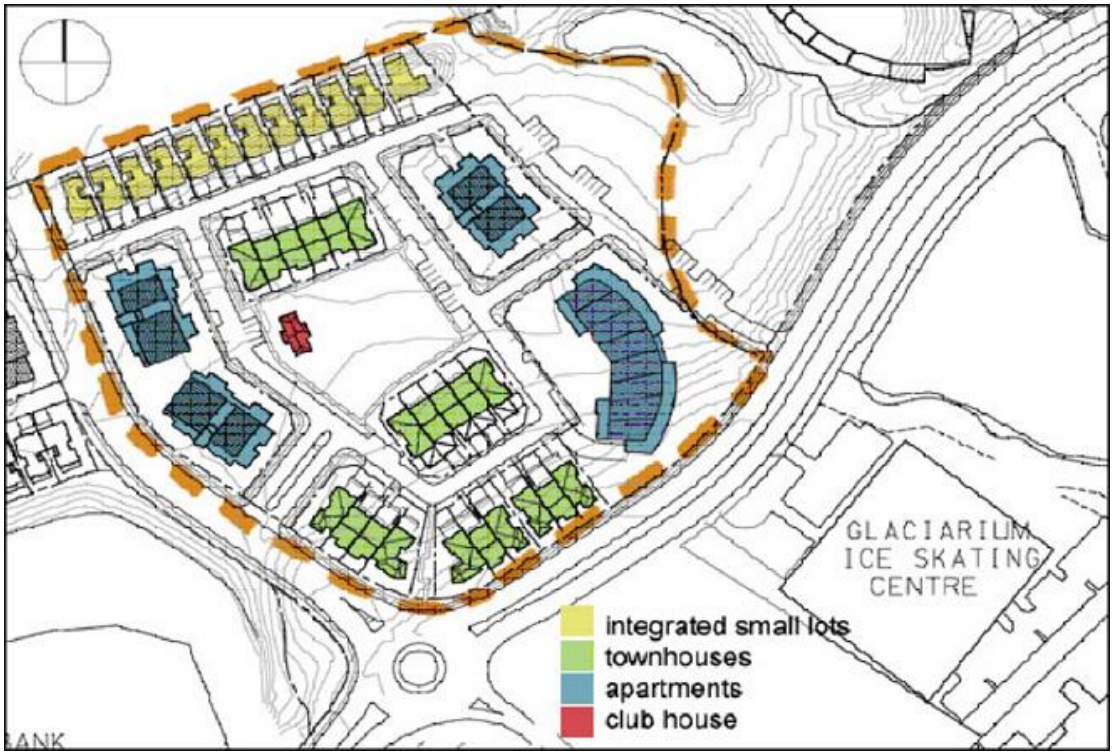

Figure 6 Central precinct building type layout plan

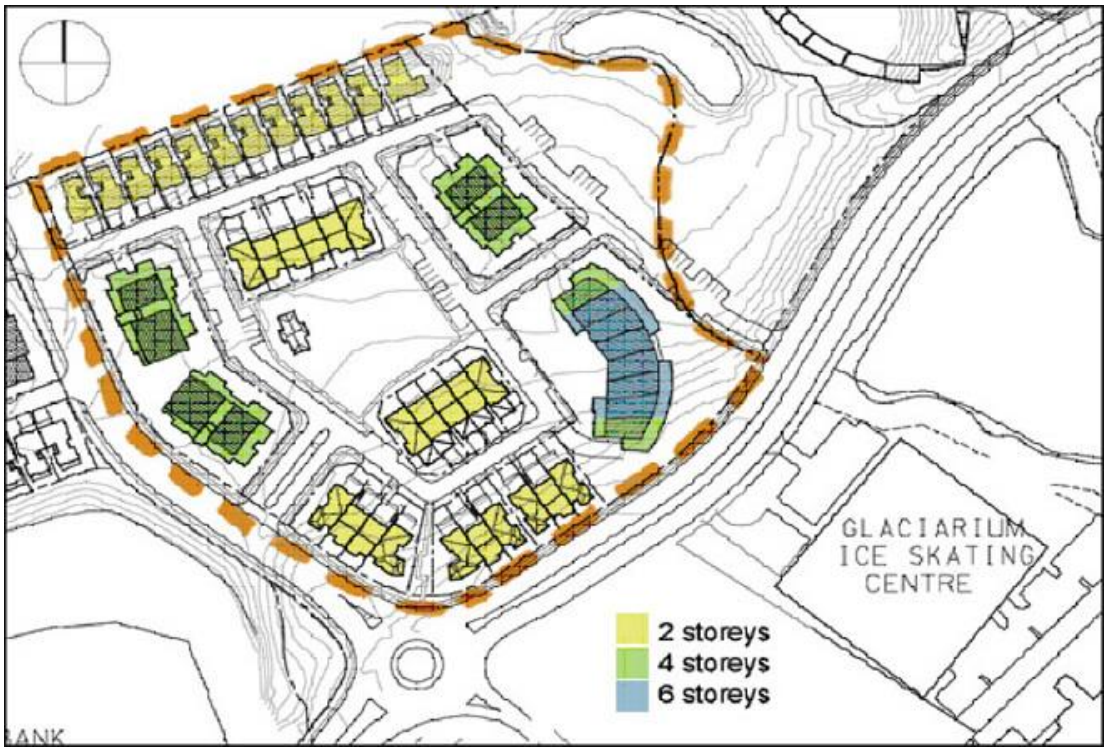

Figure 7 Central precinct building height plan



Figure 8 Central precinct common open space

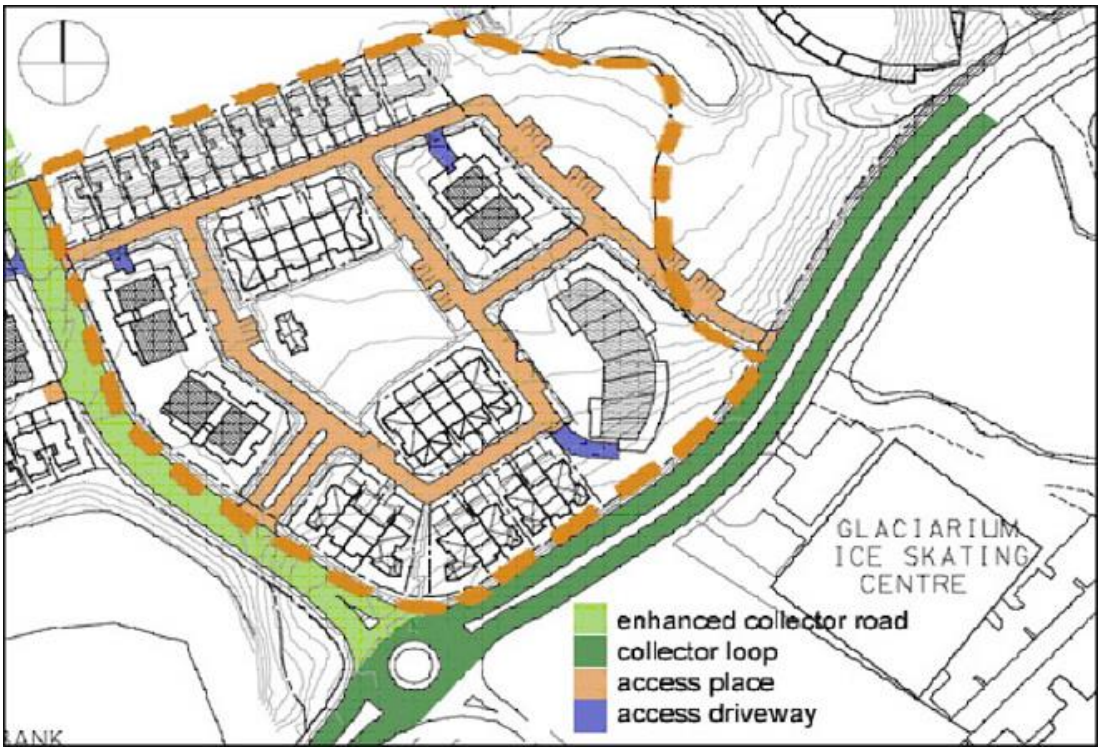

Figure 9 Central precinct street hierarchy

APPENDIX 3 - WEST PRECINCT MAPS

APPENDIX 4 - VEHICULAR ACCESS

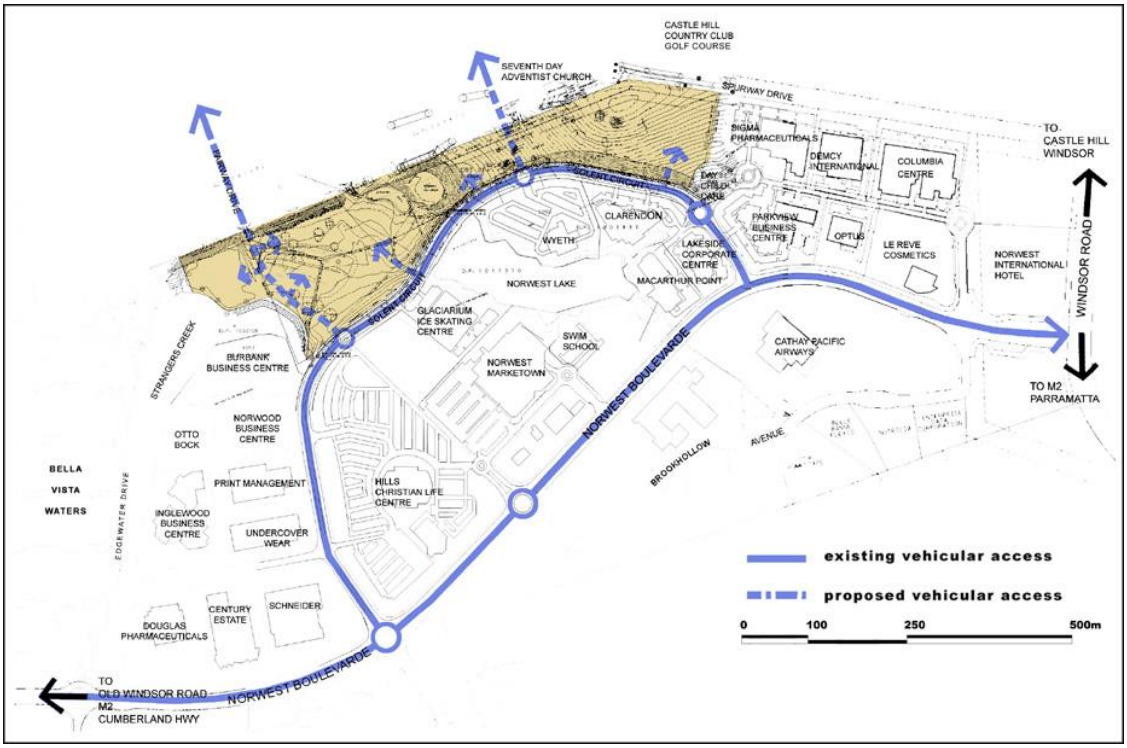

Figure 10 Vehicular access

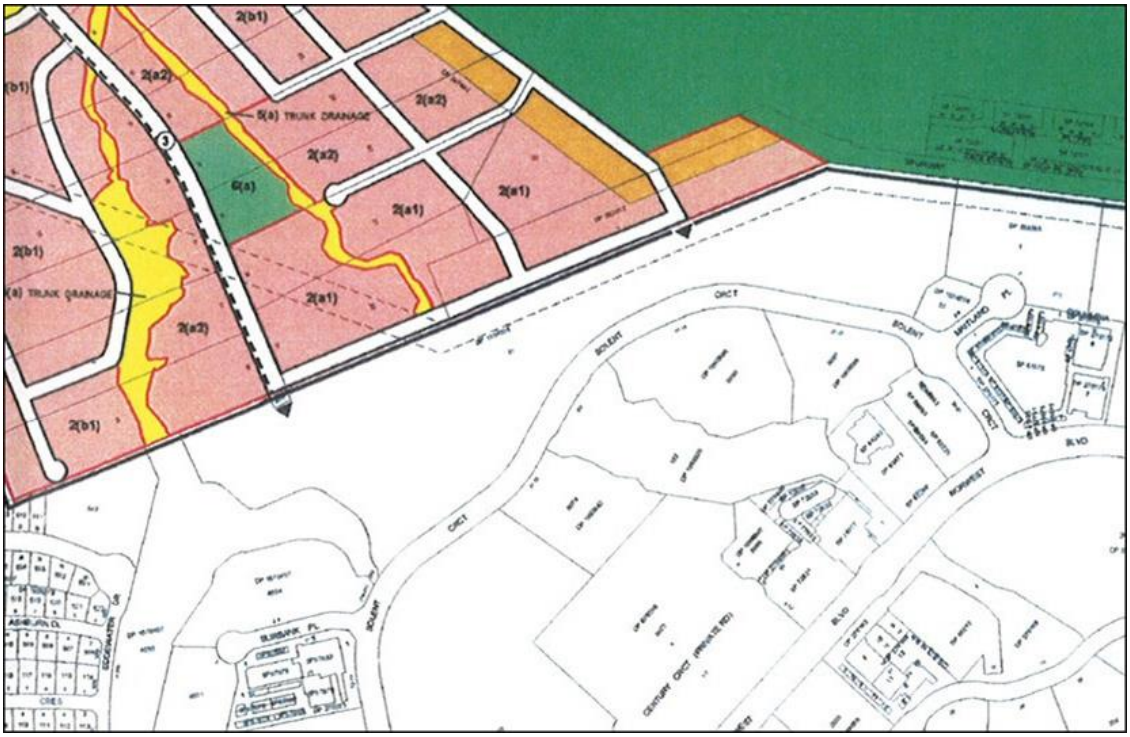

Figure 11 Partial plan from BHSC Draft DCP 20

APPENDIX 5 - PEDESTRIAN ACCESS

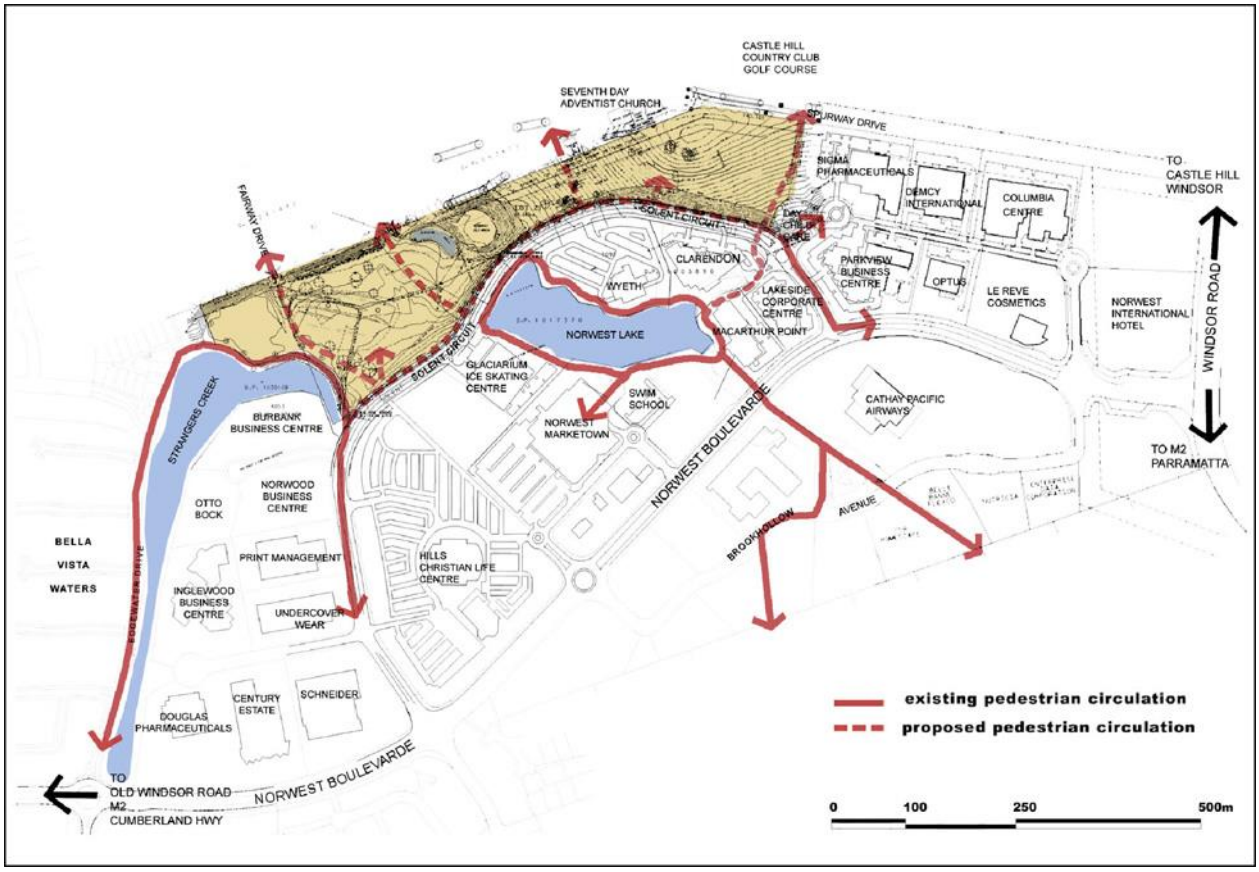

Figure 12 Pedestrian links

APPENDIX 6 - RIPARIAN CORRIDOR PLANT SCHEDULE

Table 8 Riparian Corridor Plant Schedule

Riparian Boundaries	
Casuarina glauca	Swamp Oak
Eucalyptus amplifolia	Cabbage Gum
Melaleuca decora	Bottlebrush
Melaleuca linarifolia	Snow-in-summer
Melaleuca nodosa	Nodding Bottlebrush
Melaleuca stypheloides	Prickly Paperbark

Plants for Water Management	
Carex apressa	Sedge
Juncus usitatus	Rush
Lomandra longifolia	Lomandra
Lomandra multiflora	Lomandra

APPENDIX 7 - RIPARIAN CORRIDOR - WETLAND PARK AND DETENTION BASIN



Figure 13 Wetland park and detention basin

The Hills Development Control Plan (DCP) 2012

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THE HILLS Sydney's Garden Shire



Part D Section 9
Target Site
23 - 25 North Rocks Road
North Rocks

D9

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1. INTRODUCTION

This Section of the DCP must be read in conjunction with Part A – Introduction of this DCP and other relevant Sections including:

- Part B Section 5 – Residential Flat Buildings
- Part C Section 1 – Parking
- Part C Section 6 – Flood Controlled Land.

This Section of the DCP has been prepared to guide future residential development on the former "go-kart" site at 23 - 25 North Rocks Road, North Rocks (subject site) in the Hills Shire.

1.1. LAND TO WHICH THIS SECTION OF THE DCP APPLIES

This Section applies to all land commonly referred to as the "Go-Kart Target Site", and comprises those lots identified in Figure 1.1 below and legally identified as:

- 23 North Rocks Road, North Rocks (Lot 3 DP 1158967); and
- 25 North Rocks Road, North Rocks (Lot 100 DP 1128357).

This site has a total area of approximately 2.24 hectares.

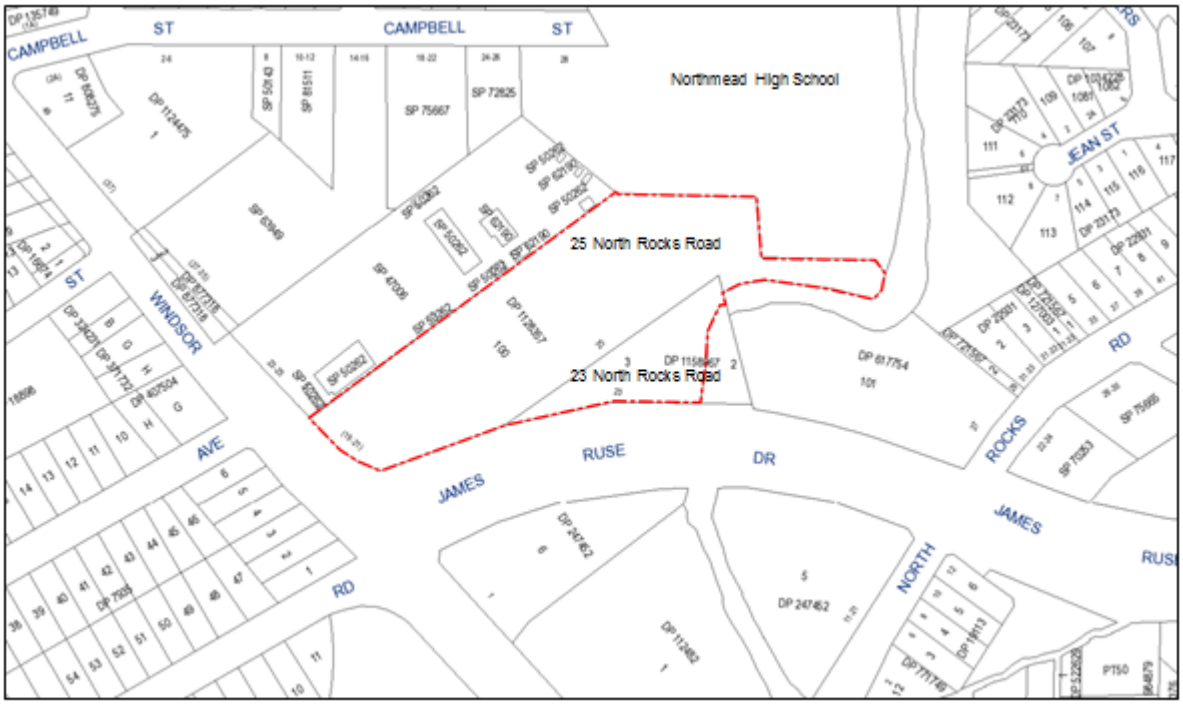

Figure 1.1 Target Site

1.2. OBJECTIVES OF THIS SECTION OF THE DCP

OBJECTIVES

(i) To achieve a medium to high density residential development on a site identified for this purpose by the Hills Shire.

(ii) To implement a development framework that will ensure anticipated future development of the site does not hinder the use or development of surrounding land for their intended or future purposes.

(iii) To incorporate and demonstrate best practice urban design on the site.

(iv) To provide design and environmental standards for the residential redevelopment of the site.

(v) To ensure the principles of SEPP 65 – Design Qualities of Residential Flat Development are considered and incorporated.

(vi) To ensure that any development on the site is appropriate to the site's context and enhances the surrounding natural characteristics.

(vii) To facilitate the amalgamation of sites and provision of a landscaped buffer to James Ruse Drive.

1.3. STRUCTURE OF THIS SECTION

This document has been divided into four parts:

1. Introduction
2. The Urban Context / Site Analysis
3. The Development Framework
4. Development Controls

2. URBAN CONTEXT/SITE ANALYSIS

Part 2 of this Section analyses the site's regional and local context. It outlines the site's placement and relationship to topography, views, drainage, accessibility, adjoining land uses and built forms.

It also identifies the opportunities and constraints exhibited by the site with respect to its regional and local context. This analysis has helped to inform the development strategy (part 3) and formulation of the development controls (part 4) for the site.

2.1. SITE ANALYSIS

2.1.1. SITE DESCRIPTION

The site is located on the north-eastern corner of the intersection of Windsor Road and James Ruse Drive, Northmead. It represents an important entry point to the Hills Shire from the south, lying just north of the boundary between The Hills and Parramatta Local Government Areas.

The site is irregular in shape and has a total area of approximately 2.24 hectares.

The site's primary frontage is to Windsor Road, however no vehicular access is available from Windsor Road or James Ruse Drive. The site is accessed from North Rocks Road.

Figure 2.1 illustrates the extent of the subject site.



Figure 2.1 Subject site

2.1.2. NOISE & VIBRATION

The site is primarily affected by traffic noise emanating from both James Ruse Drive and Windsor Road, and vibration from heavy vehicles.

A Noise Impact Assessment will be required to be lodged with any development application for residential development upon the site to determine the extent of acoustic treatment required to the buildings.

Issues relating to noise generated by the industrial premises to the north of the site and vibration from heavy vehicles will also need to be considered. Sufficient setbacks will be required to this boundary in conjunction with appropriate construction techniques to minimise any future noise and vibration impacts.

Noise impacts are illustrated in Figure 2.2.

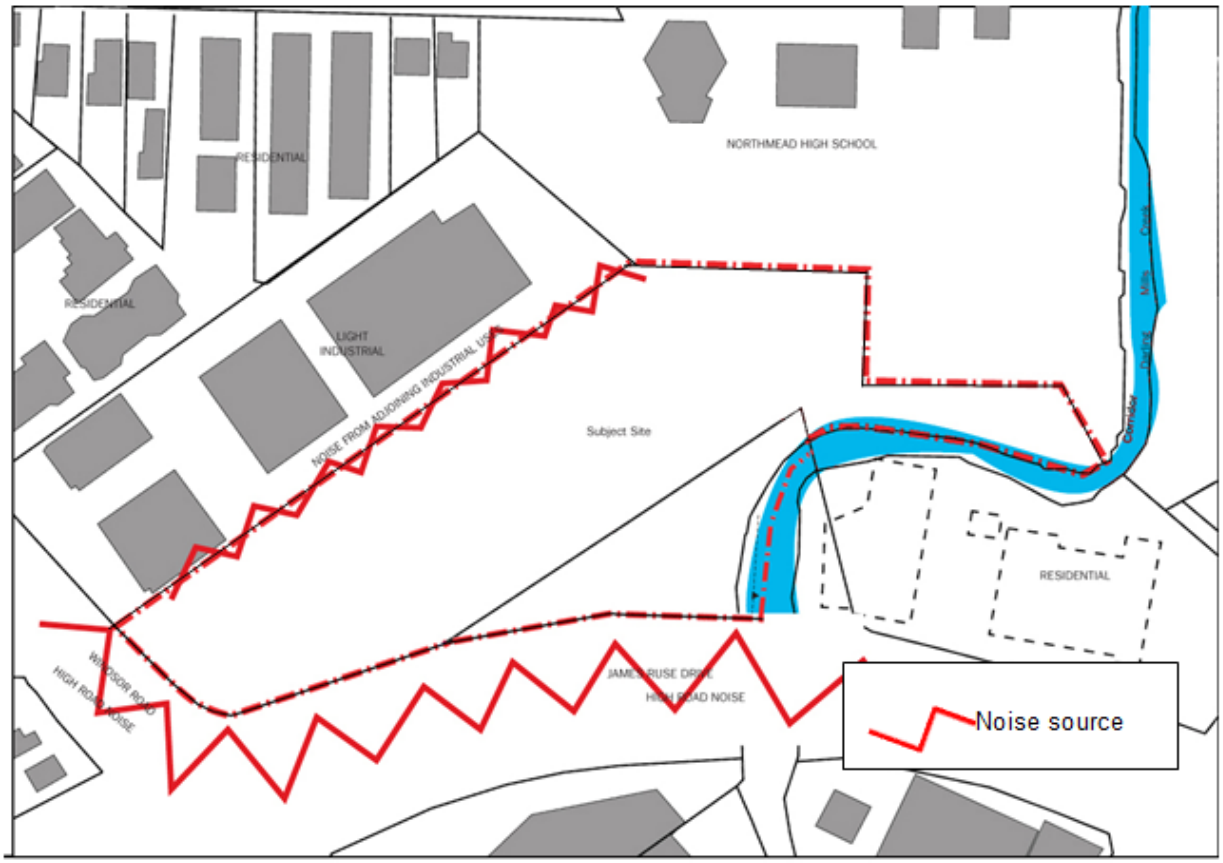

Figure 2.2 Noise impacts

2.1.3. EASEMENTS

A road widening easement of varying width lies along the site's Windsor Road frontage and a pipeline easement of varying width lies along the site's James Ruse Drive frontage. No development can occur over this pipeline easement. Any development on and within the vicinity of the pipeline should be referred to Caltex Australia Petroleum Pty Ltd for their comment.

An easement for access to the site passes through 23 North Rocks Road.

These constraints are illustrated in Figure 2.3.

2.2. SITE OPPORTUNITIES

The opportunities offered by the site and its surroundings are as follows:

- There is potential for good views to the Parramatta CBD and Darling Mills Creek from elevated positions on the site.
- The prominent corner position on two major arterial roads provides the opportunity to create a landmark built form which will reinforce this important intersection and act as a gateway to The Hills Shire.
- Given its proximity to public transport, pedestrian and cycle routes, schools, accessible green spaces and waterways, hospitals and shopping, the site is ideal to be redeveloped for medium density residential uses.
- There is the possibility to create a new pedestrian access across the site to link Campbell Street with Darling Mills Creek, whilst ensuring the creek and its core riparian are not compromised nor its function affected.
- The Darling Mills Creek and its associated natural environment create a pleasant outlook for the site and provide opportunities for regeneration of natural vegetation.
- There is potential to locate communal open space in the northern corner of the site to capitalise on its outlook, access and environmental quality. All open space and recreational areas should be located outside the core riparian corridor.
- Land at 23 North Rocks Road can provide a landscaped feature and buffer between James Ruse Drive and the built form. It also provides potential for the provision of additional vehicular circulation areas to enhance the amenity of the building entrance (ie. pick-up/drop-off).

Site opportunities are indicated in Figure 2.4.

2.3. SITE CONSTRAINTS

The constraints posed by the site and its surroundings are as follows:

- Significant traffic noise from Windsor Road and James Ruse Drive would require appropriate acoustic treatments to be incorporated.
- Noise from the adjoining industrial buildings means that sufficient setback would be required from the north-western boundary (in terms of both visual and acoustic privacy).
- The outlook to the adjoining industrial buildings is relatively poor. Appropriate screening would be required.
- The view to the two main roads is undesirable. A visual buffer would be required between these roads and the buildings.
- Development cannot occur over the road widening and pipeline easements in addition to the flood controlled land or the core riparian corridor along Darling Mills Creek.
- It is desirable to retain native vegetation located in the north-east of the site.

Site constraints are indicated in Figure 2.5.

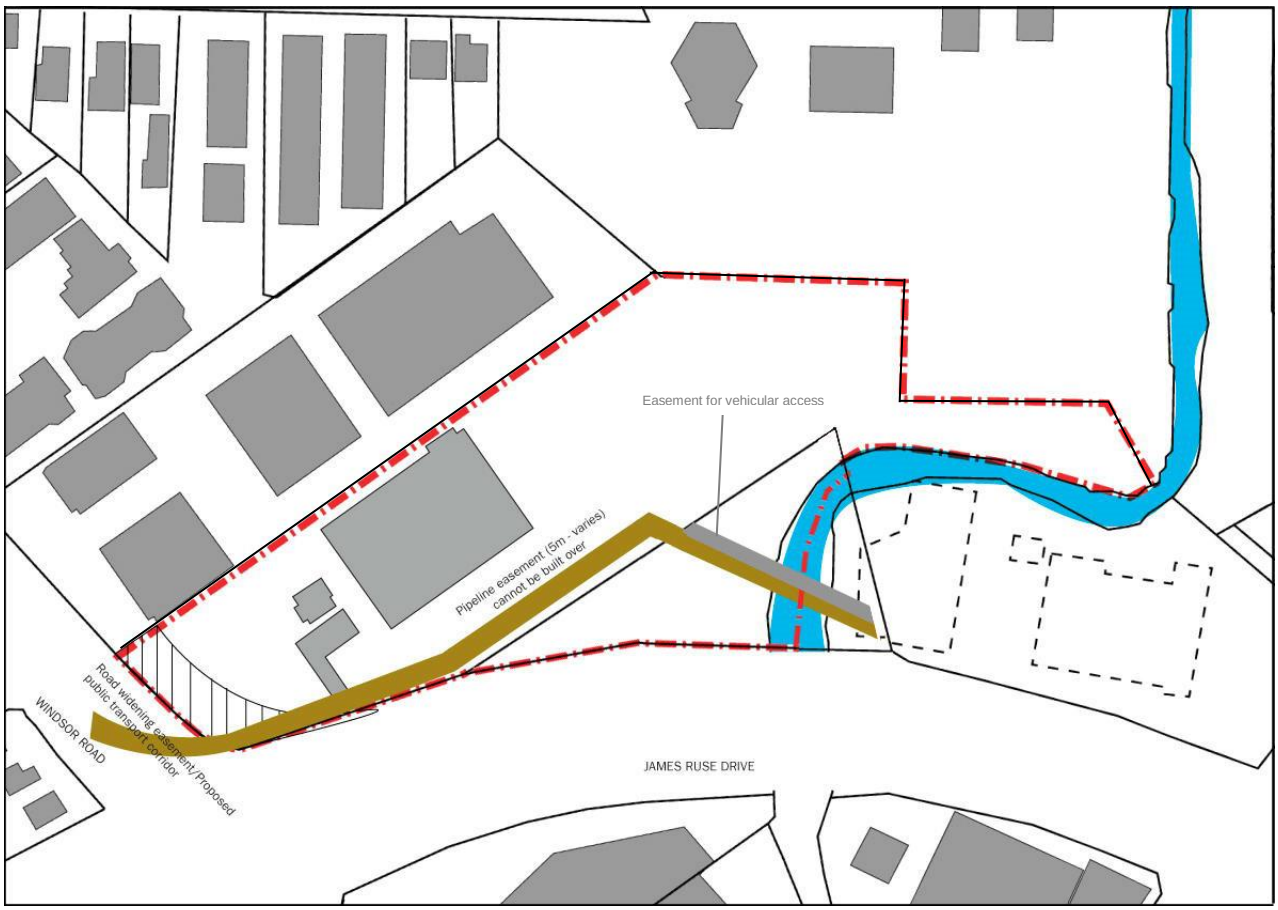

Figure 2.3 Easements

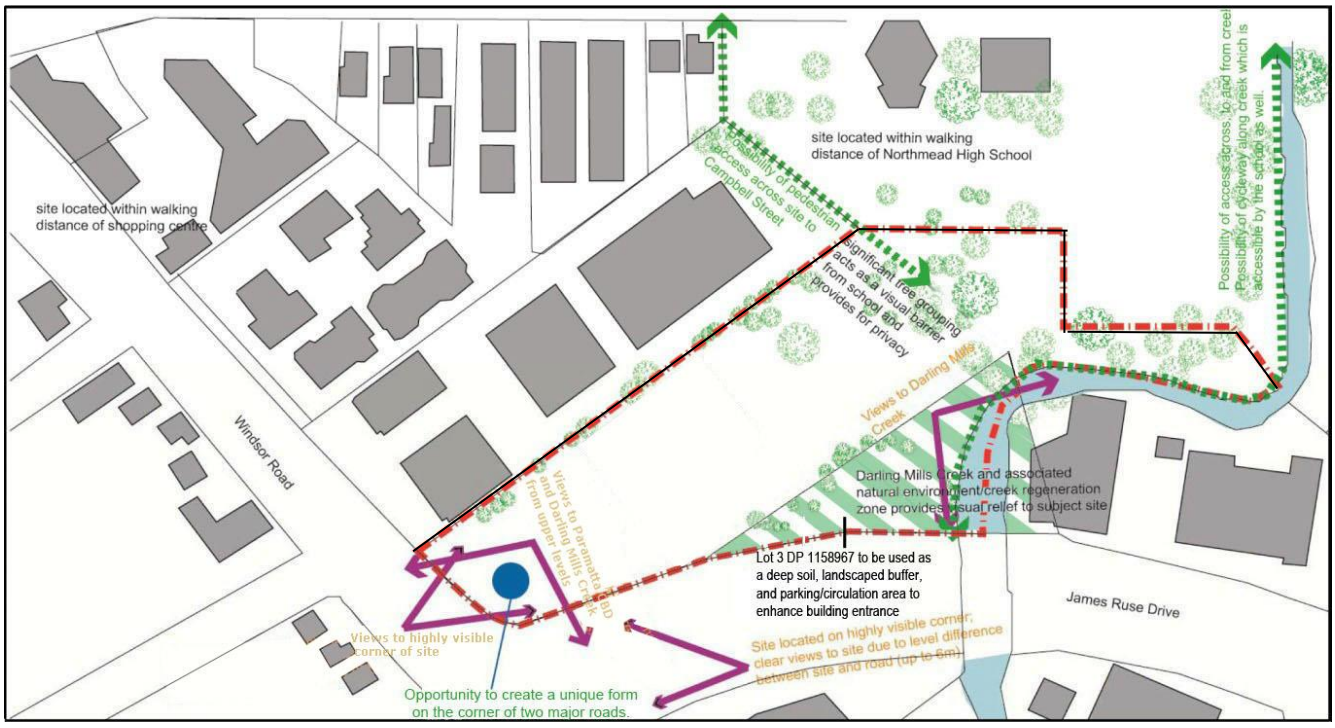

Figure 2.4 Site opportunities

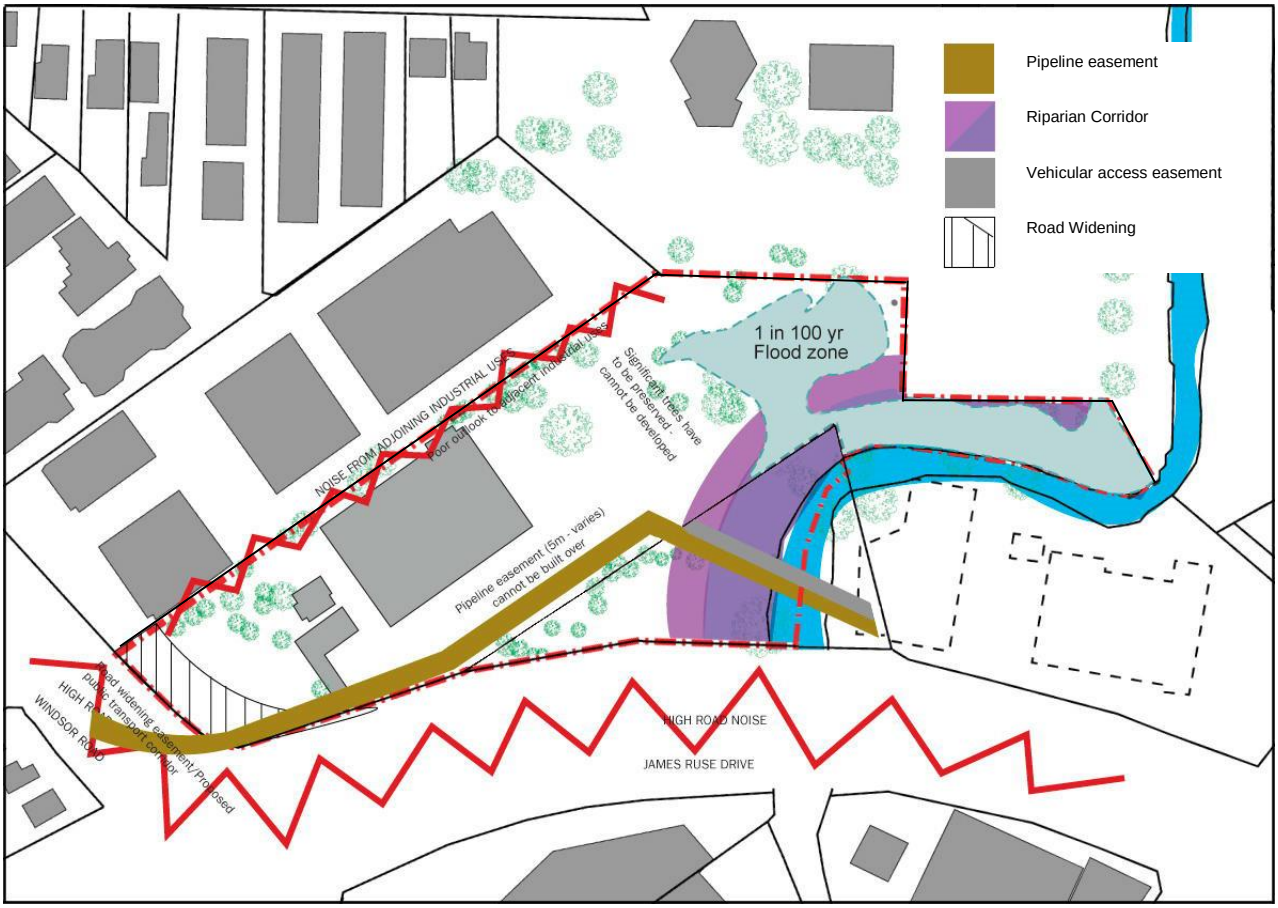

Figure 2.5 Site constraints

3. DEVELOPMENT STRATEGY

Part 3 contains development strategies for the site upon which the development controls in part 4 are based. The development strategy has been formulated with regard to the site analysis and the identification of opportunities and constraints undertaken in part 2 of this Plan.

Figure 3.1 illustrates the developable area on the site considering all requirements for setbacks and easements, access, possible focal points, open spaces and recreational facilities.

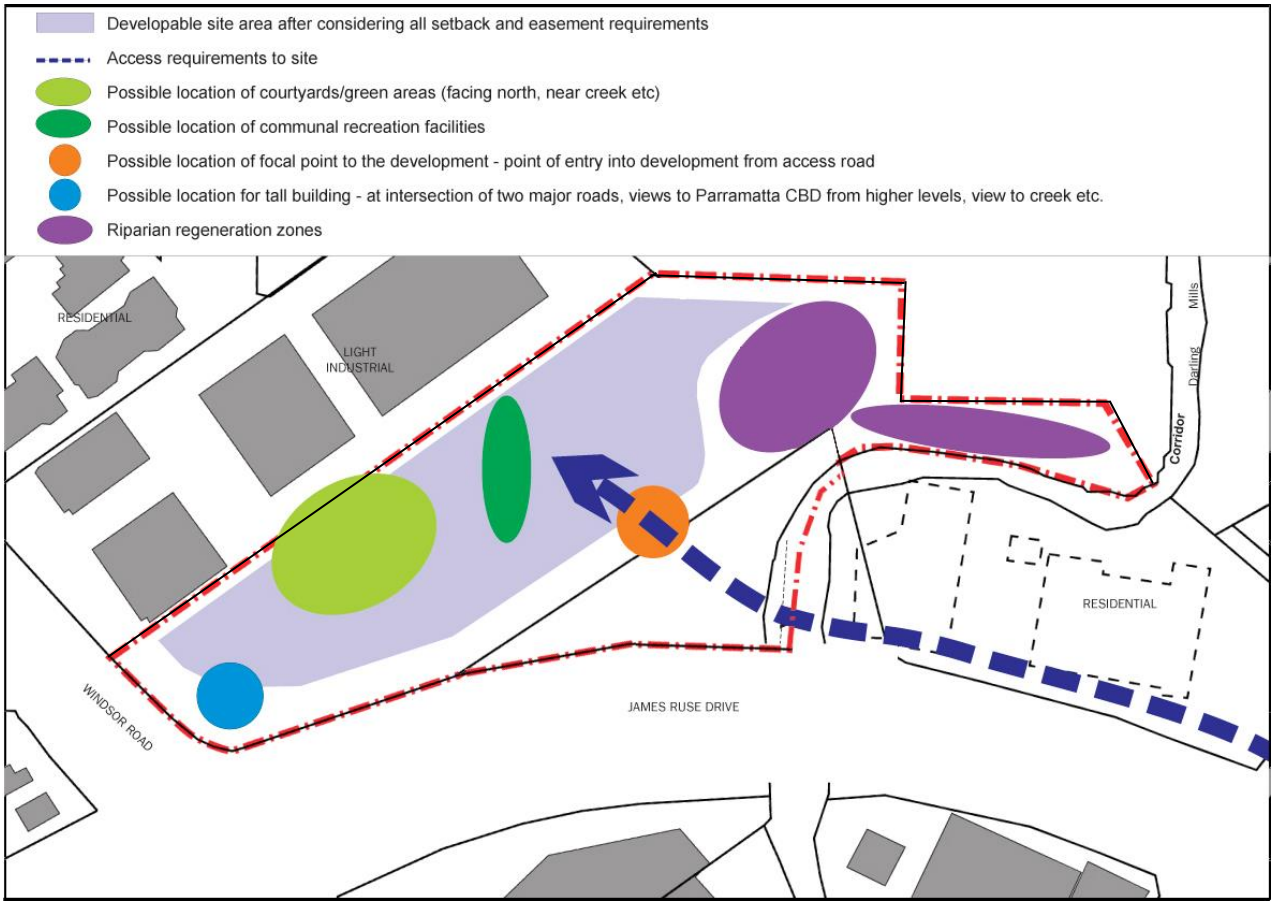

Figure 3.1 Development potential of the site

3.1. THE VISION / CONCEPT

The vision for the site is to create a quality residential development in North Rocks with high levels of residential amenity, that provide a choice of housing to meet the diverse needs of residents and cater for a variety of lifestyle expectations. Future development should contribute to the environmental and neighbourhood values of the locality through adherence to urban design principles that enhance these qualities.

The proposed vision is illustrated in Figures 3.2a and b.

Pedestrian promenades



Example of Landmark Structure





Enhanced access to natural environment and creek regeneration







Figure 3.2a Proposed development vision / concept



Figure 3.2b Proposed development vision / concept

3.2. BUILT FORM

A unique and taller building form is envisaged in the south-western corner of the site, adjacent to the intersection of James Ruse Drive and Windsor Road. This building will provide a focal point within the locality, marking the important intersection of James Ruse Drive and Windsor Road. A tall building in this location will result in negligible overshadowing impacts within the site and neighbouring development. In addition, increased building height on the highest point of the site will optimise views to Darling Mills Creek, the Parramatta CBD.

Building height will be reduced as the distance from the intersection of James Ruse Drive and Windsor Road increases. This is to enable an appropriate transition in height to provide an enhanced relationship with the lower built forms on adjacent properties.

The intent of this illustrated in Figure 3.3.

The design of buildings is to ensure optimum cross-ventilation and solar access into residential flats. Small building footprints are desirable on the site in order to achieve lower site coverage in response to the proximity of Darling Mills Creek and its riparian corridor and to allow for deep soil planting to establish a scale of vegetation compatible in scale with the proposed buildings.

Buildings are to be oriented so that living rooms of residential flats face north, maximising solar access and reducing the need for artificial lighting and heating.

3.3. BUILDING SEPARATION AND SETBACKS

Appropriate setbacks from boundaries and between buildings will be incorporated to minimise impacts upon visual and acoustic privacy, enable the growth of substantial vegetation, and minimise impacts on water quality. Setbacks are indicated in Figure 3.4.

The upper level of the building at the corner of Windsor Road and James Ruse Drive will incorporate a stepped feature. A bridging element will also be introduced in the centre of the western building to reduce massing. A curvilinear form can provide an enclosed open space to the north while creating visual interest.

Building footprints and height controls are illustrated in Figure 3.3.

3.4. BUILDING USES AND COMMUNAL FACILITIES

The site will be redeveloped for medium density residential uses. It is anticipated that 328 residential flats could be accommodated on the site.

Recreational uses such as tennis courts and swimming pools are appropriate, as well as facilities such as a gymnasium and/or a convenience store. Recommended locations for communal facilities are illustrated in Figure 3.5.

Communal facilities on the site will be located on the ground floor level to maximise accessibility. Floor to ceiling heights of the ground floor levels are to be maximised to enable a flexible change of use should future demand arise for alternative permitted uses.

3.5. ACCESS AND MOVEMENT

Consistent with Part D Section 1 - Target Site, 27-33 North Rocks Road, North Rocks, access to the site shall be from North Rocks Road via Lot 101 DP 617754 (27 North Rocks Road) and Lot 2 DP 1158967, and through Lot 3 DP 1158967 (23 North Rocks Road).

This access road is to cross Darling Mills Creek via a bridge that spans the most direct route and should be able to accommodate two lanes of vehicular traffic, as well as pedestrians. The location of the proposed access is illustrated in Figure 3.6.

Part of Lot 3 DP 1158967, 23 North Rocks Road must be utilised to provide a formal entrance to the development through the provision of an at-grade pick-up / drop-off and loading area, pedestrian shelter and clear directional signage for visitors in addition to substantial landscaping and deep soil planting.

There is potential for a shared pedestrian and cycleway link from Darling Mills Creek to Campbell Street. New development should have regard to this potential link.

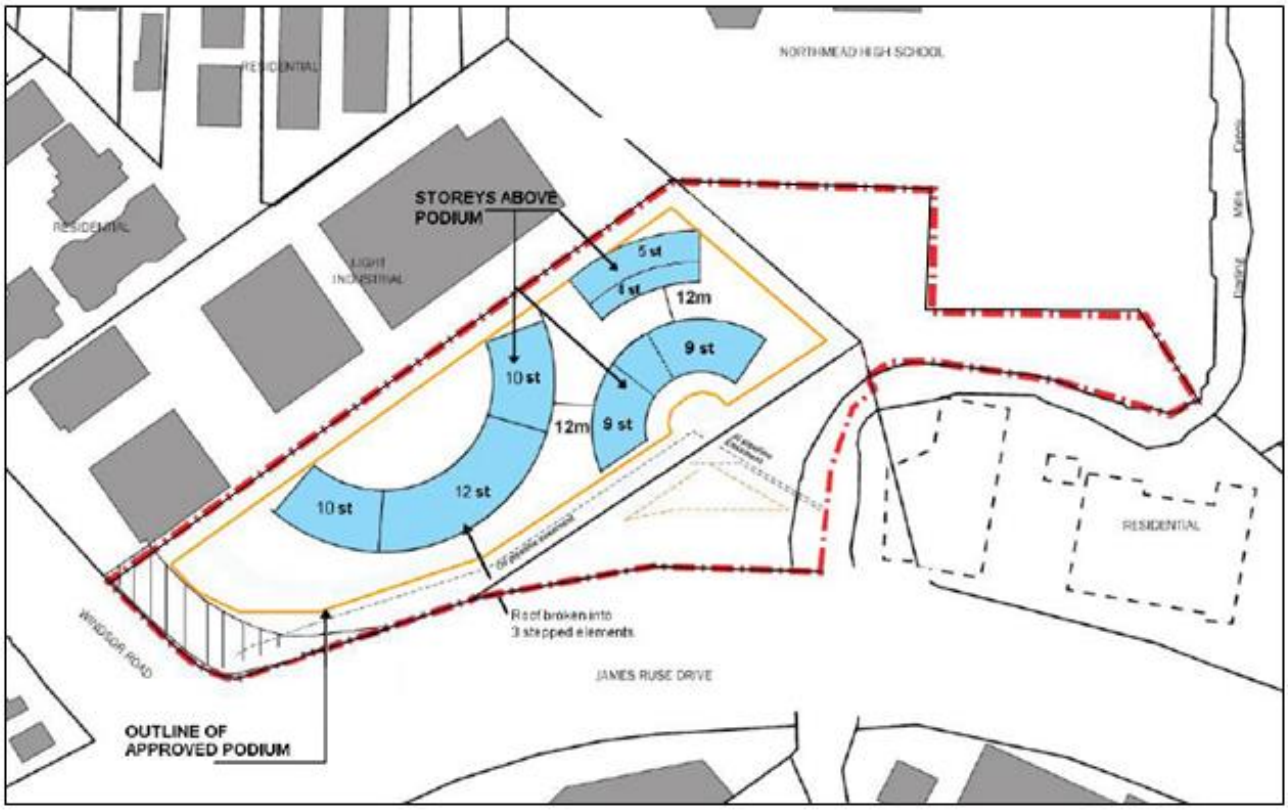

Figure 3.3 Building separation and height controls

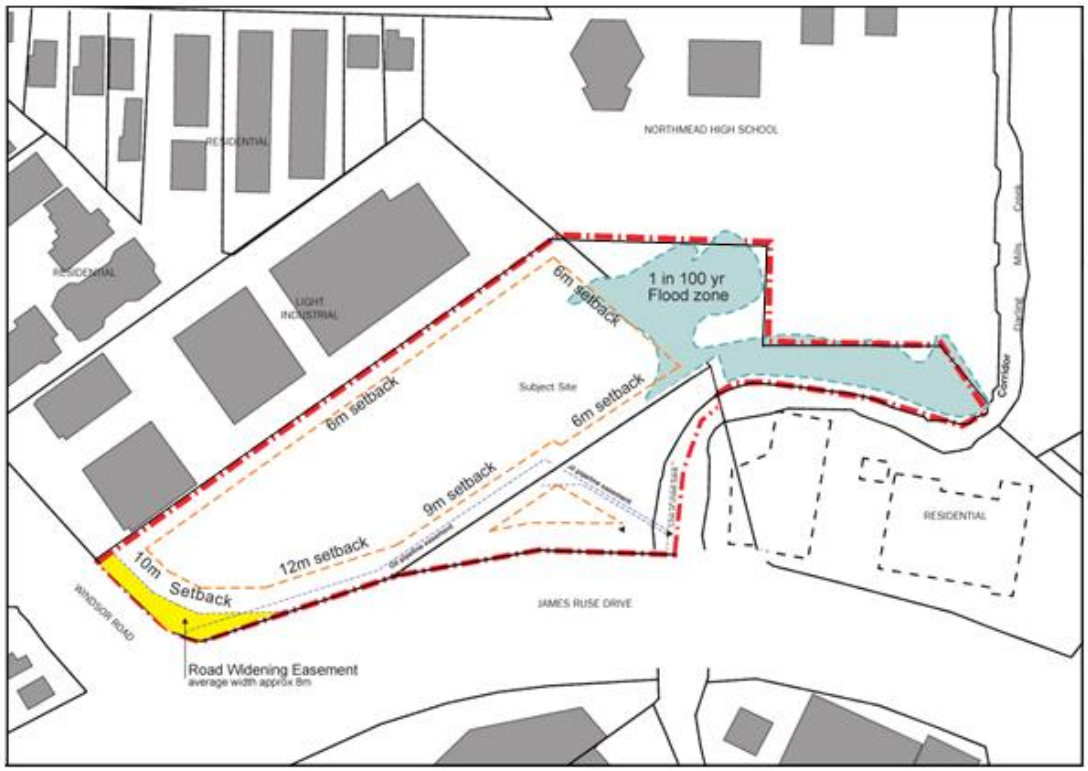

Figure 3.4 Setback controls



Figure 3.5 Space use zones

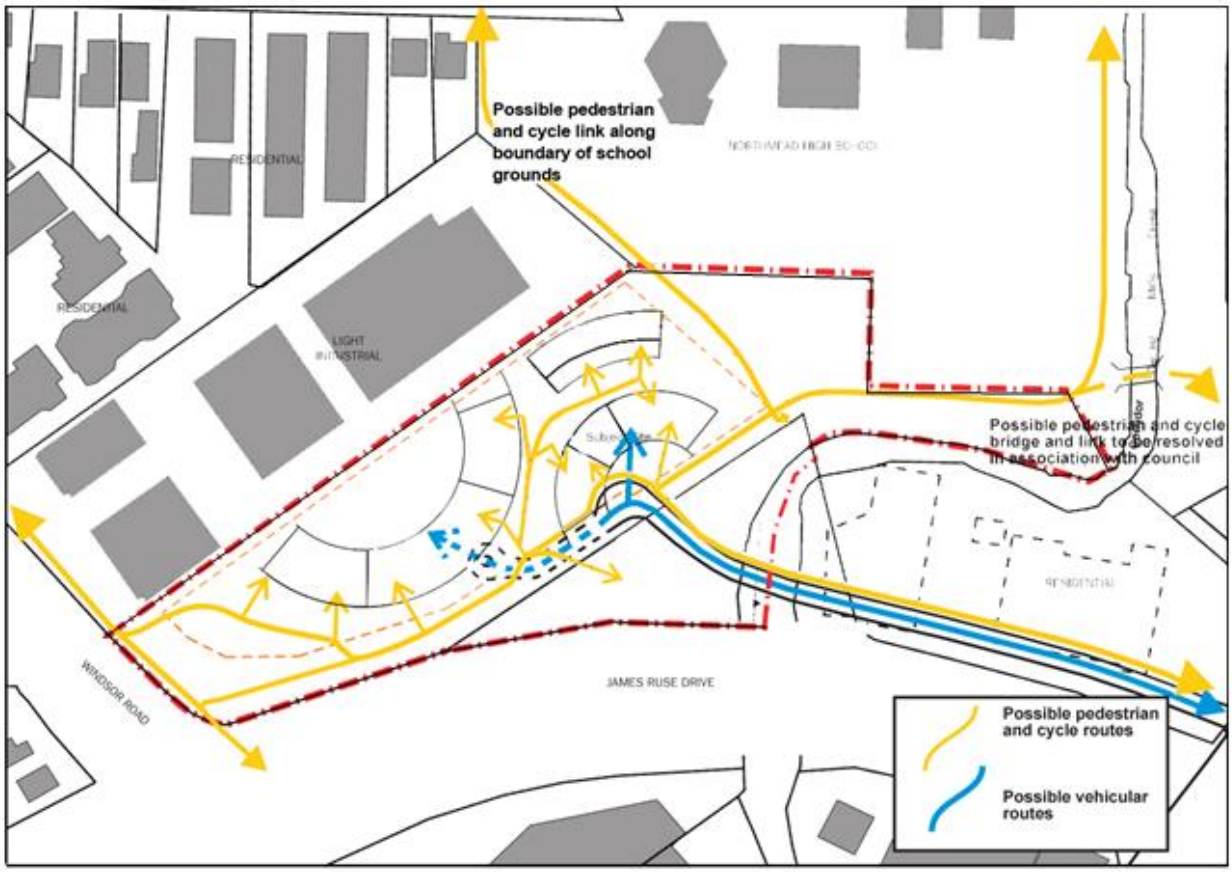

Figure 3.6 Access and movement

3.6. OPEN SPACE, VEGETATION AND LANDSCAPING

Four types of open space zones are envisaged for the site:

1. Structured and sunny open space in the form of north-facing courtyards for the private use of residents;
2. Recreational and passive open space in the middle of the site and on 23 North Rocks Road;
3. Unstructured and natural riparian corridor adjacent to Darling Mills Creek; and
4. Landscaped buffer and riparian regeneration area adjacent to James Ruse Drive (23 North Rocks Road) in addition to at-grade vehicular circulation / pedestrian movement area.

The location of these open space zones are illustrated in Figure 3.7.

Building footprints are minimised to ensure deep soil zones are incorporated across the site the establishment of trees of sufficient height to complement the scale of the proposed buildings.

Open spaces are concentrated on the northern sides of the development or aligned north-south to ensure adequate solar access, thus maximising usability. Re-vegetation along the creek, especially within the 1 in 100 year flood zone, will significantly improve the natural environment in this area.

The grouping of trees within the north-eastern part of the site should be preserved as much as possible for aesthetic and environmental reasons. This grouping of trees will also act as a visual barrier, providing privacy for future development by shielding it from the adjoining school grounds.

3.7. RESIDENTIAL AMENITY

Adequate separation should be provided between buildings and from site boundaries to ensure visual and acoustic privacy for residents. Tree planting is to be provided along main roads and the industrial interface to provide visual and acoustic amenity.

Operable shutters and louvres are to be incorporated into the overall design of the building where noise and light sources are likely to affect the future residents. Living room and bedroom zones are indicated on Figure 3.8.

Where this cannot be achieved, double-glazed openings and other techniques should be used to provide acoustic amenity.

Consideration must also be given to the likely impacts of fumes and odours from both heavy vehicles and the adjoining light industrial area.

3.8. VIEWS

The primary outlook of the site is to the Parramatta CBD to the south, whilst secondary views are available to the north-east over the school ground and the Darling Mills Creek corridor, as indicated in Figure 3.8.

It is proposed to maximise the use of these views through appropriate building orientation, building separation and stepping of building heights to encourage view sharing.

3.9 LOT 3 DP 1158967, 23 NORTH ROCKS ROAD, NORTH ROCKS

That part of the site consisting of Lot 3 DP 1158967, 23 North Rocks Road is constrained by a number of features including flooding, riparian protection zone, the petroleum products pipeline easement, setbacks to James Ruse Drive and the need to provide access to the remainder of the target site.

This land is to be amalgamated with Lot 100 DP 1128357, 25 North Rocks Road to create an enlarged and cohesive target site since it is not suitable to accommodate separate residential development. The land is suitable for the provision of the access road, substantial deep soil planting and riparian regeneration in order to provide a buffer beween the residential built form and James Ruse Drive.

Part of this land may also accommodate at-grade, short term parking (pick-up / drop-off, loading and deliveries) and the like to enhance the design and function of the building entrance, and assist in the creation of a sense of address.

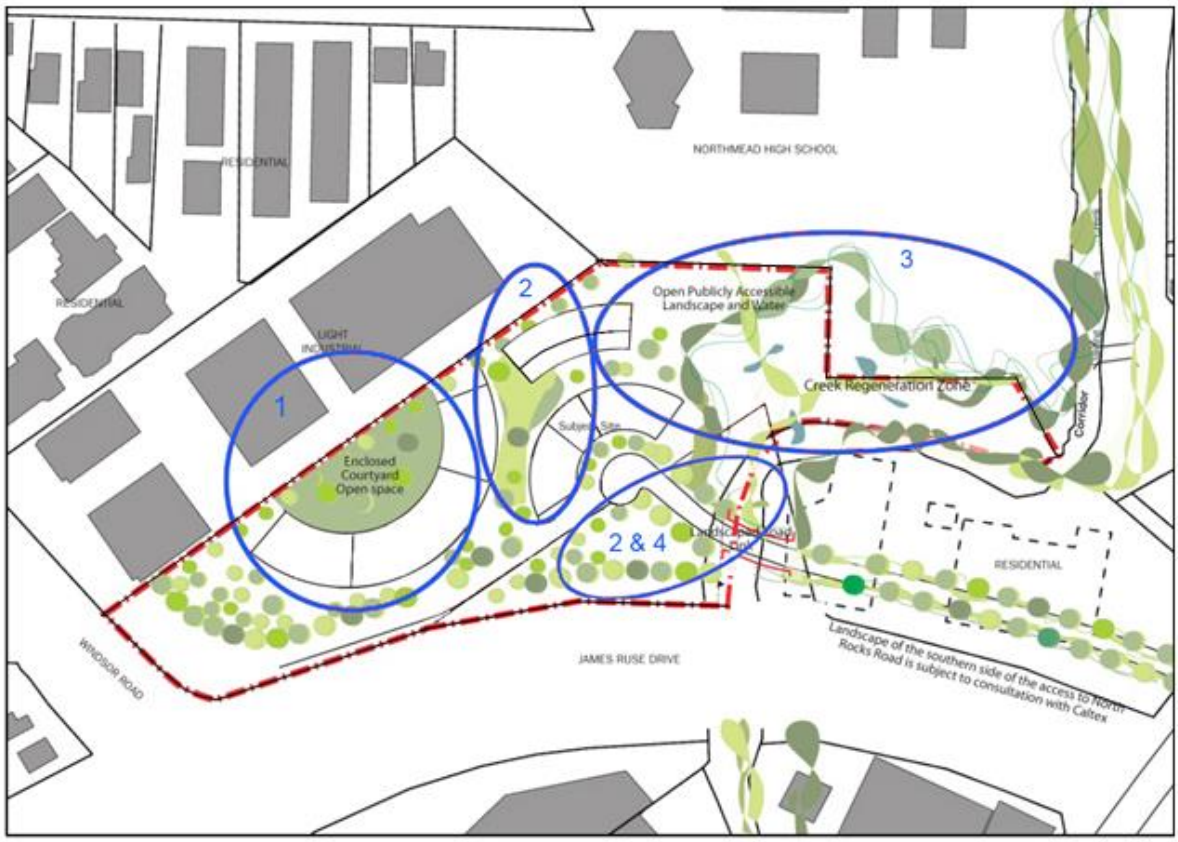

Figure 3.7 Open space / Deep zones

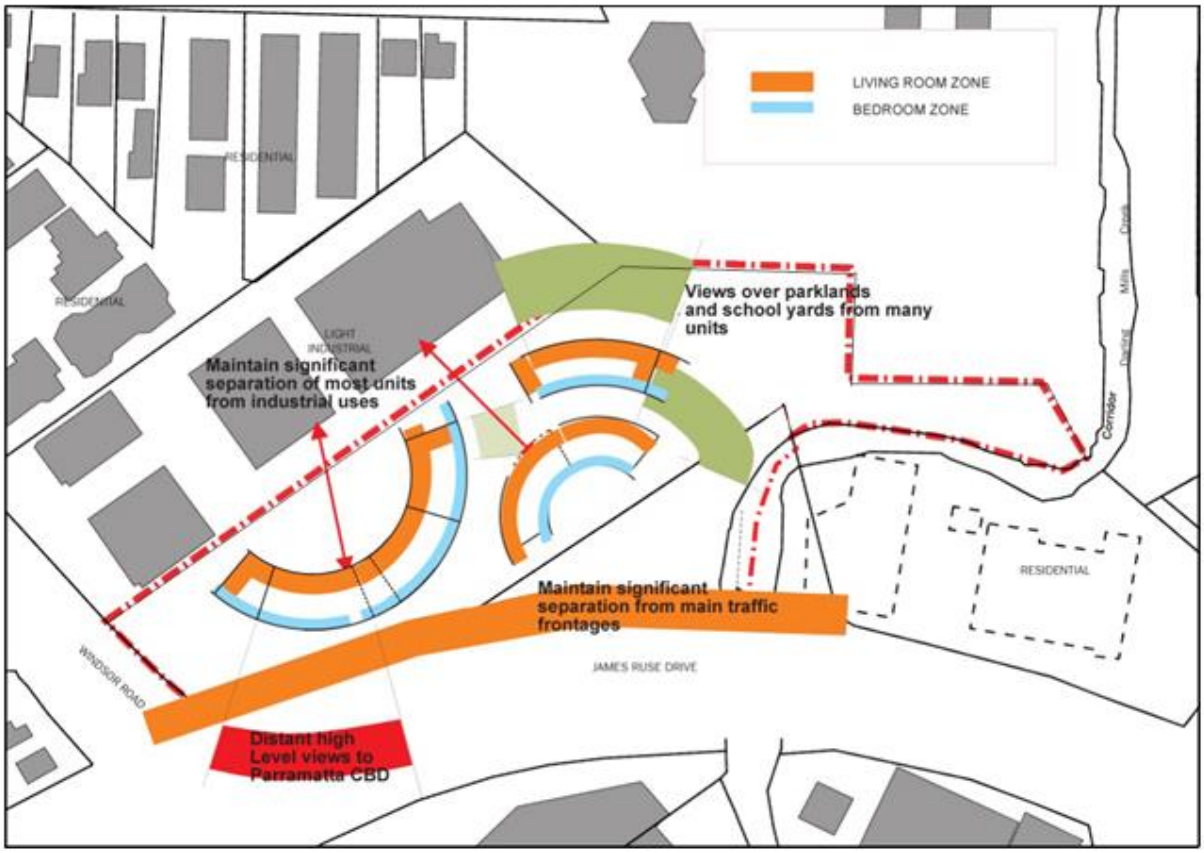

Figure 3.8 Living room zones and views

4. OBJECTIVES AND DEVELOPMENT CONTROLS

Objectives and Development Controls for the future development of the site are set out in the following sections, and are based on the development framework identified in part 3 of this Section of the DCP. Compliance with the controls will not necessarily ensure the approval by Council of any application. Each application will be considered on the individual circumstances and merits of the case in terms of the achievement of the objectives.

The controls in this part are not an exhaustive list of the controls applicable to this site. In addition to those policies, guidelines and documents specified in Part A – Introduction Section 1.4 of this DCP, this target site Section is to be read in conjunction with other relevant Sections including:

- Part B Section 5 – Residential Flat Buildings
- Part C Section 1 – Parking
- Part C Section 6 – Flood Controlled Land

4.1. BUILT FORM

4.1.1. SITE PLANNING AND SUBDIVISION

OBJECTIVES

(i) To achieve coherent site planning and development that relates to the natural typography and environmental constraints on the site.

(ii) To provide for the effective management of communal spaces within the development.

(iii) To provide for the orderly development of the target site and enhanced urban design through the amalgamation of sites.

(iv) To ensure the amenity of future residents by concentrating all residential development within Lot 100 DP 1128357, 25 North Rocks Road.

DEVELOPMENT CONTROLS

(a) Future development to be located generally in accordance with Figure 4.2.

(b) Subdivision of development on the site shall provide for the effective management of common open space areas and facilities and shall generally be in the form of strata title or community title or a combination of both.

(c) Lot 3 DP 1158967, 23 North Rocks Road and Lot 100 DP 1128357, 25 North Rocks Road must be amalgamated prior to or concurrent with the granting of consent for any development in accordance with the provisions of this Section of the DCP.

(d) Any consent for residential development on Lot 3 DP 1158967, 23 North Rocks Road, North Rocks must be surrendered prior to or concurrent with the granting of consent for any development in accordance with the provisions of this Section of the DCP.

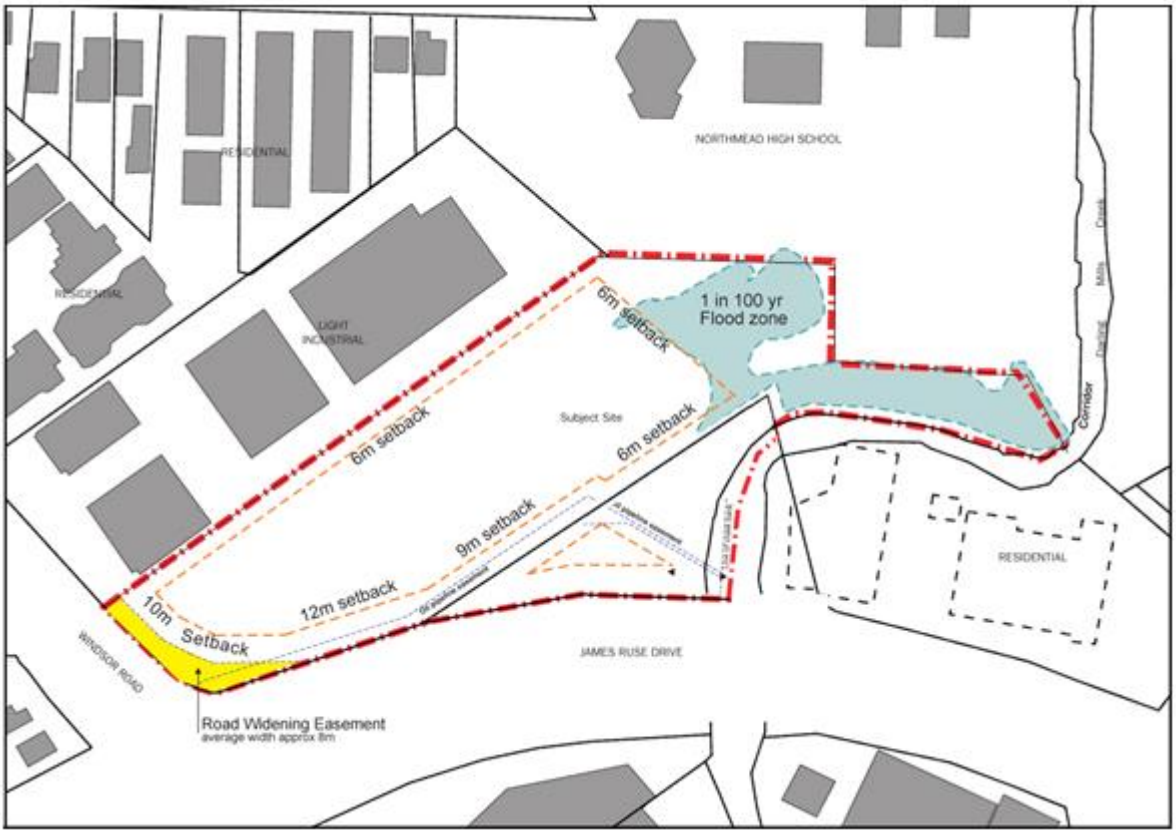

Figure 4.1 Setbacks

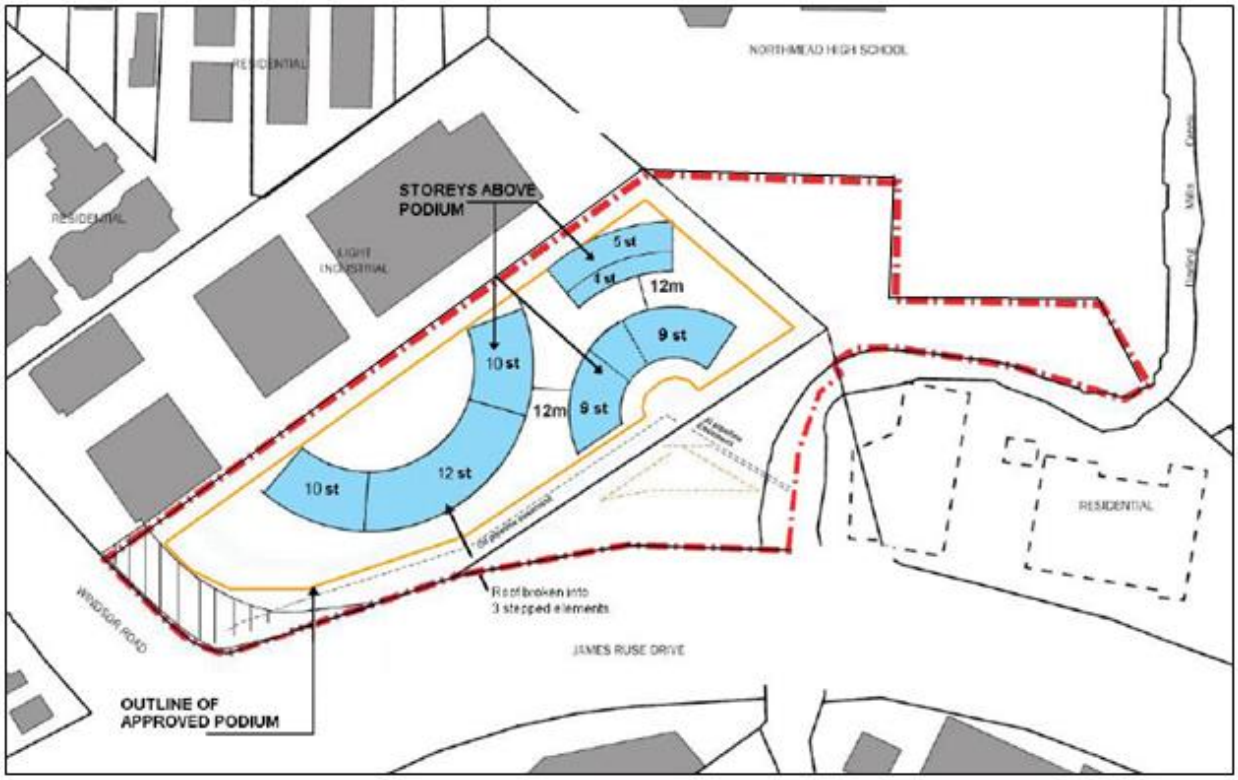

Figure 4.2 Building heights

4.1.2. SETBACKS

OBJECTIVES

(i) To provide setbacks that complement the setting, which allow flexibility in siting of buildings and allow for landscaping and common open space around new buildings.

(ii) To minimise overshadowing and protect the visual quality of open space areas and the creek regeneration area (riparian corridor).

DEVELOPMENT CONTROLS

(a) Buildings are to be set back in accordance with Figure 4.1 and:

(b) A minimum of 10 metres to the proposed realignment of Windsor Road pursuant to the Land Reservation Acquisition Map of the Local Environmental Plan 2012.

(c) A minimum of 12 metres to James Ruse Drive.

(d) A minimum of 6 metres to side and rear boundaries.

(e) A minimum of 9 metres to the south-eastern boundary to the extent that the oil pipeline runs along the boundary.

(f) A core riparian corridor is to be provided along Darling Mills Creek, with a minimum width of 20 metres from the top of bank (widening up to 30 metres where the 1:100 flood line exceeds 30 metres from the top of bank), with a 10 metre buffer.

(g) No balcony shall project into the setback area.

4.1.3. HUNTER PIPELINE EASEMENT & AGL GAS MAIN

OBJECTIVE

(i) To preserve the integrity of the Hunter Pipeline easement and AGL gas main.

DEVELOPMENT CONTROLS

(a) The applicant is required to consult with Caltex Australia Petroleum Pty Ltd and AGL with respect to the location of any proposed structure or building on or in the vicinity of the pipeline or gas main.

(b) Evidence of consultation and the concurrence of Caltex Australia Petroleum Pty Ltd and AGL is to be submitted with any development application.

4.1.4. BUILDING AND CEILING HEIGHTS

OBJECTIVES

(i) To ensure future development responds to the desired scale and character of the street and local area.

(ii) To minimise overshadowing of adjoining properties and open spaces.

(iii) To facilitate better natural daylight access into the depths of residential flats.

(iv) To facilitate well-proportioned rooms within residential flats, and to increase the sense of space within them.

(v) To create a suitable landmark building which will help to reinforce the main southern gateway to the Hills Shire.

(vi) To provide adequate clearance at the ground level to all buildings to permit a flexibility in the use of ground floor spaces.

DEVELOPMENT CONTROLS

(a) Buildings on the site are to comply with the maximum height in storeys as illustrated in Figure 4.2 and:
- A maximum of 12 storeys adjacent to the intersection of Windsor Road and James Ruse Drive, stepping down to 10 storeys adjoining the north-western boundary.
- A maximum of 5 storeys to the north-eastern boundary to the school.
- A maximum of 9 storeys across the middle of the site.

(b) The following minimum ceiling heights are to be complied with:
- All ground floors - Minimum of 3.3 metres floor to finished ceiling height (to promote solar access to ground floor residential flats, to provide articulation of the building facade and to promote the possibility of flexibility of use); and
- All other floors - Minimum of 2.7 metres floor to finished ceiling height.

4.1.5. BUILDING SEPARATION

OBJECTIVES

(i) To ensure that new development is scaled to support the desired area character with appropriate massing and spacing between buildings.

(ii) To control overshadowing of adjacent properties and private or shared open space.

(iii) To allow for the provision of open space with appropriate size and proportion for recreational activities for building occupants.

(iv) To provide deep soil zones for the establishment of tree planting and storm water management, where contextual and site conditions allow.

DEVELOPMENT CONTROLS

The following minimum rules of building separation are to be complied with:

(a) Up to 4 storeys (up to 12 metres)

- 12 metres between habitable rooms.
- 9 metres between habitable rooms/balconies and non-habitable rooms.
- 6 metres between non-habitable rooms.

(b) 5-8 storeys (up to 25 metres)

- 18 metres between habitable rooms.
- 13 metres between habitable rooms/balconies and non-habitable rooms.
- 9 metres between non-habitable rooms.

(c) 9 storeys and above (over 25 metres)

- 24 metres between habitable rooms.
- 18 metres between habitable rooms/balconies and non-habitable rooms.
- 12 metres between non-habitable rooms.

4.1.6. BUILDING DEPTH

OBJECTIVES

(i) To provide adequate amenity for building occupants in terms of solar access and natural ventilation.

(ii) To provide for dual aspect/cross ventilated residential flats.

DEVELOPMENT CONTROL

(a) Building depth is to be a maximum of 18 metres, except for balconies, fin walls, parapets and awnings which may project up to 2 metres beyond the wall of buildings.

4.1.7. BUILDING FACADES

OBJECTIVES

(i) To promote high architectural quality in buildings.

(ii) To ensure that building elements are integrated into the overall building form and façade design.

(iii) To ensure buildings respond to environmental conditions such as noise, sun, breezes, privacy and views.

(iv) To promote integration of building and private open space.

DEVELOPMENT CONTROLS

(a) Columns, beams, floor slabs, balconies, window openings and fenestration, doors, balustrades, roof forms and parapets, should be used to create interest in the façade.

(b) Facades are to be composed with an appropriate scale and proportion, which respond to building use and the desired character by:

- Expressing the internal layout of the building, for example, vertical bays or its structure.
- Articulating building entries with awnings, porticos, recesses, blade walls and projecting bays.
- Selecting balcony types which respond to the street context, building orientation and residential amenity. Cantilevered, partially recessed, or wholly recessed will all create different façade profiles.
- Using a variety of window types to express the various elements of new buildings.
- Incorporating architectural features which give human scale to the design of the building at street level. These can include entrance porches, awnings, colonnades, pergolas and fences. Recessed balconies and deep windows may be used to create articulation and define shadows, thereby adding visual depth to the façade.

(c) Facade design is to reflect the orientation of the site using elements such as sun shading as environmental controls, depending on the façade orientation.

(d) Building services such as drainage pipes are to be coordinated and integrated, with the overall façade and balcony design.

(e) The top 3 storeys and the lowest 1-2 storeys of any building are to be sufficiently articulated (through varied setbacks, architectural treatments, materials and/or colours) so that they can be read as separate elements of the building.

4.1.8. ROOF DESIGN

OBJECTIVES

(i) To provide quality roof designs, which contribute to the overall design and performance of residential flat buildings.

(ii) To increase the longevity of the building through weather protection.

(iii) To create interest and variety in the streetscape.

DEVELOPMENT CONTROLS

(a) The roof is to be compatible with the size and scale of the building and the building elevations. This includes the design of any parapet or terminating elements and the selection of roof materials.

(b) Roof design is to respond to the orientation of the site, for example, by using eaves and skillion roofs to respond to sun access.

(c) Service elements are to be integrated into the design of the roof. These elements include lift over-runs, service plants, vent stacks, gutters and downpipes.

(d) The use/future use of the roof for sustainable functions is to be facilitated by:

- Allowing rainwater tanks for water conservation.
- Suitability for photovoltaic applications.
- Allowing for future innovative design solutions, such as water features or green roofs.

(e) Copying of elements and detailing of detached dwellings is to be avoided as this often results in inappropriate proportion, scale and detail for residential flat buildings.

4.1.9. DENSITY

OBJECTIVES

(i) To ensure that residential flat building development does not over-tax services and facilities.

(ii) To provide residential flat buildings with a high level internal amenity.

(iii) Maximise the utilisation of public transport facilities.

DEVELOPMENT CONTROLS

(a) No more than 328 residential flats may be provided on the site.

4.1.10. RESIDENTIAL FLAT MIX

OBJECTIVES

(i) To provide a mix of residential flat types and size to accommodate a range of household types.

(ii) To ensure that individual units are of a size suitable to meet the needs of residents.

DEVELOPMENT CONTROLS

(a) A minimum of 10% of the residential component of the development is to comprise studio or 1 bedroom residential flats.

(b) A minimum of 10% of the residential component of the development is to comprise 3 bedroom residential flats.

(c) Development should comply with the minimum unit floor area for Part B Section 5 - Residential Flat Buildings.

4.1.11. VISUAL AND ACOUSTIC PRIVACY

OBJECTIVES

(i) To provide reasonable levels of visual privacy externally and internally, during the day and at night.

(ii) To maximise outlook and views from principal rooms and private open spaces without compromising visual privacy.

(iii) To incorporate appropriate materials and construction techniques to minimise acoustic

impacts from Windsor Road, James Ruse Drive and the adjoining industrial area.

DEVELOPMENT CONTROLS

(a) New development is to be located and oriented to maximise visual privacy between buildings on site and adjacent buildings.

(b) Building layouts are to be designed such that direct overlooking of rooms and private open spaces is minimised in residential flats by:

- Separating communal open space, common areas and access routes through the development from the windows of rooms, particularly habitable rooms.
- Changing the level between ground floor residential flats with their associated private open space, and the public domain or communal open space.

(c) Building and site design are to increase privacy without compromising access to light and air by:

- Offsetting windows of residential flats in new development from adjacent development windows.
- Location of windows between habitable rooms to avoid direct overlooking.
- Recessing balconies and/or 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.

(d) Conflicts between noise, outlook and views are to be resolved by using design measures such as double glazing, operable screens to balconies and continuous walls to ground level courtyards where they do not conflict with streetscape or other amenity requirements.

(e) Developments are to be designed to minimise noise transition between residential flats by locating similar uses next to each other and by using storage or circulation zones within an residential flat building to buffer noise from adjacent residential flats, mechanical services or corridors and lobby areas and minimising the amount of party (shared) walls with other residential flats.

(f) Dividing walls and floors between dwellings shall be constructed to limit noise transmission to 45 STC (Sounds Transmission Class) in accordance with Part F (5) of the Building Code of Australia.

(g) An Acoustic Report/Noise Impact Assessment is to be submitted with a development application for the residential use of the site. The report is to address and make recommendations with regard to noise and vibration generated by heavy vehicles and the adjoining light industrial area, and from Windsor Road and James Ruse Drive. The recommendations of the report are to be incorporated into the design and construction of the development through appropriate noise shielding and attenuation techniques.

(h) Dwellings that adjoin arterial roads are to be designed to acceptable internal noise levels, based on AS 3671- Road Traffic Noise Intrusion Guidelines.

(i) The buildings shall be designed and constructed to comply with the following criteria for all noise intrusion from external sources (including mechanical services from within the development itself), with windows and doors closed: -

Internal Space	**Time Period**	**Repeatable Maximum*** **LAeq (1 Hour)**
Living Areas	Day or night	≤ 35 dB(A)
Sleeping Areas	Day (7am to 10pm)	≤ 35 dB(A)
Sleeping Areas	Night (10pm to 7am)	≤ 35 dB(A)

*Repeatable Maximum is the highest tenth percentile hourly A-weighted LAeq noise level.

(j) The buildings shall be designed to minimise noise from known noise sources at any time and as far as possible minimise noise entering open windows and doors.

4.2. LANDSCAPING

4.2.1. LANDSCAPE DESIGN AND OPEN SPACE

OBJECTIVES

(i) To ensure that landscaping and open space design complements the environmentally sensitive nature of the site.

(ii) To enhance residents' quality of life by providing privacy, pleasant outlook, views and a range of open spaces.

(iii) To provide habitat for native indigenous plants and animals.

(iv) To improve stormwater quality and reduce quantity of run off.

(v) To improve the microclimate and solar performance within the development.

(vi) To not impact upon the continued use of the Hunter Pipeline.

(vii) To enhance the amenity and appearance of the development when viewed from James Ruse Drive by providing significant landscaping that will act as a visual buffer.

DEVELOPMENT CONTROLS

(a) The amenity of open space is to be improved with landscape design by:
- Providing appropriate shade from trees or structures.
- Screening cars, communal drying areas, and courtyards of ground floor units.
- Locating art works where they can be viewed by users of open space and/or from within residential flats.

(b) The energy and solar efficiency of dwellings and the microclimate of private open spaces are to be improved by:
- Incorporating trees which allow shading in summer and low angle sun penetration in winter on the eastern and western sides of a dwelling.
- Varying heights of different species of trees and shrubs to shade walls and windows.
- Locating pergolas on balconies and courtyards to create shaded areas in summer and private areas for outdoor living.

(c) Landscape design is to contribute to water and stormwater efficiency by:
- using plants with low water demand to reduce mains consumption.
- using plants with low fertiliser requirements.
- utilising permeable surfaces.

(d) Vegetation selection is to consist of robust native species to reduce maintenance.

(e) Private and common spaces are to be clearly defined.

(f) Vegetation selection and placement is to reflect the scale of the proposed built form and maintain a human scale where possible.

(g) Landscaping is to be enhanced along the road widening corridor, along the northern boundary and on Lot 3 DP 1158967 for improved visual amenity and privacy.

(h) With the exception of the access road and minor short term pick-up and drop-off parking / loading area, Lot 3 DP 1158967, 23 North Rocks Road must be substantially landscaped (including the planting of mature trees that will grow to a height exceeding that of James Ruse Drive) to achieve an effective visual buffer between the development and James Ruse Drive.

(i) Consultation is required with Caltex to consider landscaping opportunities on and adjacent to the Hunter Pipeline easement prior to the lodgement of any development application.

(j) Open spaces are to be concentrated on the northern sides of the development, or orientated in a north-south alignment and on Lot 3 DP 1158967, 23 North Rocks Road.

(k) A core riparian corridor is to be provided along Darling Mills Creek, with a minimum width of 20 metres from the top of bank (widening up to 30 metres where the 1:100 flood line exceeds 30 metres from the top of bank), with a 10 metre buffer. Existing trees and vegetation in this corridor and in the 1 in 100 year flood zone (below RL 16.7) are to be retained and re-vegetated where required, using native species from the local botanic provenance. Endemic riparian species that overhang the creek should also be used and emergent aquatic vegetation restored where possible. The additional 10 metres buffer zone is also to be predominantly vegetated but may contain minor paved areas.

(l) Existing trees on site are to be retained where possible and replaced where necessary with

native species. In particular the stand of mature trees in the north-eastern portion of the site are to be retained to help maintain the existing ecological habitat and to enhance visual screening to the north.

(m) The core riparian corridor and buffer is to function as an ecological system. All works, access routes (except elevated walkways where necessary), roads, recreational area, service easements and any other non-ecological functioning work or activity is to be located beyond the core riparian corridor. Minor paved areas are permitted within the buffer.

(n) Artificial watercourses, water features and wetland structures are to be located outside of the core riparian corridor and buffer.

(o) A detailed Landscape Plan is to be submitted with a development application.

4.2.2. DEEP SOIL ZONES

OBJECTIVES

(i) To assist with management of the water table.

(ii) To assist with management of water quality.

(iii) To improve the amenity of developments through the retention and/or planting of large and medium size trees.

(iv) To provide a significant landscaped buffer to James Ruse Drive on Lot 3 DP 1158967.

DEVELOPMENT CONTROLS

(a) Deep soil zones are to be located adjacent to site boundaries to provide visual and acoustic privacy between the site and adjoining properties.

(b) Deep soil zones are to be established through the middle of the site in accordance with Figure 4.3 (Deep Soil Zones) to provide visual and acoustic privacy internally to the development.

(c) A minimum of 51% of the total site area (11,645m^2) (including Lot 3 DP 1158967 and Lot 100 DP1128357) is to contain deep soil zones generally in accordance with Figure 4.3 (Deep Soil Zones).

(d) Deep soil zones are to accommodate existing mature trees, as well as allow for planting of mature trees.

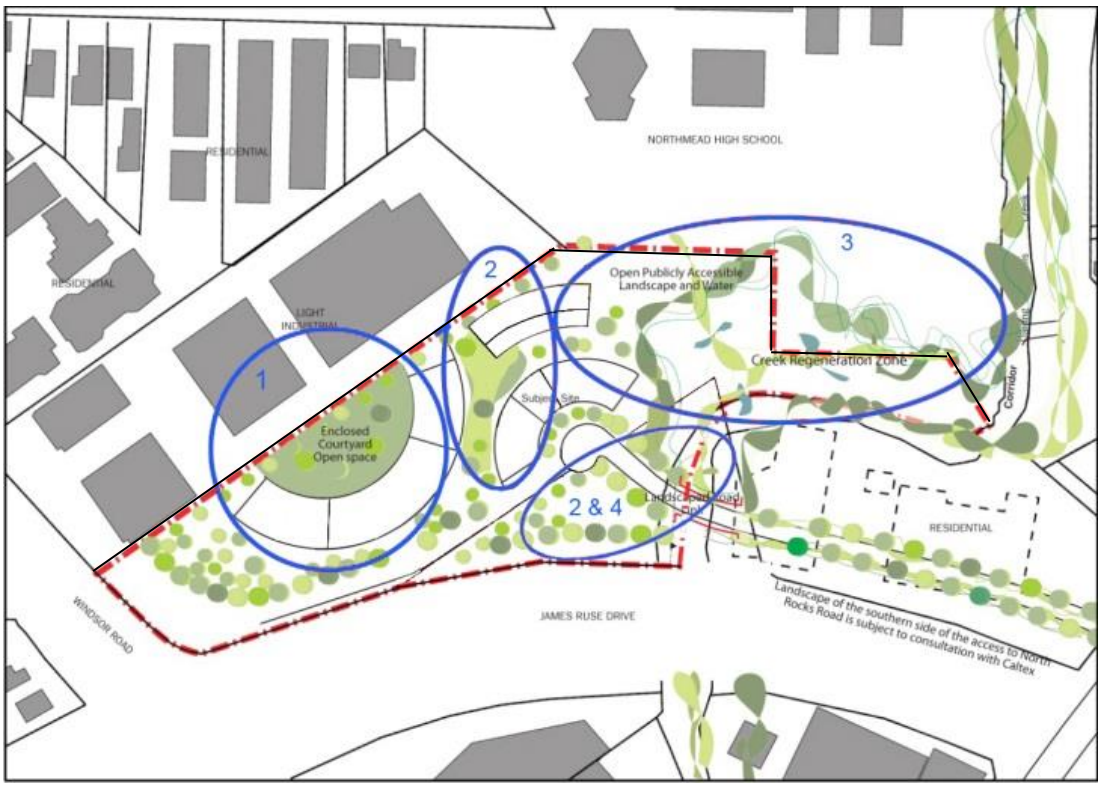

Figure 4.3 Deep Soil Zones

4.2.3. PLANTING ON STRUCTURES

OBJECTIVES

(i) To contribute to the quality and amenity of communal open space on roof tops, podiums, internal courtyards and basement structures.

(ii) To encourage the establishment and healthy growth of trees in urban areas.

DEVELOPMENT CONTROLS

(a) Plant growth is to be optimised by:

- providing soil depth, soil volume and soil area appropriate to the size of the plants to be established.
- providing appropriate soil conditions and irrigation methods.
- providing appropriate drainage.

(b) Planters are to be designed to support the appropriate soil depth and plant selection by:

- ensuring planter proportions accommodate the largest volume of soil possible.
- providing square or rectangular planting areas, rather than long narrow linear areas.

(c) Minimum soil depths are to be provided in accordance with the following:

Any subsurface drainage requirements are in addition to the minimum soil depths quoted above.

Large trees such as figs (16 metre canopy diameter at maturity)	
minimum soil volume	150 cubic metres
minimum soil depth	1.3 metres
minimum soil area	10 metre x 10 metre area or equivalent
Medium trees (8 metre canopy diameter at maturity)	
minimum soil volume	35 cubic metres
minimum soil depth	1 metre
approximate soil area	6 metre x 6 metre or equivalent
Shrubs	
minimum soil depth	500-600mm
Ground cover	
minimum soil depth	300-450mm
Turf	
minimum soil depth	100-300mm

4.3. ACCESS

4.3.1. VEHICULAR ACCESS

OBJECTIVES

(i) To ensure that vehicular access can be gained to the site from North Rocks Road, based on sound traffic management principles.

(ii) To integrate adequate car parking and servicing access without compromising street character, landscape or pedestrian amenity and safety.

(iii) To encourage the active use of street frontages.

(iv) To enhance the function, visibility and accessibility of the building entrance by providing for a limited amount of short term parking and deliveries at ground level.

DEVELOPMENT CONTROL

(a) All vehicular access to the site is to be from North Rocks Road in accordance with Figure 4.5. The route taken should cause the least disturbance and impact to the core riparian corridor and buffer. The crossing of Darling Mills Creek must be bridged and its design sensitive to the ecology, wildlife corridor and geomorphic functions of the corridor. The crossing is also to be designed in accordance with The Department of Primary Industries (Office of Water) Guidelines for watercourse crossings on waterfront land.

(b) Vehicular access to the site from North Rocks Road shall be achieved via the provision of a dual right turn lane generally in accordance with Figure 4.4. (Intersection Treatment). Detailed design plans shall be submitted to Council for approval prior to construction.

(c) The creation of a Right of Carriageway (minimum 12 metres wide) over Lot 3 DP 1158967 in favour of Lot 100 DP 1128357) to contain the future access road and footpath alignment identified in Figure 4.4. (Access to Site).

(d) Submission to Council of suitable documentary evidence that indicates the creation of a Right of Carriageway over Lot 3 DP 1158967, has been registered with the Land and Property Information, New South Wales (LPI).

(e) Consultation and concurrence from Caltex is required for the design of the accessway from North Rocks Road, to ensure the Hunter Pipeline is maintained.

(f) The design and configuration of access ways and driveways shall be in accordance with Part C Section 1- Parking.

(g) Potential pedestrian/vehicle conflict is to be minimised by:

- Limiting the width of vehicle access points.
- Ensuring clear site lines at the pedestrian and vehicle crossing.
- Separating and clearly distinguishing between pedestrian and vehicular access ways.
- Provision of a separate pedestrian path of travel into Lot 3 DP 1158967 and along the vehicular acessway to ensure the safety and amenity of pedestrians.

(h) The appearance of car parking and service vehicle entries is to be improved by:

- Locating garbage collection, loading and servicing areas away from the street and/or providing screening.
- Setting back or recessing car park entries from the main façade line.
- Avoiding 'black holes' in the façade by providing security doors to car park entries.
- Returning the façade material into the car park entry recess for the extent visible from the street as a minimum.

(i) Driveway gradients shall be in accordance with Australian Standard – AS 2890.1 – 1993 – Part 1 – Parking Facilities – Off Street Car Parking.

(j) In addition to significant landscaping and compliance with deep soil requirements, part of Lot 3 DP 1158967 is to be utilised to provide the development with a formal, external, at-grade 'address' and 'front door'. This area should accommodate a pick-up and drop-off area for residents, taxis and emergency vehicles with pedestrian shelter, a loading area for small deliveries and directional signage to all facilities, car parking areas and buildings. The area should be clearly marked as a set-down area to discourage use of the area for long term residential or visitor parking.

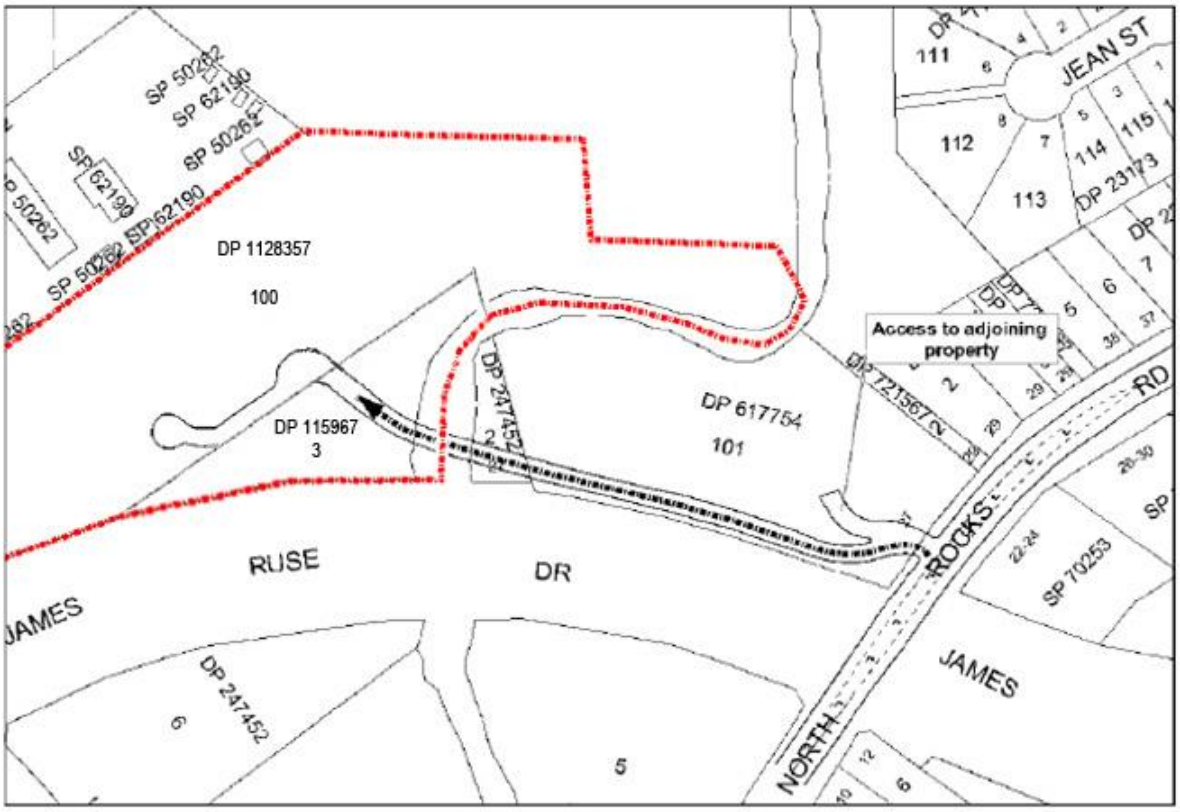

Figure 4.4. Access to site

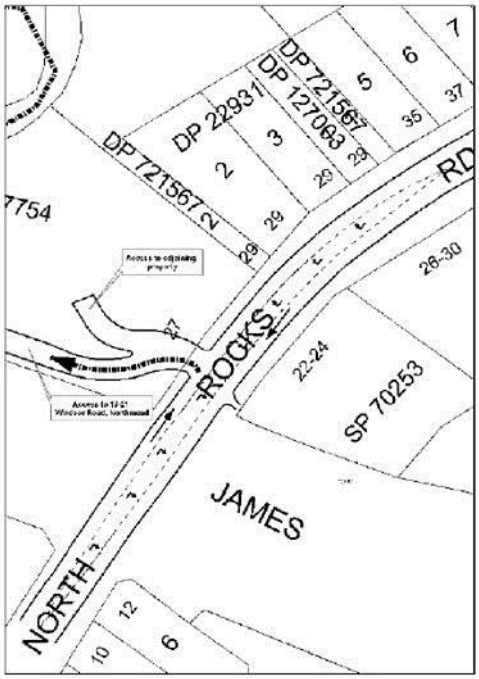

Figure 4.5 Intersection treatment

4.3.2. PEDESTRIAN ACCESS

OBJECTIVES

(i) To consider the needs of the residents with particular consideration to access requirements, safety and security.

(ii) To ensure that appropriate pathways, with high levels of pedestrian amenity are provided for residents along identified desire lines.

(iii) To ensure provision is made for bicycle access and storage.

DEVELOPMENT CONTROLS

(a) Pedestrian linkages are to be provided throughout the site generally in accordance with Figure 3.6 Access and Movement, including access to Windsor Road, and North Rocks Road. Consideration must also be given to a link to Northmead High School.

(b) Pedestrian paths and cycleways through the site are to be located outside the core riparian corridor and protected waters. Where these must necessarily intrude into the core riparian corridor they must be elevated. Minor paved areas are permitted within the buffer. All non-vehicular paths and cycleways are to be constructed in accordance with requirements of the Department of Primary Industries (Office of Water) for the design and construction of paths and cycleways in riparian areas.

(c) All surfaces should be stable, even and constructed of slip resistant materials. Any stair nosings should have a distinctive colour and texture.

(d) Pathway locations must ensure natural surveillance of the pathway from primary living areas of adjoining units. Dwelling entries must not be hidden from view and must be easily accessible.

(e) A bicycle lock-up facility is to be provided close to the main entry to the buildings.

4.4. ECOLOGICALLY SUSTAINABLE DEVELOPMENT (ESD)

Whilst current ESD best practice should be accepted as a minimum requirement, all developments are encouraged to explore technologies and smart ways to improve energy efficiency, harness renewable energy on-site and conserve water.

4.4.1. SOLAR ACCESS

OBJECTIVES

(i) To ensure that daylight access is provided to all habitable rooms and is encouraged in all other areas of residential flat development.

(ii) To provide adequate ambient lighting and minimise the need for artificial lighting during daylight hours.

(iii) To provide residents with the ability to adjust the quantity of daylight to suit their needs.

(iv) To protect the amenity of existing neighbouring developments.

(v) To improve thermal efficiency of new buildings.

(vi) To ensure that common open space areas receive a reasonable amount of sun light.

DEVELOPMENT CONTROLS

(a) Buildings are to be oriented so that solar access to buildings is optimised. Buildings are to be positioned within 30 degrees east and 20 degrees west of north, where possible, to maximise solar access.

(b) Buildings are to be positioned to minimise their impact upon solar access to communal and public open spaces.

(c) Existing constraints such as noise are to be taken into account in the orientation of buildings.

(d) Solar access to internal living spaces and private open spaces is to be optimised by facing them to the north.

(e) Living areas are to be located to the north and service areas to the south and west of the development as much as possible.

(f) The number of south-facing residential flats is to be kept at a minimum and where they occur, their window area is to be maximised.

(g) Two-storey and mezzanine ground floor residential flats are encouraged to facilitate enhanced daylight access to living rooms and private open spaces on the ground level where daylight access is limited.

(h) Daylight access is to be ensured to habitable rooms and private open spaces, throughout the year.

(i) Skylights, clerestory windows and fanlights are to be used to supplement daylight access.

(j) 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 louvers and planting.
- optimising the number of north-facing living spaces.
- providing external horizontal shading to north-facing windows.
- providing vertical shading to east or west windows.
- using high performance glass.
- minimising external glare off windows by avoiding reflective films, using a glass reflectance below 20 percent.

(k) Living rooms and private open spaces for at least 70 percent of residential flats in development are to receive a minimum of three hours direct sunlight between 9am and 3pm in mid-winter.

(l) The common open space area must receive at least four hours of sunlight between 9am and 3pm on 21 June.

4.4.2. NATURAL VENTILATION

OBJECTIVES

(i) To ensure that residential flat buildings are designed to provide all habitable rooms with direct access to fresh air and to assist in promoting thermal comfort for occupants.

(ii) To provide natural ventilation in non-habitable rooms, where possible.

(iii) To reduce energy consumption by minimising the use of mechanical ventilation, particularly air conditioning.

DEVELOPMENT CONTROLS

(a) Development is to utilise natural breezes by:

- orientating buildings to maximise use of prevailing breezes where possible.
- locating vegetation to direct breezes and cool air as it flows across the site.
- selecting planting or trees that allow for optimal airflow.

(b) Building layout is to maximise the potential for natural ventilation through:

- facilitating cross ventilation by designing narrow building depths and providing dual aspect residential flats (eg cross through and corner residential flats).
- facilitating convective currents by designing units which draw cool air in at lower levels and allow warm air to escape at higher levels (eg maisonette residential flats and two-storey residential flats).

(c) The internal layout of residential flats are to be designed to promote natural ventilation by:

- minimising interruptions in air flow through an residential flat.
- grouping rooms with similar usages together (eg. keeping living spaces together and sleeping spaces together).

(d) Doors and windows are to maximise natural ventilation by:

- locating small windows on the windward side and larger windows on the leeward side of the building thereby utilising air pressure to draw air through the residential flats.
- using higher level casement or sash windows, clerestory windows or openable fanlight windows (including above internal doors) to facilitate convective currents. This is particularly important in residential flats with only one aspect.
- selecting windows whereby occupants can reconfigure to funnel breezes into the residential flats, such as vertical louvred, casement windows and externally opening doors.

(e) Building depth is to be limited to 18 metre (glass line to glass line) to facilitate natural ventilation.

4.4.3. SITE CONTAMINATION

OBJECTIVE

(i) To ensure that the site is suitable for residential use.

DEVELOPMENT CONTROLS

(a) The site is to be fully remediated in accordance with the Remediation Action Plan prepared by EIS dated October 2005. All contaminated fill is to be removed from the site.

(b) A Validation Report and clearance documentation are to be submitted to Council upon completion of the remediation, including evidence of disposal location and volumes of disposed material.

4.5. STAGING OF DEVELOPMENT

Development approval for the Target Site must have appropriate regard to the amenity of the adjoining residential development known as 27-33 North Rocks Road, North Rocks. Accordingly, any development application for the residential development of Lot 100 DP1128357 shall have regard to the access requirements for development of the site.

OBJECTIVES

(i) To ensure the orderly and economic development of the Target Sites known as 23-25 North Rocks Road, North Rocks and 27-33 North Rocks Road, North Rocks.

(ii) To ensure that the proposed access road from North Rocks Road is achieved prior to the construction of residential units.

DEVELOPMENT CONTROLS

(a) Construction of the residential component of Lot 100 DP 1128357 shall not commence until the construction of an approved access carriageway and bridge over Darling Mills Creek in accordance with Figure 4.3 is achieved.

Access onto Lot 3 DP 1158967 and Lot 100 DP 1128357 shall be provided via Windsor Road during the construction of residential units. Where this access cannot be provided, access is to be provided from North Rocks Road.

The Hills Development Control Plan (DCP) 2012

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Part D Section 10
Baulkham Hills Town Centre

D10

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1. INTRODUCTION

The Shire of Baulkham Hills is a rapidly expanding Local Government area. The Shire has experienced significant growth over the past decade, including re-development within established areas for medium density housing and the development of the Kellyville/Rouse Hill Release Area. This high rate of growth is likely to continue with the rezoning of the Balmoral Road Release Area and the anticipated North West Land Release.

The Baulkham Hills Town Centre is located approximately 23 kilometres to the north west of the Sydney CBD. The centre consists of a wide and sustainable mix of land uses which are suited to the functioning of a centre of this size. The town centre is ideally located as a district centre, being sufficiently removed from other district centres and sub-regional centres to provide a focus for the surrounding community.

Key boundaries of the study area include: Stockland Mall and Hill Street to the north; the rear of the commercial zone (fronting Old Northern Road), Jenner Street, the commercial and open space lands adjacent to Railway Street to the east; the commercial land and existing car park on the south western corner of Windsor Road and Seven Hills Road to the south, and the open space lands and community facilities to the rear of the Bull and Bush Hotel to the west.

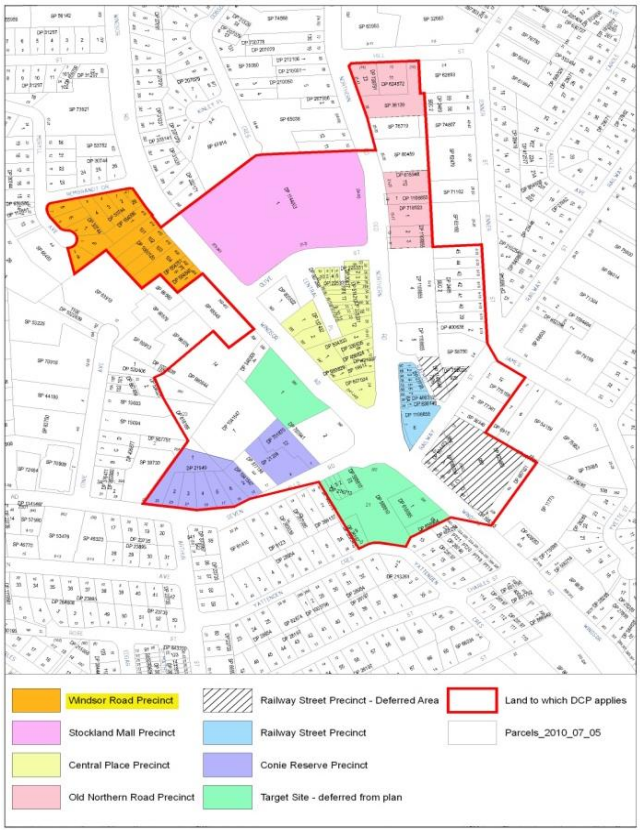


Figure 1 Land to which this Plan applies

1.1. LAND TO WHICH THIS SECTION OF THE PLAN APPLIES

This Section of the plan applies to land within the Town Centre as indicated in Figure 1.

1.2. AIMS AND OBJECTIVES OF THIS SECTION OF THE DCP

(i) Ensure that all development supports the designated functions of the town centre;

(ii) Encourage a high standard of aesthetically pleasing and functional retail, commercial and mixed use developments that sympathetically relate to adjoining and nearby developments;

(iii) Ensure that development will not detrimentally affect the environment of any adjoining lands and ensure that satisfactory measures are incorporated to ameliorate any impacts arising from the proposed development;

(iv) Ensure that development will promote and support the role of the Baulkham Hills Town Centre as a district centre;

(v) Encourage innovative and imaginative designs that add to the character of the Town Centre

with particular emphasis on the integration of buildings, landscaped areas, public art and public space;

(vi) To ensure that new development moderate the demand for travel, support the efficient and viable operation of public transport and improve accessibility to housing and employment.

(vii) Provide safe and high quality useable environments for the employees, visitors and residents using the Town Centre; and

(viii) Ensure that all developments incorporate the principles of Ecologically Sustainable Development.

(ix) Ensure that water management is a material planning consideration.

1.3. RELATIONSHIP WITH OTHER PLANS POLICIES AND DOCUMENTS

In addition to those documents listed in Part A, Section 1.4, this Section of the DCP is to read in conjunction to the following:-

- Part B Section 5 – Residential Flat Buildings
- Part B Section 6 – Business
- Part C Section 1 – Parking
- Part C Section 2 – Signage
- Part C Section 3 – Landscaping
- Part C Section 4 – Heritage
- Part C Section 6 – Flood Controlled Land
- Baulkham Hills Town Centre Masterplan. - 2004
- Planning Guidelines for Walking and Cycling (NSW Government, 2004)
- Best Practice Guidelines for NSW Public Transport Signage and Information Displays (Transport NSW
- Pedestrian Access and Mobility Plan (2001)
- Cultural Plan for Baulkham Hills Shire Council 2005-2010;
- Baulkham Hills Shire Council Bike Plan (1994)
- Development Contributions Plan No.7 – Southern Precincts;
- Section 94A Contributions Plan 2007;

Where any provision of this Section of the DCP is inconsistent with any provisions of another Section of the DCP, the provisions of this Section shall prevail.

2. DEVELOPMENT CONTROLS

2.1. DESIRED PLANNING OUTCOMES FOR THE TOWN CENTRE

"To create a vibrant, safe and attractive town centre that provides a range of living, shopping, working, transport and leisure activities"

A VIBRANT TOWN CENTRE

- A district retail, commercial and service centre for the southern areas of the Shire.
- A liveable town centre with increased residential and employment opportunities.
- A balanced variety of land uses and a satisfactory relationship with the surrounding residential interface.
- A sustainable town centre, with a compact land use pattern, coherent redevelopment and sensitive adaptive reuse of prominent heritage items.
- A focal point for community facilities, cultural events and leisure activities.
- A public transport oriented centre with a bus interchange for direct access to the City and Parramatta.

QUALITY BUILT FORM

- Identifiable Precincts within the town centre, based on land use, location and character.
- An attractive town centre with high quality architectural detail and consistent, logical pattern of development.
- Corner elements and design features on buildings to define important aspects of the town centre including local themes and character and to create visual landmarks and meeting places.
- Building height and scale that is appropriate within a town centre, providing a concentration of a variety of suitable land uses.
- Active edges to all development to reduce the visual impact of development, stimulate interaction and enhance safety at the street level. The provision of public art may be used to achieve this outcome.
- Development of an appropriate scale to create a sense of place and community focus.
- Integration of development with adjoining bus stops.

ACCESS AND AMENITY

- A town centre supported by a centrally located bus interchange reducing car dependency whilst retaining the existing supply of public parking within new development.
- A coherent and safe road network with improvements to the intersection of Windsor Road / Old Northern Road to enhance the efficiency of bus movements.
- Limited vehicular access to development to reduce vehicle conflict and the visual impact of entrances.
- Embellished and attractive streetscapes and good connectivity between precincts.
- A vibrant mixed-use character, activating all areas of the town centre and providing opportunities for casual surveillance , enhancing safety.

LANDSCAPING AND OPEN SPACE

- A consistent approach to landscaping and public domain embellishments.
- A variety of high quality, landscaped and functional outdoor pedestrian squares for the enjoyment of residents, employees and visitors.
- Design responses incorporating interactive design components which utilise public art and design methodologies.

WATER MANAGEMENT

- A Town Centre that is recognised as having incorporated sustainable technologies and best water management practices during its design and development.



Figure 2 Structure Plan

2.2. URBAN STRUCTURE

Forming the gateway location for the Shire, the Town Centre structure is defined by the historic thoroughfares of Old Northern Road, Windsor Road and Seven Hills Road. This Section describes the built form outcomes that will contribute to Baulkham Hills becoming a more liveable town centre.

OBJECTIVES

(i) To create a unified centre;

(ii) To enhance the qualities that attract people to the town centre;

(iii) To create a vibrant pedestrian and public transport orientated centre with a healthy mix of commercial, retail, residential and community facilities.

DEVELOPMENT CONTROLS

(a) All new development must contribute to and support all of the designated functions of the town centre as listed in Section 2.1.

(b) Future development to reinforce the main street character of Old Northern Road. New development shall accommodate the provision of an improved bus interchange and public domain.

(c) New development must not isolate, disconnect and/ or restrict access and development potential of any other precinct.

(d) All new development must have regard to the Movement Strategy (Figure 5) and maintain and enhance the existing pedestrian and cyclist links and existing public open space.

(e) Ensure that pedestrian and public transport movements are given priority in building design.

2.3. BUILDING FORM

Building form shall have regard to the design principles and controls for each Precinct.

OBJECTIVES

(i) To create a suitable area in which development may occur, having regard to the constraints, opportunities and character of each precinct; and

(ii) To set an appropriate scale and bulk for development in each precinct.

DEVELOPMENT CONTROLS

(a) Development is to occur in accordance with the design principles provided in Section 3 - Precinct Controls.

2.4. STREETSCAPE

OBJECTIVES

(i) To provide a range of uses to engage and activate the street and contribute to the economic viability of the town centre.

(ii) To maximise building openings and minimise the extent of blank walls facing the street.

DEVELOPMENT CONTROLS

(a) Where buildings (including dual aspect or corner lots) adjoin any public road, lane or pedestrian space they shall present an active frontage, incorporating shop entries, display windows, outdoor eating and allow direct interaction with the pedestrian.

(b) Align the ground floor level with the corresponding level of the footpath, lane way or outdoor space.

(c) Roller shutter doors facing onto the street or public space are not permitted. Appropriate security (if required) can be provided through the use of retractable security grilles (minimum 70% transparency) on the inside of the shop windows to create an open shopfront/window display area.

(d) Where possible, deliveries and space for deliveries should be made from the lesser street.

(e) Retail and commercial premises fronting Old Northern Road within the Central Place and Railway St Precincts shall be 5m – 15m wide to maintain the specialised small shop character of this area.

2.5. ARTICULATION

OBJECTIVES

(i) To achieve design excellence and innovation.

(ii) To achieve a desirable, healthy, modern environment.

(iii) To ensure new buildings are of a human scale and to promote an active street frontage.

(iv) To clearly delineate pedestrian access.

(v) To address topography and site constraints.

DEVELOPMENT CONTROLS

(a) Buildings should have an architecturally distinct bottom, middle and top and not have the same façade simply projected upwards.

(b) The elevation of a building along the Old Northern Road frontage of both Central Place and Railway Street Precinct shall incorporate architectural measures to reduce the horizontal emphasis of the building, in order to reflect the traditional narrow shop fronts and to break up the bulk and scale of the building.

(c) Blank walls and opaque glass are to be avoided. Where a blank wall is unavoidable, the elevation is to be suitably articulated though the use of awnings, recesses, architectural detail, landscaping and / or public art. Billboard advertising and the like are not suitable in this situation.

(d) Ground floors must incorporate windows and other such openings for at least 60% of the street or public street frontages.

(e) Changes in colour and texture should compliment façade articulation.

(f) Roof materials within each precinct, or block within a precinct, must be consistent to help create a continuous built form and to reduce the visual impact for overlooking properties.

2.6. AWNINGS

OBJECTIVES

(i) To provide weather protection for pedestrians.

(ii) To retain awnings as a visual feature of the town centre.

(iii) To encourage awnings appropriate to the building style.

DEVELOPMENT CONTROLS

(a) Awnings are to be provided at the street frontage where indicated in Figure 3.

(b) Awnings or other forms of weather protection must wrap around corners.

(c) Awnings should be cantilevered to avoid the need for poles along the footpath. Posts and column supports are permitted where it can be shown that they will not be a pedestrian or vehicular hindrance.

(d) Awnings should be stepped in response to the topography.

(e) Adequate lighting should be provided under the awnings in accordance with Council's Designing Safer Communities: Safer by Design Guidelines.

(f) Canvas blinds are not permitted.

(g) Colonnades are not permitted where awnings are specified In Figure 3.

(h) Colonnades must be a minimum of 2.5 metres wide to allow for adequate pedestrian movements.

(i) Colonnade 'posts' must be evenly spaced.

(j) The minimum height of a colonnade must be the same as the adjacent floor to ceiling height.

(k) The colonnade must be integrated into the building design and not obscure sight lines, safety or street activities.

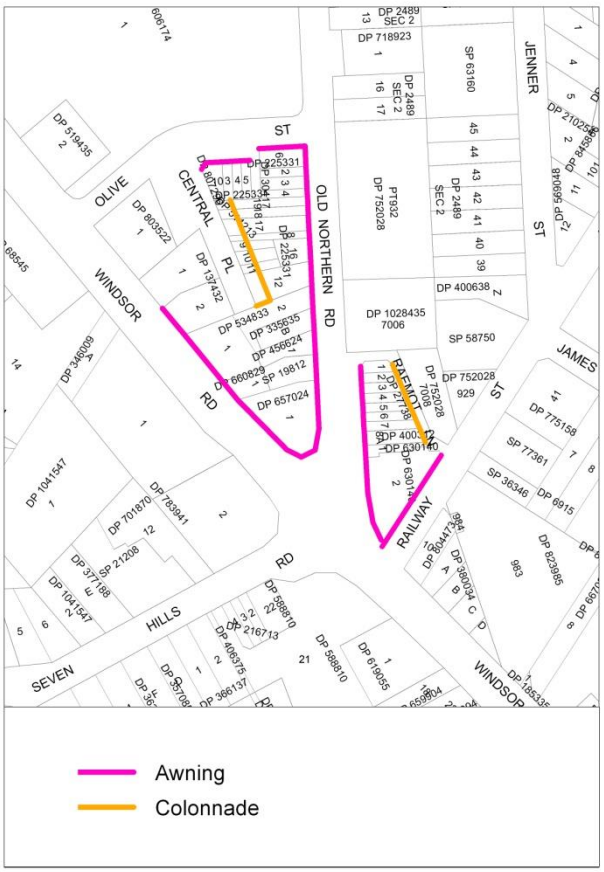


Figure 3 Awnings and Colonnades

2.7. CORNER BUILDINGS

OBJECTIVES

(i) To create visually significant elements in order to orient the visitor and provide land marks and meeting places.

(ii) To clearly delineate building entries, important intersections within the town centre and the extent of the built form.

DEVELOPMENT CONTROLS

(a) Where shown in the Precinct controls and illustrations, corner elements may exceed the height of the remainder of the building in order to emphasise the landmark location and add architectural interest to the facade and skyline.

(b) Corner aspects of any building are to be articulated with building mass and other design features.

(c) Corner should add interest through the use of splays, curves, entries and other features.

(d) Corners buildings must address all frontages, including those facing streets, lanes or pedestrian areas.

2.8. PEDESTRIAN ENTRANCES & EXITS

OBJECTIVES

(i) To provide appropriate, safe and convenient access and egress points for pedestrians.

(ii) To incorporate entrances and exits into the overall architectural design of a development.

DEVELOPMENT CONTROLS

(a) Main entrances and exits are to be located at the front of the site and be visible from the street.

(b) Entrances are not to be obscured by landscaping or other obstacles and shall have clear sight lines.

(c) Entrances shall be clearly identifiable to reduce confusion and unintentional entry by incorporating measures such as:-

- Architectural features and articulation;
- Awnings;
- Variations in colours and materials;
- Changes in paving; and
- Landscaping.

(d) All specifications relating to doors and circulation spaces are to be in accordance with AS 1428.1 (Design for Access and Mobility) and AS1428.2 (Enhanced and Additional Requirements) as a minimum.

2.9. ROOF DESIGN

OBJECTIVES

(i) To ensure roof form contributes to the character of the town centre in providing visual interest and continuity within individual blocks.

(ii) To add visual interest to the town centre skyline when viewed from street level or surrounding key vantage points.

DEVELOPMENT CONTROLS

(a) Roofs should be designed to generate an interesting skyline and enhance views from adjoining developments and surrounding areas.

(b) Parapets are to be used along the main street to create appropriate sight lines.

(c) Lift over-runs and all other service equipment shall be incorporated into the roof design and be obscured from general view.

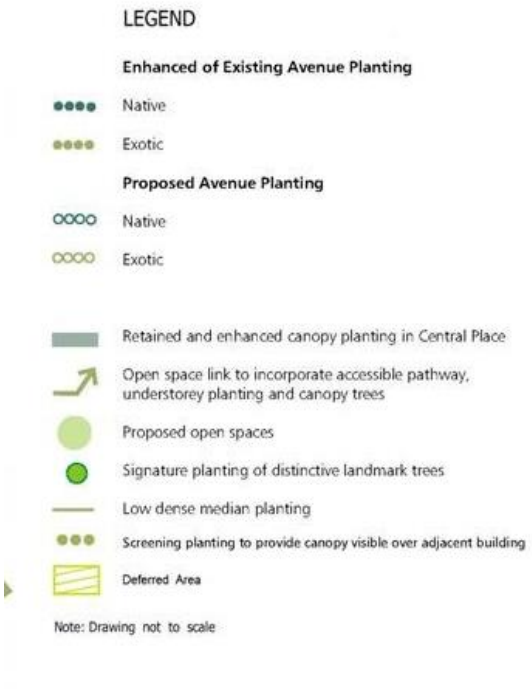
(d) The roof form for each block should be consistent. Roof top gardens (open space) and parapets may be used to provide interest.

(e) Roof forms should not add excessive bulk to the building.

(f) Roof areas should incorporate space for skylights to upper levels and solar panels.



Figure 4 Public Domain Strategy



2.10. BUILDING HEIGHT

OBJECTIVES

(i) To minimise the adverse overlooking and overshadowing of surrounding properties.

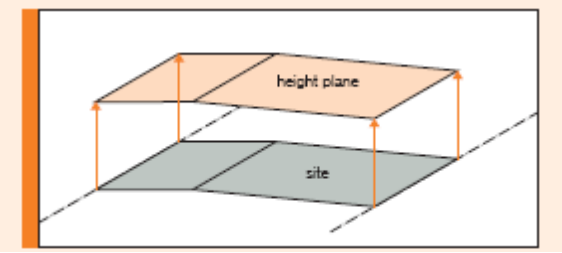
(ii) To control the visual bulk and scale of development.

(iii) To minimise loss of views.

DEVELOPMENT CONTROLS

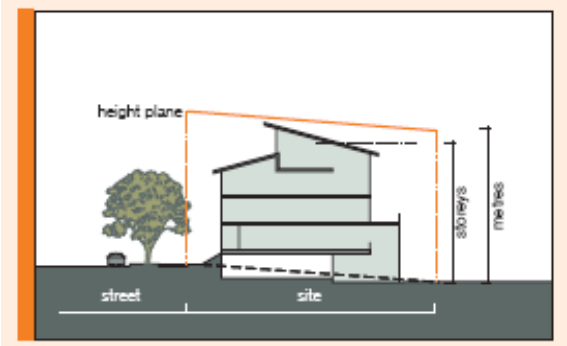
(g) Development is to occur in accordance with the permitted number of storeys and height plane controls identified in Section 3 – Precinct Controls

- Height plane follows the topography of the site and is measured along the site boundaries.



Source: Residential Flat Design Code

- On gently sloping sites the site plane follows the slope of the site.



Source: Residential Flat Design Code

- In terms of sites with greater slopes or sharp changes in levels, the height plane will vary to facilitate appropriate building forms.



Source: Residential Flat Design Code

(h) Developments on sloping sites are to be stepped so that the ground floor does not exceed one metre above natural ground level immediately below any point on the ground floor.

(i) The floor level of any residential room must be no lower than 1 metre below natural ground level.

2.11. CEILING HEIGHTS

OBJECTIVES

(i) To provide maximum flexibility for alternate uses at ground floor level.

(ii) To allow building elevations to respond to the street context.

(iii) To increase environmental performance and amenity of buildings.

DEVELOPMENT CONTROLS

a) Floor to ceiling heights shall be a minimum of 3.6m at ground floor level to allow for a range of uses, including retail and commercial.

b) Floor to ceiling heights shall be a minimum of 2.7m at upper storeys of buildings, where possible, to allow for a range of uses and to improve environmental performance and amenity of buildings.

2.12. FINISHES

OBJECTIVES

(i) To achieve a stylish, coherent streetscape.

(ii) To ensure materials require minimum maintenance and support the ESD Principles.

DEVELOPMENT CONTROLS

(a) All developments must use high quality and durable materials that are easily maintained.

(b) Opaque windows may only be used for privacy reasons, transparent glass should be used in all other windows to promote natural surveillance.

(c) Use pastel and earthy tones and avoid corporate and bright, incompatible colours.

(d) Avoid reflective and/or overly textured surfaces.

(e) Colours and materials should contribute to a coherent town centre.

(f) Where development occurs in stages, any visible external surfaces of future common walls must be adequately painted or finished until the adjacent development has been undertaken.

2.13. OUTDOOR EATING

OBJECTIVES

(i) To encourage active use of the street.

(ii) To generate after hours activity in the town centre and passive surveillance.

DEVELOPMENT CONTROLS

a) Outdoor eating areas should not impact on pedestrian movements and adequate area must be allowed to access tables. A minimum

width of 2.5 metres is to be kept free for a pedestrian walkway.

b) Tables must be located in front of shop rather than near the gutter, unless adequate landscaping or other elements can form a suitable barrier between the tables and the road.

c) Outdoor eating facilities must comply with all codes and policies associated with the serving of food.

2.14. CULTURE AND PUBLIC ART

OBJECTIVES

(i) To recognise and respond to social and cultural identity and diversity in the design of development.

(ii) To promote development that is unique to the town centre and that reflects social, cultural and historical significance of the town centre.

(iii) to promote the inclusion and integration of public artworks within development which are:

- accessible to the public;
- make a positive contribution to the urban environment; and
- add to the cultural development of the City.

DEVELOPMENT CONTROLS

a) The following development sites in the town centre shall prepare and implement an Arts and Cultural Plan as part of the overall development:

- Block 4 - Central Precinct
- Block 10 - Railway Street Precinct

Plans are required to include the provision of high quality artwork within the development in a publicly accessible location.

b) Arts and Cultural Plans are to be prepared having regard to any social, cultural historical significance of the site to the town centre. The character and design of development on such sites should be integrated with artworks.

2.15. MIXED USE COURTYARD BUILDINGS

OBJECTIVES

(i) To encourage the provision of publicly accessible communal / semi private court yard spaces, in suitable locations, which supplement the public open space network in Baulkham Hills.

(ii) To design communal / private court yards as focal spaces incorporating quality mixed use perimeter type buildings integrating non-residential uses at ground level with through site links and landscape elements.

DEVELOPMENT CONTROLS

(a) Communal / semi private space court yards are to be provided on sites identified in Section 3 - Precinct Controls.

(b) All courtyards are to be designed to permit a high degree of accessibility by the public. Pedestrian linkages, through links from adjacent sites and surrounding street networks is to be provided by multiple entries and pedestrian responsive design.

(c) Courtyards are to function as semi-public mixed use commercial spaces. They are privately maintained but are publicly accessible.

(d) The minimum area of courtyards shall comply with the common open space rate of Part B Section 5 – Residential Flat Buildings.

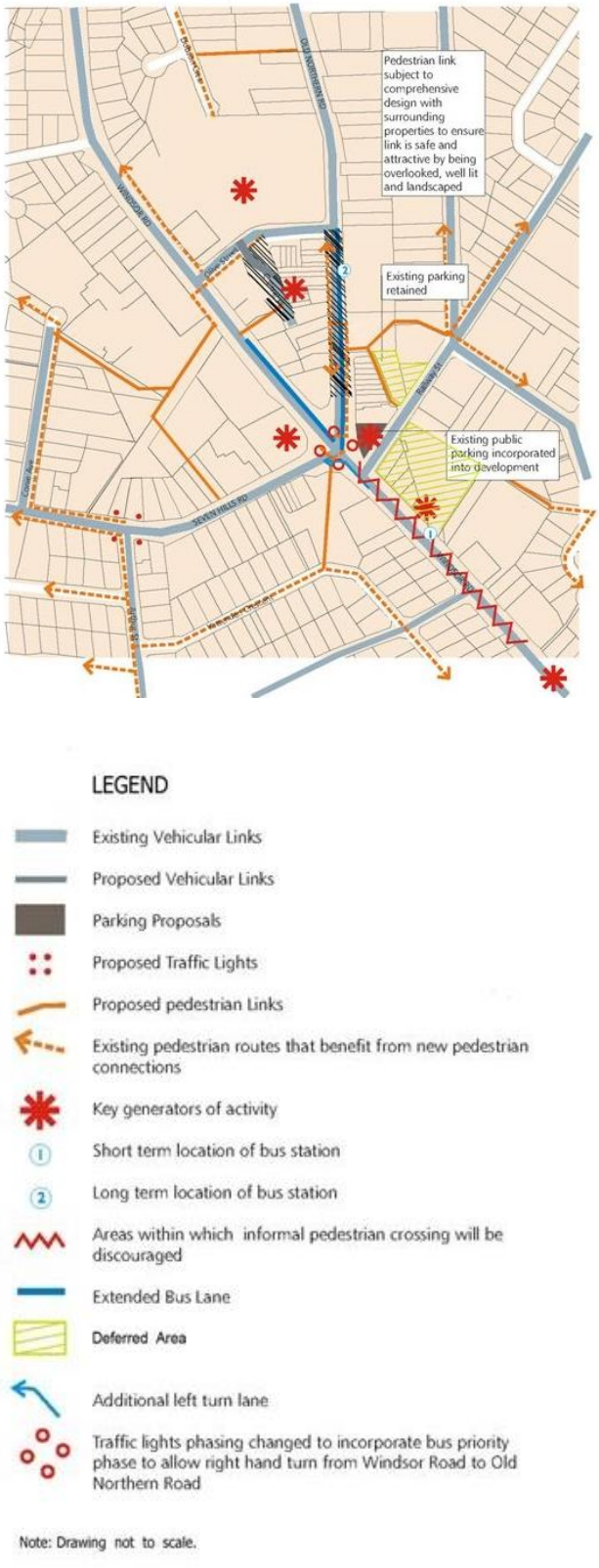


Figure 5 Movement Strategy

2.16. SAFETY & SECURITY

OBJECTIVES

(i) To ensure that the town centre is safe and secure for residents and visitors by incorporating crime prevention through environmental design.

DEVELOPMENT CONTROLS

(a) All development shall be designed to ensure the safety and security of residents and visitors within individual developments and in the public domain during the day and at night.

(b) All development applications shall refer to Council's Designing Safer Communities: Safer by Design Guidelines (2002) and demonstrate how the proposed development incorporates measures to increase safety and reduce opportunities for crime through building design, landscaping, lighting, surveillance etc.

(c) Certain developments due to their size, function or location may be referred to NSW Police for comment. These types of developments include, but are not limited to:

- Transportation facilities
- Large residential flat buildings and multi dwelling housing (50 or more dwellings)
- Large mixed use developments (50 or more dwellings)
- Major shopping centre developments
- New schools and hospitals
- Large sport facilities
- Clubs and hotels
- Service stations, convenience stores and other high-risk businesses.

2.17. LIGHTING

OBJECTIVES

(i) To ensure that all site lighting is adequate for the safety of the site without interfering with nearby residents or traffic.

2.18. ACOUSTIC

Acoustic privacy is an important consideration for the design of buildings. Appropriate siting, design and use of the noise ameliorating materials for development will ensure suitable acoustic amenity for residential development.

OBJECTIVES

(i) To provide a reasonable acoustic environment for residents,

(ii) To protect residents from noise intrusions,

(iii) To ensure the design of the dwellings on site has regard to the impacts of the major roads adjoining the site,

(iv) To ensure that the siting and design of residential building minimises noise transmission from major noise-generating land uses.

2.19. SITE FACILITIES AND SERVICING

OBJECTIVES

(i) To ensure that site facilities (such as clothes drying areas, mail boxes, recycling and garbage disposal units/areas, screens, lighting, storage areas, air conditioning units and communication structures) are effectively integrated into the development and are unobtrusive.

(ii) To ensure that site services and facilities are adequate for the nature of the development

(iii) To establish appropriate access and location requirements for servicing, and

(iv) To ensure service requirements do not have adverse amenity impacts

2.20. SOLAR ACCESS

OBJECTIVES

(i) Buildings should be designed and sited to minimise loss of sunlight to adjacent dwellings.

(ii) Private open space areas and primary habitable rooms such as living and family rooms are to maximise access to winter sun.

(iii) To provide living spaces within dwellings and open space around dwellings with reasonable access to sunlight.

3. PRECINCT CONTROLS

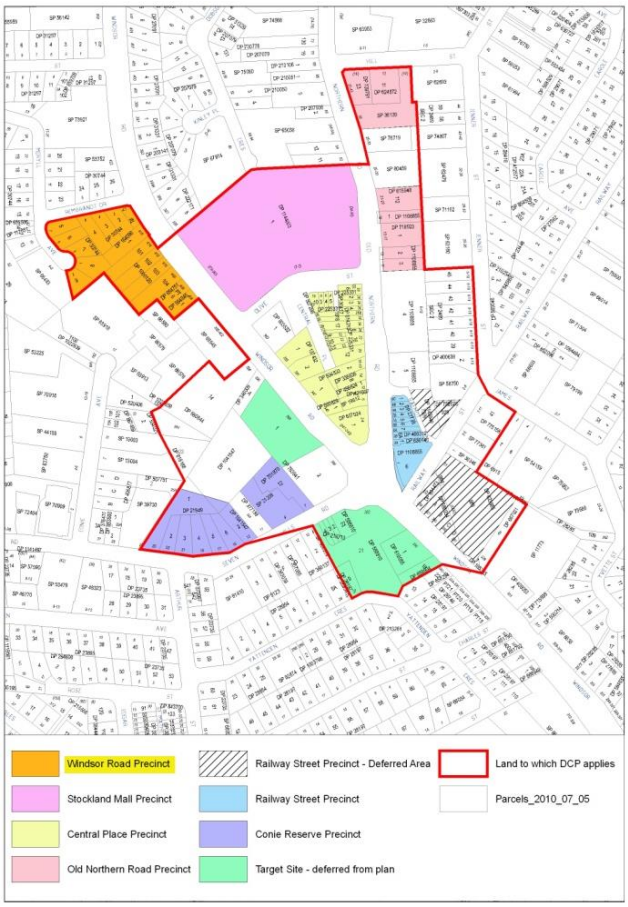


Figure 6 Town Centre Precincts

The town centre has been divided into five precincts based on the location and individual character of each area and its redevelopment potential. The Precinct objectives and development controls are to be read in conjunction with the general objectives and development controls in Section 2 and any other relevant Section of this DCP. The Precincts are:

- Railway Street
- Conie Avenue Reserve
- Central Place
- Stockland Mall
- Old Northern Road

The purpose of the precinct section of this DCP is to identify the existing and desired future character of each precinct, and to provide suitable controls that reflect the constraints and opportunities within each precinct.

All development must comply with the development controls outlined for each precinct. Where any variation is proposed, the development must demonstrate that it achieves the overall Precinct objectives (outlined below) and identified desired character. The applicant must submit written justification to support any request for a variation to the DCP.



Figure 7 Baulkham Hills Town centre

3.0. PRECINCT OBJECTIVES

The following Precinct objectives apply to all Precincts within the Baulkham Hills Town Centre, and must be considered in conjunction with the development controls for each Precinct.

LAND USE

(i) To achieve a vibrant and viable mixed-use town centre, providing a variety of retail, commercial, residential, open space and parking opportunities.

(ii) To locate particular land uses in appropriate locations having regard for heritage items, the future location of a bus interchange on Old Northern Road and the adjoining land uses at the edge of the town centre.

(iii) Stockland Mall and Central Place Precincts to remain as the retail core of the Town Centre.

(iv) To promote continuous activity within the town centre, encouraging pedestrian movement and active uses at street level.

BUILDING HEIGHT

(i) To permit higher forms of development that are appropriate within a town centre and that reflect the importance of Baulkham Hills Town Centre as the southern gateway to the Shire.

(ii) To accommodate the foreseeable expansion of retail, commercial and residential development within the town centre.

(iii) To ensure appropriate scale relationships between new development and adjoining land uses, particularly lower forms of residential development on the periphery, and heritage items.

(iv) To provide visually significant building elements in selected locations to create landmarks, add interest to the skyline, orient the visitor and to delineate important intersections.

BUILDING SETBACKS

(i) To ensure that buildings are suitably set back to maximise street level interaction and minimise the impact of the town centre development on the periphery where it adjoins residential land.

(ii) To set back development to create interest and variation in built form.

(iii) To provide visual and acoustic privacy between adjoining developments and the street, and to provide opportunities for balconies.

BUILT FORM

(i) To ensure that the town centre develops in a cohesive and logical manner in accordance with the Precinct diagrams and illustrations.

(ii) To improve pedestrian amenity and linkages within the town centre by the provision of awnings, courtyard buildings and pedestrian links.

(iii) To enhance the appearance of the town centre by providing architectural features and façade articulation.

(iv) To emphasise important locations and intersections in the town centre by incorporating landmark corner buildings.

(v) To ensure that the bus interchange on Old Northern Road can be easily integrated into the town centre.

HERITAGE

(i) To protect the town centre's heritage.

(ii) To revitalise and enhance the heritage buildings through landscaped pedestrian areas and suitable adaptive reuses.

(iii) To ensure that surrounding built forms respect the heritage curtilage.

(iv) To ensure that the history of heritage buildings is accessible to the public through interpretive signage.

ACCESS

(i) To improve the permeability and accessibility of the town centre by providing pedestrian linkages through the town centre.

(ii) To encourage pedestrian activity and enhance the public domain.

(iii) To provide high quality, safe and pleasant walking environments.

(iv) To ensure equitable and unimpeded access.

(v) To provide safe, clear and convenient vehicular access to developments.

(vi) To minimise traffic congestion.

LANDSCAPING

(i) To enhance the amenity and appearance of all streetscapes and development within the town centre.

(ii) To ensure that setback areas are treated as extensions of the public pedestrian area.

(iii) To ensure that landscaping is suitable to the function of each site.

OPEN SPACE

(i) To provide functional open space areas within the town centre for the use of residents, visitors and employees.

STORMWATER MANAGEMENT

(i) Ensure waterways and downstream drainage systems are protected during construction and post construction phases of development.

(ii) Ensure new developments do not place an increased flood risk to private and public property, and where possible, reduce the impacts of nuisance flooding to a level acceptable to the community.

(iii) Reduce potable water demand through water sensitive urban design initiatives

3.1. CENTRAL PLACE PRECINCT



Figure 8 Central Place Precinct – Aerial View

EXISTING CHARACTER

The precinct is triangular in shape and is bounded by Old Northern Road, Windsor Road and Olive Street. Central Place and a public car park are situated off Olive Street.

The retail strip that adjoins Old Northern Road significantly contributes to the town centre character of the locality. An arcade that is located mid block permits pedestrian access to Central Place, however is located off line with the existing pedestrian crossing which conveniently links to the proposed Old Northern Road bus stop and Council's library. Adjoining Windsor Road are more recent retail and commercial activities that enjoy good vehicular access and exposure.

DESIRED CHARACTER

LAND USES

- Mixed use strip shops adjoining Old Northern Road and Windsor Road with residential uses above.
- Land mark feature buildings (Illustrated in Figure 10) on the corner of:-
  - Old Northern Road and Windsor Road
  - Olive Street and Central Place

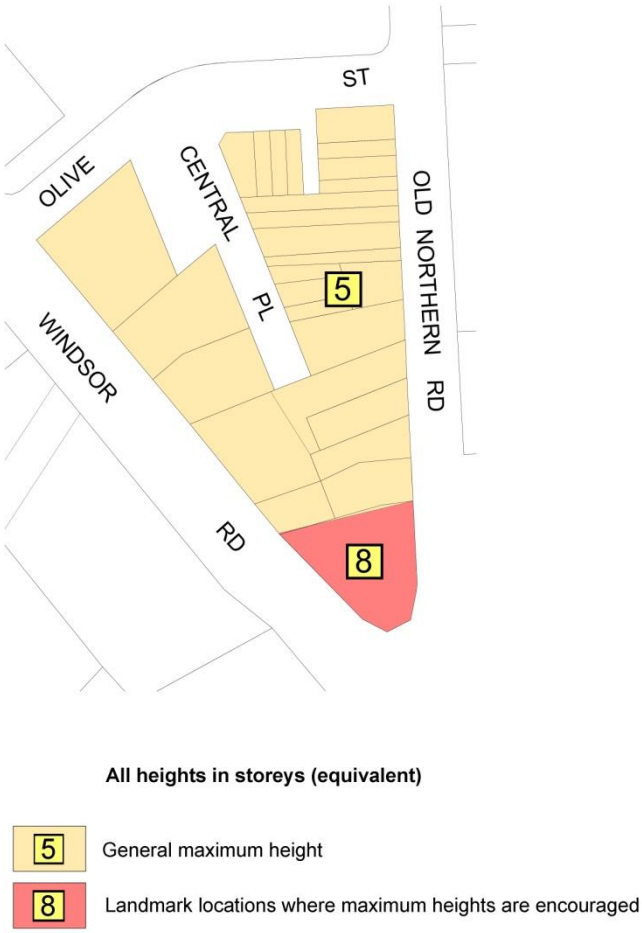


Figure 9 Central Place Precinct – Building Height

STREET FRONTAGE

- Encourage active retail development contributing to the vibrant activity conducted in the precinct.
- All development should address the street with active frontages, colonnades, awnings, and landscaping to provide a high quality pedestrian amenity.
- Provide continuous awnings along shop fronts and colonnades adjoining Central Place.

BUILT FORM

- Landmark buildings are to be of an appropriate architectural quality that use a variety of physical and design elements to achieve buildings of character and interest.
- Levels above two storeys with a direct street frontage to Old Northern Road should be stepped back to minimise the bulk and scale when viewed from the street.
- Buildings will be set back on Old Northern Road to enable broad awnings and landscape planting.
- The continuous building line on Old Northern Road is to be retained to reinforce the traditional main street character of the strip.
- Roof forms to incorporate elements to create an interesting roof scape and skyline; saw-toothed, pitched roofs, innovative skillon curved or floating roof forms are encouraged.
- Building floor plans should locate sensitive areas of use such as bedrooms away from busy roads.
- The built form should allow opportunities for passive surveillance and an active interface with publicly accessible areas.

ACCESS

- Vehicular access to be from Central Place and Olive Street in accordance with the structure plan illustrated in Figure 10.
- A 24 hour publicly accessible pedestrian plaza link is to be provided to central place via the existing mid block pedestrian link on Old Northern Road

DEVELOPMENT CONTROLS

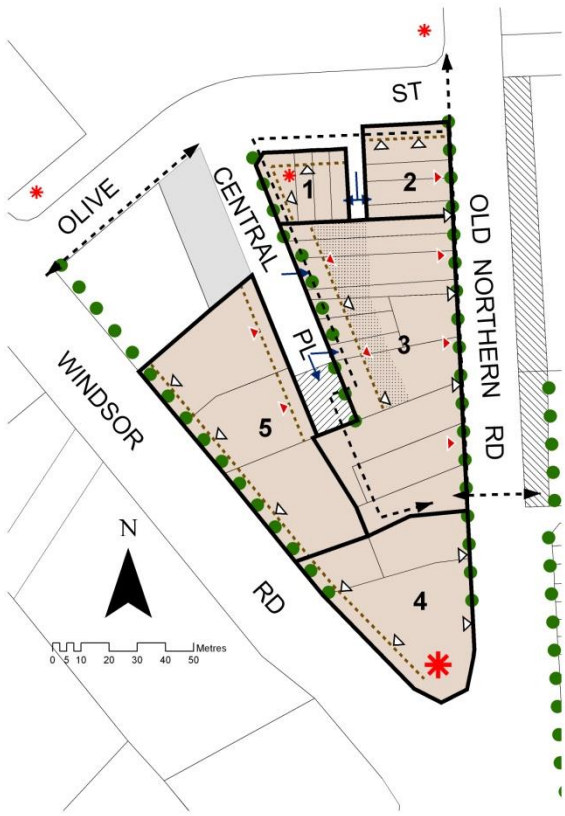
3.1.1. LAND USE

a) Ground floor uses are to be occupied by retail / commercial uses.

b) First floor uses are to be occupied by commercial / residential uses.

3.1.2. FLOOR SPACE RATIO

a) Refer to Clause 4.4 *Floor Space Ratio* of The Hills LEP 2012 and Floor Space Ratio Maps.



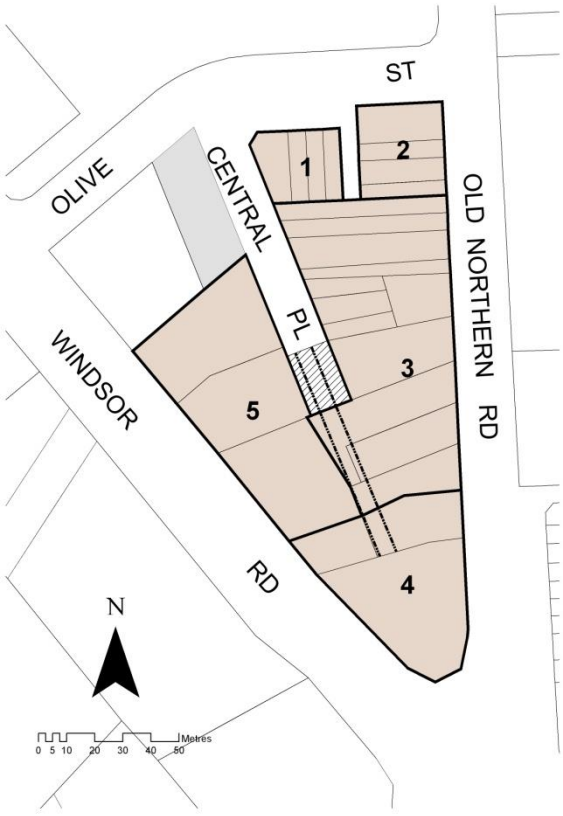
Central Place Precinct
Block
Potential road closure (see note)
Council Carpark
courtyards
Setbacks
Driveway access
Pedestrian links
Major landmark element
Minor landmark element
Avenue tree planting

Active Frontages:

Residentail - Orientation of doors & windows of habitable rooms
Commercial - Orientation of doors & display windows
Secondary active frontage - display windows

Note. The part closure of Central Place is subject to the agreement of Council.

Figure 10 Central Place Precinct - Structure Plan



Potential road closure (see note)

6m - Basement level right of carriageway

Note. The part closure of Central Place is subject to the agreement of Council.

Figure 11 Central Place Precinct – Right of Way

3.1.3. BUILDING HEIGHT

a) Refer to Clause 4.3 *Height of buildings* of The Hills LEP 2012, the LEP Height of Buildings Maps and the table below:

	Storeys
Blocks 1-3 & 5	5
Block 4	8

b) Buildings should respect the height of adjoining development and must not exceed the maximum number of levels identified in Figure 9.

c) Consideration will be given to increased heights at the landmark corner(s) where it can be demonstrated that it will enhance the design

of the building but may not contain any habitable living or business space.

3.1.4. SETBACKS

a) Setbacks shall be in accordance with the following table:-

Block 1 - Olive Street / Central Place	
Front Setback - Olive Street:	
Ground, First & Second Level	5m
Additional Levels	7.5m
Side Setback	0m
Central Place - Ground, First and Second	5m
Additional Levels	7.5m
Rear Setback	0m

Block 2 - Olive Street / Old Northern Road	
Front Setback - Old Northern Road	
Ground, First Levels	0m
Second & Third Levels	2.5m
Additional Levels	5m
Side Setback	0m
Olive Street Frontage - Ground, First and Second Levels	5m
Additional Levels	7.5m
Rear Setback	0m

Block 3: Old Northern Road	
Front Setback - Ground & First Levels	0m
Second & Third	2.5m
Additional Levels	5m
Rear Setback:	0m
Central Place - Ground, First & Second Levels	10m
Additional Levels	20m
Side Setback	0m
Block 4: Old Northern Road / Windsor Road	
Front Setback - Old Northern Road: Ground & First and Second Levels	0m
Additional Levels	2.5m
Side Setback - Windsor Road: Ground, First and Second Levels	5m
Additional Levels	7.5m
Rear Setback Ground to Fifth Level	0m
Additional Levels	25m
Block 5: Windsor Road	
Front Setback - Windsor Road	
Ground, First and Second Levels	5m
Additional Levels	7.5m
Side Setback	0m
Rear	0m
Central Place - Ground and First Levels	5m
Second & Third Levels	7.5m
Additional Levels	9.5m

3.1.5. BUILDING DESIGN

a) Architectural features and façade articulation are encouraged, particularly on the landmark corners.

b) An awning must be provided for pedestrian amenity along Old Northern Road.

c) Residential dwellings shall be dual aspect to improve solar access and amenity.

d) Active edges must be provided at ground levels to both internal public spaces and street frontages.

e) All development must provide a high level of natural surveillance over the public domain.

f) Each block should be designed with a common theme, including a common colour, materials, balconies, signage and façade for each block.

3.1.6. ACCESS

a) Vehicular access to the precinct is only permitted from Central Place or as specified in Figure 10.

b) All parking is to be underground and must be incorporated into each individual Block.

c) A 6m right of way carriageway is to be provided in favour of Lot 1 DP 657025, Lot 1 DP 660829 and SP 19812 for access to basement parking from Central Place as identified in Figure 11.

d) Pedestrian connections through the site must have regard to the structure plan illustrated in Figure 10.



Figure 12 Strip shops – Old Northern Road



Figure 13 Olive Street



Figure 14 Central Place

3.1.7. LANDSCAPING

a) Development adjoining Central Place shall integrate publicly accessible courtyards within the building design. Courtyards are to function as mixed use commercial / retail spaces, providing an attractive and district focal space.

3.1.8. WATER SENSITIVE URBAN DESIGN

a) The best practice principles of WSUD are to be applied during the construction and post construction phases of development. Schemes that promote water capture, reuse initiatives and water quality management measures, as described in documents including, but not limited to:

- *On-site Stormwater Detention Handbook, Version 4 2005, UPRCT;*
- *Australian Runoff Quality, Engineers Australia, 2006;*
- *Water Sensitive Urban Design – Technical Guidelines for Western Sydney, May 2004, Prepared for UPRCT by URS.*

are required for all new commercial and residential developments, or where the increase in impervious area over a site is greater than 150m^2. Common open space and publicly accessible courtyard areas may be utilised for WSUD initiatives.



Figure 15 Central Place Precinct – Illustrative Design

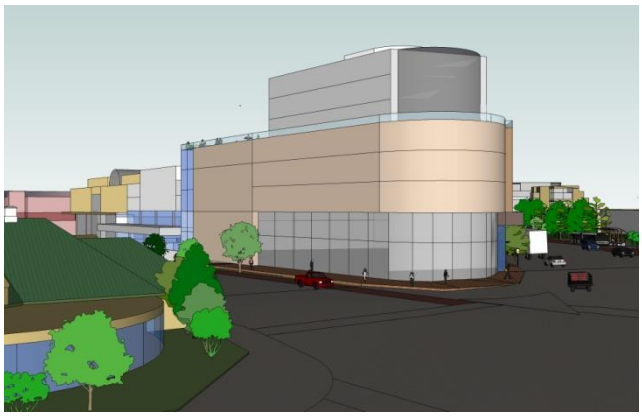


Figure 16 Central Place Precinct – View of landmark corner building

3.2. STOCKLAND MALL PRECINCT

EXISTING CHARACTER

The precinct is bounded by Old Northern Road, Windsor Road and Olive Street with residential development to the rear in Dobson Crescent. The precinct is currently occupied by Stockland Mall shopping centre and an extensive system of car parking.

Primary vehicular access to the site is via Olive Street. Pedestrian amenity and the public domain of Olive Street is poor due to high traffic volumes and its poor interface with Olive Street.

The precinct is the retail heart of Baulkham Hills, accommodating approximately 56% of retail floorspace within the Town Centre. The current configuration of the shopping centre isolates it from the Town Centre by its extensive parking area and lack of street interaction.



Figure 17 Stockland Mall Precinct – Aerial View



Figure 18 Stockland Mall Precinct – Olive Street Car park

DESIRED CHARACTER

LAND USES

- Expansion of retail floor space.
- Encourage active retail development on Olive Street.
- Provision of improved pedestrian links to the shopping centre, from Olive Street and Old Northern Road.
- Improved vehicular access to the site and consolidation of existing parking levels to improve vehicle circulation.
- Provision of a separate service access road from Windsor Road.

BUILT FORM

- Building design should ensure adequate solar access to Olive Street and use a variety of physical and design elements to achieve a building of character and interest.
- Public art is encouraged to add interest to the streetscape of Olive Street.
- The built form should respond to the topography of Olive Street.
- Lower floors should provide good street definition.
- Greater height limits at the corners of Olive St will be considered to create a landmark corner feature.

STREET FRONTAGE

- Sufficient setbacks are required on Olive Street and Windsor Road frontages to provide broader footpaths and landscaping to enhance the public domain.
- Olive Street frontage shall be embellished to provide a welcoming face and pedestrian friendly environment for the shopping centre.
- Building corners at either end of Olive Street should incorporate a landmark feature.

ACCESS

- Vehicular access shall be via Olive Street and Windsor Road, with service access via Windsor Road.
- Ensure that future development is sympathetic to pedestrian desire lines, particularly to and from the pedestrian entrances to Stockland Mall, and the main retail strip along old Northern Road.

DEVELOPMENT CONTROLS

3.2.1. LAND USE

a) Mixed retail / commercial uses appropriate to a district level shopping centre;

b) Commercial / retail uses adjacent to Olive Street to maximise street level interaction.

3.2.2. FLOOR SPACE RATIO

a) Floor space ratio shall be in accordance with Part B Section 6 – Business.

3.2.3. BUILDING HEIGHT

a) Building Height shall be in accordance with Part B Section 6 – Business.

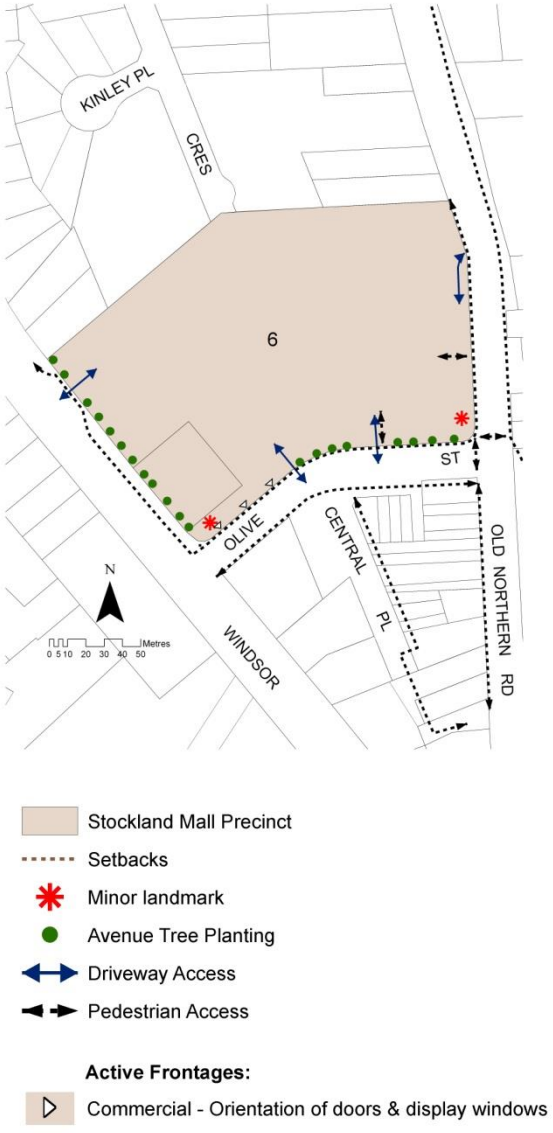


Figure 19 Stockland Mall Precinct – Structure Plan

3.2.4. SETBACKS

a) Setbacks shall be in accordance with Part B Section 6 – Business.

3.2.5. BUILDING DESIGN

a) Additional height and bulk is permitted at the Olive St intersections to provide a visual landmark feature.

3.2.6. ACCESS

a) Vehicular access is to be from Windsor Rd and Olive St with egress from the existing driveway on Old Northern Road.

b) The location of the western driveway on Olive Street shall be located opposite Central Place to accommodate any future intersection improvements required to address intersection performance at this location.

c) Existing parking decks are to be consolidated to improve building appearance and vehicle circulation.

d) All development must have regard to Councils Safer By Design Guidelines and Access for All documents.

e) Pedestrian links are to be in accordance with the design principles illustrated in Figure 19 – Structure Plan.

3.2.7. LANDSCAPING

a) Olive Street is to be of high architectural quality involving a mix of hard and soft landscaping, public art and sufficient lighting to promote street interaction and a sense of place.

3.2.8. WATER SENSITIVE URBAN DESIGN

a) The best practice principles of WSUD are to be applied during the construction and post construction phases of development. Schemes that promote water capture, reuse initiatives and water quality management measures, as described in documents including, but not limited to:

- *On-site Stormwater Detention Handbook, Version 4 2005, UPRCT;*
- *Australian Runoff Quality, Engineers Australia, 2006;*
- *Water Sensitive Urban Design – Technical Guidelines for Western Sydney, May 2004, Prepared for UPRCT by URS.*

are required for all new commercial and residential developments, or where the increase in impervious area over a site is greater than 150m^2. Common open space and publicly accessible courtyard areas may be utilised for WSUD initiatives.



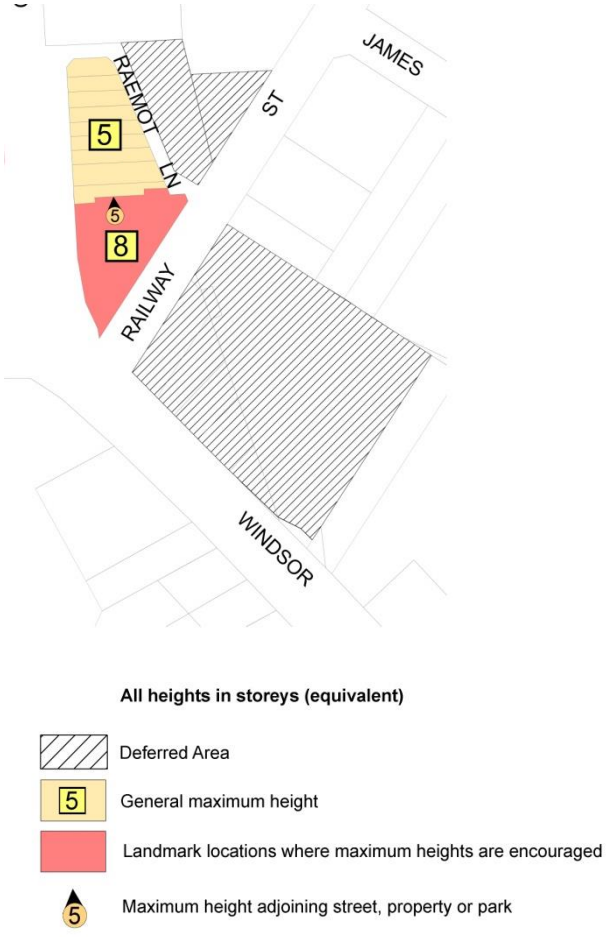


Figure 20 Railway Street Precinct – Building Height

3.3. RAILWAY STREET PRECINCT

EXISTING CHARACTER

The Railway Street Reserve Precinct has frontage to Railway St and Old Northern Road. Currently the precinct is zoned for commercial/residential and open space/recreation uses. The area is occupied by several businesses fronting Windsor Road, the Council library, a telecommunications tower and a underutilised park.

The existing businesses have varying setbacks with little landscaping. The Reserve at the rear is currently also used as a parking/loading area for the businesses.

DESIRED CHARACTER

LAND USES

- Promote commercial/ residential development given the central location of the precinct and its proximity to the bus interchange.
- Retail uses conducive to development adjacent to a transport interchange on Old Northern Road.

BUILT FORM

- The corner of Railway St and Old Northern Rd should provide a landmark feature to address this major intersection.
- Levels above two storeys should be stepped back to minimise bulk and scale when view from the street
- The built form should allow opportunities for passive surveillance and an active interface with the public open space.
- Courtyards are to be designed to overcome conflicts between public access needs and the private needs of residents having regard to visual and acoustic privacy, and the need for private open space.

STREET FRONTAGE

- All development should address the street with active frontages, colonnades and awnings, and landscaping to provide a high quality pedestrian amenity.
- Setbacks will allow for the proposed bus lay-by on Old Northern Road.

ACCESS

- Pedestrian footpaths should be upgraded with suitable street furniture and landscaping.
- Inappropriate pedestrian movements across Old Northern Road will be discouraged.
- Vehicular access shall be restricted to Railway Street or Raemot Lane only.



Figure 21 Railway Street Precinct – Landmark Corner building

DEVELOPMENT CONTROLS

3.3.1. LAND USE

a) Ground and first levels are to be occupied by retail / commercial uses.

b) Residential and commercial uses are encouraged on the upper levels.

3.3.2. FLOOR SPACE RATIO

a) Floor space ratio shall be in accordance with the following table:-

Block 9	3:1
Block 10	2:5:1

3.3.3. BUILDING HEIGHT

a) Building height shall be in accordance with the following table:-

	Storeys	Height Plane
Block 9	8	30m
Block 10	5	20m

b) Buildings should respect the height of adjoining development and must not exceed the maximum number of levels identified in Figure 20.

c) Consideration will be given to increased heights at the landmark corner where it can be demonstrated that it will enhance the design of the building but may not contain any habitable living or business space.

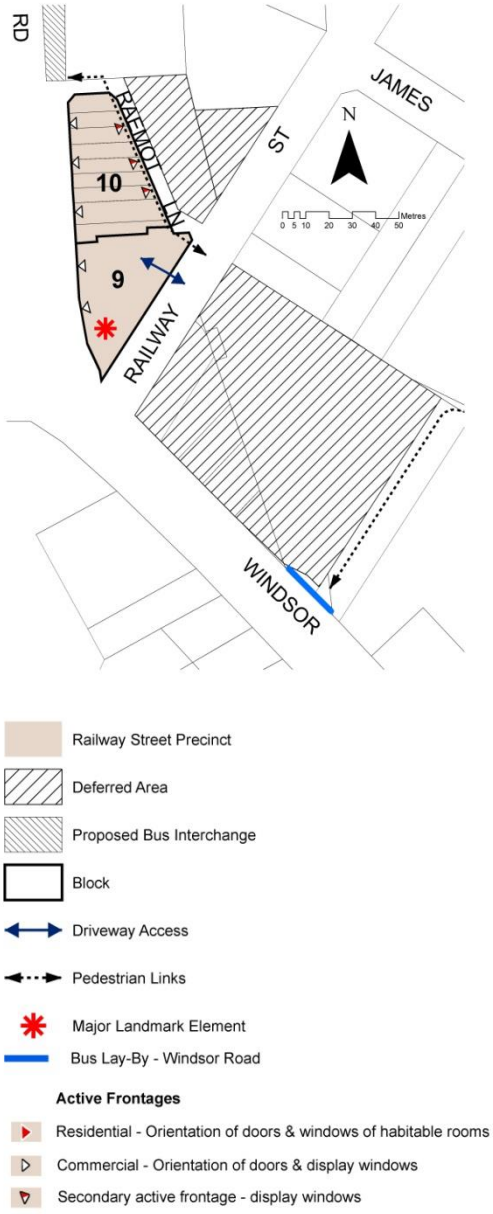


Figure 22 Railway Street Precinct – Structure Plan

3.3.4. BUILDING SETBACKS

a) Building setbacks shall be in accordance with the following tables:-

Block 9	
Front Setback: Ground, First & Second Levels	0m
Additional Levels	2.5m
Side setback	0m
Railway Street - Ground, First & Second Levels	0m
Additional Levels	2.5m
Rear setback - Ground to Fifth Level	0m
Additional Levels	20m
Block 10	

Front Setback - Ground & First Levels	0m
Second & Third Levels	2.5m
Additional Levels	5m
Rear Setback - Ground & First Levels	0m
Additional Levels	2.5m
Side setback	0m

3.3.5. BUILDING DESIGN

a) An awning must be provided for pedestrian amenity along Windsor Road and Railway Street.

b) Architectural features and façade articulation are encouraged, particularly on the landmark corner.

c) Buildings should be designed to integrate with adjoining public spaces and the proposed bus interchange on Old Northern Road.

d) Residential dwellings shall be dual aspect to improve solar access and amenity.

3.3.6. ACCESS

a) All parking is to be underground and incorporated into each individual development.

b) Vehicular access to Block 10 shall be achieved from Raemot Lane.

c) Pedestrian movement to the rear of Blocks 9 & 10 shall be contained within a colonnade addressing Raemot Lane with active uses along its length.

d) Pedestrian connections must have regard to the pedestrian movement strategy in Figure 21.

3.3.7. LANDSCAPING

a) The landscaping on the eastern elevation of Block 9 & 10, opposite Raemot Land Carpark is to form an extension of the public footpath reservation. The main function of this area is to provide a pedestrianised plaza that links the main activity nodes through the centre.

3.3.8. WATER SENSITIVE URBAN DESIGN

a) The best practice principles of WSUD are to be applied during the construction and post construction phases of development. Schemes that promote water capture, reuse initiatives and water quality management measures, as described in documents including, but not limited to:

- *On-site Stormwater Detention Handbook, Version 4 2005, UPRCT;*
- *Australian Runoff Quality, Engineers Australia, 2006;*
- *Water Sensitive Urban Design – Technical Guidelines for Western Sydney, May 2004, Prepared for UPRCT by URS.*

are required for all new commercial and residential developments, or where the increase in impervious area over a site is greater than 150m^2. Common open space and publicly accessible courtyard areas may be utilised for WSUD initiatives.

3.4. OLD NORTHERN ROAD PRECINCT

EXISTING CHARACTER

The Old Northern Road Precinct extends from the Hills District Bowling Club to the intersection of Hills Street with Old Northern Road.

The precinct is comprised of a number of heritage listed items at 11-19 and 37-43 Old Northern Road. A number of commercial uses that are well setback from the street are in operation with some renewal projects in progress.

The Hills District Bowling Club is a significant activity node and is the only recreation facility within the centre.



Figure 23 Old Northern Road Precinct

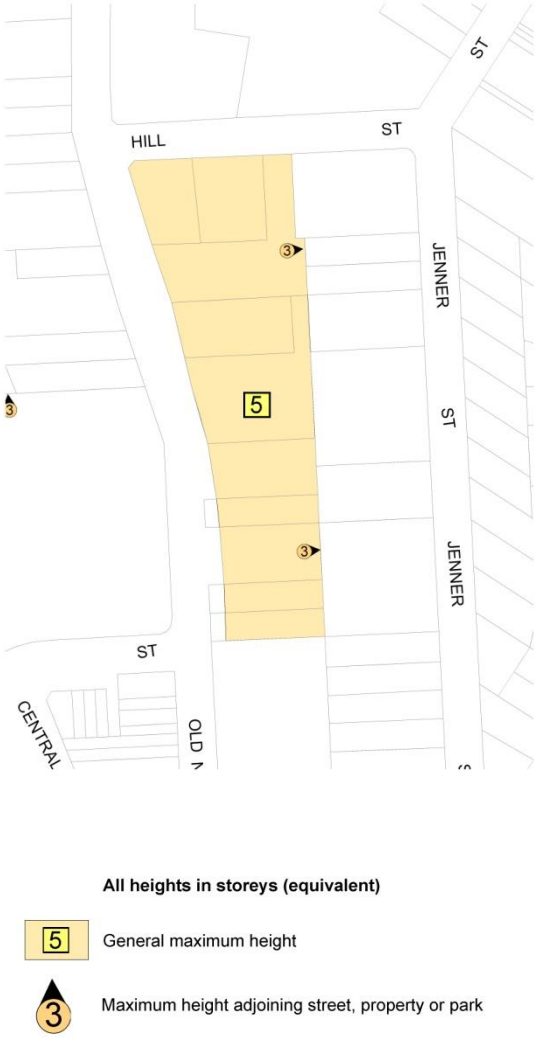


Figure 24 Old Northern Road – Building Height

FUTURE CHARACTER

LAND USES

- Mixed use development adjacent to heritage items to include ground level commercial activities with residential uses above.

STREET FRONTAGE

- Buildings to feature a strong street edge, with awnings to provide sheltered access to residential lobbies and ground floor commercial premises on Old Northern Road.
- Buildings are to be consistent with respect to setbacks, building form and materials.
- Where appropriate, heritage items are to be incorporated as an active element within future development to promote an active streetscape.
- Setbacks will allow for the proposed road widening and bus lay-by on Old Northern Road.

BUILT FORM

- New buildings are to be of an appropriate architectural quality that uses a variety of physical and design elements to achieve a building of character and interest.
- Levels above two storeys with a direct street frontage to Old Northern Road should be stepped back to minimise the bulk and scale when viewed from the street.
- The built form should allow opportunities for passive surveillance and an active interface with publicly accessible areas.
- Roof forms to incorporate elements to create an interesting roof-scape and skyline; saw-toothed, pitched roofs, innovative skillion curved or floating roof forms are encouraged.
- Building floor plans should locate sensitive areas of use such as bedrooms away from busy roads.

HERITAGE

- Relate to heritage buildings with low rise podiums, horizontal cornices and other scale breaking devices, in adjacent development.
- Relate to heritage buildings with attention to facade composition, proportions and materials.

ACCESS

- Pedestrian footpaths should be upgraded with suitable street furniture and landscaping.
- Vehicular access points to old northern road should be minimised.

DEVELOPMENT CONTROLS

3.4.1. LAND USE

Blocks 12 & 13

a) Ground Floor uses to be occupied by commercial uses. First floor and above to be occupied by commercial / residential uses.

3.4.2. FLOOR SPACE RATIO

a) Floor space ratio shall be in accordance with the following table:-

Blocks 12 & 13 - Old Northern Road	**2:1**

b) The floorspace component of a heritage item may be excluded from the floorspace calculation.



Figure 25 Old Northern Road – Structure Plan

3.4.3. BUILDING HEIGHT

a) Building Height shall be in accordance with the following table:-

	Storeys	Height Plane
Blocks 12 - 13	5	20m

b) Buildings should respect the height of adjoining development and must not exceed the maximum no of levels identified in Figure 23

3.4.4. BUILDING SETBACKS

a) Building Setbacks shall be in accordance with the following table:-

Block 12	
Front Setback: Ground & First Levels	6m
Additional Levels	8.5m
Rear Setback: Ground, First and Second Levels	6m
Additional Levels	12.5m
Side setback	0m
Southern Boundary (Bowling Club)	4m

Block 13	
Front Setback - Old Northern Road	
Ground & First Levels	6m
Additional Levels	8.5m
Side Setback - Hills Street	
Ground & First Levels	8m
Additional Levels	10.5m
Side Setback - Southern Boundary	0m
Rear Setback	
Ground & first levels	6m
Additional levels	8.5m

3.4.5. BUILDING DESIGN

a) Buildings should compliment and not visually dominate adjoining heritage buildings.
b) Residential dwellings shall be dual aspect to improve solar access and amenity.
c) Each block within the precinct should adopt a consistent yet individual architectural character and be uniform in terms of awnings, lighting and signage.
d) Adaptive reuse of heritage buildings is encouraged within building design.

3.4.6. ACCESS

a) All parking is to be underground and incorporated into each individual development.
b) Vehicular access points are to be provided as shown in Figure 24.

c) Improvement of pedestrian access within the Precinct via connecting Old Northern Road with Jenner Street as illustrated in Figure 24.

3.4.7. LANDSCAPING

a) The provision of tree plantings along pedestrian and vehicular links.

3.4.8. WATER SENSITIVE URBAN DESIGN

a) The best practice principles of WSUD are to be applied during the construction and post construction phases of development. Schemes that promote water capture, reuse initiatives and water quality management measures, as described in documents including, but not limited to:

- *On-site Stormwater Detention Handbook, Version 4 2005, UPRCT;*
- *Australian Runoff Quality, Engineers Australia, 2006;*
- *Water Sensitive Urban Design – Technical Guidelines for Western Sydney, May 2004, Prepared for UPRCT by URS.*

are required for all new commercial and residential developments, or where the increase in impervious area over a site is greater than 150m^2. Common open space and publicly accessible courtyard areas may be utilised for WSUD initiatives.

3.5. CONIE AVENUE RESERVE PRECINCT

EXISTING CHARACTER

The Conie Avenue Reserve Precinct is located on the western edge of the town centre and is bounded by Seven Hills and Windsor Roads. The Bull and Bush Hotel is a landmark heritage feature of this precinct and is a major activity centre within the precinct.

A large, poorly embellished open space area known as Conie Avenue Reserve is centrally located within the precinct. The reserve is bounded by the Baulkham Hills Community Centre on Windsor Road and detached dwellings on Seven Hills Road.



Figure 26 Conie Avenue Reserve – Aerial View

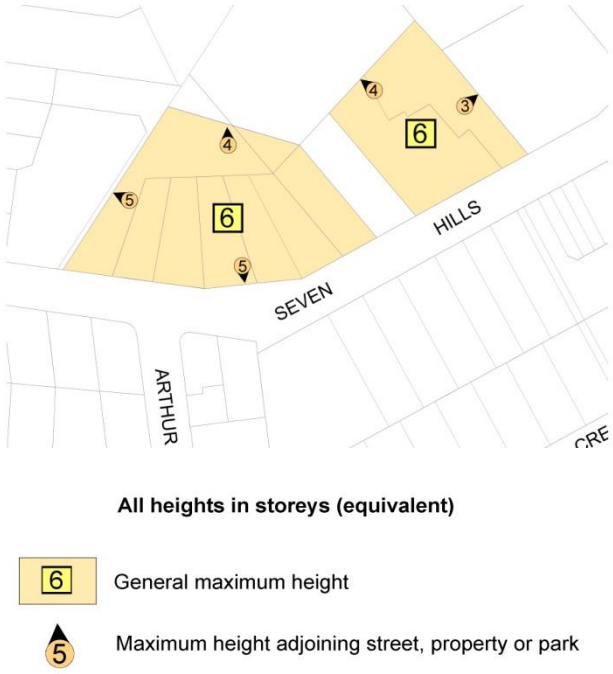


Figure 27 Conie Avenue Reserve Precinct – Building Height

DESIRED CHARACTER

LAND USES

- Consolidation of adjoining residential dwellings on Seven Hills Road and redevelopment to address the central public open space area.
- Open space provided centrally in this location and community facilities to be accessed within this precinct.
- Building designs promote casual surveillance of the adjoining open space area.

STREET FRONTAGES

- The Seven Hills Road frontage should provide generous landscaped setback and articulated façade treatment.
- Setbacks will allow for the proposed road widening on Seven Hills Road.

BUILT FORM

- Residential units are to have cross ventilation or be dual aspect.
- New buildings are to be of an appropriate architectural quality that uses a variety of physical and design elements to achieve a building of character and interest.
- The built form should allow opportunities for passive surveillance and an active interface with publicly accessible areas.
- Roof forms to incorporate elements to create an interesting roofscape and skyline; saw-toothed, pitched roofs, innovative skillion curved or floating roof forms are encouraged.
- Building floor plans should locate sensitive areas of use such as bedrooms away from busy roads.

HERITAGE

b) Respect the scale of the heritage building on the corner of Windsor Road and Seven Hills Road with complementary adjacent development.

ACCESS

c) Pedestrian links are to be provided in the locations identified in the structure plan.
d) Vehicular access to Block 14 to be located from the proposed signalised intersection of Seven Hills Road and Arthur Street.
e) To ensure that appropriate provision has been made for road widening along Seven Hills Road.

DEVELOPMENT CONTROLS

3.5.1. LAND USE

Block 14

a) Residential uses only.

Block 15

b) Ground floor uses are to be occupied by commercial / residential uses.

c) First floor and above to be occupied by residential uses.

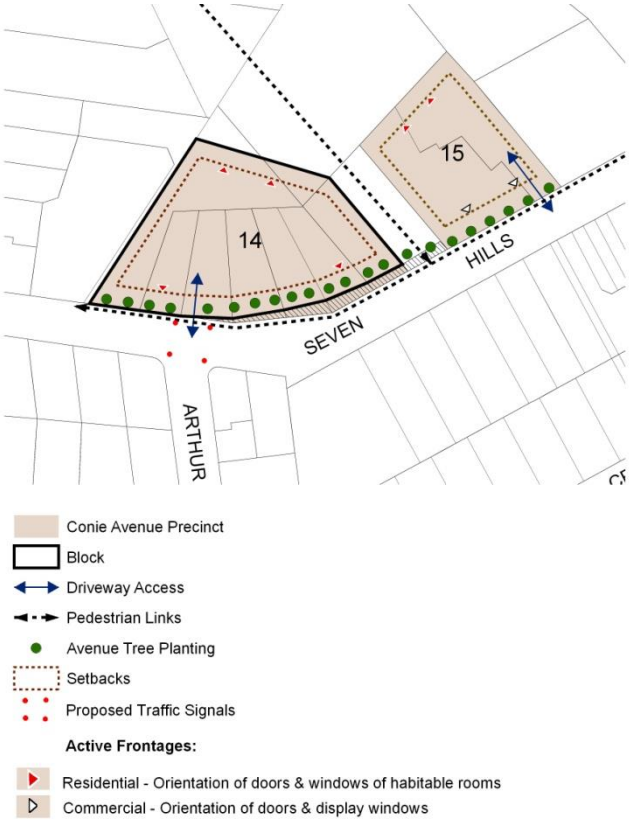


Figure 28 Conie Avenue Reserve Precinct – Structure Plan

3.5.2. FLOOR SPACE RATIO

a) The floor space ratio shall be in accordance with Clause 4.4 *Floor Space Ratio* of The Hills LEP 2012 and Floor Space Ratio Map.

3.5.3. BUILDING HEIGHT

(a) Building height shall be in accordance with Clause 4.3 *Height of Buildings* of The Hills LEP 2012 and LEP Height of Buildings Maps.

(b) Buildings should respect the height of adjoining development and must not exceed the maximum number of storeys identified in Figure 26.

3.5.4. BUILDING SETBACKS

(a) Building setbacks shall be in accordance with the following table:-

Block 14	
Front Setback: Ground - Fifth Level	10m
Additional Levels	12.5m
Rear Setback: Ground - Forth Level	8m
Additional Levels	16.5m
Side - Ground - Fifth Level	6m
Additional Levels	15m

Block 15	
Front Setback: Ground- Fifth Level	10m
Additional Levels	12.5m
Rear Setback: Ground - Forth Level	8m
Additional Levels	17m
Side Setback: Ground - Third Level	6m
Additional Levels	15m

3.5.5. BUILDING DESIGN

(a) Residential dwellings shall be dual aspect to improve solar access and amenity.

(b) Buildings should compliment and not visually dominate adjoining heritage buildings.

(c) Buildings should address Seven Hills Road and pedestrian spaces with active edges. Active edges must also be provided along the internal Connie Avenue Reserve.

3.5.6. ACCESS

(a) All parking is to be underground and incorporated into each individual development.

(b) Vehicular access to the precinct is only permitted in accordance with the points identified in the structure plan illustrated in Figure 27.

(c) Pedestrian connections through the site must have regard to the structure plan illustrated in Figure 27.

3.5.7. LANDSCAPING

(a) Common open space adjoining the Conie Avenue Reserve should be terraced and landscaped to provide change of grade and be fenced with piers and solid elements to comprise less than 40% of the fence.

3.5.8. WATER SENSITIVE URBAN DESIGN

a) The best practice principles of WSUD are to be applied during the construction and post construction phases of development. Schemes that promote water capture, reuse initiatives and water quality management measures, as described in documents including, but not limited to:

- *On-site Stormwater Detention Handbook, Version 4 2005, UPRCT;*
- *Australian Runoff Quality, Engineers Australia, 2006;*
- *Water Sensitive Urban Design – Technical Guidelines for Western Sydney, May 2004, Prepared for UPRCT by URS.*

are required for all new commercial and residential developments, or where the increase in impervious area over a site is greater than 150m^2. Common open space and publicly accessible courtyard areas may be utilised for WSUD initiatives.

3.6. WINDSOR ROAD PRECINCT

EXISTING CHARACTER

The Windsor Road Precinct is located within the northern frame of the Town Centre on the western side of Windsor Road opposite Stockland Mall. The precinct completes the western side of the Town Centre and consists of fifteen (15) properties, six of which are vacant, eight of which contain single storey dwellings and one which is currently used as a medical centre.



Figure 29 Windsor Road Precinct – Aerial View



Figure 30 Windsor Road Precinct – Illustration

OBJECTIVES OF WINDSOR ROAD PRECINCT

(i) to understand the evolving character of the Shire's town centres contained within the precinct and identify their influences on economic development and development of adjoining residential areas,

(ii) to prepare a suite of design guidelines for different forms of housing that protect and enhance the Shire's gardenesque character and reflect the evolving form of the Shire's town centres,

(iii) to achieve well designed residential development that offers a high standard of amenity for its residents and adjoining property owners,

(iv) to facilitate the development of building design excellence appropriate to a precinct,

(v) require car parking and servicing provisions to be contained within the development site to an amount and rate adequate for the economic and sustainable growth of the town centre, and

(vi) provide safe and secure access.

DESIRED FUTURE CHARACTER STATEMENT

The development controls will facilitate a unique development that seeks to balance quality, higher density residential living with leafy, green suburban character of the Shire. In so doing this, the development will seek to;

(a) Establish a strong green character to offset higher residential densities,

(b) Be well connected and integrated with the surrounding areas,

(c) Mitigate adverse off-site impacts to surrounding residential properties,

(d) Support the functioning of the Baulkham Hills centre and create a high quality, landmark building, and

(e) In addition to helping to diversify the centre, the development will deliver substantial residential floorspace in the area and contribute to increased housing diversity in the Shire.

STREET FRONTAGE

- Windsor Road frontage should provide generous landscaped setback to allow for an enhanced pedestrian area as well as privacy for dwellings.
- Setbacks should allow for any proposed road widening of Windsor Road.
- Screening and partial enclosure of balconies is limited to provide privacy for neighbours and comfort for residents without resulting in unattractive buildings or an appearance of excessive bulk or restricting opportunities for passive surveillance of the street.
- to provide setbacks that complement the setting and contribute to the streetscape and character of the street while allowing flexibility in siting of buildings.
- to ensure that the space in front of the building is sufficient to permit landscaping that will complement the building form and enhance the landscape character of the street.
- side and rear setbacks are to be proportioned to the slope of the site having regard to the height and relationship of the buildings on adjoining properties.
- the setbacks of proposed buildings are to minimise any adverse impacts such as overshadowing and privacy on adjacent and adjoining properties.

BUILT FORM

- Built form is to define the western edge of Baulkham Hills Town Centre known as the Windsor Road Precinct
- The Windsor Road Precinct should provide a prominent feature that signifies the edge of the Town Centre.
- A built form on the Windsor Road precinct that is well designed will create a feeling of arrival at the Town Centre as a destination point with the

potential to stimulate both residential and economic development in the Town Centre.

- New buildings to have appropriate architectural quality that uses a variety of physical and design elements to achieve buildings of character and interest.
- The built form should allow opportunities for passive surveillance and an active interface with publicly accessible areas.
- Buildings are to support and be integrated into the public domain network to achieve coherence and purpose.
- The integrity of heritage items and significant landscape elements in the vicinity are to be protected and enhanced.

ACCESS

Provide through site links which allow safe and convenient movement for vehicles and residents through on site links.

DEVELOPMENT CONTROLS

3.6.1. LAND USES

a) Landmark building to be located at the corner of Rembrandt Drive and Windsor Road.

3.6.2. FLOOR SPACE RATIO

a) The maximum floor space ratio is 2.3:1 identified in Figure 30 - Windsor Road Precinct Structure Plan.

3.6.3. BUILDING HEIGHT

a) Building height shall be in accordance with Figure 31 below.

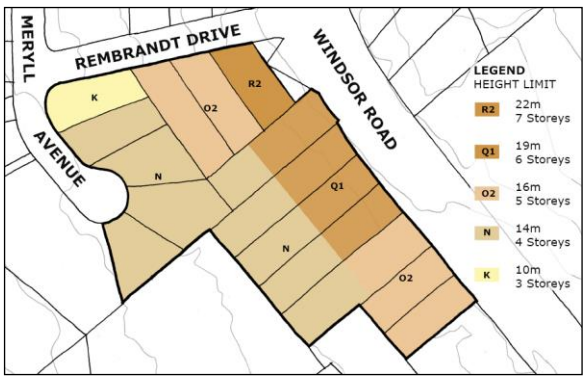


Figure 31 Windsor Road Precinct – Building Height

3.6.4. BUILDING SETBACKS AND SEPARATION

Notwithstanding the controls in this section for residential development additional setbacks maybe necessary to satisfy building separation, solar access and amenity requirements of State Environmental Planning Policy No. 65 –Design Quality of Residential Flat Development. Applicants will need to be in accordance with these requirements.

(a) Building setbacks shall be in accordance with the following table and Figures 32 & 33:

3.6.5. BUILDING SETBACKS

Building 1 & 2 Setback	Minimum	Facade articulation zone
Street frontage setback, Windsor Road and Rembrandt Drive: Ground to Fourth Storey	11 metres For a minimum 60% of building facade	9 to 11 metres Balconies and up to 40% of building facade are permitted in this zone
Street frontage setback, Windsor Road and Rembrandt Drive: Fifth to Seventh Storey	14 metres	
Rear setback: Ground to Fourth Storey	10 metres	
Rear setback: Fifth Storey	13 metres	
Side setback	10 metres	

Building 3 & 4 Setback	Minimum
Rear setback: Ground to Third Storey	10 metres
Rear setback: Fourth Storey	13 metres
Side setback	10 metres

Building 5 & 6 Setback	Minimum
Street frontage setback, Meryll Avenue	6 metres
Rear setback	10 metres
Side setback: Ground to Third Storey	8 metres
Side setback: Fourth Storey	14 metres

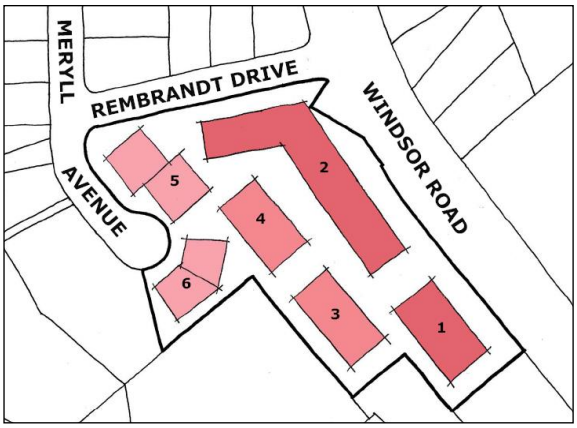


Figure 32 Windsor Road Precinct – Building Setbacks Key Diagram

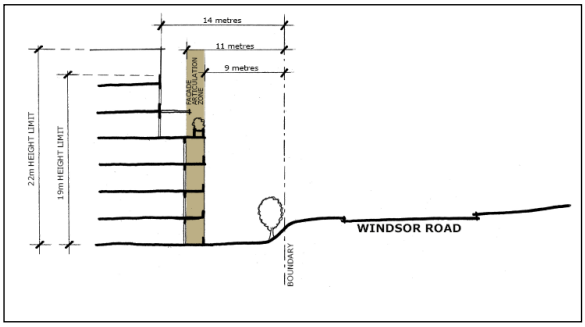


Figure 33 Rembrandt Drive & Windsor Road Facade Articulation Zone

a) Building separation shall be in accordance with the following:

Up to four storeys / 12 metres

- 12 metres between habitable rooms/balconies.
- 10 metres between habitable/balconies and non-habitable rooms.
- 8 metres between non-habitable rooms.

Five to seven storeys/up to 22 metres

- 18 metres between habitable rooms/balconies.
- 12 metres between habitable rooms/balconies and non-habitable rooms.
- 10 metres between non-habitable rooms.

3.6.6. BUILDING DESIGN

a) Residential dwellings shall be dual aspect to improve solar access and amenity. Single aspect units, must not be used unless:-

- Four (4) hours of direct sunlight is available for windows of primary living areas between 9am and 3pm on 21 June; and
- adequate ventilation can be achieved

b) Buildings should compliment and not visually dominate adjoining buildings.

c) Where shown in the Precinct controls and illustrations, corner elements may exceed the height of the remainder of the building in order to emphasise the landmark location and add architectural interest to the facade and skyline.

d) Corner aspects of any building are to be articulated with building mass and other design features.

e) Corner should add interest through the use of splays, curves, entries and other features. Corners buildings must address all frontages, including those facing streets or lanes.

f) Building facades are to be acoustically treated along Windsor Road with double glazing.

g) Balconies facing Windsor Road shall be partially screened and acoustically treated through shutters and louvers.

h) Where neighbourhood shops are located at ground level, active street edges/frontages are encouraged.

i) Roof forms to incorporate elements to create an interesting roof-scape and skyline; saw-toothed, pitched roofs, innovative skillion curved or floating roof forms are encouraged.

j) Buildings where possible shall be set around the shared central open space to improve their visual amenity and increase the natural surveillance of these areas.

3.6.7. ACCESS

a) All parking is to be underground and incorporated into each individual development.

b) Pedestrian footpaths are to be provided across the Meryll Avenue frontage, Windsor Road frontage and Rembrandt Drive frontage of the development.

3.6.8. ROADS & TRAFFIC AUTHORITY (RTA) REQUIREMENTS

a) The Windsor Road Precinct is affected by road widening order notification in Government Gazette No.97 of 7 September 1956 folio 2602. Any future development application of the site shall demonstrate consistency with road widening plans along Windsor Road.

b) Future improvement works at the intersection of Windsor Road and Rembrandt Drive would require relocation of the bus stop and the shelter further south along Windsor Road. Architectural plans and pedestrian access arrangements for the site should consider the possible relocation of the bus stop.

c) Extension of the existing median on Windsor Road to restrict the traffic movements to left-in and left-out only at the intersection of Windsor Road and Rembrandt Drive. This will require a Traffic Management Plan (TMP) to address potential traffic impacts and community concerns. The TMP will be submitted to the RTA and Council for approval prior to the implementation of works.

d) Consultation with the Roads & Traffic Authority (RTA) shall be undertaken and written evidence submitted to Council.

3.6.9. LANDSCAPING

Council requires landscape plans to be prepared by a suitably qualified landscape architect or experienced horticulturists. Objectives and development controls for landscaping development are set out in Part D Section 3 – Landscaping of Baulkham Hills Development Control Plan (BHDCP), and must be complied with. In addition the following development controls apply to this precinct:

a) Landscaping of the Windsor Road frontage should provide avenue planting of native species.

b) High, solid concrete or masonry fences should be avoided.

c) Boundaries adjoining existing developments are to be landscaped to provide privacy.

d) Lots 27 and 28 DP 30744 Rembrandt Street must to provide feature landscaping.

e) Central open space area shall be incorporated into the design of the precinct with through on site pedestrian links.

3.6.10. WATER SENSITIVE URBAN DESIGN

a) The best practice principles of WSUD are to be applied during the construction and post construction phases of development. Schemes that promote water capture, reuse initiatives and water quality management measures, as described in documents including, but not limited to:

- *On-site Stormwater Detention Handbook, Version 4 2005, UPRCT;*
- *Australian Runoff Quality, Engineers Australia, 2006;*
- *Water Sensitive Urban Design – Technical Guidelines for Western Sydney, May 2004, Prepared for UPRCT by URS.*

are required for all new commercial and residential developments, or where the increase in impervious area over a site is greater than 150m^2. Common open space and publicly accessible courtyard areas may be utilised for WSUD initiatives.

3.6.11. SITE FACILITIES AND SERVICING

MAIL BOXES

- Provide letterboxes for residential building tenancies in one accessible location adjacent to the main entrance to the development and designed to allow protection for use from inclement weather
- Mail boxes shall be integrated into a wall where possible and be constructed of materials consistent with the appearance of the building
- Letterboxes shall be secure and large enough to accommodate articles such as newspapers.

COMMUNICATION STRUCTURES, AIR CONDITIONERS AND SERVICE VENTS

- A master antenna must be provided for residential apartment buildings. This antenna shall be sited to minimise its visibility from public areas.
- Locate satellite dish and telecommunication antennae, air conditioning units, ventilation stacks and any ancillary structures, away from the street frontage integrated into the roof design and in a position where such facilities will not become a skyline feature at the top of the development adequately setback from the perimeter wall or roof edge of the buildings.

3.6.12. WASTE (GARBAGE) STORAGE AND COLLECTION

Garbage bins and recycling bins take up a large area near the street. Bin structures should be well designed and considered as part of the appearance of the overall development.

DEVELOPMENT CONTROLS

- Bin storage should be integrated with the streetscape and landscape of the residential development
- Enclosures should be durable accessible and easy to maintain
- Bin storage structures should be appropriately enclosed and screened for visual amenity

3.6.13. ACOUSTIC

Acoustic report which assess the design of dwellings and external noise attenuation devices combined shall be demonstrated to be able to achieve a maximum ambient noise level of 40 dB(A) in any habitable room.

- Council will require the submission of an acoustical assessment, by a suitably qualified acoustical engineer, with any development application for the erection of dwellings within the precinct.
- Acoustic walls to busy arterial roads needs to be designed to avoid blank painted surfaces and monotonous appearances
- Walls should be constructed of more than one material and colour
- Walls and roofs must be designed to achieve maximum insulation and reduce noise transmission, while contributing at the same time to the streetscape and character
- Appropriate materials with acoustic properties should be incorporated into design of the development.
- Appropriate separation distance must be provided between dwellings and noise sources; the use of landscape buffers and other barriers, where appropriate, must be considered
- Fencing or mounding shall be implemented to reduce noise levels from external sources such as the major roads surrounding the site.
- Council may require a noise and vibration assessment to be undertaken for the development

3.6.14. LIGHTING

The details of all proposed lighting including a light spill diagram for external lighting and the hours of operation of any lighting is to be provided with the development application.

- Adequate on site lighting is to be provided to ensure worker and customer safety.
- All lighting is to be erected to ensure that lights do not interfere with traffic movement both on the site and on nearby roads.
- Adequate lights are to be provided to assist with the security of the site.
- No lights are to interfere with the enjoyment of nearby properties.

3.6.15. SOLAR ACCESS

- Dwellings should be designed to allow at least 4 hours of sunshine within living areas of buildings and 50% of their open space, between 9.00 a.m. and 3.00 p.m. mid winter, and
- Building forms should provide a maximum northerly exposure for as many rooms as possible to each dwelling.

4. DEFINITIONS

Apartment buildings - means a building containing 3 or more dwellings where each dwelling does not necessarily have direct access to private open space at natural ground level.

DCP - Development Control Plan

Objectives - identify the desired outcomes relating to each environmental issue. These objectives may be achieved by meeting the controls.

Development Controls - set out both numerical parameters and a broad/flexible framework capable of achieving the Development Objectives. They also encourage innovative design approaches that can adapt to the site specific characteristics and/or technological advances in the industry.

Building Depth – is the horizontal cross section dimension of a building (building plan and depth + articulation zone = building envelope depth). Generally refers to the dimension measured from front to back (from street to the inside of the site). Where buildings are oriented differently, the depth will be the dimension of the shorter axis.

Building Setback - means the minimum distance that a wall, window or outer most part of the building

is required to be from a property boundary. It is measured as the horizontal distance between the proposed wall, window or outer most part of the building and the boundary.

Floor Space Ratio - Floor space ratio is the total floor area of all buildings, divided by the total area of the development site. The only areas to be excluded from the floor area calculations are spaces used for lift towers, cooling towers, plant rooms and built car parking structures required to meet Council's parking standards, and loading bays. The site area excludes land required for road widening or any other public purpose.

Existing Trees - any tree with a height over 5.0 metre and/or spread of 3.0 metres and/or a trunk diameter of 150 millimetres measured 1.0 metre from the base of the tree.

Storey - means a space within a building that is situated between one floor level and the floor level next above, or if there is no floor above, the ceiling or roof above, but does not include:

a. a space that contains only a lift shaft, stairway or meter room, or

b. a mezzanine, or

c. an attic.

Building height (or height of building) - means the vertical distance between ground level (existing) at any point to highest point of the building, including plant and lift overruns, but excluding communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like.

The Hills Development Control Plan (DCP) 2012

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Part D Section 11
Terminus Street Precinct

D11

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1.1. INTRODUCTION

This Section of the DCP has been prepared to provide direction and control to the development of the Terminus Street Precinct, located in the Castle Hill Major Centre.

This Section of the DCP must be read in conjunction with Part A – Introduction of this DCP.

1.2. LAND TO WHICH THIS SECTION OF THE DCP APPLIES

This Plan applies to the area outlined in red, being the area bounded by Old Northern Road, Cecil Avenue, Terminus Street and Crane Road as shown in Figure 1 and referred to in this Section of the DCP as the Terminus Street Precinct.



Figure 1 Terminus Street precinct

1.3. AIMS AND OBJECTIVES OF THIS SECTION OF THE DCP

The objectives of this Section of the DCP are:

(i) To provide a clear vision and desired future character for the revitalisation of the Terminus Street Precinct;

(ii) To provide detailed design guidance for the creation of an iconic, high quality public domain;

(iii) To encourage all developments to address the public street frontage and provide an attractive, safe and protective environment for the pedestrian;

(iv) To ensure that all development accommodates and supports the designated functions of the Precinct;

(v) To encourage a high standard of aesthetically pleasing and functional civic, retail, commercial, and residential uses, including mixed use developments;

(vi) To encourage innovative and high quality architectural outcomes that add to the character of the Precinct with particular emphasis on landmark features, landscaped areas, public spaces and excellent pedestrian amenity;

(vii) To encourage transport-oriented development in close proximity to the future transport interchange;

(ix) To ensure that development will not detrimentally affect the environment of any adjoining land and that satisfactory measures are incorporated to ameliorate any impacts arising from the proposed development; and

(x) To ensure that all developments incorporate the principles of Ecologically Sustainable Development (ESD).

1.4. RELATIONSHIP WITH OTHER PLANS AND POLICIES

In addition to the policies, guidelines and documents specified in Part A – Introduction to the Baulkham Hills DCP, this Section is to be read in conjunction with other relevant Sections of the DCP, including:

- Part B Section 5 – Residential Flat Buildings
- Part B Section 6 - Business
- Part C Section 1 - Parking
- Part C Section 2 - Signage
- Part C Section 3 - Landscaping
- Part C Section 4 – Heritage
- Part C Section 6 – Flood Controlled Land

Where any provision of this Section of the DCP is inconsistent with any provision of any other Section of the DCP, the provisions of this Section of the DCP shall prevail to the extent of that inconsistency.

2. URBAN CONTEXT

2.1. CASTLE HILL MAJOR CENTRE

The Terminus Street Precinct is situated within the Castle Hill Town Centre. The Department of Planning has identified Castle Hill as a Major Centre in the draft North West Subregional Strategy (December 2007). Hence, the Major Centre warrants a high quality urban development, an efficient local road network and the provision of quality civic infrastructure.

Castle Hill consists of retail, commercial, residential and community uses. Over the past two decades the Town Centre has experienced rapid growth in the quantity of retail floor space, predominately as a result of the expansion of the existing Castle Towers Shopping Centre.

Continued growth of the Town Centre is anticipated in the future, including an expected growth in traffic volumes and a growth in demand for retail, commercial and residential floorspace. Town developments anticipated in the Centre include the Castle Towers Stage 3 expansion, bus interchange, the planned bus transitway link, the Castle Hill Mainstreet Project civic improvements, the completion of the Castle Hill Ring Road, and the planned widening of Showground Road. Within this context the intensification of land use and development within the Terminus Street Precinct is proposed.

2.2. TERMINUS STREET PRECINCT

The Terminus Street Precinct contains a mix of primarily commercial and retail uses, and is situated in a central location to the Castle Hill Centre. The Precinct currently consists of a Council-owned carpark to serve the shops and businesses in the area, the Castle Mall Shopping Centre, and strip shopping fronting Old Northern Road.

The Precinct has a total area of 3.987 hectares.

2.3. TERMINUS STREET PRECINCT MASTERPLAN

In December 2007, Council adopted the Terminus Street Precinct Masterplan. The Masterplan was prepared to define the desired future development, character and role of the Terminus Street Precinct and describes the actions necessary to enhance the Precinct's economic viability and social amenity. Accordingly, this Section of the DCP is formulated to be compatible with the proposals set out in the adopted Masterplan.

The Masterplan identified a potential mix of uses including residential, commercial, civic, community and retail. It also identified the Precinct as suitable for the establishment of a high quality public domain for the long-term benefit of the Castle Hill Town Centre. The Masterplan states the vision for the Precinct as follows:

"The vision for the precinct is that of a vibrant centre, meeting the needs of the existing and future community – seamlessly connecting all of Castle Hills' retail and commercial areas to create an exciting new 'town heart' supporting sustainable growth."

This section of the DCP provides the necessary objectives and development controls required to deliver the desired future development outcome for the Terminus Street Precinct as set out in the adopted Masterplan.

2.4. OPPORTUNITIES AND CONSTRAINTS

2.4.1. INTRODUCTION

The outcomes of an opportunities and constraints analysis undertaken for the Terminus Street precinct are presented in this section of the DCP. The objectives of this DCP are:

(i) To encourage a comprehensive approach to site planning, design and assessment of the development;

(ii) To facilitate assessment of how future buildings relate to their immediate surroundings and each other;

(iii) To facilitate development of a design that minimises the negative impacts on the amenity of adjoining development;

(iv) To ensure that development is appropriate to the sites' capability and suitability for the development proposed; and

(v) To minimise impacts of the development on the environment with regard to the principles of ESD.

The analysis also considers the Precinct's immediate surrounds. The following elements have been analysed:

- Landform
- Views
- Surrounding Development/Infrastructure/Uses
- Heritage
- Traffic and Access
- Landscape and Vegetation
- Drainage
- Site Hazards

2.5. LANDFORM

The Terminus Street Precinct is located east of the ridgeline that generally follows Old Northern Road. The land within the Precinct has a cross fall of approximately 17 metres from the highest point at the intersection of Old Northern Road and Crane Road to the lowest point on Terminus Street. Figure 2 shows the topography of the site and its surrounds.

2.5.1. OPPORTUNITIES

The highest point of the Precinct provides a focal point for the Centre and the opportunity for a landmark development in close proximity to the site identified as the future bus interchange. The southern axis of Showground Road can be visually reinforced with a landmark 13 storey development. The Precinct falls away from the ridgeline that generally follows Old Northern Road. This allows the buildings with commercial uses located along Old Northern Road to act as an acoustic barrier to the Town Square located in the south-eastern portion of the Precinct. This acoustic barrier will also shield residential units to the south-east of the Old Northern Road frontage.

2.5.2. CONSTRAINTS

Overshadowing of adjoining sites due to topography and general north-south orientation.

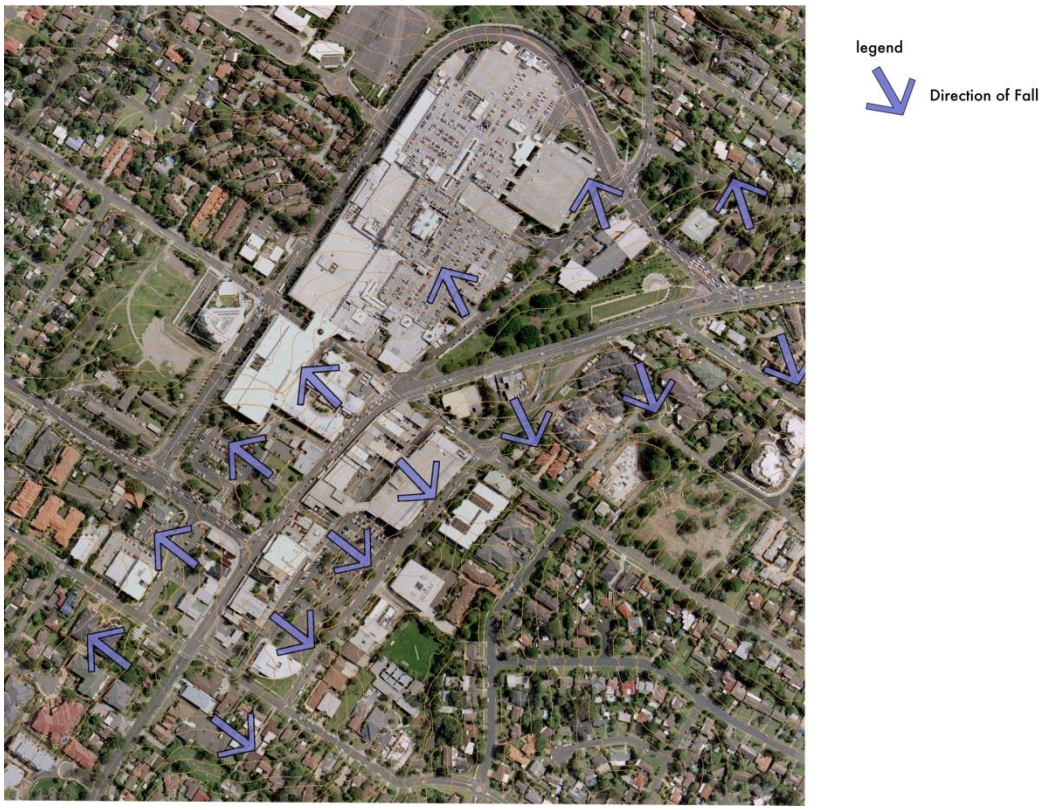


Figure 2 Topographical map

2.6. VIEWS

Direct views towards the south and south-east are available from Old Northern Road and McDougall Lane. Examples of views from key roads in the area are provided in Figures 3a-3e.

2.6.1. OPPORTUNITIES

The Precinct occupies a visually dominant position within the Castle Hill Town Centre. Parts of the Precinct are suitable for a gateway/landmark building offering district views in all directions, particularly to the south.

2.6.2. CONSTRAINTS

Possibility of overshadowing of adjacent commercial development located along the south-eastern frontage of Terminus Street.



Figure 3A Old Northern Rd facing north at Showground Rd



Figure 3B Terminus St facing north at Cecil Ave



Figure 3C Showground Rd facing east at Pennant St



Figure 3D Mercer St facing south



Figure 3E Mcdougall Lane facing north

2.7. SURROUNDING DEVELOPMENT, INFRASTRUCTURE AND USES

The surrounding development (Figure 4) includes primarily commercial and retail uses with some smaller areas of residential development. The residentially zoned land surrounding the Castle Hill Major Centre is generally zoned for residential flat buildings and multi dwelling housing. These residential zones allow for the development of higher density housing and increased population adjacent to public transport and activity areas.

A number of proposed changes will provide the necessary infrastructure and additional development to contribute to its Major Centre status and will provide an important catalyst for the future development of the Terminus Street Precinct. They include:

- The bus interchange located centrally in the Precinct;
- The construction of the Eastern Ring Road along Terminus Street;
- The Castle Hill Mainstreet civic improvements on Old Northern Road; and
- The proposed Stage 3 expansion of the Castle Towers Shopping Centre.

Thus the context of the site presents the following opportunities and constraints:

2.7.1. OPPORTUNITIES

- To design a high quality public domain outside the existing shopping malls; and
- To correct the balance between pedestrians and cars in the public domain.

2.7.2. CONSTRAINTS

- Provision of a public carpark with a minimum of 400 spaces to be provided (as per Council's resolution);
- Potential for overshadowing of neighbouring properties; and
- Potential impacts of wind.

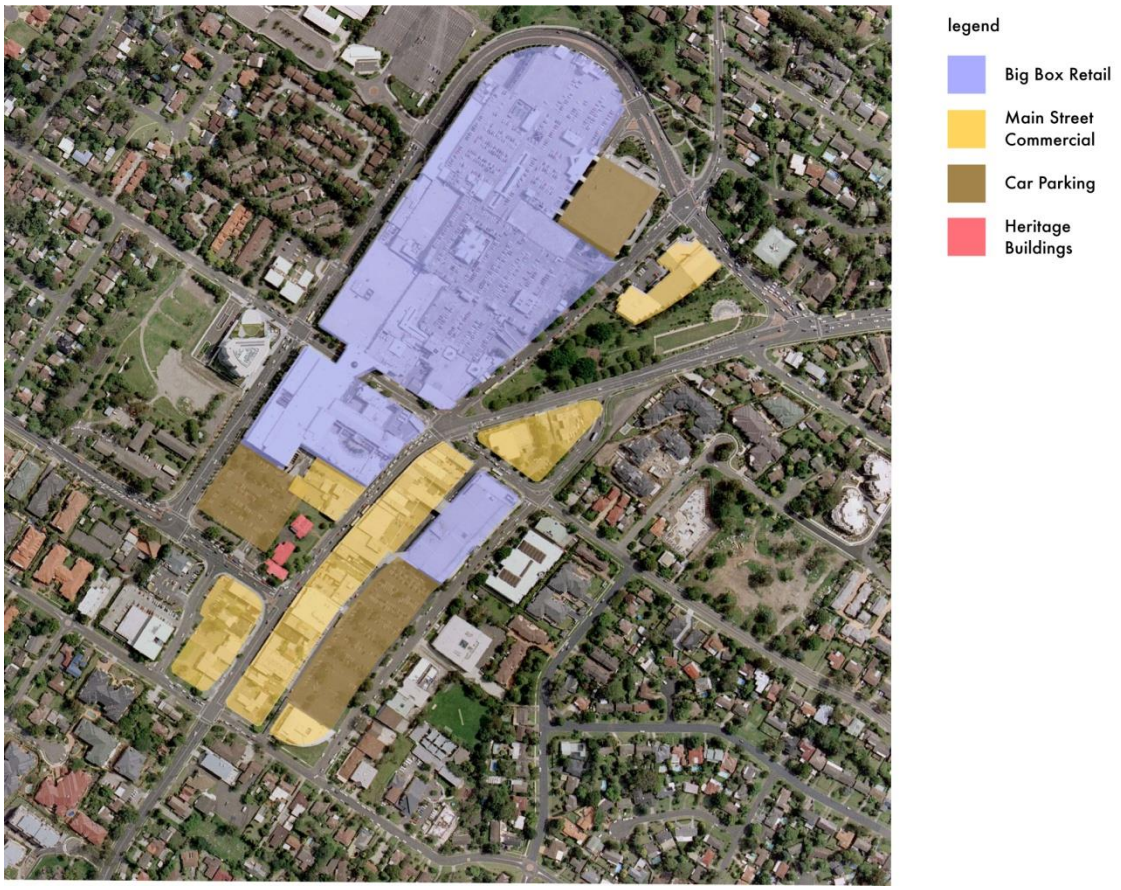


Figure 4 Existing uses

2.8. HERITAGE

No items of environmental heritage under either The Hills LEP 2012 or the State Heritage Register are situated within the Terminus Street Precinct. However, the Precinct is located opposite the Castle Hill Public School and the Former Police Station which are located at 264-266 Old Northern Road.

2.8.1. OPPORTUNITIES

The Castle Hill Public School and Former Police Station, located opposite the site, contribute to the visual variety and vitality of the Precinct. A direct visual and pedestrian link will be provided from the Precinct's Town Square to the former Castle Hill Public School.

2.8.2. CONSTRAINTS

To provide a recessive roof form that minimises the visual impact of the Precinct on the setting of the former Castle Hill Public School and Former Police Station.

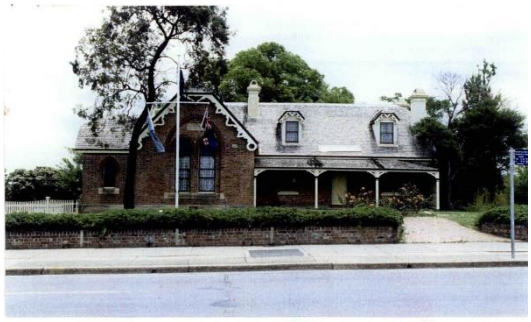


Figure 5 Former Castle Hill public school



Figure 6 Former police station

2.9. TRAFFIC AND ACCESS

2.9.1. ROAD NETWORK

The Terminus Street Precinct is bounded by Old Northern Road on its western boundary, Cecil Avenue on its southern boundary, Terminus Street on its eastern boundary and Crane Road on its northern boundary.

Old Northern Road is a classified arterial road providing a high capacity link between Baulkham Hills in the south and the Hawkesbury River in the north. It is the main north-south link through the area across the western frontage of the Precinct and carries a large volume of regional and local traffic, which includes both private vehicles and bus services. Upon the completion of the Castle Hill Ring Road, Old Northern Road will be re-classified as a local road between Showground Road and Terminus Street and will support primarily local traffic only.

Terminus Street is currently a local road supporting local traffic. The completion of the Ring Road will result in the re-classification of Terminus Street as a State arterial road for its full length. The role of Terminus Street will be to support large volumes of regional traffic as part of the Eastern Ring Road.

Crane Road is currently a local road and will remain as such following the completion of the Ring Road.

Cecil Avenue is currently a local road supporting local traffic. The completion of the Ring Road will result in the re-classification of Cecil Avenue as a State arterial road between Old Northern Road and Terminus Street. The role of Cecil Avenue will be to support large volumes of regional traffic as part of the Eastern Ring Road.

Refer to Figure 7 which presents the anticipated future road hierarchy at the Castle Hill Major Centre.

2.9.2. PUBLIC TRANSPORT

A regional public transport hub is proposed at the northern end of the town centre in close proximity to the Terminus Street Precinct, which is to include a bus interchange. The site will be well serviced by public transport and residents, workers and visitors to the Precinct will have access to a wide variety of facilities without the need to rely solely on private vehicles.

2.9.3. PEDESTRIAN FACILITIES

Pedestrian movement and amenity are to be enhanced throughout the Precinct through the provision of additional pedestrian linkages and active street frontages. The Castle Hill Mainstreet Planning Study Masterplan Report (1999) states that Old Northern Road creates a barrier and a poor environment in the Centre, and that there is a lack of cohesiveness and movement within the Centre.

A review of the Mainstreet Masterplan (1999) to reflect the recommendations of the Castle Hill Bus Interchange report, the implications of the proposed Stage 3 expansion of the Castle Towers Shopping Centre, and the implications of the draft Terminus Street Precinct Masterplan has resulted in the preparation of the Castle Hill Mainstreet Concept Design Report (June 2008). Council's vision for the Castle Hill Major Centre is as follows:

'The CBD as the heart of the community should be a vibrant and energetic place with pedestrian activity, restaurants, cafes, retail services and places for people to enjoy and meet taking full advantage of existing and proposed public transport opportunities and significant heritage items'.



Figure 7 Future street hierarchy

2.10. LANDSCAPE AND VEGETATION

Since the inception of a tramway at Castle Hill in 1910, the Terminus Street Precinct and the surrounding area has been developed for retail and commercial uses and has been cleared of its original vegetation. The Terminus Street Precinct contains stands of trees in the existing Council carpark. These trees break up the mass of the carpark somewhat, but do not contribute significantly to the character or quality of the area.

The landscape of the Centre is currently limited. Arthur Whittling Park forms a green edge at the northern end of the Centre, and contains many mature trees. The green open spaces of the heritage precinct (Former Police Station and Former Castle Hill Public School) also contribute to the character of the Centre. There are few street trees at Castle Hill, most of which are confined to Old Northern Road and at the intersection of Crane Road.

Plans for improvement to the public domain of the Centre are contained in the Castle Hill Mainstreet Concept Design Report (Environmental Partnership, 2007), and in plans for street tree planting as part of the Eastern Ring Road works.

2.10.1. OPPORTUNITIES

- Establishment of street tree planting throughout the Precinct;
- Creation of attractive pedestrian thoroughfares along the Old Northern Road frontage and McDougall Lane; and
- Creation of a “grand boulevard” along Terminus Street with an increased density of street tree plantings.

2.10.2. CONSTRAINTS

- Integration with existing utilities and services; and
- Integration with awnings along street frontages.

2.11. DRAINAGE

The Terminus Street Precinct is located within the Hawkesbury River catchment. The Precinct consists of predominantly hard surface area and generally drains towards the south-east. Stormwater drains are located within the site and surrounding area. Runoff from existing buildings and the existing Council car park are connected to Council’s stormwater drainage system.

2.11.1. OPPORTUNITIES

- Deep soil planting to promote healthy growth of large trees;
- Provision of roof gardens to contribute to the provision of quality open space and landscaping on structures; and
- Use of Water Sensitive Urban Design measures to promote water capture and re-use, as well as water quality management.

2.11.2. CONSTRAINTS

- Development on the site should not increase the proportion of hard surface area or the volume and rate of offsite stormwater drainage downstream.

3. URBAN DESIGN PRINCIPLES

3.1. DEVELOPMENT FRAMEWORK

The opportunities and constraints to development as set out in section 2 have been synthesised to determine the development framework by applying best practice urban design to achieve outcomes appropriate for the Terminus Street Precinct. Development within the Precinct must represent a high quality urban design solution and must demonstrate that adequate regard has been given to the following aspects of the design:

- Visual impact
- Urban structure
- Heritage
- Land use and density
- Access
- Landscape and character

The urban design principles that apply to the integration of future development with the whole centre are as follows:

3.1.1. VISUAL IMPACT

Future development shall:

- Provide a gateway landmark on the corner of Old Northern Road, Crane Road and McDougall Lane; and
- Provide a civic landmark on Council's car park site in alignment with the southern side of Showground Road.

3.1.2. URBAN STRUCTURE

Future development shall:

- Provide an appropriate transition in form from the existing buildings on the eastern side of Old Northern Road to the proposed buildings on the western side of McDougall Lane;
- Provide efficient access to basement parking levels; and
- Provide development of an appropriate scale to create a sense of place and community focus.

3.1.3. HERITAGE

Future development shall:

- Provide a visual connection and pedestrian link from the former Castle Hill Public School heritage building to the Town Square; and
- Demonstrate that the massing and roof form of the buildings opposite the Castle Hill Public School and Former Police Station are broken up and modulated by openings and lower scale, lighter building elements so as to respect the scale and curtilage of the heritage buildings.

3.1.4. LAND USE AND DENSITY

Future development shall:

- Ensure a mix of uses that will provide social activity throughout the day and into the evening in a manner compatible with the residential uses and complimentary to the remainder of the Precinct; and
- Provide a civil and cultural focus in the Precinct to balance the primarily retail uses in the western part of the Town Centre.

3.1.5. ACCESS

Future development shall:

- Provide an arrival point at the proposed Bus Interchange through the realignment of McDougall Lane north of the Town Square;
- Provide improved pedestrian access along the street frontage as well as through site links;

- Minimise the impact of bus, private vehicular and service access on pedestrian amenity and the Precinct environment;
- Provide a vibrant, mixed use character, activating all areas of the Precinct and providing opportunities for casual surveillance, enhancing safety.

3.1.6. LANDSCAPE AND CHARACTER

Future development shall:

- Provide a network of public spaces that deliver a high level of amenity and connectivity for pedestrians;
- Establish a vibrant community image and encourage people to use the Centre for passive recreation and as a meeting place;
- Provide a high quality design commensurate with the role of the Town Square as a focus of civic life;
- Integrate development with standards and design language established for Old Northern Road and Terminus Street, to ensure that the development is a seamless part of the public domain of the Centre;
- Avoid open space that is generated by leftover spaces resulting from building siting and location, but provide attractive, well planned/designed, usable spaces;
- Provide high quality vibrant 'urban landscape' elements that are simple and robust in design to cater for large volumes of people and that are safe during both day and night;
- Ensure a high quality public domain based on sound ecologically sustainable development and energy efficiency principles.

3.2. DESIGN PRINCIPLES

The design principles that underpin future development within the Precinct are:

i) Enhance the quality of the public domain in the area, with a new Town Square, a widened McDougall Lane and new pedestrian lanes from Old Northern Road to McDougall Lane and the Town Square;

ii) Create a Town Square that is level with McDougall Lane, with a direct visual and pedestrian link to the Castle Hill Public School heritage building;

iii) Transform McDougall Lane from a service lane into a street, with widened footpaths and carriageway, on-street parking and street trees;

iv) Provide new 5 storey buildings with street addresses onto McDougall Lane, at the eastern end of properties with shops facing Old Northern Road;

v) Make a gradual transition of scale from the existing 2 storey main street shops on Old Northern Road, with 3 storeys on Old Northern Road and 5 storeys on McDougall Lane;

vi) Create a consistent scale of building heights on the northern, western and southern sides of the Town Square;

vii) Locate the tallest tower on the southern side of the Town Square to avoid overshadowing the square, and set the tower 50m back from the square, to minimise its visual presence when viewed from the square;

viii) Site the tallest tower in alignment with the southern side of Showground Road, to create a landmark when viewed from Showground Road; and

ix) Provide good pedestrian links from Terminus Street to the development, with a lift and stairs up to the Town Square and direct pedestrian access points into the lower level active uses along Terminus Street and the car park behind.

Figures 8A-C present the potential built form outcome for the Terminus Street Precinct.

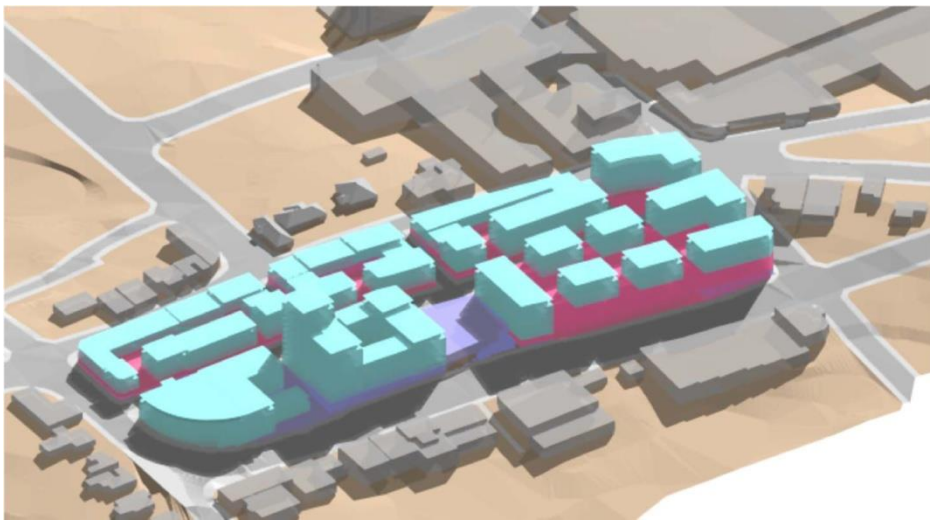


Figure 8A Potential built form outcome facing west

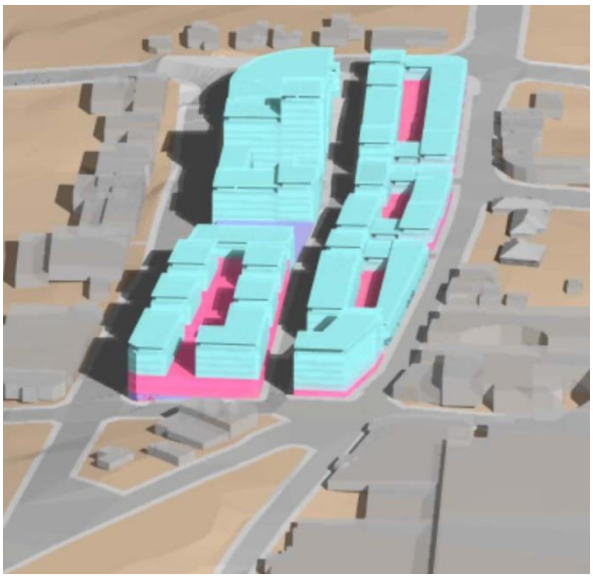


Figure 8B Potential built form outcome facing south

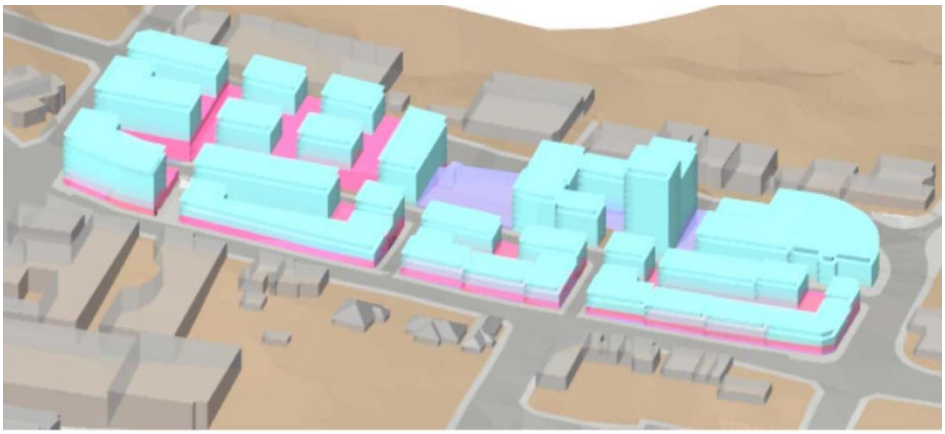


Figure 8C Potential built form outcome facing east

4. DEVELOPMENT CONTROLS

The objectives and development controls for development of the Terminus Street Precinct are set out in this section of the DCP.

4.1. URBAN CHARACTER

4.1.1. EXISTING CHARACTER

The Terminus Street Precinct contains a diverse range of character areas, including the street frontages to Old Northern Road, Cecil Avenue, Terminus Street, Crane Road, the new Town Square and McDougall Lane. These areas have either:

- An existing built form context that relates to the desired future character of the area; or
- An existing built form context that is not relevant to the desired future character of the area; or
- No existing built form context.

The areas that have an existing built form context that relates to the desired future character of the area are:

- Old Northern Road
- Cecil Avenue

The areas that have an existing built form context that are not relevant to the desired future character of the area are:

- Terminus Street
- Crane Road

The areas that have no existing built form context are:

- The new Town Square
- McDougall Lane

4.1.2. CHARACTER AREAS

Old Northern Road

The desired future character for Old Northern Road includes reinforcing the existing features of buildings that contribute to the desired future character of the street. These features are:

- Predominantly horizontal, metal and glass awnings;
- Predominantly masonry façades above awning level;
- Punched window openings in the predominantly masonry façades; and
- Colours of a mid to light tonal range.

Crane Road

The existing building on the corner of Crane Road and Terminus Street lacks window openings and façade detail, and does not form a part of the desired future context for this site. The desired future character for Crane Road is to include:

- Retail and commercial ground level uses to provide activity and visual interest for pedestrians; and
- Visual interest and a range of materials, colours and finishes in the upper level façades.

Town Square

The desired future character for the Town Square is to include:

- A well defined space, made by consistently aligned, continuous building frontages on three sides and no buildings at the level of the square on the Terminus Street side of the square;
- A civic character, with public buildings addressing the square on at least one side;
- Memorable and impressive building entries for pedestrians; and
- Active building frontages to the square, encouraging a high level of pedestrian activity into and out of buildings at ground level.

McDougall Lane

The desired future character for McDougall Lane is to include:

- A new street character rather than a service lane;
- Buildings addressing the new street with Town façades and building entries; and
- Predominantly active ground level street frontages, whilst acknowledging the need for access for service vehicles and entries to underground parking.

Cecil Avenue

The desired future character for Cecil Avenue includes reinforcing the existing features of buildings that contribute to the desired future character of the street, being:

- Predominantly solid masonry or solid panel system façades;
- A balance between window openings and solid wall in any façade; and
- Colours of a mid to light tonal range.

Terminus Street

The desired future character for Terminus Street is to include:

- A boulevard character with street trees on both sides and a wide footpath;
- A pedestrian friendly environment with easy access from the lower footpath level straight into the adjoining car park and up to the Town Square, including multiple lifts and public stairs;
- Ground level commercial uses to provide activity and visual interest to the pedestrian; and
- Visual interest and a range of materials, colours and finishes in the upper level façades.

4.2. MATERIALS, FINISHES AND STREETSCAPE

OBJECTIVES

Buildings in the Terminus Street Precinct are to:

(i) Reinforce the desired future character of the area they are located in; and

(ii) Provide richness of detail and architectural interest, particularly at visually prominent parts of the building, such as corners, entries, lower parts of the building and at the rooftop.

DEVELOPMENT CONTROLS

Old Northern Road

Buildings in Old Northern Road are to have:

(a) Predominantly horizontal, metal and glass awnings;

(b) Predominantly masonry façades above awning level, with punched window openings;

(c) Painted render as the preferred masonry finish in façades above awning level;

(d) Detailed parapets, with wall cappings and the like;

(e) Articulated roof lines, with set back top floors, projecting roofs and the like;

(f) A mid to light tonal range of colours; and

(g) Black painted façades, black glass and highly reflective glass must not be used.

Crane Road

Buildings in Crane Road are to have:

(a) Both solid wall and window openings in every façade;

(b) Punched windows providing visual relief to the façade where façades are predominantly masonry;

(c) Solid framing in masonry or panel systems providing façade articulation where façades are predominantly glazed;

(d) A balance of horizontal and vertical proportions; and

(e) Ground level commercial or retail uses, whilst accommodating the need for access for service vehicles and entries to underground parking.

Town Square

The buildings that address the Town Square, on its northern, western and southern sides, (including buildings addressing McDougall Lane on the western side of the Town Square) will demonstrate design excellence in their conception. The façades addressing the square are to contain:

(a) Active frontages at ground level for the full length of the façade facing the square;

(b) Generous and continuous pedestrian shelter in the form of colonnades or awnings at ground level or ground level and first floor level;

(c) High quality masonry façades, such as stone or mid to dark toned brickwork;

(d) Corner details such as splayed corners, curved corners, engaged columns and the like, to emphasis the corner with architectural detail;

(e) A balance between window openings and solid wall of approximately 40% window to 60% wall;

(f) A balance between horizontal and vertical proportions in the composition of the façades; and

(g) A recessed top floor, horizontal roof form and/or cornice that, in combination, create a distinctive top to the building.

The façades addressing the square are not to contain:

(a) Car park entries, fire stair exits or blank façades at ground level;

(b) Concrete block, white or light coloured brickwork or painted brick or blockwork;

(c) Primarily blank walls or primarily glazed walls for the entire façade;

(d) Either strongly horizontal or strongly vertical components in façade compositions; and

(e) A flat top to the Town façade addressing the Town Square, without a recessed top floor, horizontal roof form and/or cornice.

McDougall Lane

The buildings in McDougall Lane are to be:

(a) Built to the new street alignment;

(b) Contain active ground level frontages for the full extent of the frontage on the eastern side of the street from Crane Road to the Town Square;

(c) Contain active ground level frontages elsewhere, whilst acknowledging the need for access for service vehicles and entries to underground parking. These are to be located where indicated in Figure 19;

(d) High quality masonry façades, such as mid to dark toned brickwork or mid to light toned painted render; and

(e) Corner details such as splayed corners, curved corners, engaged columns and the like, to emphasis the corner with architectural detail.

Cecil Avenue

The buildings in Cecil Avenue are to be:

(a) Predominantly solid masonry or solid panel system façades;

(b) A balance between window openings and solid wall in any façade; and

(c) Colours of a mid to light tonal range.

Terminus Street

The buildings in Terminus Street are to have:

(a) Easy pedestrian access from the lower footpath level straight into the adjoining car park and up to the Town Square, including multiple lifts and public stairs;

(b) Ground level commercial uses to provide activity and visual interest to the pedestrian;

(c) Visual interest and a range of materials, colours and finishes in the upper level façades;

(d) Colours predominantly mid to light tonal range;

(e) Both solid wall and window openings in every façade;

(f) Punched windows providing visual relief to the façade where façades are predominantly masonry;

(g) Solid framing in masonry or panel systems providing façade articulation where façades are predominantly glazed; and

(h) A balance of horizontal and vertical proportions in every façade.

SUBMISSION REQUIREMENTS

- Elevations from all street frontages; and
- Schedule of colours and finishes.

4.3. BUILDING AND CEILING HEIGHTS

OBJECTIVES

(i) To encourage consistent building heights along the eastern side of Old Northern Road in relation to existing building heights on both the eastern and western sides of the road;

(ii) To make a gradual transition of building height from the existing buildings on the eastern side of Old Northern Road to the proposed buildings on the western side McDougall Lane;

(iii) To emphasise the corner of Old Northern Road, Crane Road and McDougall Lane as a town street intersection in the Castle Hill Town Centre, as having close proximity to the proposed bus interchange and as an entry point leading to the proposed Town Square, with taller buildings than sites to the south along Old Northern road and to the east along Crane Road;

(iv) To create cohesive built form and spatial enclosure of the proposed Town Square with consistent building heights to all sides of the square;

(v) To visually reinforce the axis of Showground Road when viewed from a distance along Showground Road, with one taller building aligned to the southern alignment of Showground Road;

(vi) To avoid the overshadowing of residential properties to the south of Cecil Avenue and the church and school grounds in Cecil Avenue in midwinter between 9am and 3pm by any tower building within the boundaries of the Precinct;

(vii) To minimize overshadowing of the proposed Town Square whilst recognising that buildings to the north will partially overshadow the Town Square in mid-winter at 12 noon; and

(viii) To create good amenity in buildings in terms of natural light penetration towards the centre of the building and natural ventilation with sufficiently high ceilings.

DEVELOPMENT CONTROLS

(a) Refer to Clauses 4.3 *Height of buildings* and 5.6 *Architectural roof features* of The Hills Local Environmental Plan 2012 and Height of Buildings Map.

(b) Maximum building heights above the top most car parking level shall be in accordance with the building heights shown in Figure 9;

(c) The maximum height of car park levels when viewed from Terminus Street is to be no more than the level of the proposed Town Square;

(d) The ceiling heights of the ground floor and the first floor (Levels 1 and 2) of all new buildings within the boundary of the Terminus Street Precinct are to be a minimum of 3.3m to promote flexibility in use; and

(e) The level of the Town Square is to be at the existing level of McDougall Lane where the Town Square meets McDougall Lane.

SUBMISSION REQUIREMENTS

- All development applications are to show floor to ceiling height dimensions for each floor, and show ground levels and roof levels at a number of locations around the building to demonstrate the relationships between the ground levels, the floor levels and the roof levels.



Figure 9 Building heights

4.4. DENSITY AND FSR

OBJECTIVES

(i) To provide development densities that are appropriate to the built form controls for the Precinct; and

(ii) To ensure that proposals for new buildings are assessed with due regard to urban design and built form controls in consideration of development density.

DEVELOPMENT CONTROLS

(a) Refer to Clause 4.4 *Floor space ratio* of The Hills Local Environmental Plan 2012 and Floor Space Ratio Map.

(b) The maximum floor space ratio (FSR) of a building on land in the Terminus Street Precinct shall be in accordance with the maximum FSR for the site as presented in Figure 10.

SUBMISSION REQUIREMENTS

- All development applications are to contain plan drawings of floor space at each level, including the top floor level, demonstrating compliance with the floor areas and percentage of top floor coverage.
- All applications are to be accompanied by an electronic 3D model of the proposed development.



Figure 10 Floor space ratio

4.5. LAND USES

OBJECTIVES

(i) To promote pedestrian movement and a high level of pedestrian amenity throughout the Precinct, with active street and Town Square frontages at ground level;

(ii) To allow for and promote commercial or retail uses at first floor level (Level 2) in all buildings; and

(iii) To allow for mixed uses, including residential and commercial uses, in buildings in the Precinct.

DEVELOPMENT CONTROLS

(a) Provide active street frontages (such as retail, cafes or restaurants) at ground floor level (Level 1) in accordance with Figures 11a and 11b; and

(b) Provide minimum 3.3m ceiling heights at first floor level (Level 2) in all buildings to promote flexibility in use over time.

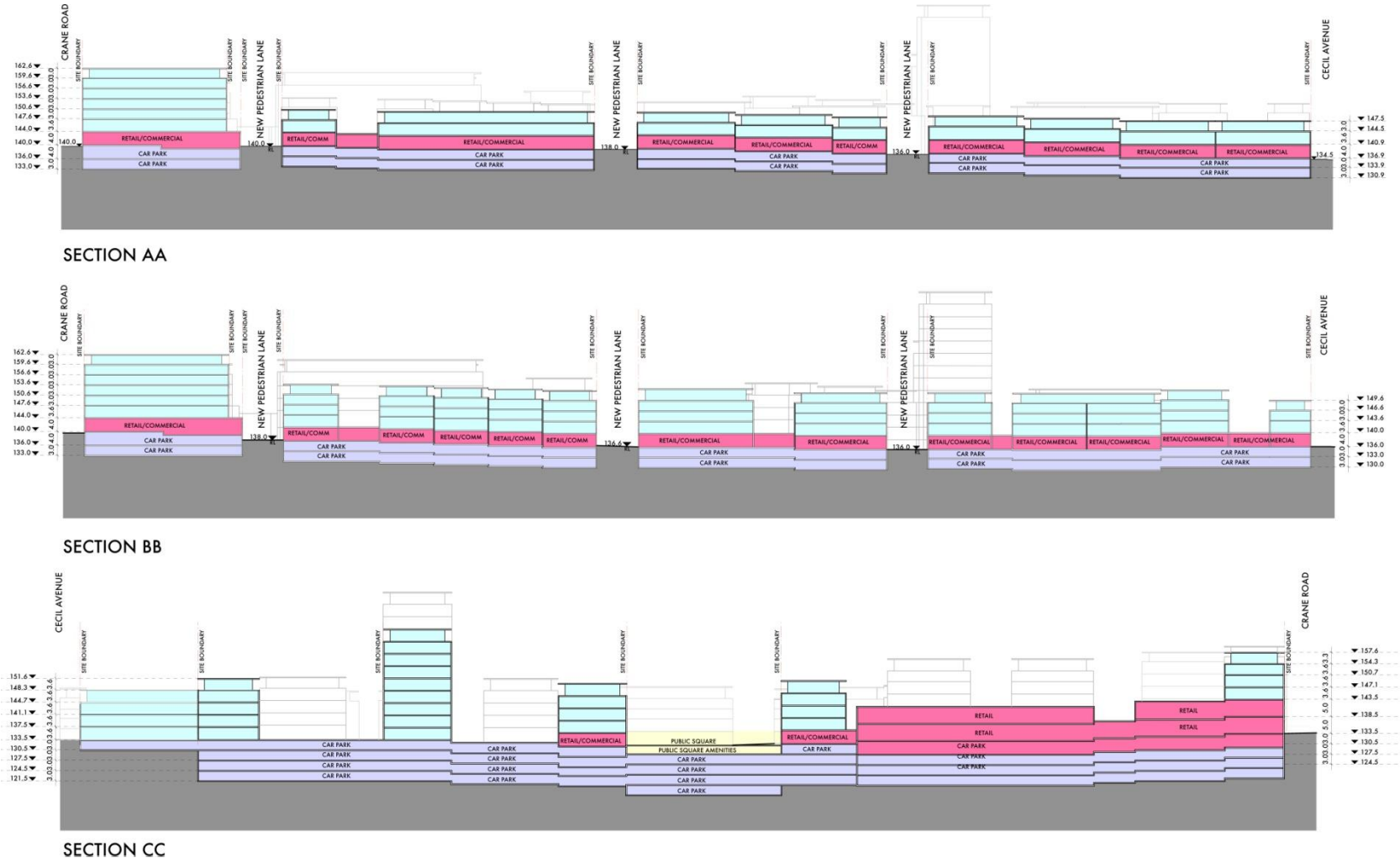


Figure 11A Cross section of land uses

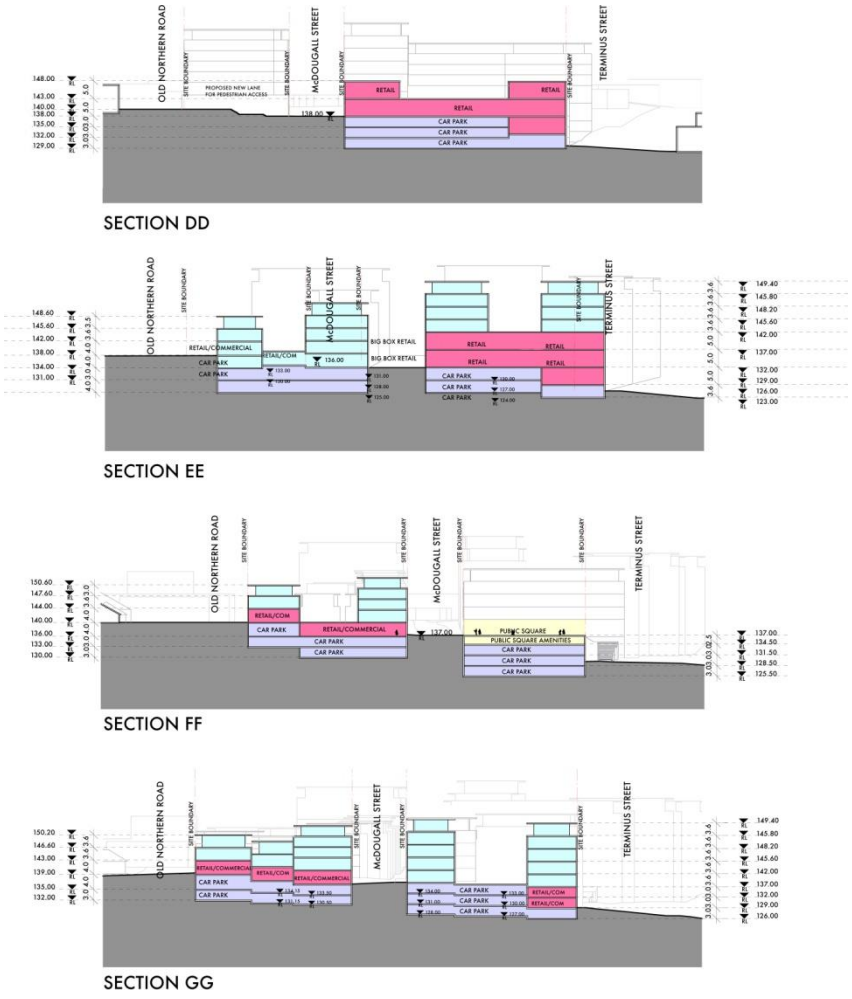
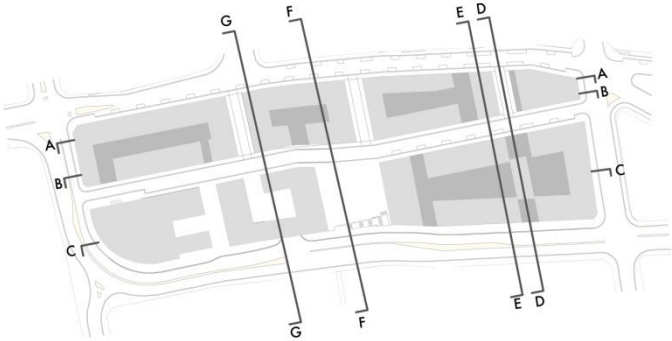


Figure 11B Cross section of land uses – Terminus St precinct



Index to Figures 11a and 11b

COMMERCIAL/RESIDENTIAL
RETAIL/COMMERCIAL
PUBLIC SQUARE
CAR PARK

4.6. BUILDING ALIGNMENTS

OBJECTIVES

(i) To create consistent and continuous building alignments that define the public domain, including the town square, streets and lanes; and

(ii) To improve the quality of the public domain.

DEVELOPMENT CONTROLS

(a) Building alignments should be provided at ground level (Level 1) in accordance with Figure 12; and

(b) Building should have street frontages built predominantly to the street alignment in accordance with Figure 12.

4.7. BUILDING SEPARATION

OBJECTIVES

(i) To ensure privacy between buildings, including windows in commercial office buildings and particularly for living spaces and private open spaces in residential buildings;

(ii) To minimise the visual impact of buildings with appropriate separation and landscaping between buildings; and

(iii) To minimize the visual bulk of top floor design, promote articulation of the top floor and prevent any increased overshadowing.

DEVELOPMENT CONTROLS

(a) The minimum separation between residential buildings is to comply with the SEPP 65 Residential Flat Design Code and SEPP 65 principles;

(b) The minimum separation between windows or balconies in commercial buildings and other windows or balconies in commercial buildings is to be 12m. Windows or balconies in commercial buildings are to be set back a minimum of 6m from side or rear boundaries of properties;

(c) The minimum separation between windows or balconies in commercial buildings and windows or balconies to habitable rooms in residential buildings is to be 12m. Windows or balconies of habitable rooms in residential buildings are to be set back a minimum of 6m from side or rear boundaries; and

(d) The floor area of the top storey of all buildings is to:

- Occupy a maximum of 70% of the floor area of the storey immediately below;
- Have a setback from the outer face of the storey below on all sides; and
- Have the appearance of a lighter, more transparent form of architecture, set back to reduce the impact of the top floor when viewed from the street.



Figure 12 Dimensions diagram

4.8. BUILDING ARTICULATION

OBJECTIVES

(i) To create richness of detail and architectural interest, especially at visually prominent parts of buildings such as lower levels and roof tops;

(ii) To maintain a pedestrian scale in the articulation and detailing of the lower levels of the building; and

(iii) To emphasise building entries, corners and other prominent locations in the Castle Hill Centre.

DEVELOPMENT CONTROLS

(a) Define the building base and top relating to the overall proportion of the building, using lighter materials and colours to ensure that the upper floors are recessive;

(b) Articulate building entries, corners and other prominent locations with awnings, porticos and recesses;

(c) Locate building entries to relate to the street and to be a clearly identifiable element of the building in the street;

(d) Select balcony types that respond to the street context, building orientation and residential amenity;

(e) Design balconies so that they are recessed behind the building façade and the outer edge projects out past the building façade;

(f) Integrate service elements, such as lift over runs, service plants, vent stacks,

(g) telecommunications infrastructures, gutters and down pipes into the overall design of the roof; and

(h) Avoid large single panels of greater than 100m^2 of solid wall or glass in façades.

4.9. PEDESTRIAN ACCESS AND LINKAGES

OBJECTIVES

(i) To promote pedestrian movement in the public realm of the Castle Hill Town Centre;

(ii) To increase the number of pedestrians within the Terminus Street Precinct;

(iii) To increase the permeability of the existing urban blocks, making pedestrian access to and from Old Northern Road, McDougall Lane and the new Town Square more direct and providing choice in the route taken;

(iv) To increase the linear length of street frontage, particularly of ground floor retail, to increase the amount of active street frontage in the Town Centre;

(v) To provide a visual connection and pedestrian link from Showground Road to the Council

owned carpark site on the eastern side of McDougall Lane;

(vi) To provide a visual connection and pedestrian link from heritage buildings on Old Northern Road to the new Town Square;

(vii) To provide a visual connection and pedestrian link from the existing shopping piazza on the western side of Old Northern Road to the Castle Mall shopping centre on the eastern side of McDougall Lane; and

(viii) To provide pedestrian connectivity with surrounding residential areas.

DEVELOPMENT CONTROLS

(a) Create public, unenclosed, through-site links as shown in Figure 13. These include visual connections and pedestrian links from Showground Road to the Council owned site on the eastern side of McDougall Lane, from the Castle Hill Public School heritage building to the new Town Square; and from the existing shopping piazza on the western side of Old Northern Road to the Castle Mall shopping centre on the eastern side of McDougall Lane;

(b) Provide a direct visual connection and pedestrian link from the intersection of Old Northern Road and Crane Road and the new Town Square; and

(c) Developments should demonstrate where possible that pedestrian connectivity to surrounding residential areas is provided.

SUBMISSION REQUIREMENTS

- Plans to show the incorporation of pedestrian links into overall site design/layout.



Figure 13 Pedestrian movements

4.10. VEHICULAR ACCESS AND PARKING

OBJECTIVES

(i) To provide safe vehicular access to public and private parking spaces;

(ii) To minimise the impact of vehicular access and parking on the design of buildings and in particular on ground level active frontages and footpaths; and

(iii) To minimise the visual impact of above ground car parking in Terminus Street and Crane Road at footpath level and the first floor level with appropriate land uses other than car parking along the street frontages to Terminus Street and Crane Road.

DEVELOPMENT CONTROLS

(a) Private car parking is to be provided in accordance with the rates specified in the Baulkham Hill DCP Part C Section 1 – Parking;

(b) Parking shall be located below ground or below Level 1, in accordance with Figures 11a, 11b and 14;

(c) Vehicle access points shall be located along street frontages to car parking in accordance with Figures 11 and 14; and

(d) Commercial or community uses such as offices, fitness centres, meeting rooms and the like should be located along the Terminus Street and Crane Road street frontages at footpath level and first floor level by 'sleeving' above ground car parking, to reduce the visual impact of the above ground parking at pedestrian and first floor levels.

SUBMISSION REQUIREMENTS

- All development applications with on-site parking are to include a Traffic and Parking Report. The report shall include details of traffic and car parking measures to be implemented during construction in order to reduce impacts on the operation of adjoining businesses; and
- Elevations to show car park structures from all street frontages.



Figure 14 Car park entrances

4.11. ACTIVE STREET FRONTAGES

OBJECTIVES

(i) To provide active frontages to streets, squares and lanes, enhancing the quality of the pedestrian environment in the public domain;

(ii) To provide visually open street frontages, creating transparency and visual interest in building façades; and

(iii) To create spaces that are safe for pedestrians throughout the day and evening.

DEVELOPMENT CONTROLS

Buildings with designated active frontages (refer to Figure 15) are to:

(a) Contain retail shops, customer counter services, restaurants, cafes and other uses that allow interaction with the public and a physical connection between the public domain and the interior of the building at ground level;

(b) Restrict vehicular entries for car parking and service vehicles, fire escapes and other services from locating on designated "Visually open street frontages";

(c) Provide active frontages flush with the footpath, for a minimum length of the entry doors to the ground floor level. Steps or open retail forecourts at a different level to the footpath are inappropriate as they separate the active use from the footpath; and

(d) locate security grilles inside the shopfront and provide transparent grilles.

(e) Contain offices, fitness centres, and other habitable floor space;

(f) Allow appropriately located vehicular entries for car parking and service vehicles, fire escapes and other services where necessary;

(g) Limit vehicular access to one access point per building by combining service vehicle access with parking access;

(h) Footpath crossings for vehicular access are to be a single crossing with a maximum width of 3m. In exceptional circumstances a double crossing with a maximum width of 5.4m may be permitted for safety reasons;

(i) Provide visually interesting street frontages, with clear glazed windows, window displays, display cases, artworks and articulated façades with extensive architectural detail; and

(j) Buildings with designated visually open street frontages (refer to Figure 15) are to avoid solid wall panels greater than 100sqm without windows.

SUBMISSION REQUIREMENTS

- Elevations;
- Schedule of proposed/potential ground floor uses; and
- Site plan, showing all setbacks, car park access points.



Figure 15 Active and open street frontages

4.12. AWNINGS

OBJECTIVES

(i) To provide pedestrian weather protection and shading for shopfronts; and

(ii) To create cohesive streetscapes with relatively continuous awning form.

DEVELOPMENT CONTROLS

(a) Provide awnings for the full extent of the street frontages where shown in Figure 16;

(b) Integrate new awnings with existing awnings to achieve continuity of weather protection and built form;

(c) Create awnings that are horizontal in form, all metal or with flat glazed sections to allow light to penetrate to the footpath; and

(d) Avoid steeply sloped, barrel vaulted or arched awnings.

4.13. DESIGN OF BUILDINGS ADDRESSING THE TOWN SQUARE

OBJECTIVE

The Town Square is to be a major focus for public life in Castle Hill. The buildings that address the Town Square (Figure 17) on its northern, western and southern sides (including buildings addressing McDougall Lane on the western side of the Town Square) will demonstrate design excellence in their conception.

DEVELOPMENT CONTROLS

The façades addressing the square are to contain:

(a) Active frontages at ground level for the full length of the façade facing the square;

(b) Generous and continuous pedestrian shelter in the form of colonnades or awnings at ground level or ground level and first floor level;

(c) High quality masonry façades, such as stone or mid to dark toned brickwork;

(d) A balance between window openings and solid wall of approximately 40% window to 60% wall;

(e) A balance between horizontal and vertical proportions in the composition of the façades; and

(f) A recessed top floor, horizontal roof form and/or cornice that, in combination, create a distinctive top to the building.

The façades addressing the square are not to contain:

(g) Car park entries, fire stair exits or blank façades at ground level;

(h) Concrete block, white or light coloured brickwork or painted brick or blockwork;

(i) Primarily blank walls or primarily glazed walls for the entire façade;

(j) Either strongly horizontal or strongly vertical components in façade compositions; and

(k) A flat top to the Town façade addressing the Town Square, without a recessed top floor, horizontal roof form and/or cornice.



Figure 16 Awnings

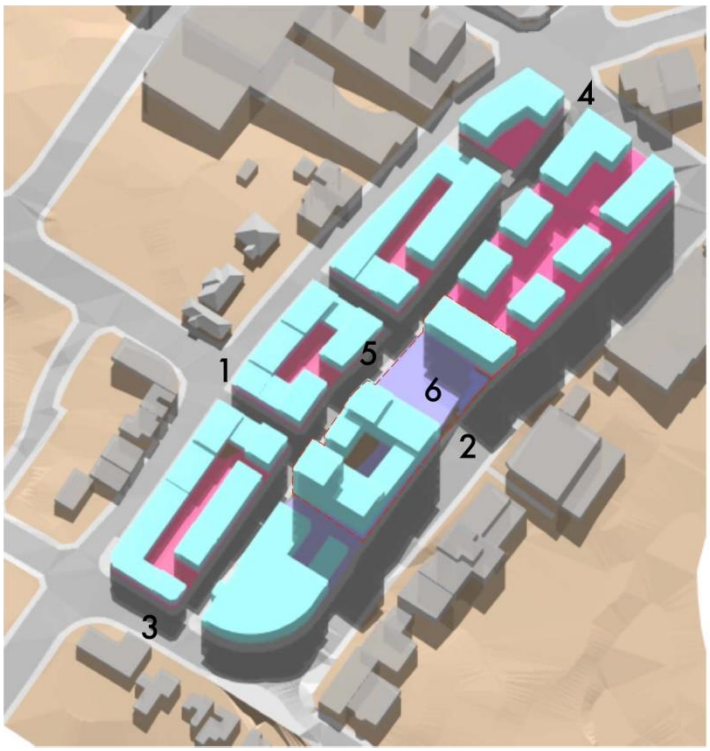


Figure 17 Town square

4.14. SOLAR ACCESS AND OVERSHADOWING

OBJECTIVES

(i) To allow sunlight access to key areas of the public and private domain; and

(ii) To incorporate energy efficiency principles to ensure sustainability in design.

DEVELOPMENT CONTROLS

(a) Overshadowing of the Town Square between 9am and 3pm on June 22nd shall not exceed that shown in Figure 17;

(b) Overshadowing of properties on the southern side of Cecil Avenue or the eastern side of Terminus Street, between 9am and 3pm, on June 22nd shall not exceed that shown in Figure 17;

(c) The living room balconies of at least 70% of residential units in a development shall receive a minimum of 2 hours direct sunlight between 9am and 3pm on June 22nd; and

(d) The number of single aspect apartments with a southerly aspect (SW-SE) is limited to a maximum of 10% of the total apartments proposed.

SUBMISSION REQUIREMENTS

- Shadow diagrams indicating the effect of shadows at 9am, 12 noon and 3pm on June 22nd as a minimum.



Figure 17 Shadow diagram at 12 noon on June 22nd

4.15. LANDSCAPING

Open space is a critical environmental resource and may be presented as 'semi-public' (accessible by the public), 'communal' (shared by the users in the building) or private (associated with a single shop, office or apartment). The size, location and design of an open space is critical to its usability.

Landscaping has the potential to contribute to the character and visual quality of the Terminus Street Precinct. Well designed buildings and landscaped areas work together, resulting in greater aesthetic quality and amenity for occupants and the adjoining public domain.

The provision of deep soil zones is of considerable importance as a component of landscaping within the Terminus Street Precinct. Deep soil zones are areas of natural ground with relatively natural soil profiles retained within a development. They are areas of the site that are not built upon. Deep soil zones have important environmental benefits, which include promoting healthy growth of large trees with large canopies and allow infiltration of rainwater to the water table and a reduction in stormwater runoff.

OBJECTIVES

(i) To provide high quality landscaping that continues the standards established for the Town Centre;

(ii) To provide a high quality Town Square with appropriate landscaping treatments; and

(iii) To provide private open space that complements internal living spaces, and creates opportunities for outdoor leisure and community recreation.

DEVELOPMENT CONTROLS

(a) Provide large evergreen trees for the western side of streets, and deciduous trees for the eastern side, with a unique planting schedule for the Town Square;

(b) Allow for substantial tree planting in the Town Square and smaller public spaces – provide for 1m minimum depth of soil over structure;

(c) All commercial, retail and mixed use developments to incorporate deep soil zones which shall comprise a minimum of 5% of the total development site area;

(d) Deep soil zones are to allow for future planting of mature trees.

Figures 18 and 19 provide a visual representation of the landscaping and public domain masterplan proposed for the Terminus Street Precinct.

SUBMISSION REQUIREMENTS

- A landscape plan, prepared by a qualified landscape architect, for each public and private open space within the development

4.16. LANDSCAPING ON STRUCTURES

OBJECTIVES

(i) To contribute to the quality and amenity of communal open space and other areas on roof tops, podiums and internal courtyards; and

(ii) To encourage the establishment and healthy growth of trees in the Precinct.

DEVELOPMENT CONTROLS

(a) Developments are to provide planter boxes or roof gardens;

(b) Design of roof gardens and planter boxes shall provide for optimum conditions for plant growth by:
- Providing soil depth, soil volume and soil area appropriate to the size of the plants to be established;
- Providing appropriate soil conditions and irrigation methods;
- Providing appropriate drainage.

(c) Design planters to support the appropriate soil depth and plant selection by:
- Ensuring planter proportions accommodate the largest volume of soil possible. Minimum soil depths will vary depending on the size of the plant however, soil depths greater than 1.5 metres are unlikely to have any benefits for tree growth;
- Providing square or rectangular planting areas rather than long narrow linear areas.

(d) Increase minimum soil depths 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, particularly the frequency of irrigation;
- Anchorage requirements of large and medium trees;
- Soil type and quality.

SUBMISSION REQUIREMENTS

- Details of planter boxes and roof gardens; and
- A drainage plan for roof top planting or other structures.

4.17. PUBLIC DOMAIN

OBJECTIVES

(i) To provide a high quality public domain that continues the standards established for the Town Centre; and

(ii) To provide a high quality Town Square with appropriate public domain treatments;

DEVELOPMENT CONTROLS

(a) The Castle Hill Main Street Design Report (2008) establishes standards for design and materials for the public domain that should be adopted for the public domain of the Terminus Street Precinct development. The standards are applicable particularly to streets and lanes. The landscape of the Castle Hill Centre should integrate the standards, but seek to create a space with an individual character with a distinctive image in the Town Centre.

(b) Standards for materials that apply to the public domain include high quality finishes suited to Australian Standards and low maintenance demands including:

- Paving – 400mm x 600mm and 600mm x 600mm green granite paving;
- Red accent banding;
- Walls – walling used as features and to accommodate level changes – precast concrete walling 600 – 900mm width, shotblast finish and integrated lighting;
- Lighting – smartpoles to McDougall Lane with specialised lighting to Town Square;
- Furniture – Botton and Gardiner seats and benches to streets and minor squares, supplemented with custom furniture and selected seating for Town Square;
- Tree grates – 1200 x 1800mm tree grates to match Mascot T 607 for McDougall Lane, special design surrounds for Town Square.

(c) Provide for integration of public art into design of the Town Square, in line with the Castle Hill Centre Public Art Plan.

Figures 17 and 18 provide a visual representation of the landscaping and public domain masterplan proposed for the Terminus Street Precinct.



Figure 18 Landscaping and public domain master plan



Figure 19 Town square landscaping and public domain

4.18. STORMWATER MANAGEMENT

OBJECTIVES

(i) Ensure waterways and downstream drainage systems are protected during construction and post construction phases of development;

(ii) Ensure new developments do not place an increased flood risk to private and public property, and where possible, reduce the impacts of nuisance flooding to a level acceptable to the community; and

(iii) Reduce potable water demand through water sensitive urban design initiatives.

DEVELOPMENT CONTROLS

Water Sensitive Urban Design

(a) The best practice principles of WSUD are to be applied during the construction and post construction phases of development. Schemes that promote water capture, reuse initiatives and water quality management measures, as described in documents including, but not limited to:

- On-site Stormwater Detention Handbook, Version 4 2005, UPRCT;
- Australian Runoff Quality, Engineers Australia, 2006;
- Water Sensitive Urban Design – Technical Guidelines for Western Sydney, May 2004, Prepared for UPRCT by URS.

These are required for all new commercial and residential developments, or where the increase in impervious area over a site is greater than 150m^2. Common open space and publicly accessible courtyard areas may be utilised for WSUD initiatives.

The Hills Development Control Plan (DCP) 2012

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Part D Section 12
Carlingford Precinct

D12

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1. INTRODUCTION

This Section of the DCP must be read in conjunction with Part A – Introduction of this DCP and Part C Section 6 – Flood Controlled Land.

This Section of the DCP has been prepared to guide future development permissible within the Carlingford Precinct under The Hills Local Environmental Plan 2012.

1.1. LAND TO WHICH THIS SECTION OF THE PLAN APPLIES

This plan applies to land bounded by Jenkins Road to the west, Pennant Hills Road to the south and east and Moseley Street to the north within the local government area of The Hills as shown in Figure 1 and referred to in this section of the DCP as the Carlingford Precinct.

1.2. AIMS AND OBJECTIVES OF THIS SECTION OF THE DCP

The aim of this Section of the DCP is to provide parameters to guide development in the Precinct for a range of built forms that allow for a mix of housing styles, commercial, retail and community uses. This Section of the DCP, in association with a Section 94 contributions plan for the Precinct also proposes upgrades of open space, vehicular and pedestrian access, public realm and upgrades of existing infrastructure for electricity, drainage and roads.

The objectives of this Section of the DCP are:

(i) To provide a clear vision and the desired future character for the revitalization of the Carlingford Precinct;

(ii) To formulate structure plans and a Master plan in response to the opportunities and constraints identified and incorporating the following design concepts for the Carlingford Precinct:

- *Streetscape character, particularly in the vicinity of Thallon and James Streets, including the concept of street level activity with living above and that adjacent public spaces be augmented and upgraded;*
- *Increased height and density, in targeted locations, will be used as a mechanism to ensure that the desired future character for the Precinct and public infrastructure can be achieved;*
- *Integration of floodplain management with adjoining development to achieve high quality open spaces;*
- *Alternative development approaches/patterns to address site specific issues within the Precinct; and*
- *Undergrounding of local and 132kv power lines to improve streetscape appearance and street lighting.*

(iii) To create a high quality, aesthetically pleasing, and functional Precinct for future residents.

Where any provision of this Section of the DCP is inconsistent with any provision of any other Section of the DCP, the provisions of this Section of the DCP shall prevail to the extent of that inconsistency.

1.3. SEPP 65 DESIGN QUALITY

Development of the residential flat buildings envisaged by this section of the plan are subject to the requirements of State Environmental Planning Policy (SEPP) No. 65 – Design Quality of Residential Flat Development. Applicants should provide a submission with the development application demonstrating compliance with these requirements.

1.4. STRUCTURE OF THIS SECTION

This document has been divided into following five parts:

1. Introduction
2. Urban Context
3. Structure Plan and Masterplan
4. Precinct-wide Built Form Controls
5. Key Site Built Form Controls

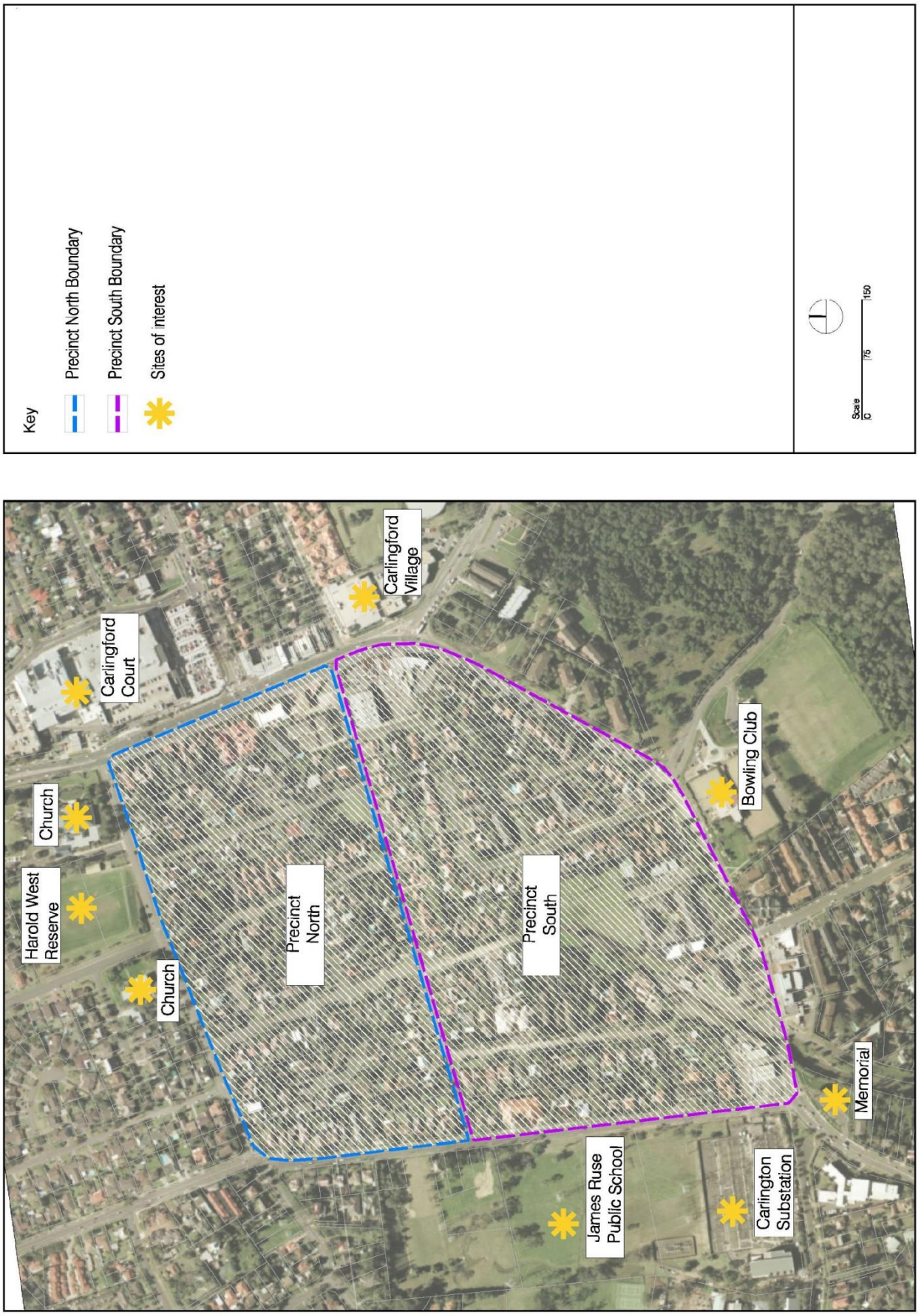


Figure 1. Precinct Boundary

2. URBAN CONTEXT

2.1. OPPORTUNITIES AND CONSTRAINTS

The Precinct's opportunities and constraints are discussed in the supporting document for this Section of the DCP. The opportunities and constraints are synthesised in ways to provide for the development of the Precinct to the densities envisaged by Council's resolution and draft Precinct Plan 2005 while optimising urban design quality and environmental outcomes. See Figure 2 – Opportunities and Constraints.

There are a series of constraints that apply across the Precinct. These include the essentially immovable elements that tend to delineate, separate and punctuate the Precinct as a whole. These elements include the rail line with its station and heritage building, major roads and pedestrian routes, topography, drainage lines, existing overhead power lines and pylons. Land subject to overland flow paths occurs in both the northern and southern sides of the Precinct. Such land is both an opportunity and a constraint to development and has been influential in the structure planning for the Precinct.

Other constraints include the existing multi unit buildings that are unlikely to change due to their being under strata title, commercial developments and the fragmented pattern of land ownership.

The Precinct includes characteristics that are opportunities for development including amalgamated key sites, proximity to the railway station, topography, the relationship of sites to the road hierarchy, public open space, property boundaries, edges, nodes, slopes, drainage, roads, landmarks, existing developments, pedestrian desired lines and areas of potential high residential amenity or public activity and commercial opportunities.

The integration of the opportunities and constraints determines the suitability of a locality for a particular combination of spatial organisation, land use, built form and unit density, design approach to public realm, landscape theme, and movement system including traffic management. In this way areas of the same desired future character and built form are reflected by appropriate controls.

This process has led to the identification of a range of development scales and densities that generally decrease moving from the south of the Precinct to the north, further from the train station and village centre.

2.2. KEY SITES

The major opportunity to achieve a coordinated, holistic development of the Precinct is the existence of several 'key sites'. These key sites comprise large land holdings that are mainly under single ownership, in locations critical to the establishment of a village centre and suitable for buildings containing a relatively large number of units. As a result, developments of a substantial size and complexity can be delivered promptly. In this way the development of these sites will be the catalyst for the redevelopment of the Precinct. These sites are identified as block numbers in Figure 3 – Key Sites and are described as follows:

Block 3	Jenkins Road and Thallon Street
Block 4	2-12 James Street
Block 6	1-7 Thallon Street
Block 17	Janell Crescent
Block 5	The 'Service station site' on corner of Pennant Hills Road and Jenkins Road
Block 16	The 'Bunnings site' at the corner of Pennant Hills Road and Post Office Street

This Section of the DCP recognises the role of the key sites and proposes development controls to ensure their development will contribute to achieving the objectives of this plan. The urban design, functional and socioeconomic outcomes proposed for these sites are the expression of the opportunity to:

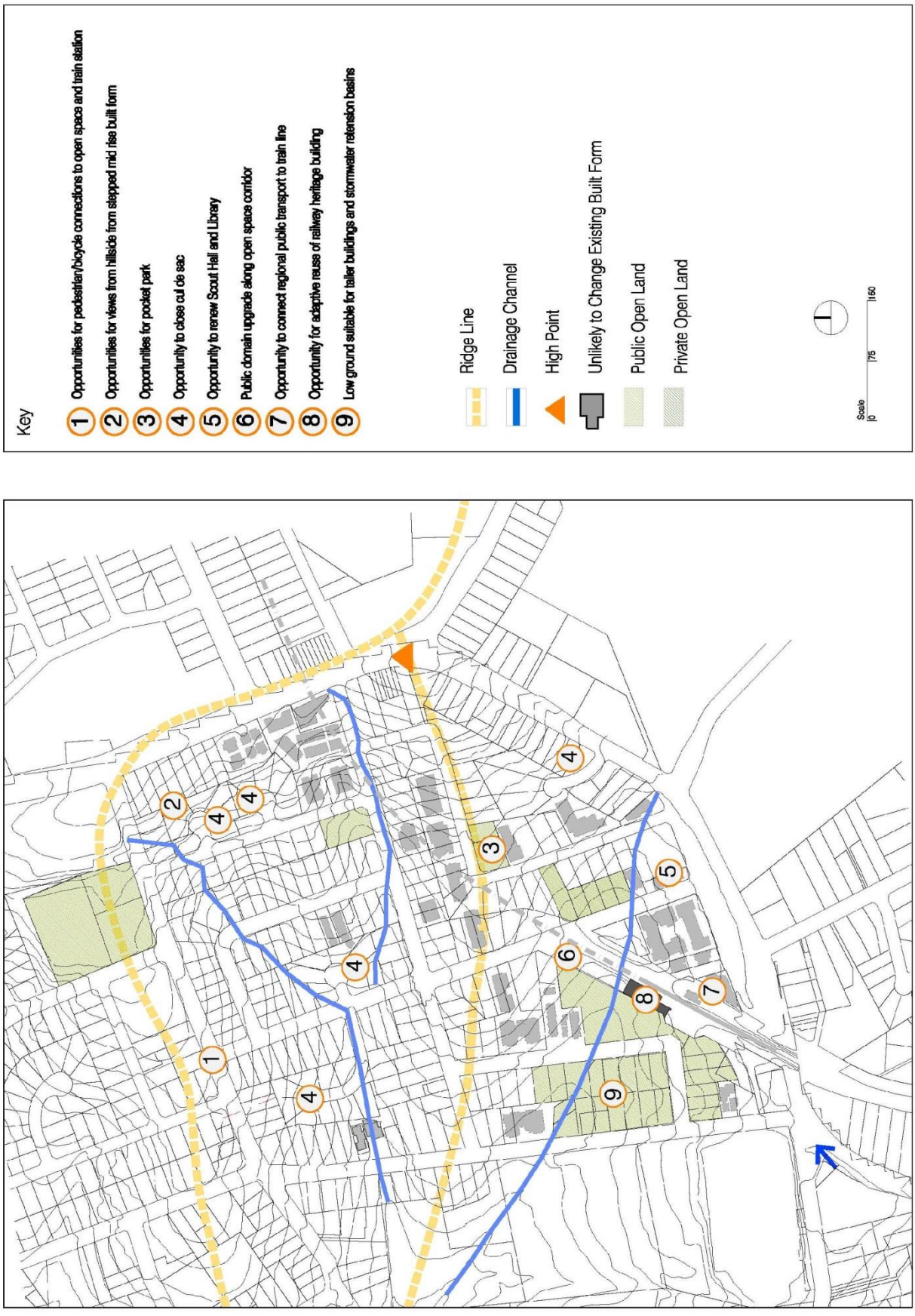


Figure 2. Opportunities and Constraints

- Provide landmark buildings denoting the core of an urban village centred around the train station, open space, pedestrian and cycle connections, and community facilities.
- Provide street level active uses and human scale in the village centre.
- Provide a substantial number of residential units in close proximity to the train station.
- Contribute to the local open space network while ensuring development applies water sensitive urban design principles.
- Provide open spaces to act as place making elements at a neighbourhood scale and the focus for outdoor activity in the areas of Janell Crescent.
- Provide landmark buildings at key gateways to the Precinct on Pennant Hills Road including the Bunnings site and the service station site.



Figure 3. Key Sites

3. STRUCTURE PLAN AND MASTERPLAN

3.1. STRUCTURE PLAN AND MASTERPLAN PROCESS

The interaction of the following parameters were analysed to inform the structure plans and masterplan:

- Access and transport;
- Stormwater management;
- Street hierarchy;
- Response of building bulk to topography;
- Design excellence (NSW Residential Flat Design Code);
- Open space and recreation;
- Public domain improvements;
- Pedestrian connections;
- Sustainability and water sensitive urban design;
- Infrastructure upgrades;
- Adaptive reuse of the railway heritage building and access to train station; and
- Streetscape.

3.2. URBAN DESIGN PRINCIPLES

For each of the above parameters a set of design principles were identified. These principles are based on best practice, such as the co-location of drainage reserves and public open space.

Other principles are based on efficiency of connections and access, convenience and the synergies of place making such as locating highest residential densities close to the train station and civic areas. These principles are to ensure the creation of a quality living environment with appropriate relationship between residential buildings, public infrastructure and public realm and in response to topography.

The existing buildings of the railway station, in association with the Council owned library, future community facilities, open space and increased residential densities near the railway station provide a central focus and landmark for the Precinct and create a strong identity for the existing centre as a potential Town Centre. The following four layered series of structure plans show the major urban design proposals for the Precinct regarding:

- access and circulation;
- open space;
- public domain; and
- building height and floor space ratio.

The desired future character statements for the Precinct outlined below are informed by the structure plans. Each structure plan includes a set of guiding urban design principles.

The structure plans inform the masterplan/indicative built form plans thus expressing the guiding principles. These plans show the distribution of the different built forms, the relationship of open space to built form, and the integration of outcomes to improve the public domain, open space, vehicle circulation and pedestrian links.

A set of development controls for each of the key sites are proposed as well as development standards for the whole of the Precinct and generic controls applying to all development. These provisions are set out in the following sections of this document.

3.3. DESIRED FUTURE CHARACTER STATEMENTS

3.3.1. SOUTHERN PRECINCT

The character of the southern end of the Precinct in the vicinity of the train station will be largely determined by the development of landmark buildings on the key sites and their role in creating street oriented village built form and character, open spaces and a civic plaza linked to the station.

In key sites affected by electricity easements, developments can contribute to publicly accessible open space with strong connections to the local open space network and civic area.

Buildings on key sites and in the southern side of the Precinct generally have been placed to provide transition in building scale and to provide natural ventilation, solar access, outlook from apartments and year round sunlight to communal open spaces.

Streetscapes are to be resident and visitor friendly in an urban landscaped setting associated with a street hierarchy that promotes a safe pedestrian and vehicular environment. The landscape works in the public realm help to define the character areas in the Precinct. These characters range from the more

urban, civic and train station oriented village to the suburban character further from the train station.

3.3.2. NORTHERN PRECINCT

The northern end of the Precinct will comprise lower scale residential flat buildings interspersed with existing multi unit developments.

The built form of development will reflect a transition of scale between the larger residential flat buildings concentrated around the train station in the south of the Precinct and the smaller scale residential flat buildings proposed in the land north of Post Office Street.

Street setbacks are to complement the proposed garden setting in contrast to the strong street edge, activated urban village character of development closer to the train station.

Additional streets are proposed to complement this relationship of buildings to the public domain and establish a finer grained street hierarchy and built forms. Private and communal open space within developments is encouraged to visually compliment the public realm and where feasible, allow some public access.



Communal open space with controlled public access to compliment developments (Source: Residential Flat Design Code, 2002)



Urban character around train station with active retail on ground floor (Source: Residential Flat Design Code, 2002)

3.4. STRUCTURE PLAN - ACCESS AND CIRCULATION

Principle: Street Hierarchy and Permeability

- Extend the northern section of Boundary Road to connect with Tanderra Street.
- Improve vehicular safety with the closure of Janell Crescent and the provision of new vehicular access arrangements from Shirley Street.
- Arrange open space and pathways to focus on the train station and link to open space/ community facilities to the east of the station also to connect to the James Ruse locality on the west of Jenkins Road (see Figure 5: Structure Plan – Open Space Strategy).
- Establish a network of cycle/pedestrian access tracks throughout the open space network of the Precinct to connect with public transport links and routes beyond the Precinct (see Figure 6: Structure Plan – Public Domain).

Principle: Proximity to Transport

- Locate the proposed residential flat buildings with highest density closest to the train station to maximise infrastructure use, improve convenience for commuters and to contribute to a critical mass for a future civic/transport hub.

Principle: Upgrade of existing road networks and footpath surfaces and traffic management works

- Provide progressively the road improvements and traffic management measures shown in Figure 4 in consultation and conjunction with

Council, with possibilities for planning agreements.

- Install new signalised traffic signals and traffic management structures such as kerb blisters, medians and lane treatments in accordance with recommendations of the Carlingford Precinct Plan Traffic Report (May 2008) prepared by Masson/Wilson/Twiney Traffic and Transport Consultants.
- Install high quality pedestrian and cycle pathways in an efficient and coherent network designed to enhance the pedestrian experience.
- Improve local traffic management in accordance with the Carlingford Precinct Plan Traffic Report including the provision of a bus stop and 'kiss and ride' passenger set down area at the train station, intersection upgrades, roundabouts and signalisation.

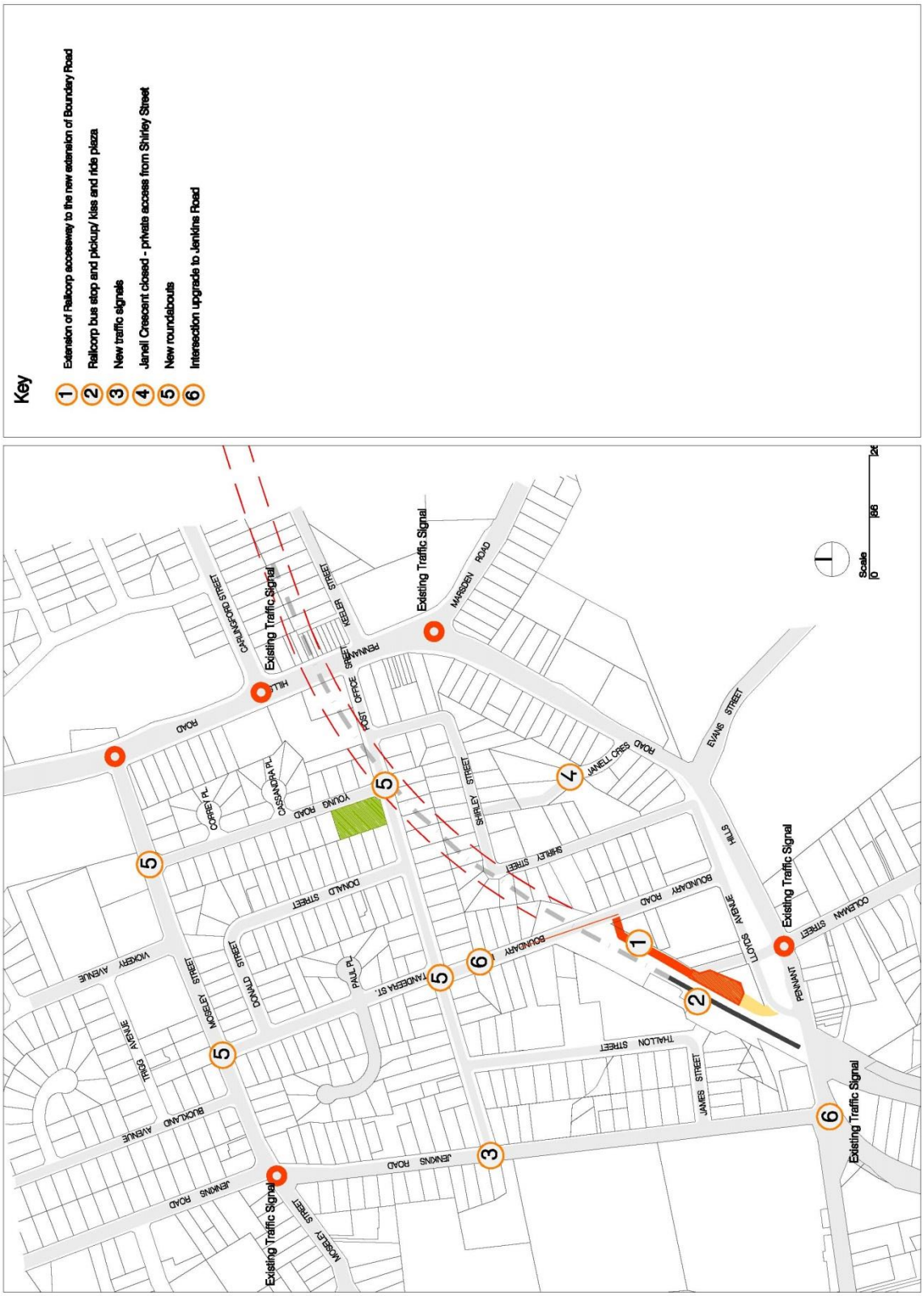


Figure 4. Structure Plan – Access and Circulation

3.5. STRUCTURE PLAN - OPEN SPACE STRATEGY

Principle: Linking of existing and potential open space areas

- The existing open space in the south of the Precinct is an opportunity to combine with the proposed open space "green spine" created by undergrounding of the electricity lines and dual use of flood prone land.
- The combination of the former easement with an overland stormwater flow path enhances the scenic and environmental outcomes of this element with the possibility of creating water features.
- Create a civic square addressing the entrance to the train station and connected to open space links associated with electricity easements.
- Install play equipment in safe and appropriate locations within open space.

Principle: Open space and built form relationships

- Several key sites close to the train station have easements for the existing electricity pylons. Once the pylons are removed, the former overhead easement can contribute to publicly accessible open space surrounding new developments and linked to the open space adjacent to Council's existing library building.
- In areas further from the train station, use key sites and flood prone land to create communal open spaces and new parks addressed by buildings. These parks help to impart a garden suburb character to complement residential buildings set in generous private / communal open space
- In areas further from the train station, site planning for buildings could aim to amalgamate private green spaces to optimise deep soil planting areas, communal open space, shared views and landscape and contribute to the garden suburb theme.

Principle: Quality residential open space areas

- Communal open space at ground or podium level for residents is to be provided. This open space should enhance the quality of the built environment by providing opportunities for landscaping in a parkland setting as well as providing a visual and activity focus for the new residential community created through this development.
- All communal open space areas are to accommodate appropriate facilities such as picnic and barbeque areas, children's play area and grassed areas for passive recreational use. Developments are to include designated communal open space areas with year round solar access.
- Water Sensitive Urban Design (WSUD) guidelines and On-site Stormwater Detention (OSD) principles are to be incorporated in both private and communal open space design.



Figure 5. Structure Plan – Open Space Strategy

3.6. STRUCTURE PLAN - PUBLIC DOMAIN

Principle: Streetscape

- Street tree planting and landscaping is to be consistent with the Carlingford Precinct Public Domain Plan.

Principle: Public domain improvements

- Embellish the existing public open space to the west of the rail reserve. The railway station, rail reserve and public open space near the scout hall are major organising elements in the Precinct. This is an opportunity to increase the pedestrian connections to the park and its attractiveness for recreation of the future residents of the Precinct.
- A public square on the west of the train station to act as a gateway entry point.
- Create new public parks using WSUD for floodways associated with the site amalgamations producing key sites in the Janell Crescent area.

Principle: Infrastructure upgrades

- It is proposed to underground both the street power lines and the high voltage power lines and pylons to remove the visual impact of the existing structure and provide public open space within the easement.

Principle: Pedestrian connections

- Provide improved footpath connections and unified hardscape treatment of the public realm.
- Provide cycle and pedestrian paths responding to desire lines.

Principle: Adaptive re–use of the railway heritage building

- The existing heritage building in the train station curtilage may have the potential for adaptive reuse. This would be an opportunity to add variety and activity to a future civic precinct that centres on the station and the public open space adjacent to the railway reserve.

Principle: Stormwater management

- Site planning and development generally must respond to the recommendations of Council's Carlingford Stormwater Study and Management Plan.
- On the southern side of Post Office Street a major opportunity arises from site amalgamation to provide a series of linked open spaces. These spaces could be combined with a stormwater capture system incorporating linked retention basins along the water course to form a "green spine" linking the upper Pennant Hills Road section of the Precinct to the lower section being the public open space adjacent to the railway line.
- Install a variety of bio-retention measures including grass depressions and swales on street edges and within open space.

Principle: Sustainability and WSUD

- Development in the Precinct will be required to undertake sustainability initiatives: stormwater capture, bio-retention basins, integration of watercourses with open space and landscaping.

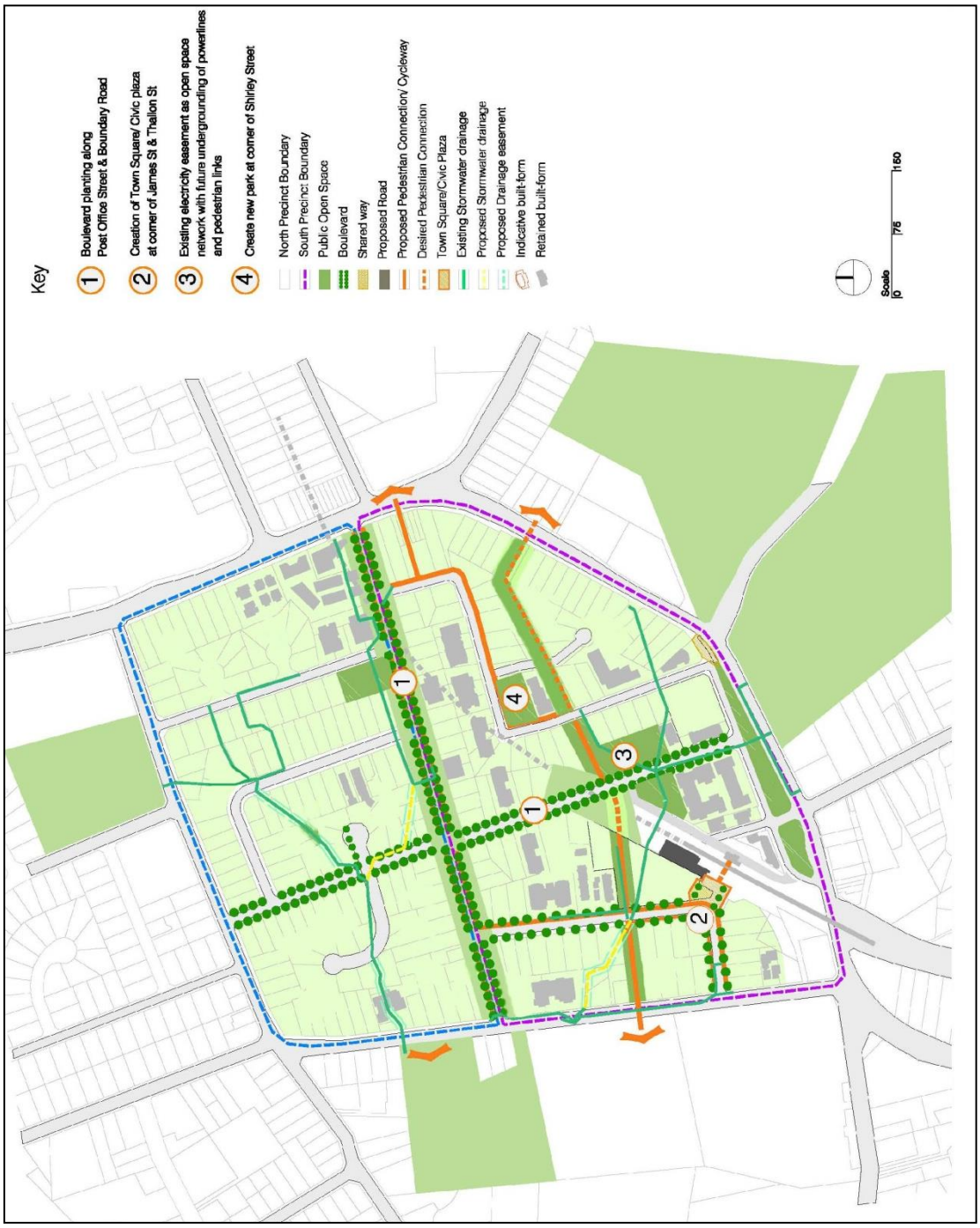


Figure 6. Structure Plan – Public Domain

3.7. STRUCTURE PLAN (INDICATIVE BUILDING HEIGHT AND FSR)

Principle: Building heights should increase the closer sites are to the train station

- Concentration of the residential density close to the station will maximise usage of the train service by the maximum number of people in the shortest, most convenient walking distance from the station.
- Concentration of high-rise buildings close to the station will provide an orienting landmark for the village centre.

Principle: Built Form Should Address Open Space

- In areas further from the train station, building placement should address adjacent open space to allow interaction of residents with that space and for passive surveillance.

Principle: Built Form Should Respond To Street Hierarchy

- In general, the low-rise buildings are proposed together with lower FSR limits on the local roads within the northern part of Precinct. This approach responds to the lower scale suburban desired future character for areas further from the train station.
- Maximum of 9 storeys is proposed for development fronting Pennant Hills Road. This is to achieve a presence associated with deep setbacks for major planting, footpath upgrades and pedestrian amenities.

3.8. ILLUSTRATIVE MASTERPLAN

Principle: Response of Building Bulk and Scale to Topography

- Site specific development controls are to be provided for Key Sites in the vicinity of the train station to minimise overshadowing and create pedestrian scale podiums containing retail and commercial uses and associated public open spaces.
- High rise developments are to be concentrated in the low ground close to the train station. This is an opportunity for the apparent height of high rise buildings to be diminished when viewed in their topographic context. The proposed building envelopes thus take up the opportunity for the prominence of tower buildings to be visually absorbed by the backdrop of the slopes leading up to the ridge lines along which runs Pennant Hills Road.
- Provide for home office and ancillary commercial and convenience retail uses on ground floor areas of developments on pedestrian routes to the train station.
- In areas further from the train station, the built form, site coverage, setbacks and composition of boundaries and building placement are to create a garden suburb character. This character should complement, in style and function, the public open space adjacent to the train station and community facilities to the east. This integrated approach is key to producing a synergy and coherence between private development and the public realm. This will be a unique place making force for a possible civic hub in the vicinity of the train station/scout hall.

Principle: Design Excellence (NSW Residential Flat Design Code)

- Buildings that are close to the train station should be in the form of a slender tower and positioned so as to minimise impacts on privacy and overshadowing of open space and adjacent development.
- Iconic buildings located at gateways, nodes and major intersections.

Principle: Built Form and Setbacks are to Relate to Street Hierarchy

- On the axial boulevards of the Precinct, built form, height and landscaping is to be of a scale that signifies the importance of these major urban elements and their intersections.
- Setbacks in the Thallon Street area are to contribute to the urban village character. Setbacks in the remainder of the southern part of the Precinct are to contribute to the landscaped character while allowing flexibility in the siting of buildings. The setbacks of proposed buildings are designed to minimise adverse impacts such as overshadowing and privacy on adjacent and adjoining properties.
- Key sites are identified sites that can accommodate landmark buildings.
- Other key sites are identified in flood prone land that can act as dual usage parks and stormwater retention basins.



Figure 7. Illustrative Masterplan

4. PRECINCT-WIDE BUILT FORM CONTROLS

The following development controls apply to development across the Precinct.

4.1. FLOORSPACE RATIO

4.1.1. OBJECTIVES

(i) To ensure that the bulk and scale of the development is in keeping with the site area and its surroundings in accordance with Council's ESD objective 7;

(ii) To ensure that the bulk and scale of development does not reduce the amenity of adjacent residential or other land uses;

(iii) To control the density of residential development; and

(iv) To prevent excessive site coverage.

4.1.2. DEVELOPMENT CONTROLS

(a) Floor space ratio of a proposed development within the Precinct must not exceed the maximum ratio specified for that development site in the Floor Space Ratio Map of The Hills LEP 2012.

4.2. BUILDING HEIGHT

4.2.1. OBJECTIVES

(i) To ensure that buildings reflect the existing landform of the neighbourhood, including ridgelines and drainage depressions;

(ii) To protect privacy and amenity of surrounding residential developments and allotments in accordance with Council ESD objective 7;

(iii) To ensure that development responds to the desired scale and character of the street appropriate in different parts of the Precinct; and

(iv) To allow reasonable daylight access to all developments and the public domain.

4.2.2. DEVELOPMENT CONTROLS

(a) The height of proposed development within the Precinct must not exceed the maximum height specified for that development site in the Building Height Map in The Hills LEP 2012. The maximum height of the building at any point shall be measured from the natural ground level to the ridge of the roof or top of the flat roof slab or top of the parapet if there is parapet on the roof slab. Natural ground level means the actual physical level of the site as existing prior to development taking place.

(b) For the purpose of this part of The Hills DCP, building heights as specified in the Building Height Map in The Hills LEP 2012 equal to number of storeys depicted in the following table:

Building Height	Equivalent Storeys
10m	2 storeys
16m	4 storeys
21m	6 storeys
27m	9 storeys
28m	9 storeys, with retail at ground floor and commercial at first floor
33m	11 storeys
57m	18 storeys, with retail at ground floor and commercial at first floor

(c) Development on sloping sites is to be stepped so that the ground floor does not exceed one metre above natural ground level immediately below any point on the ground floor.

4.3. SITE COVERAGE

4.3.1. OBJECTIVES

(i) To ensure an appropriate balance of open space surrounding buildings within their site area, reflecting the different scales of development appropriate in the north and south of the Precinct;

(ii) To provide solar access; and

(iii) To control building bulk by working in conjunction with the FSR and height limits that help differentiate the desired future character appropriate in the north and south of the Precinct.

4.3.2. DEVELOPMENT CONTROLS

(a) Building site coverage shall not exceed of 35% of site area.

"Building" for the purpose of this control is defined as the building footprint to the outside of the external walls excluding underground parking structures no more than 1.2 metres above ground and where roof of the parking structure is a private or communal open space.

4.4. SITE REQUIREMENTS

4.4.1. OBJECTIVES

(i) This control is to encourage the amalgamation of sites thus promoting the efficient use of land;

(ii) To promote developments compatible with the desired Precinct character; and

(iii) To encourage orderly development in regular allotment patterns.

4.4.2. DEVELOPMENT CONTROLS

(a) The minimum site area of development sites shall be consistent with the site areas specified in the potential site amalgamation plan (Figure 8).

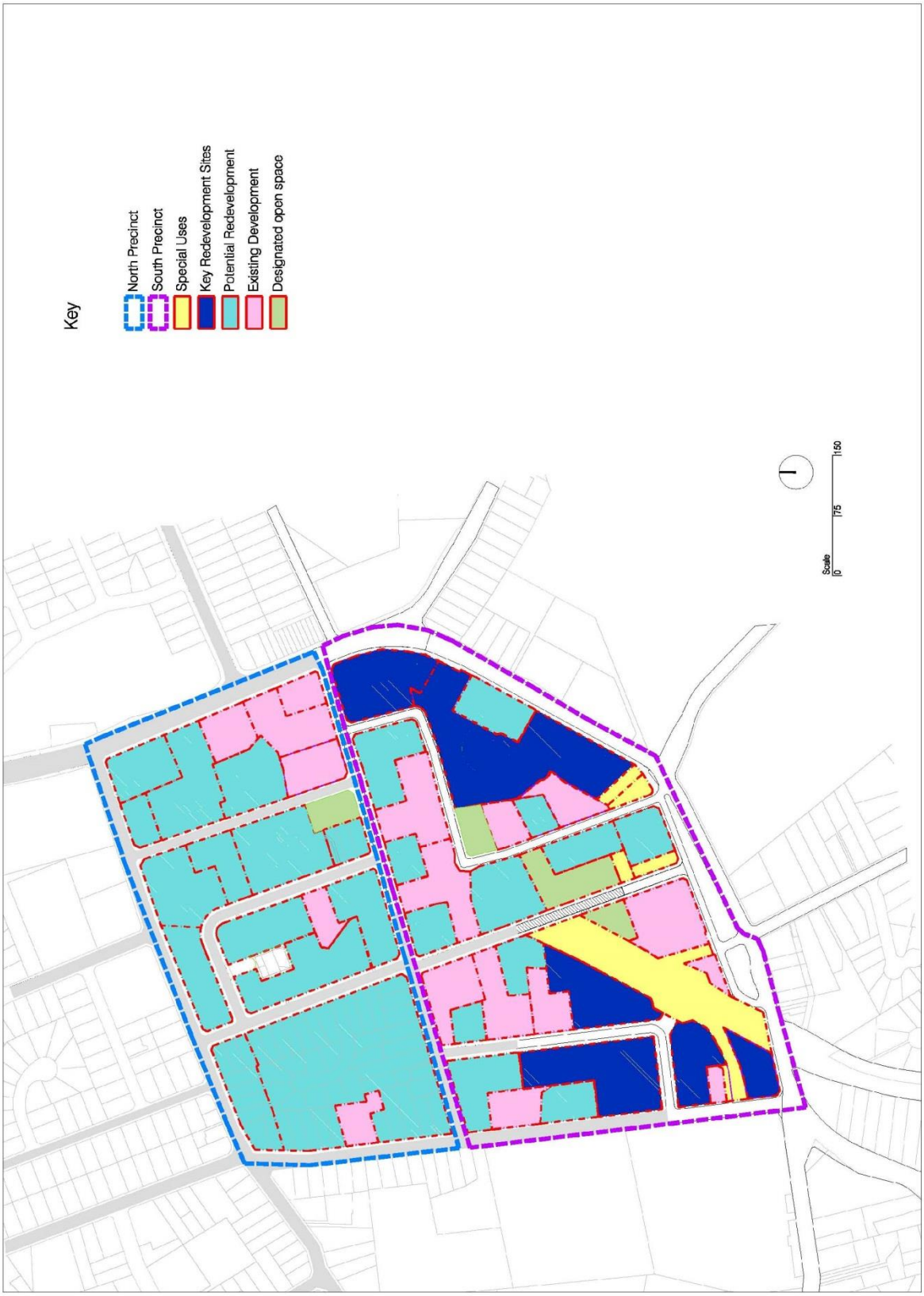


Figure 8. Potential Site Amalgamation Guide Plan

4.5. DEEP SOIL ZONES

Definition of deep soil zone: Areas of natural ground within the site that have relatively natural soil profiles retained.

4.5.1. OBJECTIVES

(i) To assist with the management of the water table;

(ii) To assist with the management of water quality; and

(iii) To improve the amenity of developments through the retention and/or planting of large and medium size trees.

4.5.2. DEVELOPMENT CONTROLS

(a) *A* minimum of 25 percent of the unbuilt upon area of a site is to be a deep soil zone; alternatively, 15% of the total site *area, whichever is greater.*

4.6. RESIDENTIAL FLAT BUILDING - APARTMENT SIZE

4.6.1. OBJECTIVES

(i) *To provide a diversity of residential flat building/ apartment types, which cater for different household requirements now and in the future; and*

(ii) *To maintain equitable access to new housing by cultural and socio-economic groups.*

4.6.2. DEVELOPMENT CONTROLS

(a) Single-aspect apartments should be limited in depth to 8 metres from a window.

(b) The back of a kitchen should be no more than 8 metres from a window.

(c) The width of cross-over or cross-through apartments over 15 metres deep should be 4 metres or greater to avoid deep narrow apartment layouts.

(d) Buildings not meeting the minimum standards listed above, must demonstrate how satisfactory day lighting and natural ventilation can be achieved, particularly in relation to habitable rooms (see Daylight Access and Natural Ventilation).

4.7. SETBACKS

Building setback requirements are shown in Figure 9 and for the Key Sites in Section 5 of this DCP. The objectives and development controls for each are set out below.

4.7.1. OBJECTIVES

6m setback:

(i) To allow for the higher buildings proposed in the Thallon / James Street area to relate closely to the street; and

(ii) To allow buildings fronting Boundary Road and Shirley Street to form the basis of a more regular streetscape/built form relationship.

8m setback:

(i) To allow for new buildings along Jenkins Road to match the setback of the existing multi unit developments along the street;

(ii) To allow visual separation from the traffic on Jenkins Road and space to install road noise attenuation structures within each development;

(iii) To allow for buildings along Post Office Street sufficient space to provide substantial landscaping to create a boulevard character; and

(iv) In parts of the Precinct further from the train station, to allow privately owned land upon to be landscaped and embellished so as to complement the landscape themes of the public realm of the open space.

10m setback:

(i) To reinforce the north south and east west axes in the Precinct; and

(ii) To create a green edge along Pennant Hills Road to allow for street tree planting, future footpath widening and bus shelters.

4.7.2. DEVELOPMENT CONTROLS

(a) **6m setback:** The front façade of buildings are to be set back a minimum of 6m from the front boundary of the site.

(b) **8m setback:** The front façade of buildings are to be set back a minimum of 8m from the front boundary of the site.

(c) **10m setback:** The front façade of the building is to be setback 10m from the front boundary of the site.

Building Side and Rear Setbacks

4.7.3. OBJECTIVES

Side Setbacks

(i) To minimise the impact of development on light, air, sun, privacy, views and outlook for neighbouring properties, including future buildings;

(ii) To retain or create a rhythm or pattern of development that positively defines the streetscape so that space is not just what is left over around the building form;

(iii) To allow modulation of end walls for structures higher than 4 storeys.

Rear Setbacks

(i) To maintain deep soil zones to maximise natural site drainage and protect the water table;

(ii) To maximise the opportunity to retain and reinforce mature vegetation;

(iii) To optimise the use of land at the rear and surveillance of the street at the front; and

(iv) To maximise building separation to provide visual and acoustic privacy.

4.7.4. DEVELOPMENT CONTROLS

(a) Side and rear setbacks must comply with building separation, open space and deep soil zone controls in this Section of the DCP.

(b) Rear setback is to be a minimum of 8m.

(c) Side setbacks are to be a minimum of 4.5m to walls and 6m to windows from ground floor to fourth storey, and 6 metres for walls and windows above the fourth storey.

(d) Primary and secondary setback lines must comply with building separation, open space and deep soil zone controls in this DCP.

(e) Where setbacks are limited by lot size and adjacent buildings, internal courtyards that limit the length of walls facing boundaries may be proposed. This approach must comply with building separation, open space and deep soil zone controls in this DCP.

(f) In general, no part of a building or above ground structure may encroach into a setback zone. Exceptions are access to underground parking structures.

(g) A 450mm articulation zone is permitted for non floor space building elements such as fins louvers, shading devices and balconies.

(h) Future development is to be located in accordance with the setbacks in Figure 9, and, for the Key Sites, in Section 5 of this DCP.

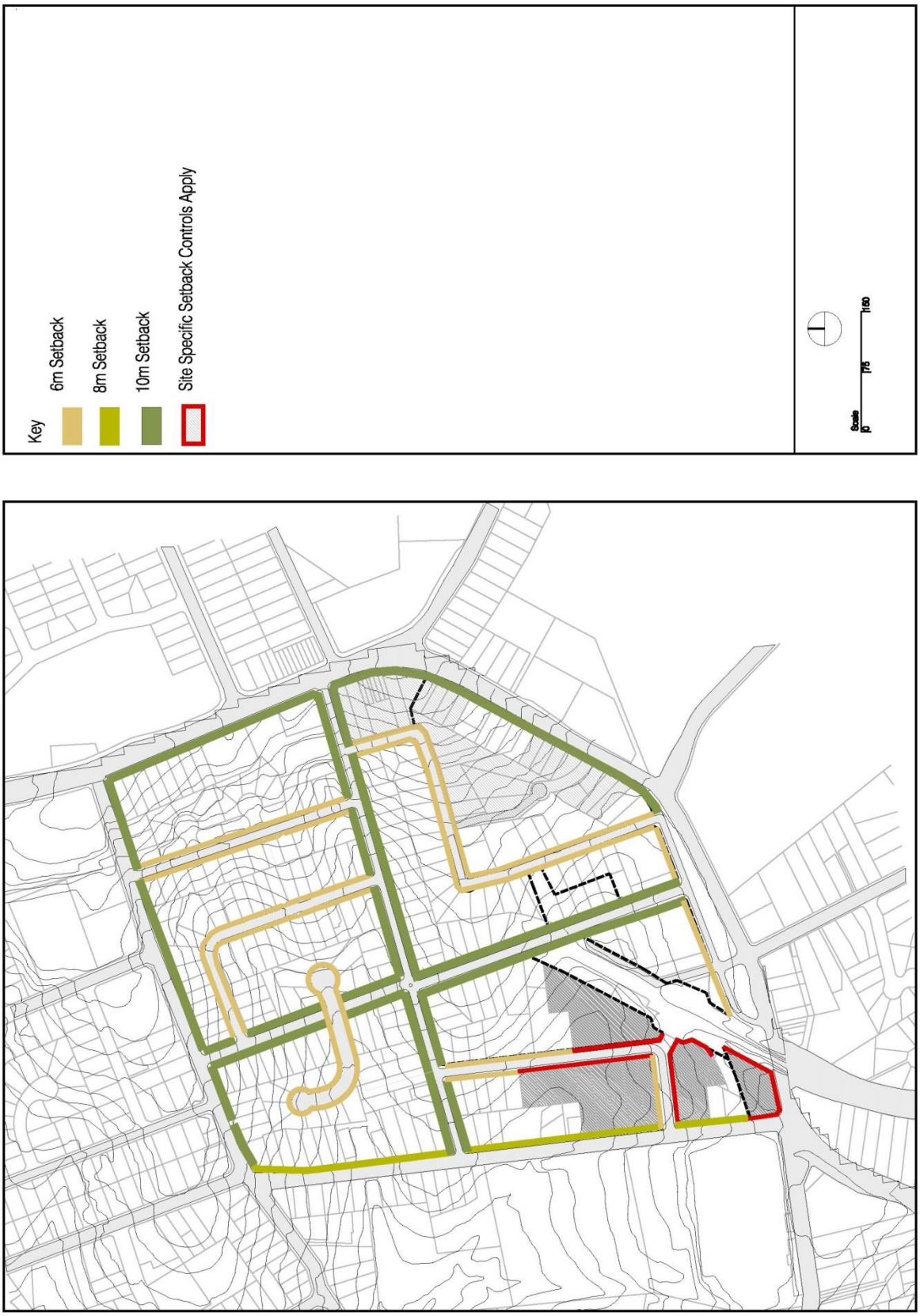


Figure 9. Setback Controls

4.8. BUILDING SEPARATION AND TREATMENT

4.8.1. OBJECTIVES

(i) To ensure that new development is scaled to support the desired area character with appropriate massing and spaces between buildings;

(ii) To provide visual and acoustic privacy for existing and new residents;

(iii) To control overshadowing of adjacent properties and private or shared open space;

(iv) To allow for the provision of open space of an appropriate size and proportion for recreational activities for building occupants; and

(v) To provide deep soil zones for stormwater management and tree planting.

4.8.2. DEVELOPMENT CONTROLS

(a) The minimum dimensions within a development, for internal courtyards and between adjoining sites shall be:

Buildings up to 4 storeys

- 12 metres between habitable rooms/balconies;
- 9 metres between habitable/balconies and non-habitable rooms; and
- 6 metres between non-habitable rooms.

Buildings from 5 to 8 storeys

- 18 metres between habitable rooms/balconies;
- 12 metres between habitable rooms/balconies and non-habitable rooms; and
- 9 metres between non-habitable rooms.

Buildings 9 storeys and above

- 24 metres between habitable rooms/balconies;
- 18 metres between habitable rooms/balconies and non-habitable rooms; and
- 12 metres between non-habitable rooms.

4.9. BUILDING DEPTH

4.9.1. OBJECTIVES

(i) To ensure that the scale of the development is consistent with the existing or desired future context;

(ii) To provide adequate amenity for building occupants in terms of solar access and natural ventilation; and

(iii) To provide for dual aspect apartments.

4.9.2. DEVELOPMENT CONTROLS

(a) **Building Depth:** In general, a residential flat building depth of approximately 18 metres from glass line to glass line is appropriate. Developments that propose depths wider than 18 metres from glass line to glass line must demonstrate how satisfactory daylight and natural ventilation are to be achieved. The building envelope includes the articulation zone (balconies, bay windows, shading devices). Exceptions may be made to allow projections beyond the building where they are an appropriate minimum distance above the finished ground level. These exceptions do not include bay windows and balconies.

(b) The 18 metre from glass line to glass line guideline generally applies to street wall buildings, buildings with dual aspects and buildings with minimal side setbacks.

(c) Freestanding buildings (the big house or tower building types) may have greater depth than 18 metres only if can be demonstrated that they achieve satisfactory daylight and natural ventilation.

(d) Building depth is to be in combination with other controls to ensure adequate amenity for building occupants. For example, a deeper plan may be acceptable where higher floor to ceiling heights allow solar access or where apartments have a wider frontage.

(e) **Building Length:** In general, a residential flat building length of approximately 50 metres is appropriate. Developments more than 50 metres in length must demonstrate how satisfactory day lighting and natural ventilation are to be achieved. Note: this parameter for buildings on key sites is subject to site specific controls.

4.10. LANDSCAPE DESIGN

4.10.1. OBJECTIVES

(i) To ensure a high quality public domain that is compatible with the achievable built forms and appropriate for the desired future character of the Precinct;

(ii) To add value to the quality of life of residents within the Precinct in the forms of privacy, outlook and views;

(iii) To improve stormwater quality and reduce quantity;

(iv) To improve the microclimate and solar performance within the development;

(v) To improve urban air quality; and

(vi) To contribute to biodiversity.

4.10.2. DEVELOPMENT CONTROLS

(a) Development is to provide landscaping in accordance with The Hills Development Control Plan Part C Section 3 - Landscaping.

(b) Landscaping of the public domain is to be undertaken in accordance with the provisions of the Carlingford Precinct Public Domain Plan. This includes, but is not limited to, kurb and gutter construction, paving, landscaping, street furniture, lighting and street tree planting.

4.11. OPEN SPACE

4.11.1. OBJECTIVES

(i) To provide residents with passive and active recreational opportunities;

(ii) To provide an area on site that enables soft landscaping and deep soil planting;

(iii) To ensure that communal open space is consolidated, configured and designed to be useable and attractive; and

(iv) To provide a pleasant outlook.

Provide high quality design for communal open spaces to encourage outdoor activities.



(Source: Residential Flat Design Code)



(Source: Residential Flat Design Code)

4.11.2. DEVELOPMENT CONTROLS

(a) The area of communal open space required should be at least 30 percent of the site area. (Larger sites may have potential for more than 30 percent.)

(b) Provision of roof top communal open space will be considered when calculating the area of communal open space for mixed use developments with retail and commercial uses where it is not possible to provide 30 percent of the site area in communal open space at ground level.

(c) Private open space must be readily accessible from living areas of dwelling units.

(d) The minimum area of private open space for each apartment at ground level must be 25m$^{2.}$ The minimum dimension is 4 metres.

(e) In order to provide useable open space to dwellings above ground level, any balcony or terrace shall have a minimum area of 10m^2 and a minimum depth of 2 metres.

4.12. BALCONIES

4.12.1. OBJECTIVES

(i) To provide all apartments with private open space;

(ii) To ensure balconies are functional and responsive to the environment thereby promoting the enjoyment of outdoor living for apartment residents;

(iii) To ensure that balconies are integrated into the overall architectural form and detail of residential flat buildings; and

(iv) To contribute to the safety and liveliness of the street by allowing for casual surveillance.

4.12.2. DEVELOPMENT CONTROLS

(a) Provide primary balconies for all apartments with a minimum depth of 2 metres. Developments which seek to vary the minimum standards must demonstrate that negative impacts from noise and wind cannot be satisfactorily mitigated with design solutions.

(b) The minimum area for a balcony is 10m^2.



Provide residents with functional balconies (Source: Residential Flat Design Code)



Provide balustrades/railings for safety (Source: Residential Flat Design Code)

4.13. SOLAR ACCESS

4.13.1. OBJECTIVES

(i) To ensure that solar access is provided to all habitable rooms and encouraged in all other areas of residential flat development;

(ii) To provide adequate ambient lighting and minimise the need for artificial lighting during daylight hours; and

(iii) To provide residents with the ability to adjust the quantity of daylight to suit their needs.

4.13.2. DEVELOPMENT CONTROLS

(a) Buildings must be designed to ensure that adjoining residential buildings, and the major part of their landscape receive at least four hours of sunlight between 9am and 3pm on 21 June.

(b) Living rooms and private open spaces for at least 70 percent of apartments in a development should receive a minimum of four hours direct sunlight between 9 am and 3 pm on 21 June.

(c) Limit the number of single-aspect apartments with a southerly aspect (SW-SE) to a maximum of 10 percent of the total units proposed. Developments which seek to vary from the

minimum standards must demonstrate how site constraints and orientation prohibit the achievement of these standards and how energy efficiency is addressed (see Orientation and Energy Efficiency).

(d) Main windows should have suitable shading or other solar control to avoid discomfort (shutters/blinds/screens/retractable awnings).



Provide residents with means to adjust the quantity of daylight (Source: Residential Flat Design Code)



Articulate built form to allow daylight access to habitable rooms (Source: Residential Flat Design Code)

4.14. CAR PARKING PROVISION

4.14.1. OBJECTIVES

(i) To ensure that all car parking demands generated by the development are accommodated on the development site;

(ii) To minimise car dependency for commuting and recreational transport use and to promote alternative means of transport including public transport, bicycling, and walking;

(iii) To provide adequate car parking for building users and visitors, depending on building type and proximity to public transport; and

(iv) To integrate the location and design of car parking with the design of the site and the building.

4.14.2. DEVELOPMENT CONTROLS

(a) Parking for residents is to be provided at the rate of 1 space per 1 bedroom apartment, 2 spaces per 2 bedroom apartment, and 2 spaces per 3 bedroom apartment. These car parking rates do not apply to the Key Sites identified in Section 5 of this part of the DCP.

(b) Visitor parking is to be provided at the rate of 2 spaces per 5 apartments for all development within the Precinct.

(c) All car parking required by Council shall be provided on-site in accordance with the requirements of Part C Section 1 – Parking of this DCP.

(d) Car parking including visitor parking shall be located underground to minimise the height of buildings above natural ground level.

(e) Visitor parking is to be located in easily accessible and identifiable areas.

4.15. VEHICLE ACCESS

4.15.1. OBJECTIVES

(i) To ensure that vehicles may enter and leave the site in a safe and efficient manner; and

(ii) To provide a legible and permeable road network.

4.15.2. DEVELOPMENT CONTROLS

(a) Access to the site is to be in accordance with the requirements within Part C Section 1 – Parking of this DCP.

(b) Ensure vehicular ingress and egress to the site is in a forward direction at all times.

(c) Adequate provision shall be made for service vehicle access and service areas.

(d) Driveways are to have a minimum width of 6 metres at the property boundary for a distance of 6 metres within the development to ensure easy entry/exit of vehicles.

(e) Access to multi-level basement car parks should be provided in the form of a two-way ramp (two lane width - minimum 5.5m wide) or two separate single lane (minimum 3.0m wide) ramps.

(f) The design and configuration of access ways and driveways shall be in accordance with Part C Section 1 - Parking of this DCP.

(g) Locate vehicle entries away from main pedestrian entries and on secondary frontages.

(h) All car parking areas and spaces shall be designed in accordance with The Hills Shire Part C Section 1 – Parking of this DCP.

(i) Car parking space dimensions and gradient design shall be in accordance with the relevant Australian Standard. The relevant Australian Standard at present is Australian/New Zealand Standard AS/NZS 2890.1:2004 - "Parking Facilities - Part 1: Off-street car parking" (AS/NZS 2890.1:2004).

4.16. FENCES AND WALLS

4.16.1. OBJECTIVES

(i) To define the edges between public and private land;

(ii) To define the boundaries between areas within the development having different functions or owners;

(iii) To provide privacy and security; and

(iv) To contribute positively to the public domain.

4.16.2. DEVELOPMENT CONTROLS

(a) The fencing materials chosen must protect the acoustic amenity and privacy of courtyards. Courtyard fences shall be constructed of masonry.

(b) Where residential buildings are required to be set back 10m from the front boundary, fencing / walls fronting a street shall be setback a minimum of 2 metres. This is to allow for consistent street edge landscaping, and shall include recesses and other architectural features.

(c) All fencing or walls shall be combined and integrated with site landscaping.

(d) The following fencing materials or finishes are not acceptable because of their poor visual appearance:

- Pre-painted, profiled metal sheeting; and
- Rendered finishes when the entire fence is rendered.

(e) The use of natural materials is encouraged.

(f) Front fences should not be of a height so as to prevent casual surveillance of the public realm and adjacent prosperities.

(g) In mixed use developments containing non residential uses on the ground floor, front boundaries should be defined by accessible paved and landscaped areas to demarcate public from private realm.

(h) Ground floor retail edges should have barrier free access and public amenities such as awnings.



Combined wall/fencing materials with planting elements to soften the hard edge (Source: Residential Flat Design Code)

4.17. ORIENTATION

4.17.1. OBJECTIVES

(i) To optimise solar access to residential apartments within the development and adjacent development;

(ii) To contribute positively to desired streetscape character;

(iii) To protect the amenity of existing development; and

(iv) To improve the thermal efficiency of new buildings.

4.17.2. DEVELOPMENT CONTROLS

(a) Orient and design buildings to maximise the number of dwellings with direct sunlight where possible. Ideally, face the long axis of the development up to 30 degrees east and 20 degrees west of true north. This is illustrated in Figure 10.

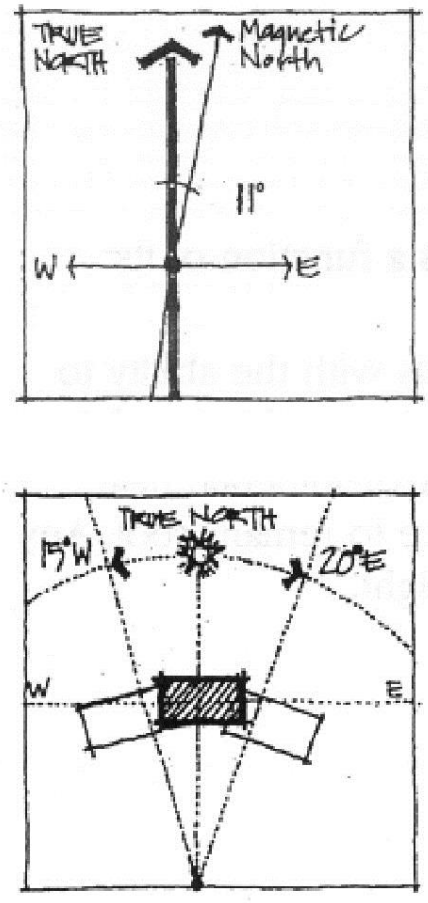


Figure 10: Building Orientation

(b) Face living spaces to the north wherever possible.

(c) No more than 10% of single aspect residential units are to face due south.

4.18. PLANTING ON STRUCTURES

4.18.1. OBJECTIVES

(i) To contribute to the quality and amenity of communal open space on roof tops, podiums and internal courtyards; and

(ii) To encourage the establishment and healthy growth of trees in urban areas.

4.18.2. DEVELOPMENT CONTROLS

(a) Large trees such as figs (canopy diameter of up to 16 metres at maturity):

- minimum soil volume: 150 cubic metres
- minimum soil depth: 1.3 metre
- minimum soil area: 10 metre x 10 metre area or equivalent

(b) Medium trees (8 metre canopy diameter at maturity):

- minimum soil volume: 35 cubic metres
- minimum soil depth: 1 metre
- approximate soil area: 6 metre x 6 metre or equivalent

(c) Small trees (4 metre canopy diameter at maturity):

- minimum soil volume: 9 cubic metres
- minimum soil depth: 800mm
- approximate soil area: 3.5 metre x 3.5 metre or equivalent

(d) Shrubs:

- minimum soil depths: 500-600mm

(e) Ground cover:

- minimum soil depths: 300-450m

(f) Turf:

- minimum soil depths: 100-300mm

(g) Any subsurface drainage requirements are in addition to the minimum soil depths quoted above.

4.19. STORMWATER MANAGEMENT

4.19.1. OBJECTIVES

(i) To control stormwater runoff and minimise discharge impacts on adjoining properties and into natural drainage systems before, during and after construction;

(ii) To minimise the impacts of residential flat development and associated infrastructure on the health and amenity of natural waterways;

(iii) To minimise the discharge of sediment and other pollutants to the urban stormwater drainage system during construction activity;

(iv) To provide for the disposal of stormwater from the site in efficient, equitable and environmentally sensible ways in accordance with Council's ESD objective 3;

(v) To provide for on-site detention of site drainage;

(vi) To prevent flood damage to the built and natural environment, inundation of dwellings and stormwater damage to properties;

(vii) To ensure that proposed development does not adversely affect the operational capacity of the downstream stormwater system;

(viii) To encourage reuse, recycling and harvesting of stormwater to reduce wastage of water; and

(ix) To encourage a reduction in water consumption.

4.19.2. DEVELOPMENT CONTROLS

(a) Drainage easements will be required where the development property does not drain directly into the existing stormwater drainage system or a public road. Development Consent will not be issued until the submission of documents demonstrating the creation of any necessary easements over downstream properties.

(b) Developments must comply with any requirements of the Sydney Catchment Management Authority.

(c) On-site detention, water recycling, or water quality management systems may be required to Council's and/or the Sydney Catchment Management Authority requirements, to counteract an increase in stormwater runoff.

(d) Drainage systems are to be designed and constructed in accordance with the design guidelines set out in "Design Guidelines for Subdivisions and Developments" published by The Hills Shire Council and "Australian Rainfall and Runoff" published by the Institution of Engineers, Australia (1987).

(e) Discharge points are to be controlled and treated to prevent soil erosion, and may require energy dissipating devices on steeper topography, to Council's requirements.

(f) Where necessary, downstream amplification of existing drainage facilities will be required including Council infrastructure if required.

(g) Water Sensitive Urban Design (WSUD) principles shall be employed in the management of the site's stormwater in terms of water retention, reuse and cleansing in accordance with the "Water Sensitive Urban Design Technical Guidelines for Western Sydney" published by the Upper Parramatta River Catchment Trust (May 2004). In this regard the drainage design is to include measures to manage the water quality of stormwater runoff. At a minimum the design is to integrate bio retention filters along roadways, driveways and within open space areas.

(h) On site detention tanks are only permitted in common areas within a proposed development (for example driveways, common open space and not within private courtyards).

(i) Drainage systems are to be designed and constructed in accordance with the design guidelines set out in "Design Guidelines for Subdivisions and Developments" published by The Hills Shire Council and/or "Australian Rainfall and Runoff" published by Institution of Engineers, Australia (1987) and/or the Sydney Catchment Management Authority.

(j) On-site detention systems, where required, are to be designed in accordance with (a) above.

Note: Where land is identified as flood controlled land, please refer to Part C Section 6 – Flood Controlled Land of the DCP.

4.20. BUILDING ENTRY

4.20.1. OBJECTIVES

(i) To create entrances which provide a desirable residential identity for the development;

(ii) To orient the visitor;

(iii) To contribute positively to the streetscape and building facade design; and

(iv) To provide entrances that are legible, safe, accessible and well lit.

4.20.2. DEVELOPMENT CONTROLS

(a) Provide as direct a physical and visual connection as possible between the street and the entry.

(b) Achieve clear lines of transition between the public street, the shared private circulation spaces and individual apartments.

(c) Provide safe and secure access. Design solutions include:

- Avoid ambiguous and publicly accessible small spaces in entry areas.
- Provide a clear line of sight between one circulation space and the next.
- Provide sheltered, well lit and highly visible spaces to enter the building, meet and collect mail.

(d) Generally provide separate entries from the street for:

- Pedestrians and cars.
- Different uses, for example, for residential and commercial users in a mixed-use development
- Ground floor apartments, where applicable.

(e) Design entries and associated circulation space to be of an adequate size to allow movement of furniture between public and private spaces.

4.21. CEILING HEIGHT

4.21.1. OBJECTIVES

(i) To increase the sense of space in apartments and provide well proportioned rooms;

(ii) To promote the penetration of daylight into the depths of the apartment;

(iii) To contribute to flexibility of use; and

(iv) To achieve quality interior spaces while considering the external building form requirements.

4.21.2. DEVELOPMENT CONTROLS

(a) Ceiling heights shall be measured from finished floor level (FFL) to finished ceiling level (FCL). These are minimums only and do not preclude higher ceilings, if desired.

(b) In mixed use buildings: 3.3 metre minimum for ground floor retail or commercial and for first floor residential retail or commercial to promote future flexibility of use in residential flat buildings in mixed use areas: 3.3 metre minimum for ground floor to promote future flexibility of use.

(c) In general, 2.7 metre minimum for all habitable rooms on all floors, 2.4 metres is the preferred minimum for all non-habitable rooms, however 2.25m is permitted.

(d) For two storey units, 2.4 metre minimum for second storey if 50 percent or more of the apartment has 2.7 metre minimum ceiling heights.

(e) For two storey units with a two storey void space, 2.4 metre minimum ceiling heights.

(f) Attic spaces shall have a 1.5 metre minimum wall height at edge of room with a 30 degree minimum ceiling slope.

4.22. FLEXIBILITY

4.22.1. OBJECTIVES

(i) To encourage housing designs which meet the broadest range of the occupants' needs possible;

(ii) To encourage adaptive re-use; and

(iii) To save the embodied energy expended in building demolition.

4.22.2. DEVELOPMENT CONTROLS

(a) Provide robust building configurations, which utilise multiple entries and circulation cores, especially in larger buildings over 15m long.

(b) Utilise structural systems, which support a degree of future change in building use or configuration. Design solutions may include:

- A structural grid, which accommodates car parking dimensions, retail, commercial and residential uses vertically throughout the building.
- The alignment of structural walls, columns and services cores between floor levels.
- The minimisation of internal structural walls.
- Higher floor to floor dimensions on the ground floor and possibly the first floor.

4.23. GROUND FLOOR APARTMENTS

4.23.1. OBJECTIVES

(i) To contribute to the desired streetscape of the range of localities in the Precinct and to create active safe streets; and

(ii) To increase the housing and lifestyle choices available in residential flat buildings.

4.23.2. DEVELOPMENT CONTROLS

(a) Optimise the number of ground floor apartments with separate entries.

(b) Provide ground floor apartments with access to private open space, preferably as a terrace or garden.

4.24. INTERNAL CIRCULATION

4.24.1. OBJECTIVES

(i) To create safe and pleasant spaces for resident circulation;

(ii) To facilitate quality apartment layouts, such as dual aspect apartments;

(iii) To contribute positively to the form and articulation of the building facade and its relationship to the urban environment; and

(iv) To encourage interaction and recognition between residents to contribute to a sense of community and improve perceptions of safety.

4.24.2. DEVELOPMENT CONTROLS

(a) In general, where units are arranged off a double-loaded corridor, the number of units accessible from a single core/corridor should be limited to eight (8). Exceptions may be allowed:

- For adaptive reuse buildings.
- Where developments can demonstrate the achievement of the desired streetscape character and entry response.
- Where developments can demonstrate a high level of amenity for common lobbies, corridors and units.

4.25. MIXED USE DEVELOPMENTS

4.25.1. OBJECTIVES

(i) To support the integration of appropriate retail and commercial uses with housing;

(ii) To create more active lively streets and urban areas, which encourage pedestrian movement, service the needs of the residents and increase the area's employment base; and

(iii) To ensure that the design of mixed use developments maintains residential amenities and preserves compatibility between uses.

4.25.2. DEVELOPMENT CONTROLS

(a) Choose a mix of uses that complement and reinforce the character, economics and function of the local area, for example, food retail, small-scale commercial and residential.

(b) Desired uses at ground floor level of eighteen (18) storey buildings near the station include small supermarkets, post office, chemist, newsagent, bank and other service retail and commercial to meet the day-to-day needs of the local community.

(c) Ensure the building positively contributes to the public domain and streetscape by:

- Fronting onto major streets with active uses; and
- Avoiding the use of blank walls at the ground level.

4.26. STORAGE

4.26.1. OBJECTIVES

(i) To provide adequate storage for everyday household items within easy access of the apartment; and

(ii) To provide storage for sporting, leisure, fitness and hobby equipment.

4.26.2. DEVELOPMENT CONTROLS

(a) In addition to kitchen cupboards and bedroom wardrobes, provide accessible storage facilities at the following rates:

Residential Flat Buildings

- Studio apartments – $6m^3$
- One-bedroom apartments – $6m^3$
- Two-bedroom apartments – $8m^3$
- Three plus bedroom apartments – $10m^3$.

Multi Dwelling Housing

As per Part B Section 4 – Multi Dwelling Housing of The Hills Development Control Plan.

4.27. NATURAL VENTILATION

4.27.1. OBJECTIVES

(i) 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;

(ii) To provide natural ventilation in non-habitable rooms, where possible; and

(iii) To reduce energy consumption by minimizing the use of mechanical ventilation, particularly air conditioning.

4.27.2. DEVELOPMENT CONTROLS

(a) Sixty percent (60%) of residential units should be naturally cross ventilated.

(b) Twenty five percent (25%) of kitchens within a development should have access to natural ventilation.

(c) Developments, which seek to vary the minimum standards must demonstrate how natural ventilation can be satisfactorily achieved, particularly in relation to habitable rooms.

4.28. AWNINGS

4.28.1. OBJECTIVES

(i) To provide shelter for public streets; and

(ii) In that part of the Precinct closer to the train station, to ensure signage is consistent with desired streetscape character and with the development in scale, detail and overall design.

4.28.2. DEVELOPMENT CONTROLS

(a) Encourage pedestrian activity on streets by providing awnings to retail strips, where appropriate.

(b) Contribute to the legibility of the residential flat development and amenity of the public domain by locating local awnings over building entries.

(c) Enhance safety for pedestrians by providing underawning lighting.

4.29. FACADES

4.29.1. OBJECTIVES

(i) To promote high architectural quality in residential flat buildings;

(ii) To ensure that new developments have facades which define and enhance the public domain and desired street character; and

(iii) To ensure that building elements are integrated into the overall building form and facade design.

4.29.2. DEVELOPMENT CONTROLS

(a) Compose facades with an appropriate scale, materials and finishes, rhythm, and proportion, which response to the building use and the desired contextual character. Design should include but are not limited to:

- defining a base, middle and top related to the overall proportion of the building;
- expressing the variation in floor to floor height particularly at the lower levels;
- articulating building entries with awnings, porticos, recesses, blade walls and rejecting bays;
- selecting balcony types which respond to the street context, building orientation and amenity of the locality; and
- incorporating architectural features which give human scale to the design of the building at street level; These include entrance porches, awnings, colonnades, pergolas and fences.

(b) High quality materials and finishes for facades such as natural stone, granite or porcelain stoneware tiles must be used for the podium level of eighteen (18) storey buildings near the station.

(c) Design facades to reflect the orientation of the site using elements such as sun shading, bay windows, as environmental controls depending on the façade orientation.

(d) Express important corners by giving visual prominence to parts of the façade, for example, a change in building articulation, material or colour, roof expression or increased height.



Use of varying facade alignments and sunscreens articulate the taller mass of this building. (Source: Residential Flat Design Code)

4.30. ROOF DESIGN

4.30.1. OBJECTIVES

(i) To provide quality roof designs, which contribute to the overall design and performance of residential flat buildings;

(ii) To integrate the design of the roof into the overall facade, building composition and desired contextual response; and

(iii) To increase the longevity of the building through weather protection.

4.30.2. DEVELOPMENT CONTROLS

(a) Articulate the roof to break down its mass on larger buildings, to minimise the apparent bulk or to relate to a context of smaller building forms.

(b) Design the roof to relate to size and scale of the building, the building elevations and three dimensional building form.

(c) Design roofs to respond to the orientation of the site, for example, by using eaves to respond to sun access.

(d) Minimise the visual intrusiveness of service elements by integrating them into the design of the roof.

(e) Facilitate the use or future use of the roof for sustainable functions, for example, water management and photovoltaic applications.

(f) Where habitable space is provided within the roof optimise residential amenity in the form of attics or penthouse apartments.

(g) The use of roof space to provide communal open space areas incorporating facilities such as swimming pools, BBQ areas and seating is encouraged.



Articulation of rooflines to break up roof mass. (Source: Residential Flat Design Code)

4.31. ADAPTABLE HOUSING

In order to provide for disabled people and the aging population, apartments must be capable of adaptation so as to accommodate residents who may have special needs, declining mobility and sight. This is in addition to being appropriately designed for everyday pedestrian use.

4.31.1. OBJECTIVES

(i) To ensure that developments provide appropriate and improved access and facilities for all persons (consistent with the provisions of Australian Standard AS1428.1-1998);

(ii) To ensure designers/developers consider the needs of people who are mobility impaired and to provide greater than the minimum requirements for access and road safety;

(iii) To ensure that building design does not prevent access by people with disabilities; and

(iv) To incorporate design measures that are appropriate for people with disabilities.

4.31.2. PERFORMANCE CRITERIA

(a) Development to provide housing for a cross section of the community.

(b) All development applications for residential flat buildings should be accompanied by a report prepared by a suitably qualified Access Consultant addressing access and mobility provisions within the development.

4.31.3. DEVELOPMENT CONTROLS

(a) All apartments required under this Section of the DCP to be adaptable dwellings and those which cannot be directly accessed from ground level are to be served by a lift.

(b) Units with a floor level within 1.5m of the natural ground must be accessible to the front door of each unit.

(c) At least 1 unit in each residential flat building with less than 20 units, or 5 percent of the units in any development of 20 or more units, must be either:

- An accessible unit to AS 1428 Part 2, suitable for occupation by a wheelchair user; or
- Meet Class B adaptability provisions under AS 4299.

(d) Each unit so provided above shall have an accessible car parking bay complying with AS 2890 for people with a disability, and be accessible to a pick-up and drop-off point. An accessible route between the unit's dedicated car parking spaces and unit shall be provided.

(e) All stairs intended for circulation between levels, whether external or internal, shall comply with AS 1428 Part 1, if they are located on common property.

(f) At least 10% of toilets (but not less than 1 male and 1 female toilet) provided on the common property must be wheelchair accessible.

(g) At least one entry to any common facilities on the common property must be wheelchair accessible.

(h) An accessible pick-up and drop-off point can be located on the public road (with Council or RMS permission) or on the site, but it must allow for vehicles up to a coaster size bus to pick up and drop off.

(i) Apartments are to be designed to permit adaptation of units so that they can change to meet future needs. Design features that might be included are:-

- Lightweight or non-load bearing walls that can be removed to re-configure rooms; and
- Wall panels that can be easily removed to connect adjoining apartments and cater for larger extended families.

(j) Development applications should address provisions contained in Council's "Making Access For All Guidelines" 2002.

4.32. SITE FACILITIES

4.32.1. OBJECTIVES

(i) To provide site facilities which are adequate and conveniently located for resident needs; and

(ii) To ensure facilities are practical, attractive and easily maintained.

4.32.2. PERFORMANCE CRITERIA

(a) Rubbish and recycling bin enclosures, letter boxes, and other site facilities should be adequate in size, durable, weather proofed and visually integrated with the development. Their location is to have regard to the protection of residential amenity, service vehicle access, visual impact and residential access.

4.32.3. DEVELOPMENT CONTROLS

Laundry Facilities

(a) All apartments are to be provided with internal laundry facilities and internal drying facilities.

(b) Laundries for town houses and small lot integrated housing shall be provided to each dwelling with a permanent or collapsible clothes line provided in a conveniently accessible courtyard.

Waste and recycling bins

Waste management requirements are to be in accordance with Part B Section 5 – Residential Flat Buildings.

Waste Management Planning

(a) Demolition and construction works must maximise the reuse and recycling of building/construction materials in accordance with Council's ESD objectives and State and Federal Government waste minimisation targets.

(b) All asbestos, hazardous and/or intractable wastes are to be disposed of in accordance with Workcover Authority and EPA requirements.

(c) All Development Applications are to be accompanied by a Waste Management Plan that demonstrates appropriate project management

and construction techniques for ensuring waste minimisation including the re-use of waste on-site and off-site recycling.

The Waste Management Plan must include the following information:

(a) Types of waste to be produced;

(b) Quantities of waste likely to be produced;

(c) On-site and/or off-site reuse and recycling methods for waste;

(d) Details as to the contractor and destination of all waste materials;

(e) Location of on-site separation and storage facilities for waste materials;

(f) Design of waste management facilities for use by residents following occupation;

(g) A Waste Data File (a file containing the Waste Management Plan together with records-waste receipts or dockets) of recycling and disposal of demolition and construction materials must be kept by the Construction Contractor responsible for the site.

A Waste Management Plan template is available from Council's website www.thehills.nsw.gov.au.

Mail Boxes

(a) Mail boxes are to be generally incorporated into front fences, landscaped areas or integrated with individual building entry design.

(b) Mail boxes should be in close proximity to the pedestrian entrance of all housing types, and be easily identifiable for ease of use.

(c) The location of mail boxes and mail drop-off points will need to be confirmed with Australia Post.

4.33. ECOLOGICALLLY SUSTAINABLE DEVELOPMENT

Ecologically Sustainable Development (ESD), as identified in the National ESD Strategy, refers to development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It embodies the responsibility to maintain ecological processes (biodiversity and life support systems), quality of life and social interactions within a productive economic environment.

In order to fulfil Council's statutory responsibilities as required by Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* and the *Local Government Amendment (ESD) Act 1997* and to meet its adopted goals and objectives as defined in Council's Environmental Management Plan development is required to comply with the Council's Sustainability Objectives.

4.33.1. OBJECTIVES

(i) To apply precautionary principles where development is likely to cause short or long-term irreversible or serious threats to the environment;

(ii) To address and allow for broad community involvement in respect to local issues of concern throughout the development process;

(iii) To ensure that during the design, construction and operation of the development, that water leaving the site is of a quality and quantity comparable to that which is received;

(iv) To ensure that biodiversity, and the integrity of ecological processes, are not compromised by the development; and

(v) To promote the following during the design, construction and operation of any development:

- *The use of energy efficient materials and designs;*
- *Utilisation of renewable energy and materials; and*
- *Energy efficient technology.*

(vi) To follow the principles of the 'Waste Hierarchy' (reduce, reuse, recycle) in the use of materials and the design of waste recovery and disposal systems throughout the development process;

(vii) To protect neighbourhood amenity and safety in the design, construction and operation of the development;

(viii) To encourage the long term economic viability and health of the community in the development process; and

(ix) To encourage the use of public transport, use of bicycles and pedestrian trips in the development and design process.

4.33.2. DEVELOPMENT CONTROLS

(a) As part of the Statement of Environmental Effects required to be submitted with all development applications a summary of the action taken in

order to achieve these objectives must be included.

(b) To improve the air quality of the locality, the installation of wood heaters is not permitted.

4.34. BASIX

All development applications will be required to demonstrate that they meet the BASIX targets.

More information on BASIX can be found at the following website:

www.planning.nsw.gov.au

4.35. ACCESS, SAFETY AND SECURITY

4.35.1. OBJECTIVES

(i) Site and dwelling layouts are to ensure safe and convenient passage for residents and visitors.

4.35.2. PERFORMANCE CRITERIA

(a) Consideration should be given to the needs of residents in regard to prams, wheelchair access and people with disabilities.
(b) Footpaths, landscaped areas and driveway designs are to provide opportunities for surveillance and allow for the safe movement of residents and visitors.
(c) Apartments and town houses are to have adequate lighting in commonly accessible areas.

4.35.3. DEVELOPMENT CONTROLS

(a) Stairs and ramps are to have reasonable gradients and non-slip even surfaces. Refer to AS 1428.1 – 1988 Design for Access and Mobility and supplementary AS 1428.2 – 1992.
(b) Access to dwellings is to be direct and without unnecessary barriers. For example, use ramps instead of stairs/steps, consider the height and length of handrails and eliminate changes in level between ground surfaces.
(c) Development applications should address provisions contained in Council's "Safer by Design Guidelines" (2002).
(d) Private areas in a development are to be clearly recognisable.

4.36. VISUAL AND ACOUSTIC PRIVACY

4.36.1. OBJECTIVES

(i) To limit views into adjoining private open spaces and living rooms;
(ii) To protect residents from external noise; and
(iii) To contain noise between dwellings without unreasonable transmission to adjoining dwellings.

4.36.2. PERFORMANCE CRITERIA

(a) The effective location of windows and balconies is preferred to the use of screening devices, high sills or obscured glass. Where these are used, they should have minimal negative effect on resident or neighbour amenity.
(b) Direct views from the living rooms of dwellings into private open space or the interior of other dwellings should be obscured with landscaping, architectural detail and building design (refer to AMCORD).
(c) Where minimum separation distances cannot be practically met, windows should be placed to minimise direct viewing between dwellings.
(d) In general, dwellings are to be designed to limit the potential for noise transmission to living and sleeping areas of adjacent existing and future developments. Consideration should be given to minimising noise emissions from air conditioners, driveways and the like. This can be achieved by complying with the Building Code of Australia requirements.
(e) Dwellings that adjoin Pennant Hills Road are to be designed to acceptable internal noise levels, based on AS 3671 – Road Traffic Noise Intrusion Guidelines.

4.36.3. DEVELOPMENT CONTROLS

(a) Minimise direct overlooking of main internal living areas and private open space of dwellings both within and of adjoining development through building design, window locations and sizes, landscaping and screening devices.
(b) Consider the location of potential noise sources within the development such as common open space, service areas, driveways, road frontage and provide appropriate measures to protect acoustic privacy by the careful location of noise-

sensitive rooms (bedrooms, main living areas) and double glazed windows.

(c) The location of the plant and equipment for residential flat buildings should be designed so that the noise level does not exceed the background noise level. This is to reduce background noise level creep.

(d) In regard to the town houses and small lot integrated houses, ideal positions or specifically designed positions for any air conditioners should be provided in the plans at development application stage.

(e) Air conditioners shall be located a minimum of three (3) metres from any property boundary and must not exceed 5dB(A) above the background noise level or alternatively if there is no other option and the air conditioner is located within three (3) metres of any property boundary it must not exceed the background noise level.

(f) Private areas in a development are to be clearly recognisable.

4.37. GEOTECHNICAL

4.37.1. OBJECTIVES

(i) To ensure the possibility of soil movement or slip does not adversely affect proposed development.

4.37.2. DEVELOPMENT CONTROLS

(a) All development applications submitted to Council shall be accompanied by geotechnical appraisal report from a suitably qualified experienced Geotechnical Engineer.

(b) The geotechnical appraisal report must satisfy Council that the possibility of soil movement or slip will not affect the proposed development of the site and outline recommendations to ameliorate any geotechnical impacts.

4.38. UNDERGROUNDING OF EXISTING POWER LINES

4.38.1. OBJECTIVES

(i) To improve streetscape/public domain appearance; and

(ii) To utilise the former overhead easements for open space and drainage purposes.

4.38.2. DEVELOPMENT CONTROLS

(a) The existing overhead high voltage power lines on a development site must be undergrounded in accordance with the requirements of the relevant power supply authority and Clause 7.8 *undergrounding power lines at Carlingford* of The Hills Local Environmental Plan 2012.

(b) A letter/correspondence from the relevant power supplying authority confirming that the applicant has consulted and made prior arrangements with the authority to underground the existing high voltage power lines within the site must be submitted with the Development Application.

(c) Applicants are required to make satisfactory arrangements with Integral Energy for the provision of underground electricity to the site in accordance with Integral Energy's *Network Connection Contestable Works General Terms and Conditions Policy*.

(d) Applicants are required to make satisfactory arrangements with the relevant authority(s) for the provision of underground telecommunications services to the site.

(e) A new easement for undergrounded electrical works satisfying the relevant authority must be provided on site. This is to enable any future maintenance works for the undergrounded network.

4.39. DEVELOPER CONTRIBUTIONS

4.39.1. OBJECTIVES

(i) To address the likely demands placed on public amenities and services as a result of the increase in residential development; and

(ii) To determine a reasonable development contribution based on the impact of residential development.

4.39.2. DEVELOPMENT CONTROLS

(a) Council will seek a Section 94 Contribution from developments within the Precinct.

(b) Applicants should consult with Council's Section 94 Contributions Plan and Council's Officers to determine the required amount of Section 94 Contributions payable.

4.40. DEVELOPMENT NEAR RAIL CORRIDORS

4.40.1. OBJECTIVES

(i) To minimise adverse impacts on rail safety; and

(ii) To minimise impact of rail noise and vibration adjoining development.

4.40.2. DEVELOPMENT CONTROLS

(a) New development and structures adjacent or near RailCorp facilities shall allow continued access to the rail corridor for maintenance.

(b) Buildings should be designed so that objects cannot be thrown from windows or balconies into the rail corridor. This could be achieved through providing windows with a limited range of opening such as louvers, and by enclosing balconies.

(c) All balcony and window design should meet the relevant BCA standards.

(d) If excavation is involved, a geotechnical or site stability report needs to be prepared as part of the application.

(e) Sound level in any bedroom must not exceed 35db(A) at any time between 10.00pm and 7.00am, and anywhere in the building (other than a garage, kitchen, bathroom or hallway) – 40db(A) at any time.

(f) If Council is of the view that development is likely to be affected by rail noise or vibration, a consent shall not be granted unless it is satisfied that appropriate measures will be taken to ensure that above sound levels are not exceeded.

(g) New development and structures adjacent or near RailCorp facilities must allow continued access to the rail corridor for maintenance.

5. KEY SITE BUILT FORM CONTROLS

The controls for the development on these sites are set out below in the form of design principles, development standards and diagrams. These controls prevail over the Precinct Built Form Controls to the extent of any inconsistency.

5.1. BLOCK 3: JENKINS ROAD AND THALLON STREET

Design Principles

BUILDING HEIGHT

- By virtue of its location close to the train station, this site has the ability to provide development of substantial height to contribute to a landmark to denote the village centre. The eighteen (18) storey height limit for the tower on this site achieves this objective.
- The placement of 2 x 18 storey towers maximises solar access to the ground level of the site and to the above ground units; also to minimise overshadowing of adjacent buildings and open spaces.
- The six storey podium height for this key site provides street frontage development in a form and scale comfortable for civic life of the village centre and to allow for ground floor active uses. The placement and orientation of the eight (8) storey tower on the corner of James and Thallon Streets minimises overshadowing of development to the south.

FSR LIMIT

- The FSR limit for the key sites which are closer to the train station is higher than for sites further from the station. This is to encourage developments of substantial size thus creating a critical mass for the village centre.
- To ensure optimal mix of uses within buildings by specifying FSR components for residential and commercial uses.

BUILDING FOOTPRINT AND DEEP SOIL COVER

- Due to the electricity line / floodway easements, the building footprint is limited to 40% of the site. This allows adequate deep soil provision.
- Open space on the site is concentrated to its north side so as to maximise its amenity. This placement of open space maximises its ability to operate in conjunction with the open space of the former electricity easement to adjacent to the north.

BUILDING SETBACKS FROM BOUNDARIES

Setback from Thallon and Jenkins Streets:

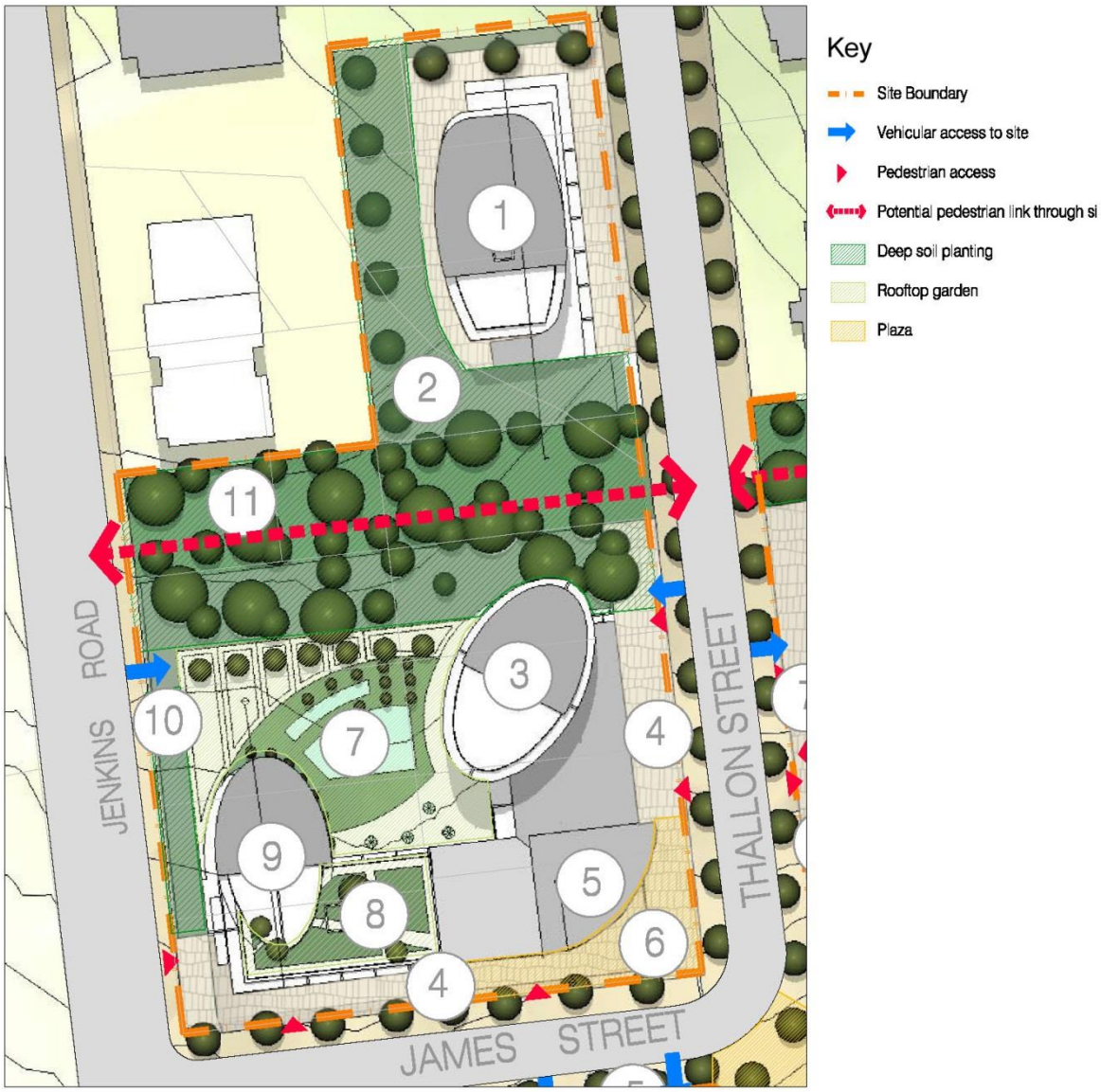
- Eight (8) metre setback is required to ensure adequate solar access to the development and open space to the south. This setback also allows for landscaping and street tree planting. The setbacks from Thallon Street may be reduced to 6m for the first two storeys to encourage street level pedestrian activity.

Setback from James Street:

- Six (6) metre setback is required to allow for landscaping and street tree planting.

5.1.1. DEVELOPMENT CONTROLS

DEVELOPMENT PARAMETER	DEVELOPMENT CONTROLS
Building height	Refer to LEP Building Height Map – Carlingford Precinct.
FSR	Refer to LEP Floor Space Ratio Map – Carlingford Precinct.
Building site coverage	Maximum 40%
Vehicle access points and circulation	Refer to Figure 11
Car parking requirements	0.8 space per 1 br unit 1 space per 2 br unit 1.3 spaces for 3 br unit 2 visitor spaces per 5 units
Distribution of uses within the building	Retail commercial uses limited to ground floor
SEPP 65 compliance statement	Required
Deep soil planting	Minimum 15% of total site area



1. Residential Tower with podium including communal facilities on Ground Floor
2. Landscape area/Communal open space
3. Signature tower, located to minimise solar impact to the development south of James Street
4. Active edges along Thallon St and James St
5. Articulated building corner
6. Forecourt to complement Civic Plaza at Station Entry
7. Landscape courtyard
8. Opportunity for communal roof garden to maximase solar access for the development south of James St
9. Articulated corner/built form addressing Jenkins St
10. Alternateive vehicular entry
11. Future green linkon existing powerline easement

Figure 11. Conceptual Built Form Controls: Block 3 Jenkins Road / Thallon Street

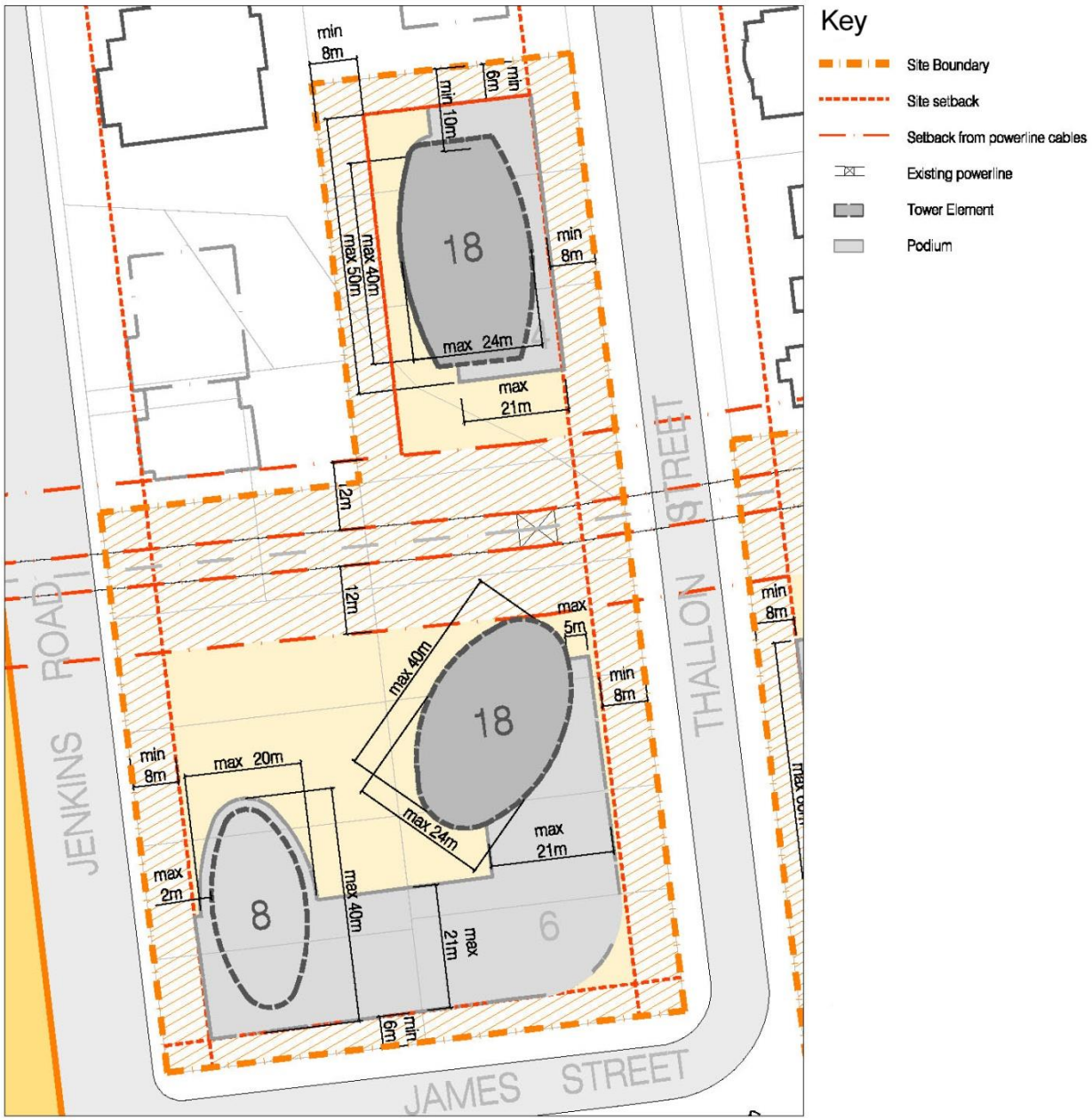


Figure 12. Dimensional Built Form Controls: Block 3 Jenkins Road / Thallon Street

5.2. BLOCK 4: 2-12 JAMES STREET

Design Principles

BUILDING HEIGHT

- Nos. 2-12 James Street, by virtue of their location close to the train station, have the ability to provide development of substantial height to contribute a landmark to denote the village centre.
- The development of Nos. 2-12 James Street should provide for orderly development by maximising opportunities for a shared basement layout and common open areas.
- Using the above urban design principles, Nos. 2-12 James Street may achieve two 18 storey towers. Placement of the towers minimises overshadowing of adjacent buildings and open spaces to the south (Figure 13).
- The six storey podium on Nos. 8-10 James Street provides development to the street frontage in a form and scale commensurate with the civic life of the village centre and to allow for ground floor active uses.
- Nos. 2-6 James Street will be developed to a maximum height of six storeys to maintain sufficient solar access to the existing low rise buildings to the south.

FSR LIMIT

- Due to its close proximity to the train station, the FSR limit for this key site is higher than sites further from the train station. This is to encourage developments of substantial size thus creating a critical mass for the village centre.
- To ensure an optimal mix of uses within buildings by specifying distribution of residential and commercial uses within the building.

BUILDING FOOTPRINT AND DEEP SOIL COVER

- Due to the more urban context to the site, a greater site coverage is appropriate. The building footprint is limited to 55% of the site. This allows deep soil provision of a minimum 15% of the total site area.
- Due to the more urban context to the site open space is provided on a rooftop podium.

BUILDING SETBACKS FROM BOUNDARIES

- Refer to Figure 14. The setbacks from the irregular boundaries of this key site vary in response to the need to provide solar access, pedestrian circulation space and to introduce modulation in the street wall.

5.2.1. DEVELOPMENT CONTROLS

DEVELOPMENT PARAMETER	DEVELOPMENT CONTROLS
Building height	Refer to LEP Building Height Map – Carlingford Precinct.
FSR	Refer to LEP Floor Space Ratio Map – Carlingford Precinct.
Building site coverage	Maximum 55%
Vehicle access points and circulation	Refer to Figure 13.
Car parking requirements	0.8 spaces per 1 br unit 1 space per 1 br unit 1.3 spaces for 3 br unit 2 visitor spaces per 5 units
Distribution of uses within the building	Retail and commercial uses limited to ground floor
SEPP 65 compliance statement	Required
Deep soil planting	Minimum 15% of total site area



1. Forecourt
2. 6 storey podium with ground floor retail/commercial to minimise overshadowing with opportunity for communal roof garden or solar panels
3. Communal open space/deep root planting area
4. Residential tower with ground floor retail
5. Potential vehicular access
6. Opportunity to extend Civic Plaza at station entry
7. Iconic bookend tower on Civic Plaza

Figure 13. Conceptual Built Form Controls: Block 4 2-12 James Street

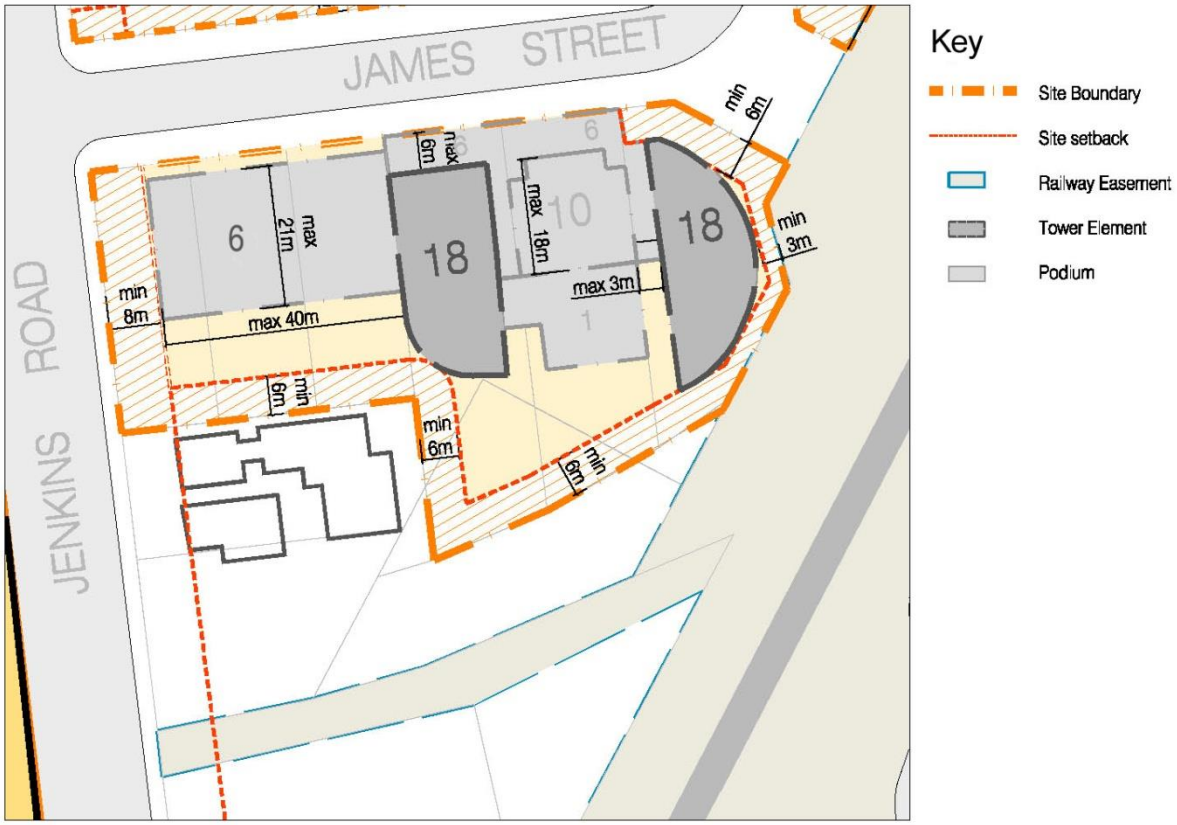


Figure 14. Dimensional Built Form Controls: Block 4 2-12 James Street

5.3. BLOCK 6: 1-7 THALLON STREET

Design Principles

BUILDING HEIGHT

- Nos.1-7 Thallon Street by virtue of their location close to the train station have the ability to provide development of substantial height to contribute a landmark to denote the village centre. The eighteen (18) storey height limit for the elliptical shaped tower on this site achieves this objective.
- This key site contains both a higher rise landmark tower and a six storey rectangular building forming part of the podium aligned with Thallon Street.
- A second six storey podium element that aligns with the railway reserve and faces the open space to the north of the main tower.
- The two podium elements combine to create a courtyard area that addresses the retained railway heritage building.

FSR LIMIT

- The FSR limit for the various components of this key site which is close to the train station is higher than for sites further from the station. This is to encourage developments of substantial size thus creating a critical mass for the village centre.
- To ensure an optimal mix of uses within buildings by specifying FSR components for residential and commercial uses.

BUILDING FOOTPRINT AND DEEP SOIL COVER

- Due to the electricity line / floodway easements, the building footprint is limited to 40% of the site. This allows adequate deep soil provision.
- Open space on the site is concentrated to its north side so as to maximise its amenity. This placement of open space maximises its ability to operate in conjunction with the open space of the former electricity easement to adjacent to the north.

BUILDING SETBACKS FROM BOUNDARIES

- Setback from Thallon Street: There is an eight (8) metre setback requirement for the rectangular building fronting Thallon Street. This allows for street landscaping and outdoor activities such as cafes that will benefit from solar access to the north.

5.3.1. DEVELOPMENT CONTROLS

DEVELOPMENT PARAMETER	DEVELOPMENT CONTROLS
Building height	Refer to LEP Building Height Map – Carlingford Precinct.
FSR	Refer to LEP Floor Space Ratio Map – Carlingford Precinct.
Building site coverage	Maximum 40%
Vehicle access points and circulation	Refer to Figure 15
Car parking requirements	0.8 spaces per 1 br unit 1 space per 2 br unit 1.3 spaces for 3 br unit 2 visitor spaces per 5 units
Distribution of uses within the building	Retail and commercial uses limited to ground floor
SEPP 65 compliance statement	Required
Deep soil planting	Minimum 15% of total site area

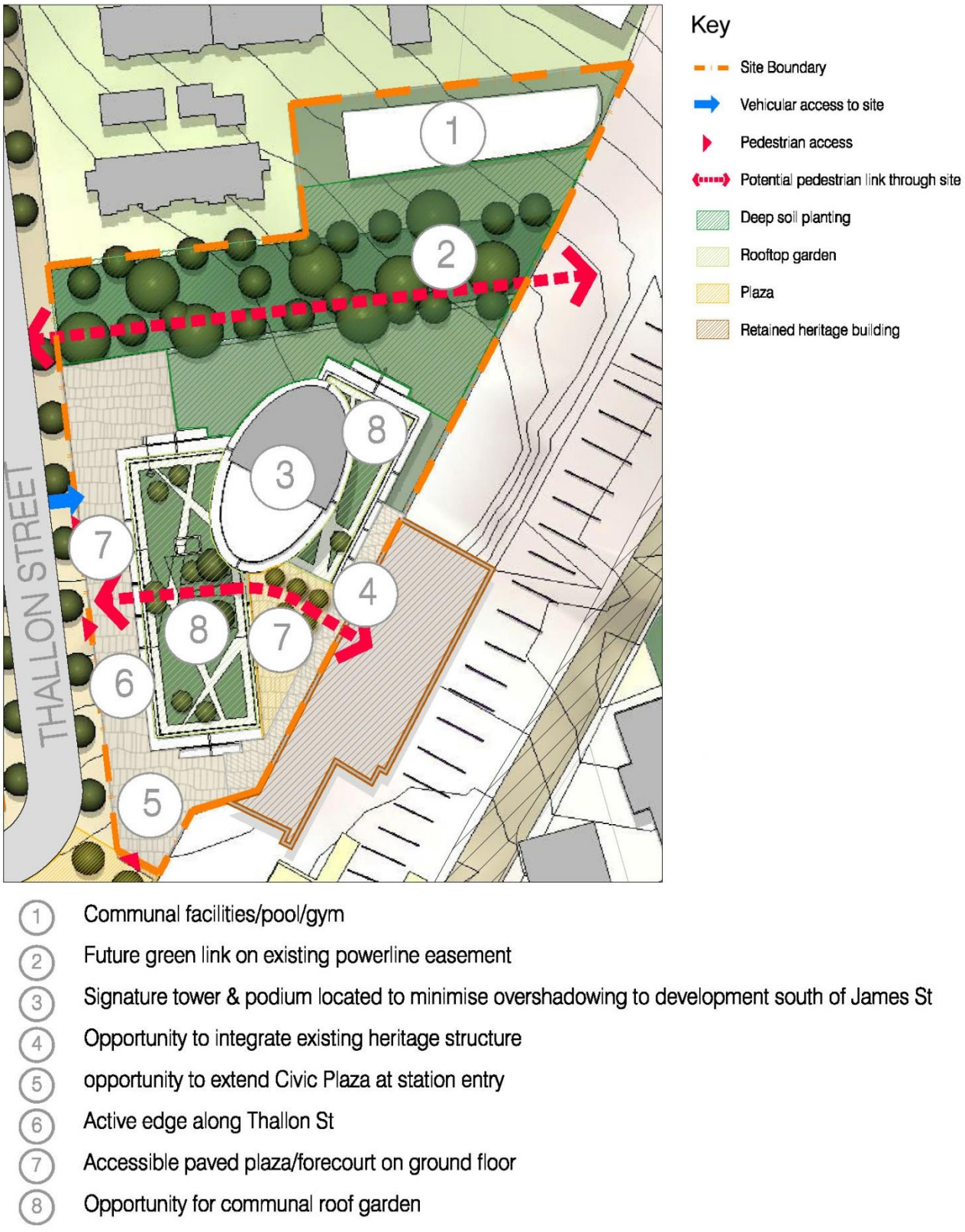


Figure 15. Conceptual Built Form Controls: Block 6 1-7 Thallon Street

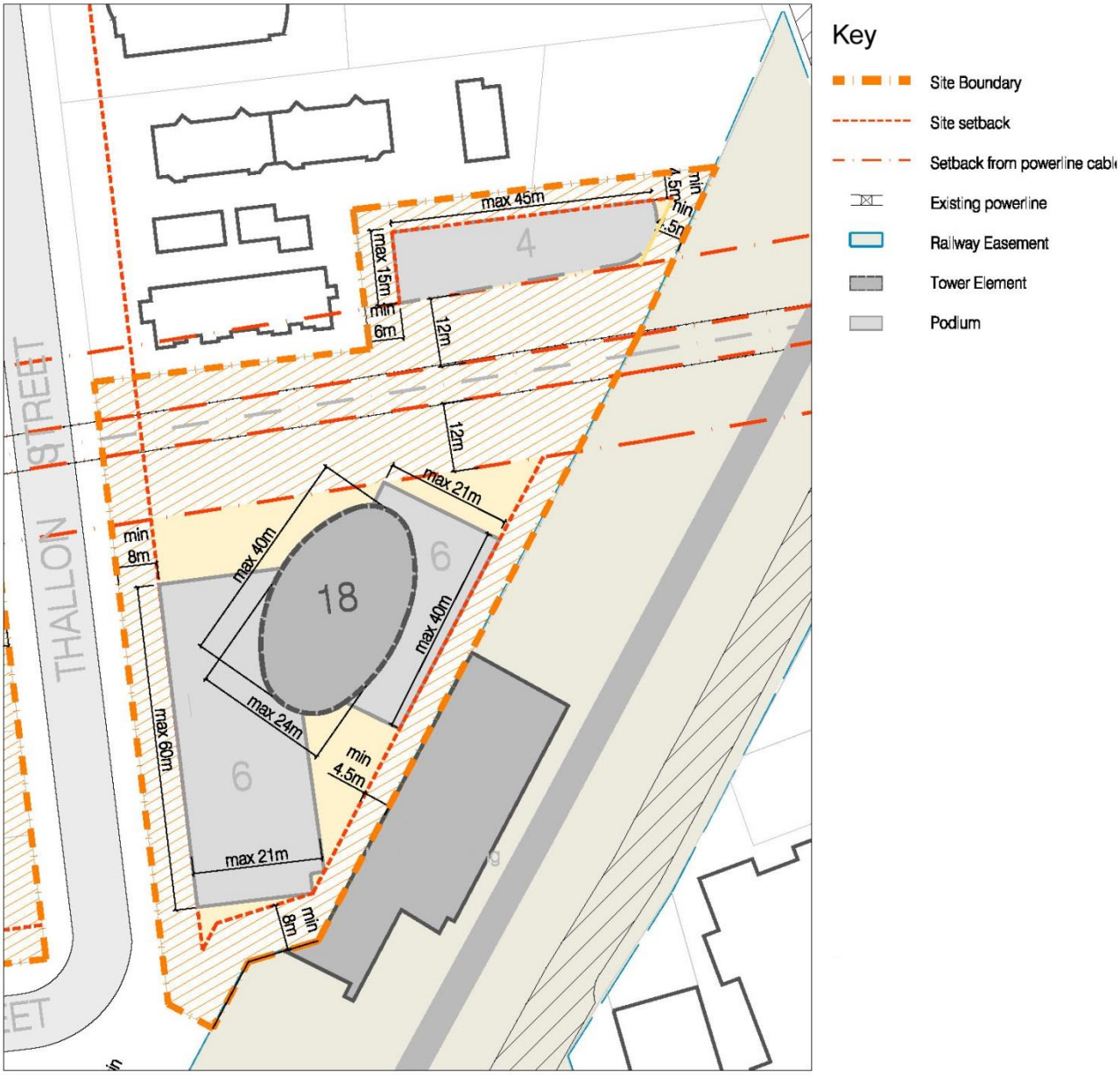


Figure 16. Dimensional Built Form Controls: Block 6 1-7 Thallon Street

5.4. BLOCK 17: JANELL CRESCENT

Design Principles

- This is a key site by virtue of its large size which provides an opportunity to develop a substantial number of units in a single amalgamated site with strong connections to the local open space green spine of the Precinct.

BUILDING HEIGHT

- The higher elements of the development on this site are placed on either side of the electricity easement. This allows a separation between the two taller elements of approximately 35m.
- The taller elements are located so as to minimise overshadowing.
- Due to the considerable open space provided along the electricity easement in this site, the building heights are limited to eleven (11) storeys in order to achieve the nominated FSR of 2.3:1.

FSR LIMIT

- The FSR limit for the various components of this key site is to enable increased residential densities proximity to the public transport system consistent with the State plans, policies and strategies and The Hills Local Strategy.
- The site has frontage to an arterial road along Pennant Hills Road. For sites in this position in the hierarchy, more substantial buildings are appropriate.
- The site is within 400m of the train station, accordingly a higher FSR is appropriate to maximise public transport usage.

BUILDING FOOTPRINT AND DEEP SOIL COVER

- Due to the electricity line and floodway easements, the building footprint is limited to 40% of the site. This allows adequate deep soil provision.
- Open space on the site is concentrated in the centre of the site so as to maximise its ability to operate in conjunction with the open space of the electricity easement that runs east west through the site.

BUILDING SETBACKS FROM BOUNDARIES

- 12m setback from the centre line of the high voltage power lines.
- 6m side setbacks
- 6m setback to Shirley Street.
- 10m setback to Pennant Hills Road.

5.4.1. DEVELOPMENT CONTROLS

DEVELOPMENT PARAMETER	DEVELOPMENT CONTROLS
Building height	Refer to LEP Building Height Map.
FSR	Refer to LEP Floor Space Ratio Map.
Building site coverage	Maximum 40%
Vehicle access points and circulation	Refer to Figure 17
Car parking requirements	0.8 spaces per 1 br unit 1 space per 2 br unit 1.3 spaces for 3 br unit 2 visitor spaces per 5 units
Distribution of uses within the building	Residential on all floors.
SEPP 65 compliance statement	Required
Deep soil planting	Minimum 15% of total site area

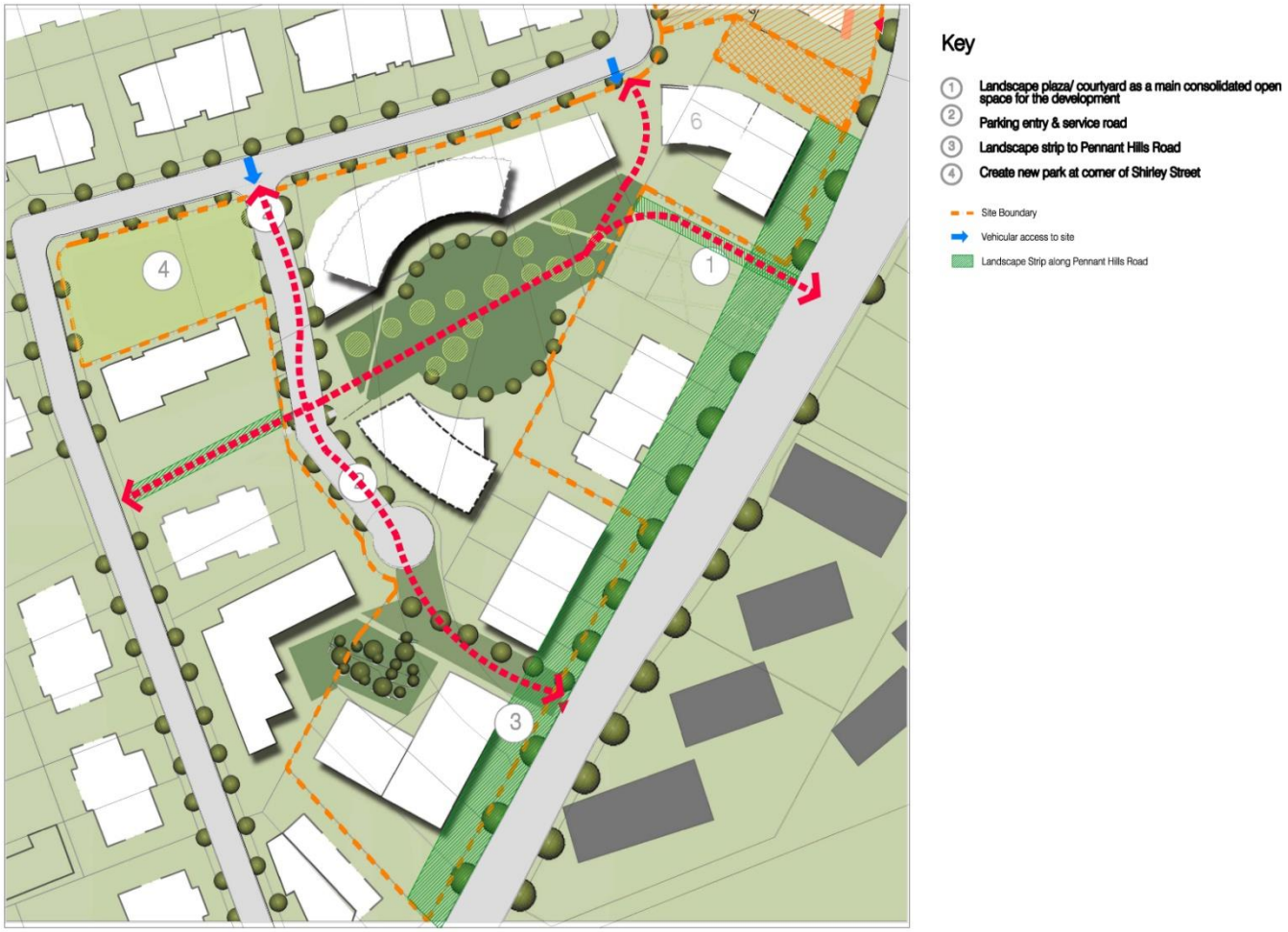


Figure 17. Conceptual Built Form Controls: Block 17 Janell Crescent

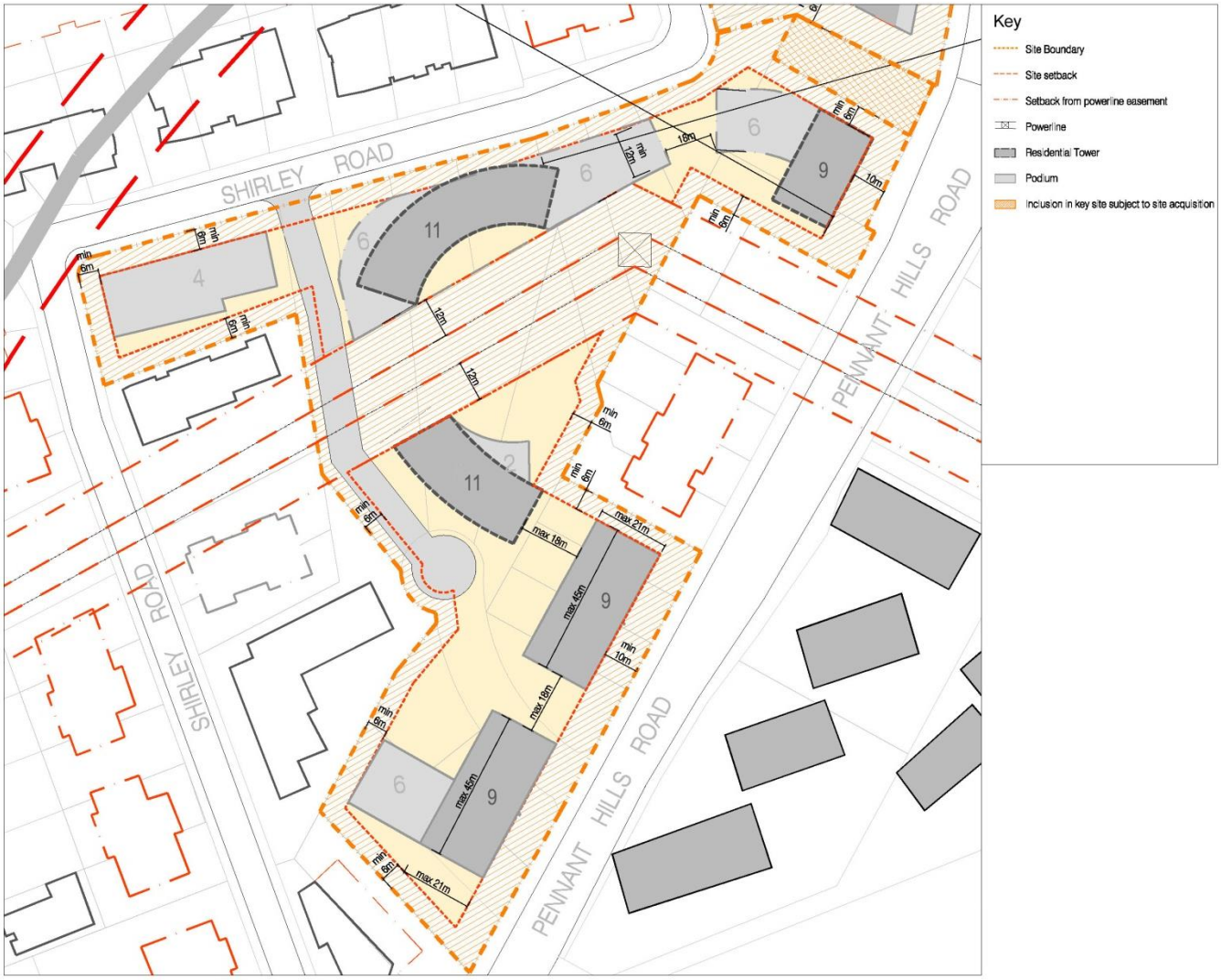


Figure 18. Dimensional Built Form Controls: Block 17 Janell Crescent

5.5. BLOCK 5: SERVICE STATION SITE ON CORNER OF PENNANT HILLS ROAD AND JENKINS ROAD

This is a key site because it's highly prominent location is ideal for a landmark development denoting the southern gateway to the Precinct.

Design Principles

BUILDING HEIGHT

- The eighteen (18) storeys are proposed for the tower element of the building due to its close proximity to the train station.
- The tower proposed on this key site is aligned to minimise its overshadowing of land to the south.
- The tower element is to have a similar axial alignment to the tower elements on the key sites in the Thallon Street area. This is a compatible contribution to the more prominent urban form of the village centre close to the station.
- The four storey podium proposed is to impart a comfortable scale to the street frontage that is compatible with the podiums containing active uses in the Thallon Street area.

FSR LIMIT

- The FSR limit for this site has been determined due to the limiting effect of site constraints and the lack of opportunity to amalgamate with other sites.

BUILDING FOOTPRINT AND DEEP SOIL COVER

- No restrictions apply to building footprint due to the highly constrained nature of the site.

BUILDING SETBACKS FROM BOUNDARIES

Minimum setbacks are required to be:

- 6m from the site's northern and eastern boundaries.
- 3m from Pennant Hills Road and Jenkins Street.
- 0m for the tower façade at the apex of the street corner.

5.5.1. DEVELOPMENT CONTROLS

DEVELOPMENT PARAMETER	DEVELOPMENT CONTROLS
Building height	Refer to LEP Building Height Map.
FSR	Refer to LEP Floor Space Ratio Map.
Building site coverage	Unrestricted
Vehicle access points and circulation	Refer to Figure 19 Vehicular access prohibited from Pennant Hills Road
Car parking requirements	0.8 spaces per 1 br unit 1 space per 2 br unit 1.3 spaces per 3 br unit 2 visitor spaces per 5 units
Distribution of uses within the building	Ground floor - commercial First, second and third storeys - home office Fourth to 18th storey - residential.
SEPP 65 compliance statement	Required
Deep soil planting	No restriction

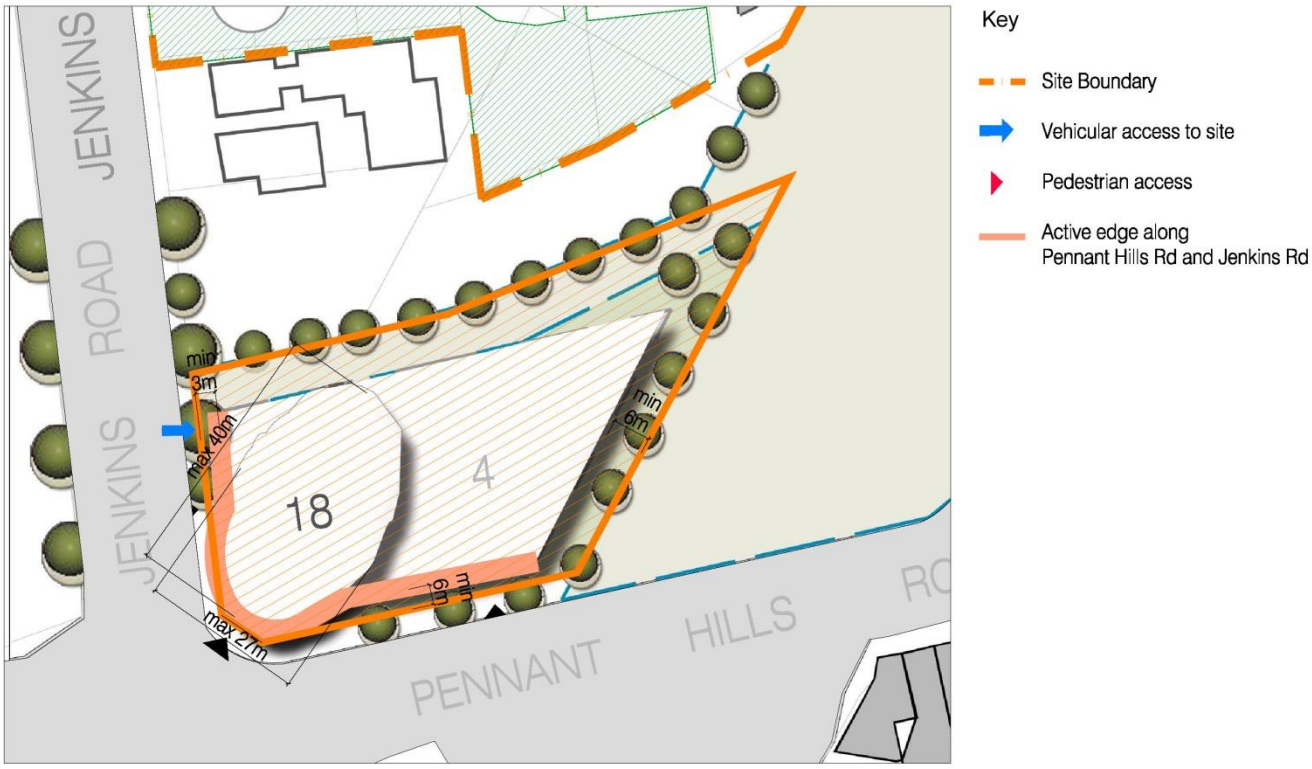


Figure 19. Dimensional Built Form Controls: Block 5 Corner of Pennant Hills Road and Jenkins Road

5.6. BLOCK 16: BUNNINGS SITE AT CORNER OF POST OFFICE STREET AND PENNANT HILLS ROAD

This is a key site because it's highly prominent location is ideal for a landmark development denoting the northern gateway to the Precinct.

Design Principles

BUILDING HEIGHT

- The nine (9) storey tower element of the building proposed on this key site is located parallel to Pennant Hills Road.
- Two storey podium proposed is to impart a comfortable scale to the street frontage that is compatible with the podiums containing active uses in the Pennant Hills Road area.

FSR LIMIT

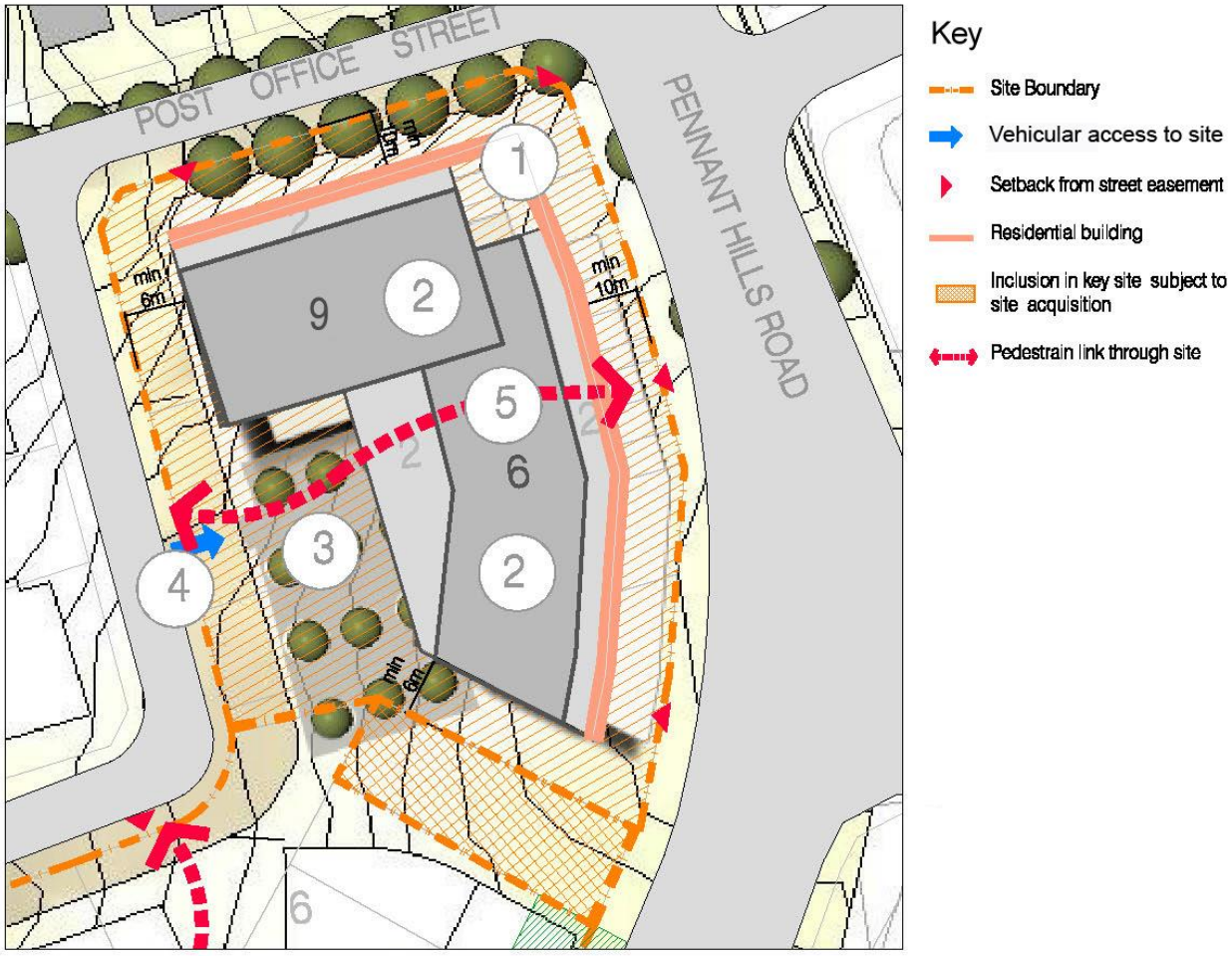
- The FSR limit is appropriate for a landmark building at a gateway to the Precinct.

BUILDING SETBACKS FROM BOUNDARIES

- Minimum 10m setback from Post Office Street and Pennant Hills Road to allow for pedestrian circulation space and active uses on the street frontage.
- Minimum 6m setback from Shirley Street and side boundaries.

5.6.1. DEVELOPMENT CONTROLS

DEVELOPMENT PARAMETER	DEVELOPMENT CONTROLS
Building height	Refer to LEP Building Height Map.
FSR	Refer to LEP Floor Space Ratio Map.
Building site coverage	Maximum 50%
Vehicle access points and circulation	Refer to Figure 20. Vehicular access prohibited from Pennant Hills Road.
Car parking requirements	For Residential uses: 0.8 spaces per 1 br unit 1 space per 2 br unit 1.3 spaces per 3 br unit 2 visitor spaces per 5 units Commercial uses: Parking requirements as per Part C Section 1 - Parking.
Distribution of uses within the building	Ground floor - commercial Level 1 and above - residential use.
SEPP 65 compliance statement	Required.
Deep soil planting	No restriction.



1. Forecourt to commercial/retail on ground floor
2. Ground floor retail/home office and 6-9 storey residential above
3. Commercial parking on surface
4. Entry to undercroft/underground residential carpark
5. Pedestrian connection through retail on ground floor

Figure 20. Dimensional Built Form Controls: Block 16 Corner of Pennant Hills Road and Post Office Street

6. INFORMATION REQUIRED FOR A DEVELOPMENT APPLICATION

In preparing plans applicants must also address the submission requirements listed in this Section of the DCP relevant to the application. The following plans and details will be required with all development applications along with the relevant application form(s).

STATEMENT OF ENVIRONMENTAL EFFECTS

SITE PLANS

SITE ANALYSIS

ARCHITECTURAL PLANS

- Internal layout of unit/building (existing and proposed)
- Elevations
- Sections

PRELIMINARY ENGINEERING DRAINAGE PLANS

- Including any On Site Detention Plans

LANDSCAPE PLAN

EARTHWORKS PLAN

SIGNAGE PLANS

- See Part C Section 2 – Signage

STREETSCAPE PERSPECTIVE

MODEL

- For all developments comprising 10 or more units a scale model must be provided including adjoining properties at the time of the submission of the development application and be on display for the duration of the public exhibition period.
- Should a model not be submitted with the application, an immediate “stop the clock” order will be placed on the development application until the model is submitted.

WASTE MANAGEMENT PLAN

DESIGN VERIFICATIONS

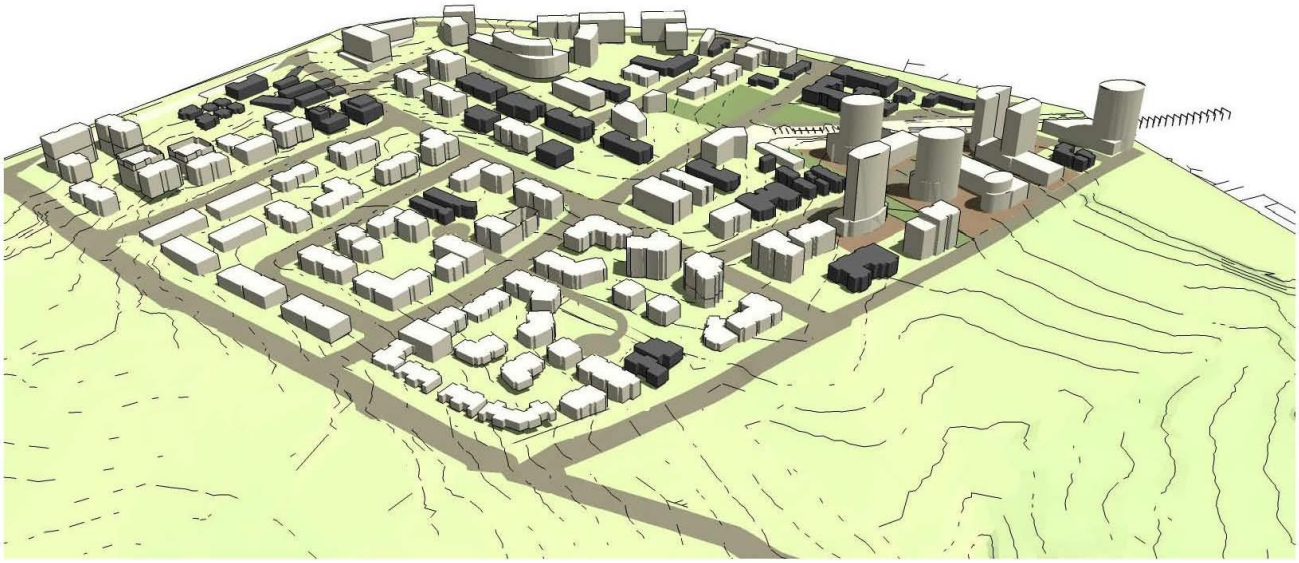
- As per SEPP 65 requirements

BASIX CERTIFICATE

Note. Refer to Part A – Introduction section 4.0 for general lodgement requirements and detailed requirements to be included in each of the above documentation.

REFERENCES

- Baulkham Hills Shire Council, 2002 Making Access For All.
- Department of Planning State Environmental Planning Policy No. 53 – Design Quality of Residential Flat Development.
- Carlingford Precinct Plan Traffic Report (May 2008), prepared by Masson/Wilson/Twiney Traffic and Transport Consultants.
- Faculty of the Constructed Environment, RMIT University et al, Australia’s Guide to Good Design – Residential, prepared on behalf of the National Office for Local Government.
- NSW Planning Department, 2002, Residential Flat Design Code, Tools for improving the design of residential flat buildings.



The Hills Development Control Plan (DCP) 2012

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THE HILLS Sydney's Garden Shire





Part D Section 13
354-368 Old Northern Road
Castle Hill

D13

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1. INTRODUCTION

1.1. NAME AND STATUS OF THIS SECTION OF THE DCP

This Section of the DCP must be read in conjunction with Part A – Introduction of The Hills DCP 2012.

This Section of the DCP has been prepared to guide future residential development on the site at 354-368 Old Northern Road, Castle Hill (subject site) in The Hills Shire, and is to be referred to as "The Hills Development Control Plan 2012 Part D Section 13 - 354-368 Old Northern Road, Castle Hill".

1.2. LAND TO WHICH THIS SECTION OF THE DCP APPLIES

This Section applies to all land identified in Figure 1.1 below and legally identified as:

- Lot 2002 DP 1090990



Figure 1.1 Subject site

.

1.3. OBJECTIVES OF THIS SECTION OF THE DCP

OBJECTIVES

(i) To achieve a low density residential development.

(ii) To implement a development framework that will ensure anticipated future development of the site does not hinder the use or development of surrounding land for their intended or future purposes.

(iii) To incorporate and demonstrate best practice urban design on the site.

(iv) To provide design and environmental standards for the residential redevelopment of the site.

(v) To ensure that any development on the site is appropriate to the site's context and enhances the surrounding natural characteristics.

(vi) To protect, rehabilitate and conserve areas of environmental sensitivity or significance.

(vii) To encourage development that is sympathetic with and that does not impact upon the heritage significance of the adjoining Heritage Park.

1.4. STRUCTURE OF THIS SECTION

This document has been divided into four parts:

1. Introduction
2. The Urban Context / Site Analysis
3. The Development Strategy
4. Development Controls

2. URBAN CONTEXT/SITE ANALYSIS

Part Two of this Section of the DCP analyses the site's existing regional and local context. It outlines the site's placement and relationship to topography, views, drainage, accessibility, adjoining land uses and built forms.

It also identifies the opportunities and constraints exhibited by the site with respect to its regional and local context. This analysis has helped to inform the development strategy (Part Three) and formulation of the development controls (Part Four) for the site.

2.1. LOCAL CONTEXT

2.1.1. ROAD NETWORK

The subject site is located adjacent to the Old Northern Road, 1.6 kilometres north (by road) of the Castle Hill shops. Old Northern Road is a Classified Road and joins Windsor Road (also a Classified Road) to the south, leading to Parramatta. Another connection to Windsor Road is via Showground Road (a Classified Road) which also connects to Old Northern Road. This route leads to the Norwest Business Park.

The M2 Motorway is located approximately 4.5 kilometres to the south of the site and is a major traffic artery between Western Sydney and the CBD. The M2 is accessible from the site via either Windsor Road or Castle Hill Road joining Old Northern Road (south of the site) and Pennant Hills Road.

The road network servicing the site is illustrated in Figure 2.1.

2.1.2. PUBLIC TRANSPORT

The site is well served by public transport, being located directly adjacent to a bus route along Old Northern Road which passes through Castle Hill. A bus stop is located in front of Oakhill College, opposite the site. From Castle Hill a number of bus routes provide access to the surrounding areas.

The nearest railway stations to the site are located at Beecroft and Pennant Hills (approximately 5.3 kilometres to the south-east and east south-east, respectively). Parramatta Station is approximately 10.5 kilometres to the south. Bus services from Castle Hill provide connections to these rail stations.

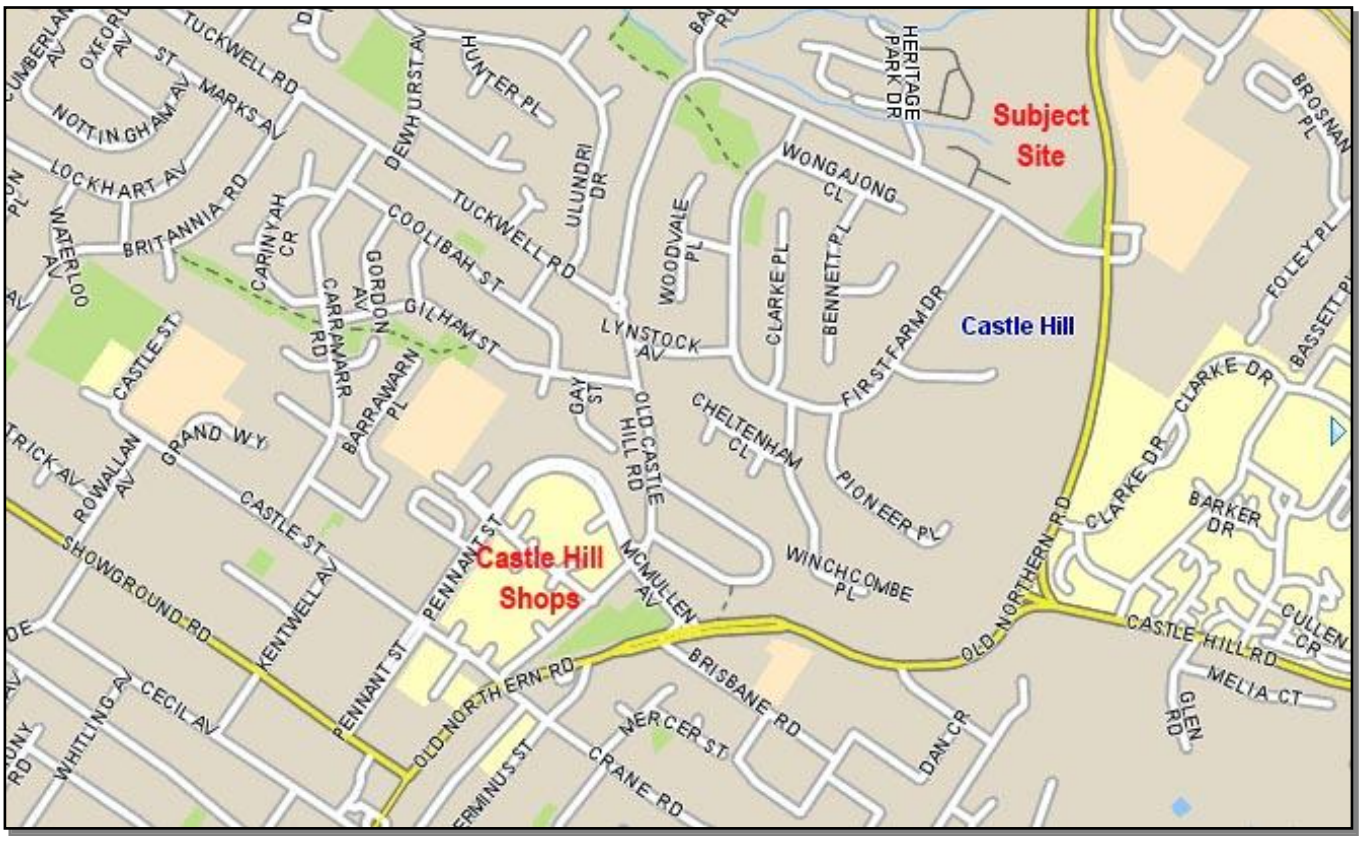

Figure 2.1 Road hierarchies (Source www.whereis.com)

2.1.3. WATERWAYS

The locality forms part of the catchment of the Hawkesbury River system. Drainage lines commencing to the west and north of the site run into Castle Hill Creek. This watercourse joins Cattai Creek approximately 3 kilometres to the west of the site. Cattai Creek eventually joins the Hawkesbury River. There is existing riparian vegetation along the length of these watercourses.

2.1.4. OPEN SPACE

The locality contains an extensive system of reserves and other public open spaces. These are generally located along watercourses. Substantial green spaces in the vicinity of the site include Heritage Park immediately to the north-west, Fred Caterson Reserve approximately 2.9 kilometres to the west and Berowra Valley Regional Park approximately 3.5 kilometres to the east. Berowra Valley Regional Park contains unsealed walking tracks and is a more natural environment than other structured open spaces in the vicinity.

Active recreation opportunities are provided in Fred Caterson Reserve which contains a cycleway, sports fields, a basketball stadium and the Hills District Pony Club. Berowra Valley Regional Park contains a network of walking trails.

2.1.5. LAND USE AND BUILT FORM

The greenfield site is situated within a predominantly urban residential area, 1.2 kilometres north-east of the Castle Hill shops (1.6 kilometres by road). The site immediately to the west is currently being developed for environmentally integrated housing. Low density housing is located further to the west and to the south. Adjoining the south-eastern corner of the site is a scenic lookout.

North of the site is a rural zone containing predominantly vegetation and some detached housing. To the north-west is Heritage Park (a State listed heritage item). Beyond these areas are large

homes on acreage (Glenhaven). To the east are Oakhill College and the Australian Catholic University. These are surrounded by further residential housing, including an Anglican retirement village to the south of the college.

The character of the surrounding residential development is predominantly single detached dwellings, with the exception of the environmentally integrated housing adjacent to the site. Parks and reserves are interspersed throughout the area.

2.2. SITE ANALYSIS

2.2.1. SITE DESCRIPTION

The site is located on the northern corner of the intersection of Old Northern Road and Old Castle Hill Road. It forms part of the curtilage to Heritage Park, and allows views to the Park, the Shire and the Blue Mountains from Old Northern Road.

The site is irregular in shape and has a total area of 8.031 hectares. The site's primary frontage is to Old Northern Road. The southern boundary adjoins Old Castle Hill Road and the north-western corner adjoins Heritage Park Drive.

Figure 1.1 illustrates the extent of the subject site.

2.2.2. LAND ZONING

Refer to The Hills LEP 2012.

2.2.3. VEHICULAR AND PEDESTRIAN ACCESS

There is currently no formal vehicular or pedestrian access to the site. Access to the subject site is proposed via Heritage Park Drive. There is potential to provide a future pedestrian link from the scenic lookout through the site to Heritage Park, hence improving the permeability of the area for pedestrians.

2.2.4. TOPOGRAPHY, ORIENTATION AND VIEWS

The site is undulating and generally slopes from east to west. The site has been identified as being geotechnically sensitive and consequently stabilisation is required before development of the site can take place. The site offers views of Heritage Park to the north, and the Shire and Blue Mountains to the west.

The northern portion of the site will be dedicated as open space due to the presence of mature vegetation and its excellent location with regard to solar access, given the absence of shadow casting structures. The southern portion of the site will also be dedicated as open space to maintain the amenity and functionality of the scenic lookout, and preserve views.

Topography, orientation and views are shown in Figure 2.2.

2.2.5. VEGETATION

The site contains mature vegetation along its northern boundary, which forms part of a remnant approximately one hectare in size, crossing into the neighbouring property to the north. This portion of the site is to be preserved for environmental quality and aesthetic reasons.

The remainder of the site is largely grassed, with scattered trees throughout the site. Where possible the trees on the remainder of the site should be retained to maintain the environmental quality of the site and ensure that development does not dominate the views.

Existing vegetation is indicated in Figure 2.3.

2.2.6. DRAINAGE AND FLOODING

Due to the slope and orientation of the terrain, the site is generally drains to the west, into Castle Hill Creek. As development of the site will create hard surfaces where there are currently none, appropriate stormwater management measures are required to mitigate impacts on Castle Hill Creek.

2.2.7. NOISE & VIBRATION

The site is primarily affected by traffic noise emanating from Old Northern Road.

A preliminary Noise Impact Assessment will be required to be lodged with any subdivision application to advise which residential lots will require individual Noise Impact Assessments.

Issues relating to vibration from heavy vehicles using the Old Northern Road will also need to be considered. Sufficient setbacks will be required to this boundary in conjunction with appropriate construction

techniques to minimise any future noise and vibration impacts.



Figure 2.2 Topography, orientation and views



Figure 2.3 Vegetation

2.2.8. EASEMENTS & RESTRICTIONS ON TITLE

A road widening reserve lies along the site's Old Northern Road frontage. The construction of a retaining wall required for the geotechnical stabilisation works is not to encroach on the Old Northern Road reserve.

Easements on DP 1090990 are:

E – Easement to drain water 20 metres wide

F – Easement for access & works 20 metres wide

G – Easement to drain water 20 metres wide

J – Restriction on use road widening

K – Easement for access & works variable width

M – Easement for access & works 1 metre wide

All these can be accommodated within the proposed subdivision. No other easements affect the site.

The easements are illustrated in Figure 2.4.

2.3. SITE OPPORTUNITIES

The opportunities offered by the site and its surroundings are as follows:

- Given its proximity to public transport, schools, accessible green spaces, recreational facilities and shops, the site is ideal to be redeveloped for residential uses.
- There is the possibility to create a new pedestrian access across the site to link the scenic lookout with Heritage Park, thus improving the pedestrian permeability of the area. Such pedestrian access would also ensure optimal access to the existing bus stop on Old Northern Road.
- There is potential to provide access to the site off Heritage Park Drive.
- There is potential for the provision of two open space areas within the site which would protect existing views and vegetation.
- Significant views are available to the Blue Mountains.
- Northerly aspect can be achieved for each lot to ensure excellent solar access.

2.4. SITE CONSTRAINTS

The constraints posed by the site and its surroundings are as follows:

- No access is available to the site from the Old Northern Road.
- Extensive geotechnical stabilisation works are required prior to or in conjunction with residential development of the site.
- Residential development cannot occur over the land designated as road widening reserve. Detailed design and geotechnical reports for retaining walls adjacent to the reserve for road widening are to be provided to the RMS for its review at DA stage.
- The views towards Heritage Park, the Shire and the Blue Mountains from Old Northern Road are important and development is not to detract from these views. This has implications for the height of development, among other factors, and controls to protect these views through building height restrictions are included in Part Four of this Section of the DCP.
- The mature vegetation on the northern portion of the site is to be retained.
- Given the vegetation within and adjoining the site, the potential for bushfire should be considered in any development.
- Traffic noise from Old Northern Road may require appropriate acoustic treatments to be incorporated.

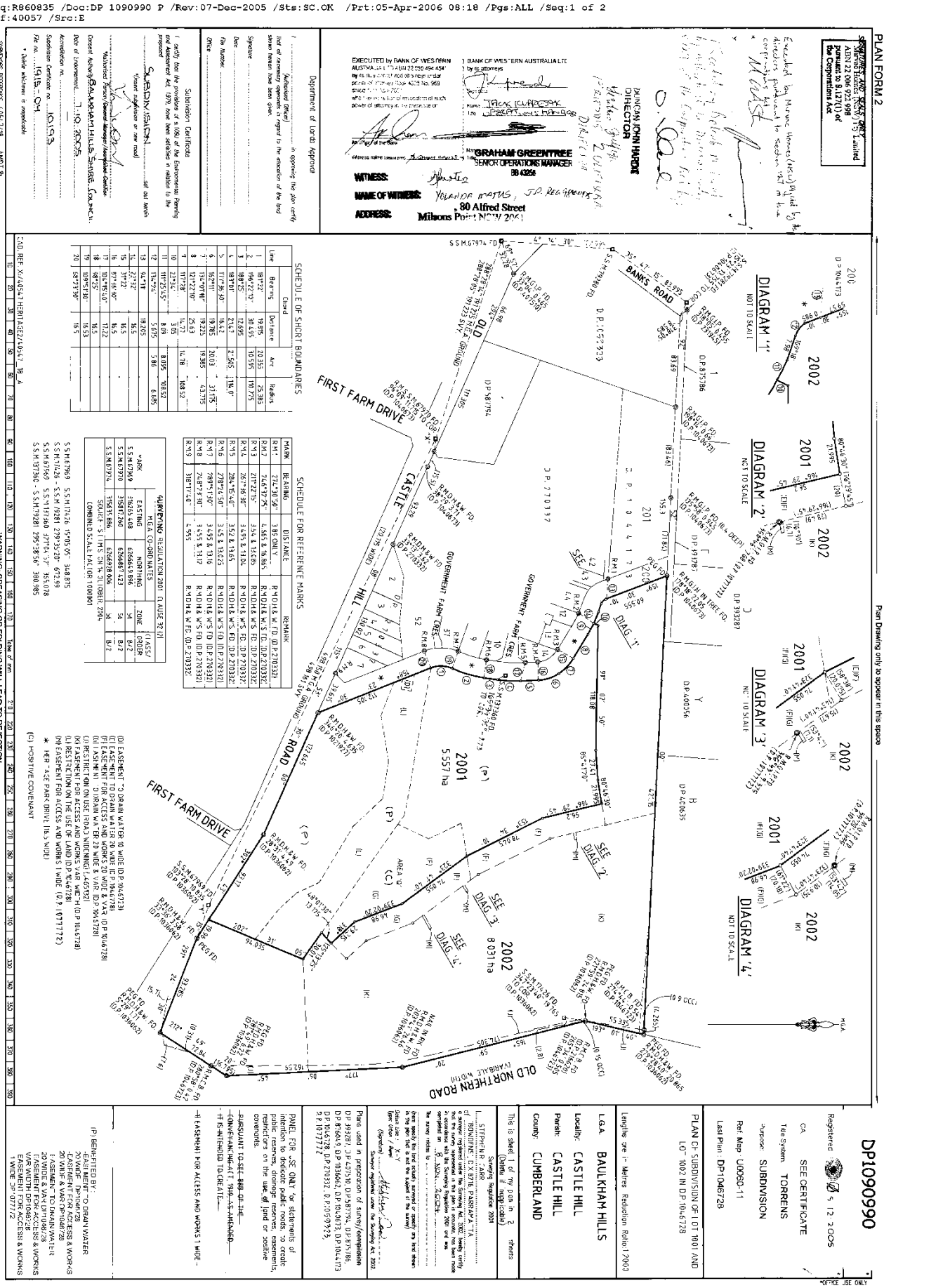

Figure 2.4 Easements & restrictions (Extract from DP 1090990)

3. DEVELOPMENT STRATEGY

This Part contains development strategies for the site upon which the development controls in Part Four are based. The development strategy has been formulated with regard to the site analysis and the identification of opportunities and constraints undertaken in Part Two.

Figure 3.1 illustrates the general development strategy for the site.



Figure 3.1 Development potential of the site

3.1. THE VISION / CONCEPT

The vision for the site is to create a quality residential development in Castle Hill with high levels of residential amenity, within the physical and environmental constraints of the site.

The development is to preserve the views of the Shire and Blue Mountains to the west and Heritage Park to the north. The site is to maintain a satisfactory relationship with the State significant Heritage Park, through pedestrian permeability and appropriate landscaping.

Future development should contribute to the environmental and neighbourhood values of the locality through adherence to urban design principles that enhance these qualities.

The vision is illustrated in Figures 3.2 & 3.3.

3.2. GEOTECHNICAL STABILISATION

The site is geotechnically sensitive. Stabilisation of the site is required before development of the site can take place. The recommended geotechnical stabilisation method is the 'big dig'. This involves:

- excavation of all the unstable materials from within the slide area;
- installation of trench drains;
- refilling the excavated area; and
- construction of a retaining wall along the eastern boundary (Old Northern Road).

This will also reduce the risk to residential areas down slope of the site.

Stabilisation of the site must be in accordance with peer reviewed and Council approved geotechnical reports, as well as the development controls in this document.

3.3. BUILT FORM

The form of residential dwellings on the site is envisaged to be modern, but sympathetic to the landscape, environmental and heritage characteristics of the area.

Dwellings will be generally limited to 8 metres in height and their design and colouring will not dominate the landscape.

The height of dwellings on lots adjoining the Old Northern Road is to be limited to a maximum RL to ensure that the significant views from Old Northern Road are protected, as indicated in section 4.7.7.

The intent of this is to maintain flexibility with building design but to maintain all views as illustrated in Figure 3.2 and 3.3.

The design of dwellings is to ensure optimum cross-ventilation and solar access. Small building footprints are desirable on the site in order to allow for deep soil planting, and to establish a scale of vegetation compatible with the existing vegetation, proposed buildings and the residential nature of the site.

Dwelling designs are to have regard to water and energy efficiency principles as required by BASIX.

3.4. BUILDING SEPARATION AND SETBACKS

Appropriate setbacks from boundaries and between buildings will be incorporated to minimise impacts upon visual and acoustic privacy, enable the growth of substantial vegetation, and minimise impacts on water quality and views. Setbacks are detailed in section 4.7.5.

3.5. ACCESS AND MOVEMENT

Vehicular access is not available via Old Northern Road or Old Castle Hill Road. Vehicular access to the site is to be provided from the north-western corner (Heritage Park Drive), and is able to accommodate two lanes of vehicular traffic, as well as pedestrians. The access road is not to impinge on the mature vegetation along the northern boundary of the site.

A pedestrian link from the scenic lookout through the site to Heritage Park is to be incorporated. The preferred location of the proposed pedestrian access is illustrated in Figure 3.5.



Figure 3.2 Proposed vision / concept. Viewed from the lookout at the south eastern corner of the site



Figure 3.3 Development concept protects views to mountains through maximum building height planes

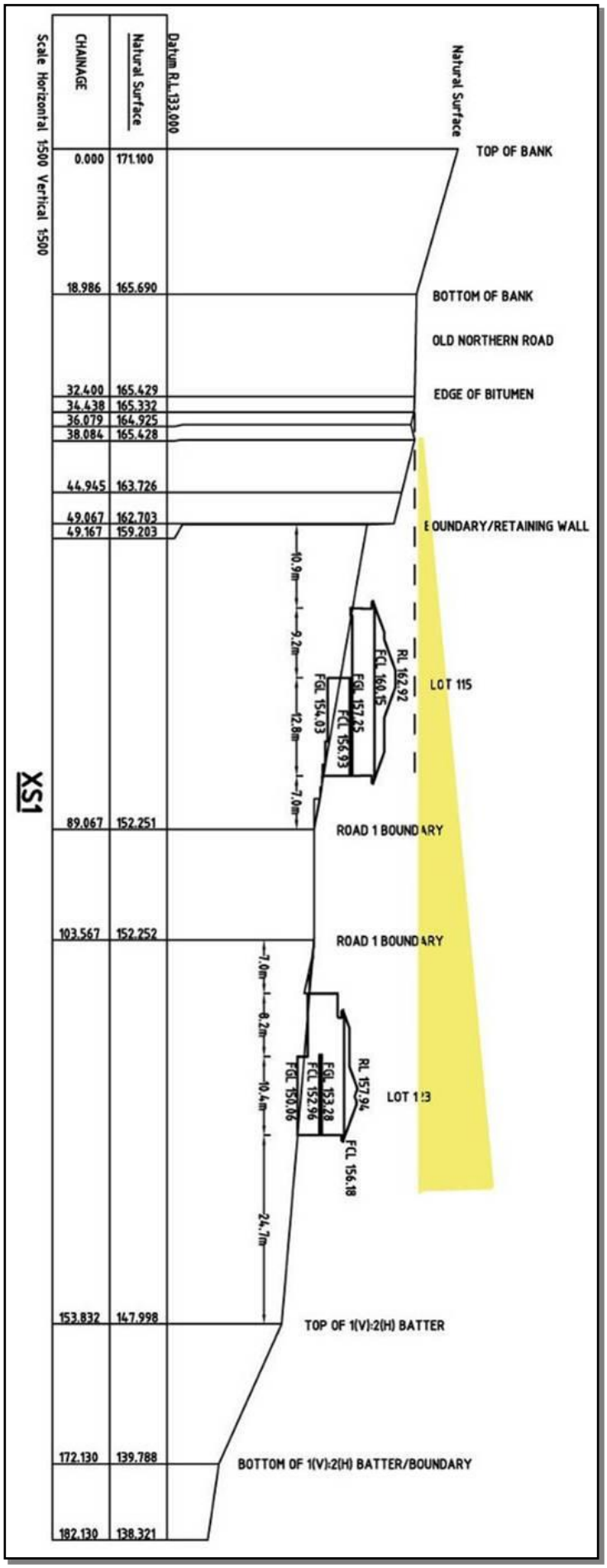

Figure 3.4
Building heights - view lines to the Blue Mountains from the Old Northern Road are to be retained over dwellings

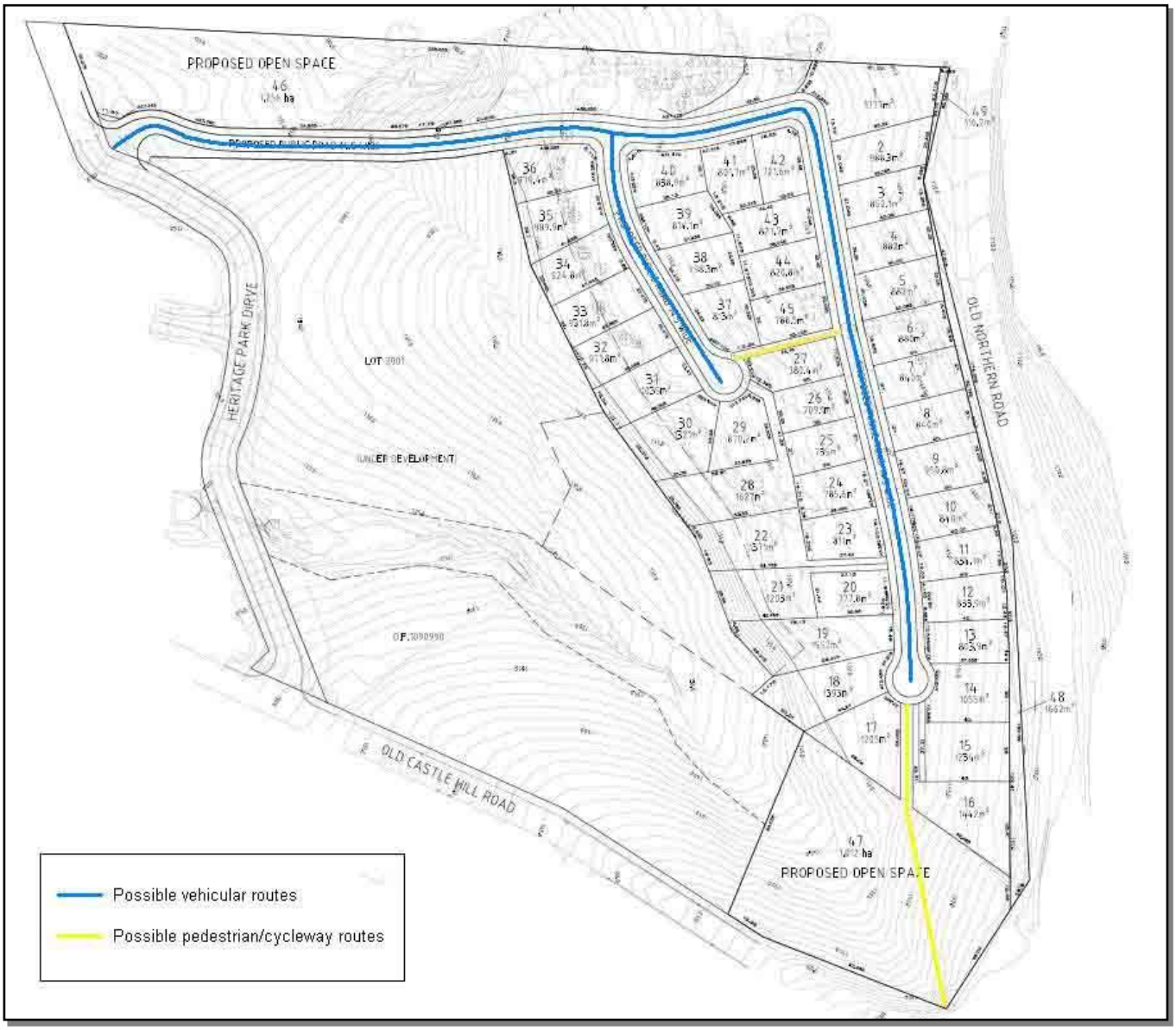

Figure 3.5 Access and movement

3.6. OPEN SPACE, VEGETATION AND LANDSCAPING

Three types of open spaces are envisaged for the site:

1. Private, sunny open space in the form of back/front yards of dwellings.
2. Publicly accessible open space at the southern end of the site in front of the scenic lookout. The aim of this area would be to maintain the existing views to Heritage Park, the Shire and the Blue Mountains. Vegetation in this area should not block the views; however some screening vegetation for privacy may be appropriate.
3. Unstructured and natural vegetation at the northern end of the site. The aim of this area would be to preserve the existing mature vegetation for both environmental and aesthetic reasons. As such, there should be minimal access to, and disturbance of this area. This vegetation will also provide a visual buffer between Heritage Park and the development.

The location of these open space typologies are illustrated in Figure 3.6.

Building footprints are to be minimised to ensure deep soil zones are incorporated across the site for the establishment of trees of sufficient height to complement the scale of the proposed buildings and existing vegetation.

3.7. RESIDENTIAL AMENITY

Adequate separation should be provided between dwellings and from site boundaries to ensure visual and acoustic privacy for residents. Landscaping along Old Northern Road may be appropriate to provide visual and acoustic amenity, however care should be taken in the landscaping design not to block the views to the Blue Mountains.

Appropriate acoustic measures are to be incorporated into the dwelling designs where noise from Old Northern Road is likely to affect the future residents.

3.8. VIEWS

The primary outlook of the site is over the Shire and to the Blue Mountains to the west. Heritage Park can also be viewed to the north.

It is a desirable outcome to protect these views through appropriate building design and landscaping, site layout and provision of open space.

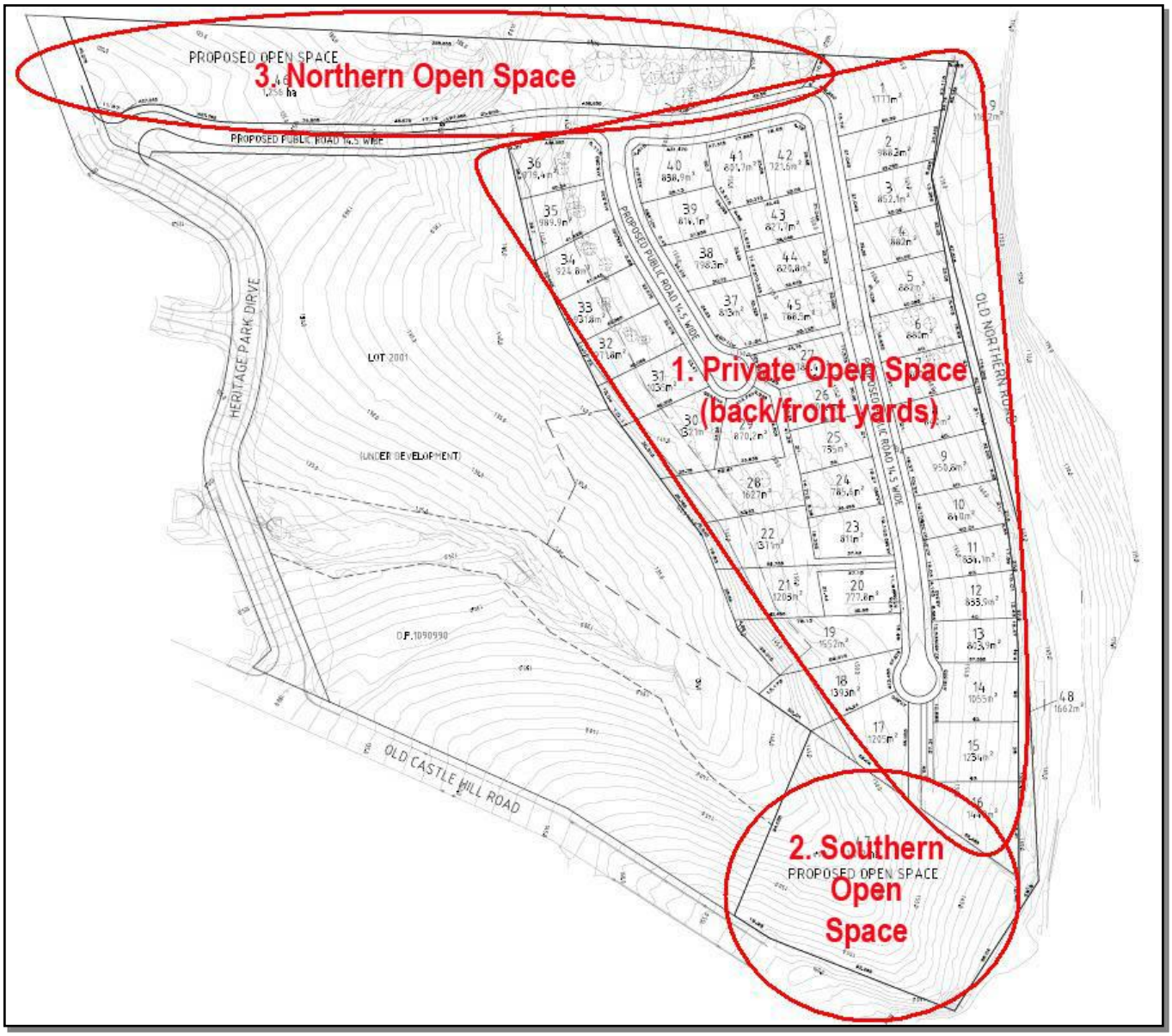

Figure 3.6 Open space opportunities

4. OBJECTIVES AND DEVELOPMENT CONTROLS

Objectives and development controls for the future development of the site are set out in this part, and are based on the development strategies identified in Part Three. Compliance with the controls set out in this section will not necessarily ensure the approval by Council of any application. Each application will be considered on the individual circumstances and merits of the case in terms of the achievement of the objectives.

The controls in this part are not an exhaustive list of the controls applicable to this site. In addition to those policies, guidelines and documents specified in Section 1.4 of Part A – Introduction, this Section is to be read in conjunction with other relevant Sections including:

- Part B Section 2 – Residential
- Part C Section 1 – Parking
- Part C Section 3 – Landscaping
- Part C Section 4 – Heritage
- Part C Section 6 – Flood Controlled Land

4.1. BUSH FIRE HAZARD MANAGEMENT

OBJECTIVES

(i) To reduce the risk to life and property in areas of bushfire risk.

(ii) In determining Development Applications, Council will have regard to any likely bushfire hazard.

DEVELOPMENT CONTROLS

(a) Council has adopted the NSW Rural Fire Service Guidelines entitled "Planning for Bushfire Protection 2006". Development subject to bushfire risk will be required to satisfy the requirements in these guidelines.

(b) Asset protection zones should take the form of Inner Protection Areas, measured from the extremities of the buildings. Fuel management within the asset protection zones should be maintained by regular maintenance of the landscaped areas and mowing of lawns.

(c) All dwellings should be constructed to comply with Level 1 Construction Standards as defined by Australian Standard AS 3959 – 1999 (amended) for protection against ember attack.

(d) Roof gutters and valleys to all buildings should be leaf proofed by the installation of an external gutter protection shroud or a gutter system that denies all leaves from entering the gutter and building up on that gutter. Any material used in such a system should have a flammability index of no greater than 5 (as measured against AS 1530.2).

(e) Hydrants should be provided in accordance with Australian Standard AS 2419.1.

SUBMISSION REQUIREMENTS

- Bushfire report detailing compliance with "Planning for Bushfire Protection 2006" and the above controls.

4.2. GEOTECHNICAL SITE STABILITY

4.2.1. THE 'BIG DIG'

OBJECTIVES

(i) To stabilise the site to a level of stability acceptable for residential development.

(ii) To reduce the risk to residential areas downslope of the site.

(iii) To remove the physical restrictions that would otherwise prevent development of the site to its potential permitted in this DCP.

DEVELOPMENT CONTROLS

Note. Refer to Clause 7.6 *Landslide* Risk of The Hills LEP 2012 and the Landslide Risk Map.

(a) Site stabilisation works shall be completed in accordance with the August 2004 Jeffery and Katauskas report titled "Additional Investigation and Preliminary Stabilisation Design", the addendum to this report dated August 2006 and the recommendations of any independent peer review of the Jeffery and Katauskas reports as required by Council.

SUBMISSION REQUIREMENTS

- Geotechnical advice demonstrating compliance with the recommendations of the Jeffery and

Katauskas reports, and the independent peer review of those reports.

4.3. BUSHLAND AND BIODIVERSITY

4.3.1. MATURE VEGETATION

OBJECTIVE

(i) To conserve and protect the remnant mature vegetation on the northern portion of the site.

DEVELOPMENT CONTROLS

(a) The mature vegetation on the northern portion of the site is to be retained to help maintain the existing ecosystem.

(b) The mature vegetation remnant is to function as an ecological system. All works, site stabilisation works, access routes, roads, recreational area, service easement and any other non-ecological functioning work or activity is to be located beyond the vegetated area.

(c) Protective fencing is to be provided around the vegetated area for the duration of the subdivision and building construction (refer section 4.9.2).

SUBMISSION REQUIREMENTS

- Applications for subdivision should include a flora and fauna assessment in accordance with the Environmental Planning and Assessment Act, 1979. If there is likely to be a significant effect on threatened species, populations, or ecological communities or their habitats a species impact statement will be required.

4.4. EROSION AND SEDIMENT CONTROL

OBJECTIVES

(i) Minimise land degradation, water pollution and damage to infrastructure from accumulated sediment in accordance with Council's ESD Objective 3.

(ii) To ensure development controls are identified for all stages of development and to ensure a consistent approach to erosion and sediment control.

DEVELOPMENT CONTROLS

(a) Applications for residential development including subdivision are to be accompanied by an Erosion and Sediment Control Plan (ESCP) which will describe the measures to be taken at development sites to minimise land disturbance and erosion and control sediment pollution of waterways. ESCPs are to clearly identify the erosion and sediment control measures to be used.

(b) ESCPs shall be prepared in accordance with best practice principles.

(c) The erosion and sediment control measures proposed may need to change during the development process. The ESCP should address all phases of the development process.

(d) Erosion and sediment controls must be in place before work commences and be retained and revised to reflect changes in site conditions, until the development is finalised and the site stabilised.

SUBMISSION REQUIREMENTS

- Erosion and Sediment Control Plans

4.5. HERITAGE

4.5.1. HERITAGE PARK

OBJECTIVES

(i) To conserve the heritage significance of Heritage Park.

(ii) To ensure that development is undertaken in a manner that is sympathetic to, and does not detract from, the heritage significance of Heritage Park and its setting.

DEVELOPMENT CONTROLS

(a) Views to and from Heritage Park are to be protected.

(b) As the site adjoins Heritage Park, which is listed as a heritage conservation area under The Hills LEP 2012, development must address and comply with the provisions of Part C Section 4 – Heritage.

SUBMISSION REQUIREMENTS

- Any development application for subdivision must be accompanied by a Heritage Impact Statement which addresses the impact of the development on the Heritage Park site and in particular the areas of historic and archaeological significance identified within the Heritage Park site.
- An Archaeological Assessment is to be submitted with an application for site stabilisation works or subdivision. The assessment must take into consideration the site's proximity to Heritage Park, and the possible presence of the grave of Colonel Verricourt de Clambe adjacent to the site.

The heritage and archaeological issues are identified in the following studies:

- Heritage and Visual Analysis of the Environs of Heritage Park Castle Hill, March 1999, Mayne – Wilson & Associates;
- Archaeological Zoning Plan – corner of Old Northern Road and Old Castle Hill Road, Castle Hill, May 1999, Casey and Lowe Associates.

Copies of these studies can be viewed at Council's Administration Centre at the corner of Showground and Carrington Roads, Castle Hill.

4.5.2. COLOURS AND MATERIALS

OBJECTIVE

(i) To ensure that the new dwellings erected on the site are sympathetic to the character and setting of Heritage Park.

DEVELOPMENT CONTROLS

(a) The colours, materials and external finishes used in the development are to be compatible with the site's proximity to Heritage Park.

SUBMISSION REQUIREMENTS

- Details of colours and materials to be used must be submitted at the DA stage.

4.6. STORMWATER MANAGEMENT

OBJECTIVES

(i) To provide for the disposal of stormwater from the site in efficient and environmentally sensible ways in accordance with Council's ESD objective 3.

(ii) To control stormwater and to ensure that developments do not increase downstream drainage flows or adversely impact adjoining or downstream properties.

(iii) To ensure the integrity of watercourses is protected and enhanced in accordance with Council's ESD objective 4.

(iv) To provide for on-site detention of stormwater.

(v) To encourage the reuse of stormwater.

DEVELOPMENT CONTROLS

(a) Water Sensitive Urban Design (WSUD) measures should be employed in the management of the site's/development's stormwater in terms of water retention, reuse and cleansing.

In all development, consideration should be given to utilising one of the following WSUD measures:-

M1 Low Impact Building Design

M2 Low Impact Landscape Design

A detailed description of the actions required to implement each of these measures is included in Appendix B of The Hills DCP 2011.

(b) *Rain water tanks to reuse rainwater must be installed for each new dwelling. The requirements for their installation and use are included in Appendix B under the heading:

M3 Rainwater Utilisation – toilet, irrigation

[*Applies only where BASIX exemption is relied on.]

(c) Drainage systems are to be designed and constructed in accordance with best practice principles.

(d) On-site detention systems (OSD) when required, are to be designed in accordance with (a) above and best practice principles.

(e) Concentrated stormwater flows must be connected to Council's drainage system. In some cases this may require the creation of drainage easements over downstream properties. In this circumstance, a letter of consent from the owner(s) of the downstream properties is to be submitted with the development application. On rural properties overflow from rainwater tanks must be dispersed on site to ensure concentrated flows do not impact on adjoining properties or cause erosion.

(f) Reference should be made to the Restrictions As To User on the title of the land to which the development is proposed in relation to requirements for on-site detention.

(g) Discharge points are to be controlled and treated to prevent soil erosion, and may require energy dissipating devices on steeper topography, to Council's requirements.

SUBMISSION REQUIREMENTS

- Preliminary Engineering Drainage Plans indicating the proposed drainage infrastructure.
- If required, easements are to be created over downstream properties prior to the release of the linen plan for the subdivision, or prior to the release of a Building or Occupation Certificate whichever is earliest.
- OSD Plans if required.

4.7. BUILT FORM

4.7.1. SITE PLANNING AND SUBDIVISION

OBJECTIVE

(i) To achieve coherent site planning and development that relates to the natural typography and environmental constraints of the site.

DEVELOPMENT CONTROL

(a) Future development to be located generally in accordance with the indicative subdivision layout provided in Figure 4.1.

SUBMISSION REQUIREMENTS

- Site plans



Figure 4.1 Lot layout

4.7.2. MINIMUM LOT SIZE

OBJECTIVE

(i) To create a low-density residential area of single dwellings that does not dominate the landscape, and is consistent with the environmental capacity of the site.

DEVELOPMENT CONTROLS

(a) Refer to Clause 4.1 *Minimum subdivision lot size* of The Hills LEP 2012 and Minimum Lot Size Map.

(b) The maximum yield shall be 47 lots including two large lots to be set aside for open space. The lot configuration is to be set out in accordance with the lot layout indicated in Figure 4.1.

SUBMISSION REQUIREMENTS

- Site plans and/or subdivision plans, showing lot sizes.

4.7.3. BUILDING PLATFORM

OBJECTIVE

(i) To ensure lots have a suitable area for the erection of a dwelling and associated structures, free of constraints or restrictions.

DEVELOPMENT CONTROLS

(a) Each lot must be capable of providing a building platform of at least 20 metres by 15 metres clear of any restrictions or building line setbacks. The building platform shall be sited in an accessible and practical location suitable for residential building construction.

(b) Practical and suitable access shall be provided from a public road to the building platform.

SUBMISSION REQUIREMENTS

- The subdivision plans must clearly indicate where the building platforms can be located on each lot and the proposed access paths to the platforms free of any restrictions.

4.7.4. CUT AND FILL

OBJECTIVE

(i) To prevent impacts on the stability of the site following geotechnical stabilisation works.

DEVELOPMENT CONTROLS

(a) Building siting and design should consider the topography of the site. If cut and fill is necessary it is preferable that it be balanced to ensure no fill leaves the site.

(b) Where plans show an excess of 600 millimetres of filling, a condition of approval will be imposed requiring a concealed dropped edge beam to contain the fill in excess of 600 millimetres.

(c) Cut and fill greater than 1 metre is to be supported by geotechnical evidence showing that it is consistent with the outcomes of the site stabilisation works described in section 4.2.1.

SUBMISSION REQUIREMENTS

- Details of the exact amount and extent of excavation and filling on the site.

4.7.5. SETBACKS

OBJECTIVES

(i) To provide setbacks that complement the setting, allowing flexibility in siting of buildings, landscaping and private open space around new dwellings.

(ii) To minimise overshadowing and protect the privacy of adjacent dwellings and visual quality of open space areas and views.

(iii) To protect view lines through and over the development.

(iv) To ensure new development is consistent with the desired future character of the locality.

(v) To minimise noise and vibration impacts from Old Northern Road.

DEVELOPMENT CONTROLS

(a) The minimum setback to the Old Northern Road reserve is 10 metres.

(b) The minimum setback to the south-western boundary of the lots adjoining the southern open space area (lots 16 and 17) is 2 metres.

(c) The minimum setback to the northern boundary of the site (applicable to lot 1 only) is 3 metres, excluding ground level decks.

(d) The minimum primary road frontage setback is 6 metres.

(e) Development on corner allotments (lots 36, 40 and 42) shall have regard to the streetscape of both street frontages and may provide a setback of not less than 6 metres for the primary frontage and 4 metres to a secondary road frontage.

(f) All garages must be set back in accordance with the setbacks described in (d) and (e) above, or 5.5 metres, whichever is the greater. This is required to ensure vehicles parked on the driveway in front of the garage do not encroach into the road reservation.

(g) The minimum side boundary setback is 900 millimetres to walls and 675 millimetres to eaves.

(h) The minimum rear boundary setback is 4 metres for single storey dwellings and 6 metres for double storey dwellings, except for Lot 17 and subject to (a).

(i) No balcony shall project into the setback area, unless screening (or other design element) is provided to ensure the privacy of adjoining dwellings, and there is no impact on views.

(j) Development must comply with other setbacks as required by the Easements and Restrictions on the title.

(k) Consideration should be given to Council's Safer by Design Guidelines, particularly in regards to natural surveillance, sightlines and lighting.

SUBMISSION REQUIREMENTS

- Site plans

4.7.6. SITE COVERAGE

OBJECTIVES

(i) To maximise the provision of private open space.

(ii) To avoid the creation of drainage and runoff problems, through minimising the amount of impervious area.

(iii) To minimise bulk and scale of development.

(iv) To facilitate spatial separation between buildings.

(v) To provide adequate landscaped area.

(vi) To maintain the character of existing areas by retaining vegetation.

DEVELOPMENT CONTROLS

(a) The maximum site coverage permitted is 30%.

(b) Site coverage calculations must include areas containing garage/carport, driveways, outbuildings, decks, patios, tennis courts and pools.

SUBMISSION REQUIREMENTS

- A schedule showing the site coverage and landscape area should be submitted with the application or included on the Site Plan.

4.7.7. BUILDING HEIGHTS

OBJECTIVES

(i) To ensure future development responds to the desired scale and character of the local area.

(ii) To protect the existing views from Old Northern Road to the Blue Mountains and from the scenic lookout.

(iii) To minimise overshadowing of adjoining properties and open spaces.

(iv) To facilitate better solar access into the depths of dwellings.

DEVELOPMENT CONTROLS

(a) Buildings on lots 1 – 16 are not to exceed the maximum height to top of roof indicated in Table 1.

(b) Buildings on the site must not intrude into the view line from Old Northern Road to the Blue mountains as illustrated in Figure 3.4 and:

(c) Refer to Clause 4.3 *Height of buildings* of The Hills LEP 2012 and Height of Buildings Map.

SUBMISSION REQUIREMENTS

- Elevation Plans
- Evidence of compliance with the maximum RL indicated in Table 1.

Lot No	Maximum RL
1	172.5
2	171.4
3	170.5
4	169.5
5	168.5
6	167.8
7	167.2
8	166.8
9	166.3
10	166
11	165.7
12	165.5
13	165.4
14	165.3
15	165.2
16	165

Table 1 Maximum building height RL for building lots 1-16 (AHD)

4.7.8. BUILDING FACADES

OBJECTIVES

(i) To promote high architectural quality in buildings.

(ii) To ensure that dwellings sited on corner lots take advantage of their visually prominent location whereby the design addresses both street frontages.

(iii) To ensure buildings respond to environmental conditions such as noise, sun, breezes, privacy and views.

(iv) To promote integration of building and private open space.

DEVELOPMENT CONTROLS

(a) Columns, beams, floor slabs, balconies, window openings and fenestration, doors, balustrades, roof forms and parapets, should be used to create interest in the façade.

(b) Facade design is to reflect the orientation of the site using elements such as sun shading as environmental controls, depending on the façade orientation.

(c) On corner lots a minimum of three of the following design elements are to be included along the secondary frontage:

- Verandahs;
- Gables;
- Vertical elements to reduce the horizontal emphasis of the façade;
- Entry feature or portico;
- Balcony/window boxes or similar elements;
- Landscaping/fencing compatible with the frontage status of the elevation; and
- Windows.

(d) On corner lots the following features are not to occur along either façade:

- Blank walls without relief;
- Windows or doors of utility rooms exposed to view; and
- Hot water services, air conditioning machinery or similar utility installations.

SUBMISSION REQUIREMENTS

- Elevation Plans

4.7.9. DENSITY

OBJECTIVES

(i) To ensure that residential development does not over-tax services and facilities.

(ii) To provide detached dwellings with a high level of internal amenity.

DEVELOPMENT CONTROLS

(a) A maximum of 45 residential lots is permitted on the site.

(b) No more than one dwelling may be provided on each lot.

SUBMISSION REQUIREMENTS

- Site plans.

4.7.10. VISUAL AND ACOUSTIC PRIVACY

OBJECTIVES

(i) To provide reasonable levels of visual privacy externally and internally, during the day and at night.

(ii) To maximise outlook and views from principal rooms and private open spaces without compromising visual privacy.

(iii) To incorporate appropriate materials and construction techniques to minimise acoustic impacts from Old Northern Road.

DEVELOPMENT CONTROLS

(a) New development is to be located and oriented to maximise visual privacy between dwellings.

(b) Building and site design are to increase privacy without compromising access to light and air by:

- Offsetting dwelling windows from adjacent dwelling windows;
- Location of windows between habitable rooms to avoid direct overlooking;
- Recessing balconies and/or vertical fins between adjacent balconies;
- Using solid or semi-solid balustrades to balconies;
- Using louvres or screen panels to windows and/or balconies; and
- Providing appropriate fencing.

(c) Conflicts between noise, outlook and views are to be resolved by using design measures such as double glazing, operable screens to balconies where they do not conflict with streetscape or other amenity requirements.

(d) On the lots alongside the Old Northern Road, dwellings are to be designed to acceptable internal noise levels, based on AS 3671- Road Traffic Noise Intrusion Guidelines.

(e) Low screening is to be provided at subdivision stage along Old Northern Road to screen the rear private spaces of the dwellings, whilst retaining views from the road. This screening will be in the form of a low fence, separated from the pedestrian footpath with landscaping to provide horizontal and vertical separation.

SUBMISSION REQUIREMENTS

- A preliminary Noise Impact Assessment is to be submitted with any subdivision application. The purpose of the assessment is to determine which residential lots in the subdivision require an individual Noise Impact Assessment.
- A Noise Impact Assessment is to be submitted with any residential development application for a lot identified in the preliminary Noise Impact Assessment as requiring such an assessment. The assessment should include a statement from a qualified acoustic consultant certifying that the design and construction of the building meets the Environmental Protection Authority – Environmental Criteria for Road Traffic Noise and Australian Standard 3671 – Road Traffic Noise Intrusion – Building Siting and Construction.

4.8. ACCESS

4.8.1. CAR PARKING AND VEHICULAR ACCESS

OBJECTIVES

(i) To integrate adequate car parking and servicing access without compromising street character, landscape or pedestrian amenity and safety.

(ii) To encourage the active use of street frontages.

DEVELOPMENT CONTROLS

(a) The design and configuration of access ways and driveways shall be in accordance with Part C Section 1 – Parking.

(b) Car parking is to be provided in accordance with Part C Section 1 – Parking.

(c) Potential pedestrian/vehicle conflict is to be minimised by:

- limiting the width of vehicle access points to 3.5m;
- ensuring clear site lines where driveways cross pedestrian paths; and
- separating and clearly distinguishing between pedestrian and vehicular access ways.

(d) Driveway gradients shall be in accordance with Australian Standard – AS 2890.1 – 1993 – Part 1 – Parking Facilities – Off Street Car Parking.

SUBMISSION REQUIREMENTS

- Plans showing proposed vehicular access and circulation and calculations, specifically relating to vehicular movement, turning circles, parking spaces, and driveway widths. The Australian Standard 2890.1 – Off Street Car Parking templates must be overlaid on the appropriate plans.

4.8.2. ROAD DESIGN AND CONSTRUCTION

OBJECTIVES

(i) To ensure that vehicular access can be gained to the site from Heritage Park Drive, based on sound traffic management principles.

(ii) To ensure sufficient carriageway and verge widths are provided to allow streets to perform their designated functions within the street network and to accommodate public utilities and drainage systems.

(iii) To encourage the use of streets by pedestrians and cyclists, and to allow cars and other users to proceed safely without unacceptable inconvenience or delay.

(iv) To provide street geometry that is consistent with the needs of the street function, physical land characteristics and safety.

DEVELOPMENT CONTROLS

(a) The principal vehicular access to the site is to be provided from Heritage Park Drive and designed in accordance with Figure 4.2. The route taken should cause the least disturbance and impact to the mature vegetation remnant.

(b) New streets constructed on the site should allow unobstructed movement in one lane as well as passing opportunities to enable movement in both directions.

(c) The design of the carriageway is to discourage motorists from travelling above the intended speed.

(d) Street cross falls, longitudinal gradient, vehicle-turning movements and sight distances are to comply with Council's Design Guidelines Subdivisions/Developments (June 1997).

(e) The access streets are to conform to these minimum dimensions:

- Carriageway width: 8.5 metres
- Verge widths: 3.5 metres
- Road reserve: 14.5 metres
- Cycle ways/Footpaths: 2.5 metres one side

(f) Construction of half width carriageways is not permitted.

(g) Street trees are to be provided in all subdivisions and will be required to be planted at the time of subdivision construction.

(h) Street tree planting is to be provided to all streets with a spacing of between 7 and 10 metres, with a minimum of one tree per lot frontage. Corner lots will have a minimum of two street trees and normally three trees. The location of street trees must complement proposed driveway locations.

(i) Street tree planting will only be permitted within roads that are to be dedicated to Council as public road.

(j) All plans documenting proposed street tree planting must indicate the location of Sydney Water sewer and water pipes including where they enter a public road reservation. No planting of street trees is permitted within 1.5 metres of a Sydney Water pipe.

SUBMISSION REQUIREMENTS

- Detailed design plans for vehicular access to the site.



Figure 4.2 Access to site

4.8.3. PEDESTRIAN ACCESS

OBJECTIVES

(i) To consider the needs of the residents with particular consideration to access requirements, safety and security.

(ii) To ensure that appropriate pathways, with high levels of pedestrian amenity are provided for residents along identified desire lines.

DEVELOPMENT CONTROLS

(a) Pedestrian linkages are to be provided throughout the site generally in accordance with Figure 3.5 Access and Movement, including access to Heritage Park Drive, the scenic lookout, Old Northern Road and Old Castle Hill Road.

(b) Pedestrian paths and cycleways through the site are to be located outside the mature vegetation remnant.

(c) All pathways and ramps should conform to the minimum dimensional requirements set out in AS1428.1 – 2001 Design for Access and Mobility – General requirements for access – New building work, and AS 1428.2 – 1992 – Design for Access and Mobility – Enhanced and additional requirements – Buildings and facilities.

(d) All surfaces should be stable, even and constructed of slip resistant materials. Any stair nosings should have a distinctive colour and texture.

(e) Pathway locations must ensure natural surveillance of the pathway from primary living areas of adjoining dwellings. Dwelling entries must not be hidden from view and must be easily accessible.

SUBMISSION REQUIREMENTS

- Site plans should show pedestrian paths and cycleways.

4.8.4. ACCESS RESTRICTIONS

OBJECTIVE

(i) To ensure that public lands are not compromised by uncontrolled and informal pedestrian, bicycle and vehicular access from adjoining residential lots.

DEVELOPMENT CONTROLS

(a) No residential lot created on the site shall be permitted to have direct pedestrian, bicycle or vehicular access to either of the open space areas on the northern and southern portions of the site.

(b) No residential lot created on the site shall be permitted to have direct pedestrian, bicycle or vehicular access to the pedestrian paths and cycleways located on the site.

4.9. LANDSCAPING AND OPEN SPACE

4.9.1. LANDSCAPE DESIGN AND OPEN SPACE

OBJECTIVES

(i) To ensure that landscaping and open space design complements the environmentally sensitive nature of the site.

(ii) To enhance residents' quality of life by providing privacy, pleasant outlook, views and a range of open spaces.

(iii) To provide habitat for native indigenous plants and animals.

(iv) To ensure that landscaping may be efficiently maintained.

(v) To ensure adequate private open space is provided for use by residents.

(vi) To improve stormwater quality and reduce quantity of runoff.

(vii) To improve the microclimate and solar performance within the development.

(viii) To promote a safe living environment.

DEVELOPMENT CONTROLS

(a) An open space area is to be provided on the northern portion of the site to protect the mature vegetation remnant.

(b) An open space area is to be provided on the southern portion of the site to protect the functionality of the scenic lookout and the views to Heritage Park and the Blue Mountains.

(c) Private and public spaces are to be clearly defined.

(d) The amenity of open space is to be improved with landscape design by providing appropriate shade from trees or structures.

(e) Landscaping is to be enhanced along the road widening corridor for improved visual amenity and privacy.

(f) Vegetation selection is to consist of robust native species to reduce maintenance.

(g) Vegetation selection and placement is to reflect the scale of the proposed built form.

(h) Existing trees on the site are to be retained where possible and exotic species replaced where necessary with native species.

(i) Private open spaces are to be located on the northern sides of dwellings where possible.

(j) Private open space (behind the front building line) is to be 20% of the lot area or 80 square metres, whichever is the greater and can be contained within the landscaped area of the site.

(k) The private open space area must be able to contain a rectangle measuring 6 metres by 4 metres.

(l) Landscape design is to contribute to water and stormwater efficiency by:

- Using plants with low water demand to reduce mains consumption;
- Using plants with low fertiliser requirements; and
- Utilising permeable surfaces.

(m) The energy and solar efficiency of dwellings and the microclimate of private open spaces are to be improved by:

- Incorporating trees which allow shading in summer and low angle sun penetration in winter on the eastern and western sides of a dwelling;
- Varying heights of different species of trees and shrubs to shade walls and windows; and
- Locating pergolas on balconies and courtyards to create shaded areas in summer and private areas for outdoor living.

(n) Consideration should be given to Council's Safer by Design Guidelines, particularly in regards to natural surveillance, sightlines and lighting.

Note. Landscaped area does not include any paved or built upon area such as driveways, tennis courts, patios/decks, outbuildings or pools.

SUBMISSION REQUIREMENTS

- Landscape plan.
- A schedule showing the site coverage and landscaped area should be submitted with the application or included on the site plan.
- The location and dimensions of private open space must be shown on the site plan.

4.9.2. PUBLIC OPEN SPACE AND DEVELOPMENT

OBJECTIVE

(i) To ensure that land dedicated as public open space is adequately protected during the subdivision and dwelling construction stage.

DEVELOPMENT CONTROLS

(a) No retaining walls are to be constructed adjacent to proposed open space areas.

(b) Proposed open space areas should not be filled.

(c) A minimum 2 metre high, temporary chain-wire fence around proposed open space areas, with access provided by a lockable gate, is to be provided at the developer's expense. The fence must be sited in such a way as to limit access into the open space area, ensuring protection of the area for the duration of subdivision and building construction. The fence must be removed at the completion of the works.

SUBMISSION REQUIREMENTS

- Details of fence construction are to be provided by the proponent with the submission of the engineering designs.

4.9.3. FENCING

OBJECTIVE

(i) To ensure that new fencing associated with the new dwellings erected on the site is sympathetic to the character and setting of Heritage Park.

DEVELOPMENT CONTROLS

(a) The design, colours, materials and height of fences used in the development are to be compatible with the site's proximity to Heritage Park.

(b) Retaining walls:

- Generally should be no taller than 1 metre;
- Should not cut through roots of any tree required by Council to be preserved;
- Should be separated from any associated fence by a planter-bed at least 500 millimetres wide, to minimise the apparent overall height of fencing;
- Should provide drainage for any associated planter-bed;
- Should be separated from any driveway by a landscaped verge at least 500 millimetres wide, to prevent impact damage from vehicles.

(c) Fences should be generally no taller than 1.8 metres and 2.4 metres on sloping sites, including the height of any retaining wall.

(d) Fences along boundaries forward of the front building alignment:

- Should generally not be taller than 1.2 metres and consist of see-through construction;
- Should not be constructed of metal panels;
- Walls of solid construction and taller than 1.2 metres (such as courtyard walls) should be set back at least 2 metres from the front boundary (to allow for landscaping) and shall not occupy more than 50% of allotment width.

(e) Fences around private open space should minimise cross-viewing and the transmission of noise.

(f) Fences in any location that can be seen from the street or adjoining open space areas should not be constructed of metal panels.

(g) Where fencing affects easements or stormwater flow paths, consult with Council and the relevant authority.

(h) Fencing of a "see-through construction" includes panels set into a timber frame or between brick piers, where:

- Any solid base is not taller than 1 metre; and
- Panels are spaced timber pickets or palings, or lattice.

(i) Consideration should be give to Council's Safer by Design Guidelines, particularly in regards to natural surveillance, sightlines and anti-graffiti surfaces.

SUBMISSION REQUIREMENTS

- Details of all fencing.

4.10. PROVISION AND LOCATION OF UTILITIES

OBJECTIVES

(i) To maximise the opportunities for shared (common) trenching and reduce constraints on landscaping within road reserves.

(ii) To ensure the provision of public utilities is undertaken in accordance with the requirements of both Council and the relevant servicing authority.

DEVELOPMENT CONTROLS

(a) Gas and water services may be located in a shared trench on one side of the street and electricity power and telephone located in a shared trench on the other side of the street.

(b) The Council requires underground electricity reticulation and telecommunications for all urban development.

(c) Where agreement to develop shared trench practices cannot be met, or location of services are unable to be limited to one side of the road, the alignment of services shall be to a standard acceptable to Council.

(d) Utilities and services are to be supplied and constructed in accordance with the requirements of the relevant authority.

(e) Details of the location of all sewer reticulation mains are to be supplied to Council for assessment of environmental and property considerations.

(f) Development is to have a water supply for fire-fighting purposes in accordance with the NSW Rural Fire Service's *"Planning for Bushfire Protection Guidelines"* or as amended thereto.

(g) Concurrence from the relevant electricity authority is required for all development applications where the property is affected by electricity easements.

SUBMISSION REQUIREMENTS

Site plans are to show all services.

The Hills Development Control Plan (DCP) 2012

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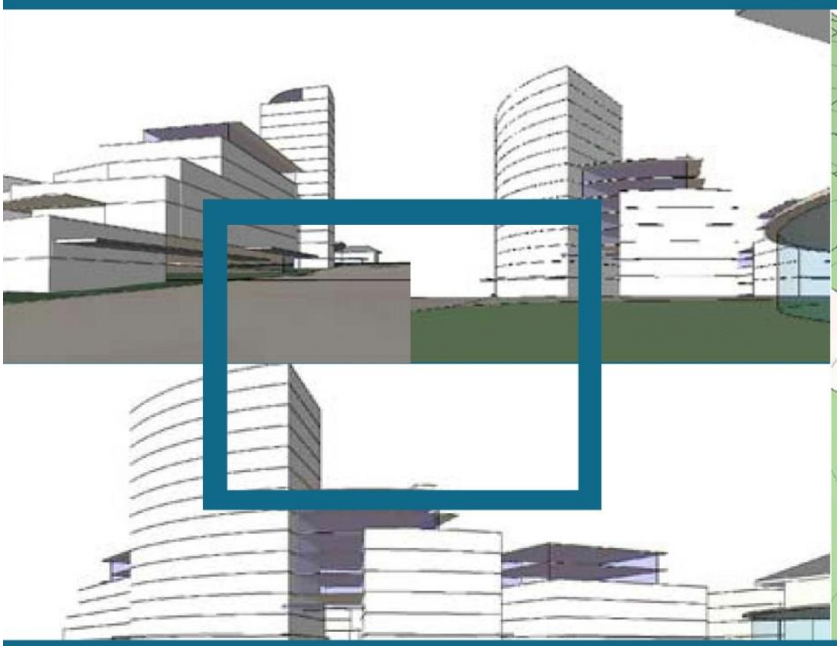



Part D Section 14

Target Site, Corner Windsor Rd & Seven Hills Rd, Baulkham Hills

D14

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1. INTRODUCTION

This Section of the DCP must be read in conjunction with Part A – Introduction of The Hills DCP 2011.

This Section of the DCP has been prepared to provide direction and control of the development of the Target Site at the corner of Windsor Road and Seven Hills Road, Baulkham Hills.

1.1. LAND TO WHICH THIS SECTION APPLIES

This Section of the DCP applies to all land commonly referred to as "Target Site No. 6", and comprises the land identified in Figure 1 and legally identified as:

- Lots 2, 3 and 4 DP 216713, Nos 6 - 8 Seven Hills Road;
- Lots 21 and 22 DP 588810, Nos 2 and 4 Seven Hills Road;
- Lot 1 DP 619055, Nos 346 - 350 Windsor Road;
- Lot 18 DP 659904, No. 344 Windsor Road; and
- Lot 9 DP 28197, No. 27 Yattenden Crescent.

The site has a total area of 1.167 hectares.

1.2 OBJECTIVES OF THIS SECTION OF THE DCP

The objectives of this Section of the DCP are:

(i) To provide detailed design and environmental standards for the development of the Target Site.

(ii) To provide a mixed use commercial development that relates compatibly to existing and future adjoining development.

(iii) To encourage an innovative and imaginative design with particular emphasis on the integration of commercial, retail and residential uses with a publicly accessible plaza.

(iv) To provide a safe and attractive pedestrian environment supporting a new through site link with retail and commercial anchors.

(v) To provide flexible buildings that can accommodate different uses in response to changing needs.

(vi) To clearly define public and private domains;

(vii) To create a residential neighbourhood with opportunities for local shopping, employment and a dining/ entertainment hub.

(viii) To provide safe and convenient vehicle access to and from the site that minimises traffic impacts on local residents; and,

(ix) To ensure that the development applies the Principals of Ecologically Sustainable Development.

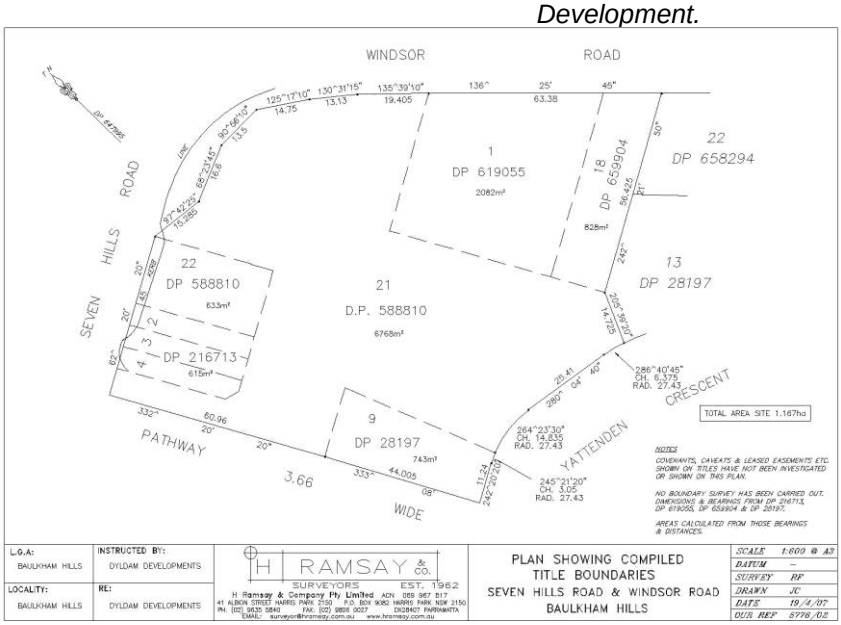

Figure 1 Target site

1.3 DESIGN EXCELLENCE

Refer to Clause 7.7 *Design excellence* of The Hills Local Environmental Plan 2012.

PROCESS

- The landowner, or an appointed agent of the landowner, is to be nominated as the 'proponent' for the purpose of the competitive process.
- The proponent is responsible for the running and the costs associated with the competition process.
- The proponent of a design competition will prepare the invited design competition brief in accordance with the Director-General's Design Excellence Guidelines.
- Council endorses an invited competition design competition brief.
- The proponent will invite a minimum shortlist of three architectural/design firms to participate in a design competition and supply them with the competition brief, endorsed by Council.

Refer to the Director General's Design Excellence Guidelines and procedures approved by the Director General from time to time.

SUBMISSION REQUIREMENT

- Competition brief for an invited design competition

2. DEVELOPMENT OVERVIEW

2.1. REGIONAL CONTEXT

The subject site is located in the Baulkham Hills Town Centre, which is identified as a Town Centre in the North West Subregional Strategy and in Council's Local Strategy (2008). It is located close to the Major Centre of Castle Hill and the Regional City of Parramatta. The Town Centre is an important public transport hub for local and regional bus networks on Strategic Bus Corridors No. 5 and 40.

2.2. STRATEGIC OPPORTUNITIES AND CONSTRAINTS OF THE BAULKHAM HILLS TOWN CENTRE STUDENT/ FINAL MASTERPLAN

Refer to Baulkham Hills Town Centre Final Draft Masterplan 2004 and DCP Part D Section 10 – Baulkham Hills Town Centre.

3. SITE OPPORTUNITIES AND CONSTRAINTS ANALYSIS

3.1. INTRODUCTION

The site analysis focuses on the opportunities and constraints for land use and development within the site and also considers the site's immediate surrounds. The following elements are analysed:

- Landforms
- Views
- Surrounding Development/Infrastructure/Uses
- Heritage
- Traffic and Access
- Landscape and Vegetation
- Drainage
- Site Hazards

Objectives of site analysis:

(i) To encourage a comprehensive approach to site planning, design and assessment of the development.

(ii) To facilitate assessment of how future buildings relate to their immediate surroundings and each other.

(iii) To facilitate development of a design that minimises the negative impacts on the amenity of adjoining development.

(iv) To ensure that development is appropriate to the sites capability and suitability for the development proposed.

(v) To minimise impacts of the development on the environment with regard to the principals of ESD.

3.2. LANDFORM

The subject site is located at the crest of the hill where Windsor Road meets Seven Hills Road. The land within the site has a cross fall of approximately 13 metres from the corner of Windsor Road to the lowest point fronting Yattenden Crescent. Figure 2 shows the topography of the site and its surrounds.

Opportunities

- The hilltop is the "5 ways" focal point of Baulkham Hills Town centre and provides the opportunity for a landmark development with high exposure to both the street frontages.
- The level change from the street frontage to the rear is 13 metres. This allows a building with commercial uses on the perimeter of the site to act as an acoustic barrier to a courtyard in the centre of the site. This acoustic barrier will also shield residential units to the rear of the commercial uses.
- The level change and orientation of the allotments provides good solar access and views to the south.
- Development on the site may include more than one pedestrian access point and a through site link.
- The level change across the site allows the building to have internal "zones" of different function that are vertically separated but linked by circulation spaces and courtyards.

Constraints

- Overshadowing of adjoining residential sites due to topography and north-south orientation.

3.3. VIEWS

Direct views from the site towards the south, south-east and south-west are available from the existing at-grade car park. The group of Eucalyptus trees on the southern boundary of the site are a landscape visual asset.

Opportunities

- Council's Masterplan identifies the subject site as occupying a visually dominant position within the Baulkham Hills Town Centre and close to the majority of services offered by the centre.
- The site is suitable for a gateway / landmark building offering district views in all directions, particularly to the south.

Constraints

- Possibility of overlooking into adjacent residential dwellings.

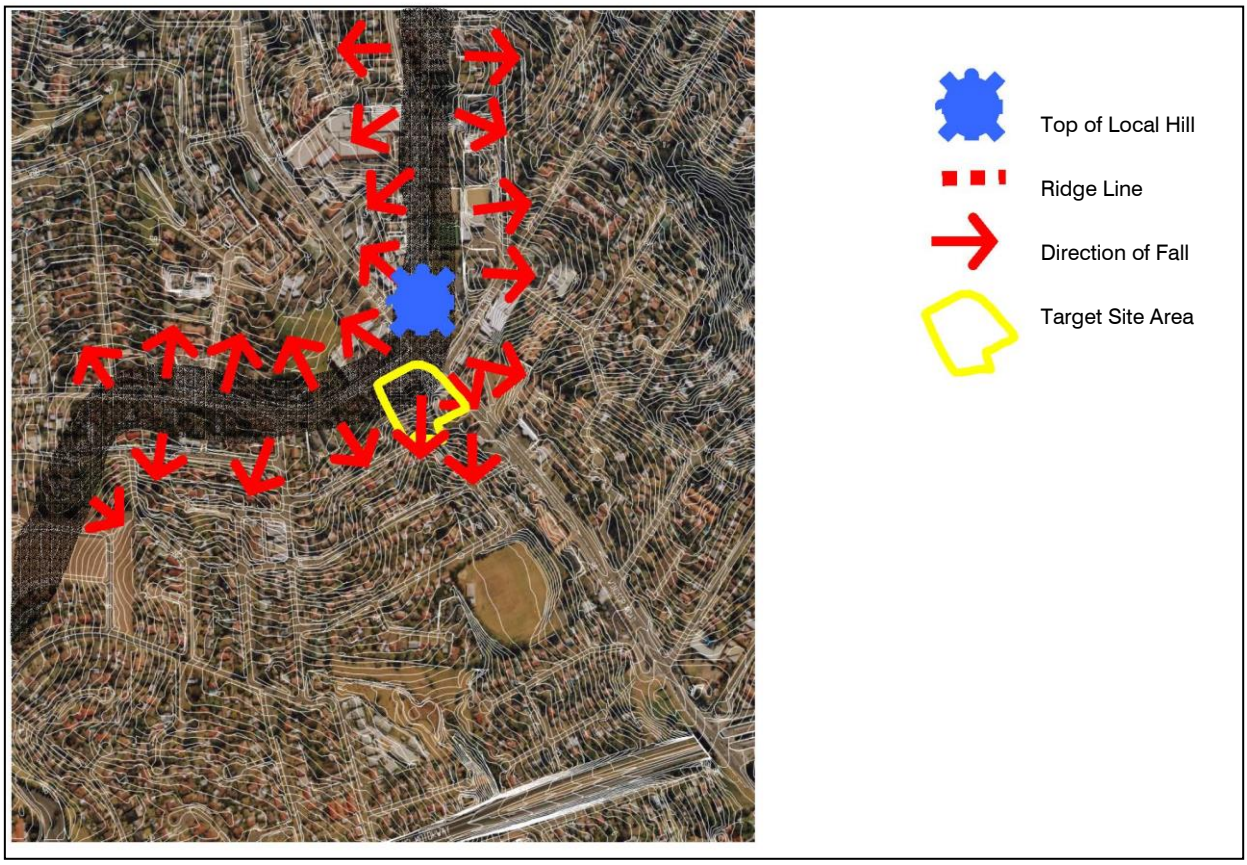

Figure 2 Site topography, context and views



Figure 3 Visual analysis of surrounding area



Figure 4 Site frontage to Seven Hills Road



Figure 5 Site frontage to Windsor Road

3.4. SURROUNDING DEVELOPMENT, INFRASTRUCTURE AND USES

The surrounding development includes single storey dwellings, the Bull and Bush Hotel and commercial/ retail uses. The adjoining residential land is zoned for residential flat buildings and represents the future built form of these areas.

The existing pattern of subdivision of land within the Baulkham Hills Town Centre is irregular due to the intersection of a number of major roads including Windsor Road, Seven Hills Road, Old Northern Road and Railway Street. Thus the context of the site presents the following opportunities and constraints:

Opportunities

- To enhance the streetscape and provide a focal point within the southern precinct of the Town Centre by replacing existing built form with a development that provides a landmark tower and activity focus.
- To provide an active street interface with Seven Hills Road and Windsor Road with well defined entry points located on existing pedestrian desire lines.
- To utilise the frontage to one local street and two arterial roads to achieve a high level of vehicle accessibility.

Constraints

- Noise from Seven Hills and Windsor Roads will influence on the distribution of uses within the building.
- Street width and car parking on Yattenden Crescent.
- Overshadowing of neighbouring properties will influence building design.
- Building massing to be sympathetic to the heritage curtilage of the Bull and Bush Hotel.

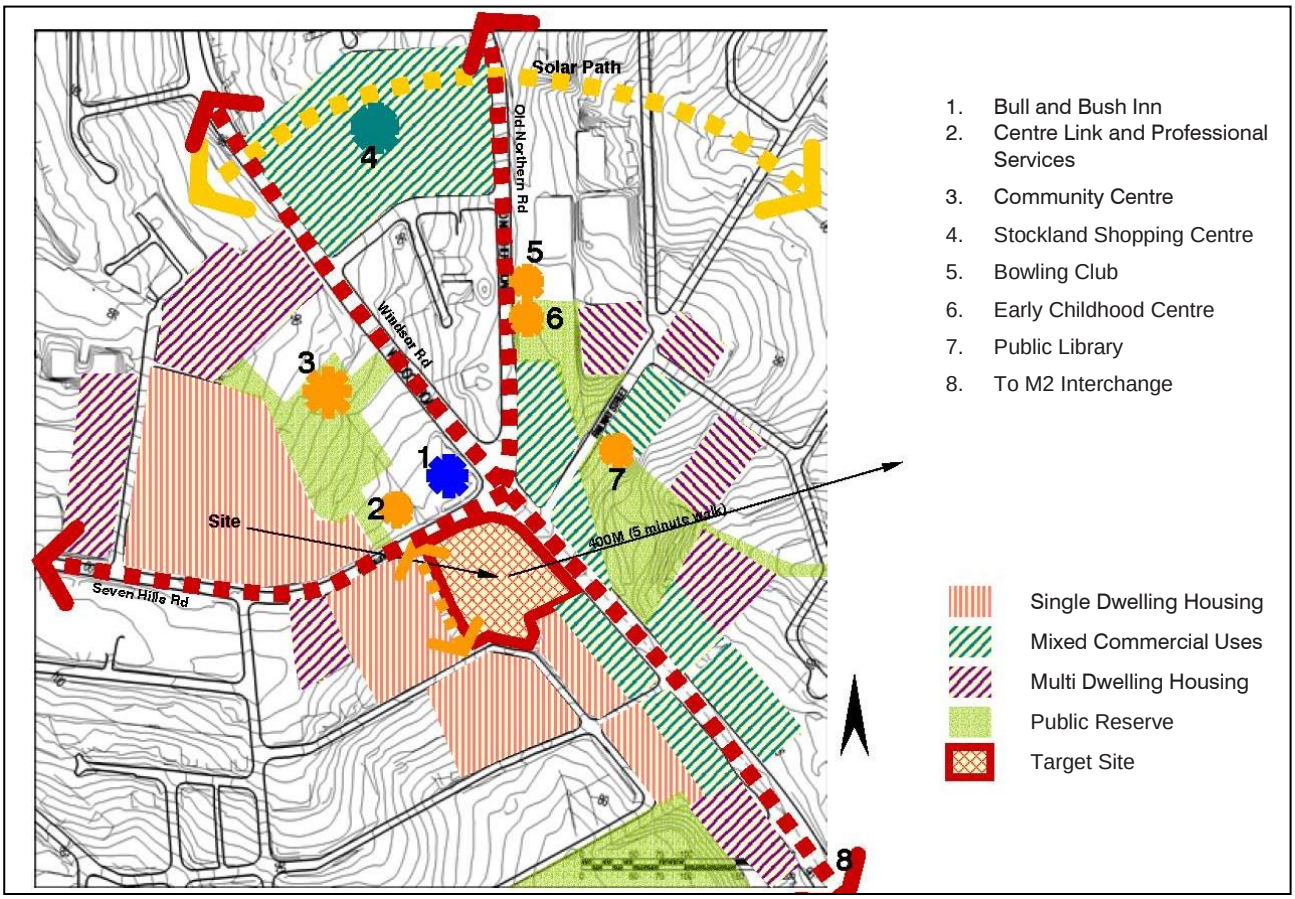

Figure 6 Context Analysis Map

3.5. HERITAGE

No existing items of environmental heritage under either The Hills LEP 2012 or the State Heritage Register are located on the site.

However, the Target Site is opposite the Bull and Bush Hotel which is located on the northern corner of Seven Hills Road and Windsor Road. A Heritage Report by David Scobie dated September 27, 2002 entitled "*346-352 Windsor Road, Baulkham Hills Development within the vicinity of the Bull and Bush Hotel*" provides recommendations with respect to setbacks and building height.

Opportunities

- The Bull and Bush Hotel opposite the site contributes to the visual variety and vitality of the southern part of the Town Centre. The hotel use is compatible with the mixed use nature of the development proposed by this Section of the DCP.

Constraints

- To provide a recessive roof form that minimises the visual impact of the Target Site on the setting of the Bull and Bush Hotel.



Figure 7 Bull and Bush Hotel

3.6. TRAFFIC AND ACCESS

A traffic study formed part of the research for this target site reviews and recommends the proposed access arrangements, trip distribution, traffic generation of the expected yield and parking provision. The study described the existing situation as follows:

Road Network

The site is bounded by Seven Hills Road on its northern boundary, Windsor Road on its eastern boundary and Yattenden Crescent on its southern boundary.

Seven Hills Road is a classified road providing a high capacity link between Windsor Road in the east and Old Windsor Road in the west. Most intersections along this corridor are priority controlled intersections with some intersections controlled by traffic signals. The site currently has a left in / left out driveway in Seven Hills Road.

Windsor Road is the main north – south arterial road through the area carrying large volumes of general traffic and buses. Across the frontage of the site, the road has three general traffic lanes in either direction separated by a concrete median.

Yattenden Crescent is a local street with a carriageway width of 7-9 metres. Unrestricted parallel parking is permitted on both sides of the street which requires cars to use gaps at driveways to pass another vehicle in the opposite direction. It was observed all residences have off street parking provision for more than one vehicle.

Arthur Street currently performs the role of collector road for the surrounding residents between Seven Hills Road and the M2 overpass. This road is currently used as a rat – run during peak periods. The intersection of Arthur Street / Seven Hills Road is unsignalised and traffic volume in Seven Hills Road makes it difficult to turn right out of this street.

The performance of the following intersections in the vicinity of the subject site have been analysed using the aaSIDRA intersection analysis program:

- Seven Hills Road / Arthur Street
- Arthur Street / Yattenden Crescent
- Arthur Street / Charles Street

The results show that the intersection of Seven Hills Road / Arthur Street currently operates with a poor level of service in both peak periods. All remaining intersections surrounding the site currently operate with a satisfactory level of service.

Public Transport

The site is located adjacent to one of the most heavily utilised bus stops in The Hills LGA.

Each weekday, a total of 132 southbound buses pass through the bus stops on Windsor Road south of Seven Hills Road. Of these, the vast majority (102) approach from Old Northern Road and turn left into Windsor Road. The remaining 30 services approach the intersection from Windsor Rd and pass straight through.

Overall the site is extremely well serviced by public transport and residents will have access to a wide variety of facilities without the need to use their private vehicle.

Pedestrian Facilities

Pedestrian pathways are provided on both sides of Windsor Road and Seven Hills Road across the frontage of the site. The intersection of Seven Hills Road / Windsor Road / Old Northern Road has pedestrian phases on all arms of the intersection.

3.7. LANDSCAPE AND VEGETATION

The site and the surrounding area have been developed since the 1950's for suburban use and has been cleared of all original vegetation. The diagram below indicates the vegetation on site.

Opportunities

- An existing group of well established eucalypt trees on the Yattenden Crescent frontage is a visual and screening asset.
- *Constraints*
- Limited possibilities for street tree planting on three frontages due to likelihood of road widening by RMS.

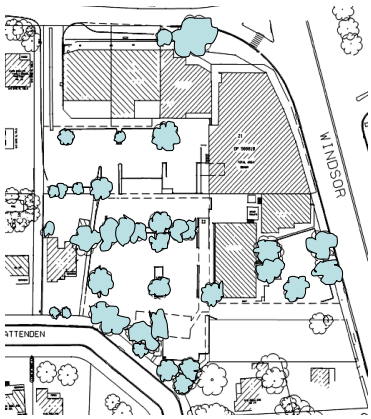

Figure 8 Existing vegetation

3.8. DRAINAGE

The site is located within the Parramatta River catchment. The site generally drains toward the south. Approximately 50% of the site is a paved, at-grade parking area. Stormwater drains are located within the site and surrounding area. Runoff from existing buildings and car park are connected to Council's stormwater drainage system.

Opportunities

- Deep soil area on site is linked to Yattenden Crescent nature strip to allow subsoil drainage.

Constraints

- An overland flow path has been identified on the western boundary of the site along a pathway owned by Council in which an existing stormwater drainage line is located.
- The redevelopment of the site will have a similar proportion of hard surface area supplemented by communal open space and soft landscaped area. Development on the site should not increase the volume and rate of offsite stormwater discharge downstream.

3.9. SITE HAZARDS

The subject site and its history of land uses are not considered to have given rise to any contaminants. The site is not known to contain any hazards, nor been used for a purpose which is likely to have given rise to contamination.

4. DEVELOPMENT FRAMEWORK

The opportunities and constraints to development as set out in section 3 were synthesised to determine the development framework by applying best practice urban design to achieve outcomes appropriate for a Target Site within the Baulkham Hills Town Centre. Council will not grant consent for development within the site unless Council is satisfied that the proposed development demonstrates that it represents a high quality urban design solution and that adequate regard has been given to the following aspects of the design.

4.1. VISUAL IMPACT

The proposed development must:

- Provide a gateway landmark by placing a strong visual element of 14 storeys generally at the apex of the corner.

4.2. URBAN STRUCTURE

The Target Site consists of Sites 1 & 2, determined on the pattern of ownership. Site 2 consists of Nos. 4 - 8 Seven Hills Road and also benefits from the right of way over No. 2 Seven Hills Road. Site 1 consists of all other land in the Target Site.

The proposed development must:

- Provide an appropriate transition in form to the future development along Yattenden Crescent and allow solar access and privacy to that development in accordance with Council's standards.
- Provide afternoon sunlight to "rear" and plaza areas of development.
- Provide efficient access to basement parking levels.
- Provide a stepped street wall along Windsor Road that reflects the slope of the topography.
- Consist of the development of Site 1 and 2 in a coordinated manner such that each can function independently of the other unless they are amalgamated prior to development.

4.3. HERITAGE

The proposed development must:

- Demonstrate that the massing and roof form of the building opposite the Bull and Bush Hotel is broken up and modulated by openings and lower scale, lighter building elements so as to respect the scale and curtilage of the Bull and Bush Hotel.

4.4. LAND USE AND DENSITY

The proposed development must:

- Ensure a mix of uses that will provide commercial and social activity throughout the day and into the evening in a manner compatible with the residential uses and complimentary to the remainder of the town centre.
- Take advantage of the site's position on the south end of the town centre to "commence" the revitalisation of the south end.
- Provide a multi unit development comprising a range of residential unit types.

- Provide a public plaza on the podium allowing for sunlight to open space and restaurant areas.
- Use buildings to provide acoustic buffering from road noise to the podium plaza public open space.
- Position residential units in the upper levels of the development away from road noise by elevation.

4.5. ACCESS

The proposed development must:

- Provide improved pedestrian access along the street frontage as well as through site links.
- Provide a logical separation of uses within the building related to street level access, basement supermarket, plaza activity, lunchtime visitors and after hours amenity of residents in upper levels.
- Provide convenient pedestrian access to shopping / restaurants for local Yattenden Crescent residents.
- Provide commercial deliveries and commercial waste collection vehicle entry to Site 1 from Windsor Road only.
- Provide vehicular access to and from Yattenden Crescent for residents and persons accessing retail and employment within the site.
- Provide vehicular access from Yattenden Crescent for vehicles collecting residential waste.
- Provide commercial and waste collection vehicle and residential vehicle entry from Seven Hills Road to Site 2 for off street collections and deliveries unless Site 2 is amalgamated with Site 1, in which case access for these vehicles must be from Windsor road.
- Provide access to site 1 for residential vehicles from Windsor Road.

4.6. LANDSCAPE AND CHARACTER

The proposed development must:

- Provide deep soil and planting appropriate for the Yattenden Crescent frontage.
- Provide landscaping to the podium that is appropriate for the public usage of the space.

5. DESIGN PRINCIPLES

The site opportunities and constraints analysis produced the development framework set out above in section 4. The development of the site within this framework requires application of the design principles illustrated below:

Design Principles

1. Lower buildings as scale transition to existing and future context;
2. Slender tower to provide landmark at intersection;
3. Scale transition and modulation to corner element;
4. Height aligned with future context;
5. Recess to articulate the tower & respond to heritage item opposite;
6. 2-3 storey breezeway access to plaza aligned with Old Northern Road;
7. Deep soil planting to Yattenden Crescent;
8. Publicly accessible plaza with active uses;
9. Provide adequate separation between buildings;
10. Landscaped rooftops and plaza;
11. Continuous built edge as noise buffer;
12. Building form steps up slope along Windsor Road;
13. Residential uses concentrated in upper levels to avoid noise and privacy issues; and
14. Development on Sites 1 and 2 is to be designed and constructed in a compatible, integrated manner including access to the plaza level, built form and materials and vehicular access from Seven Hills Road.

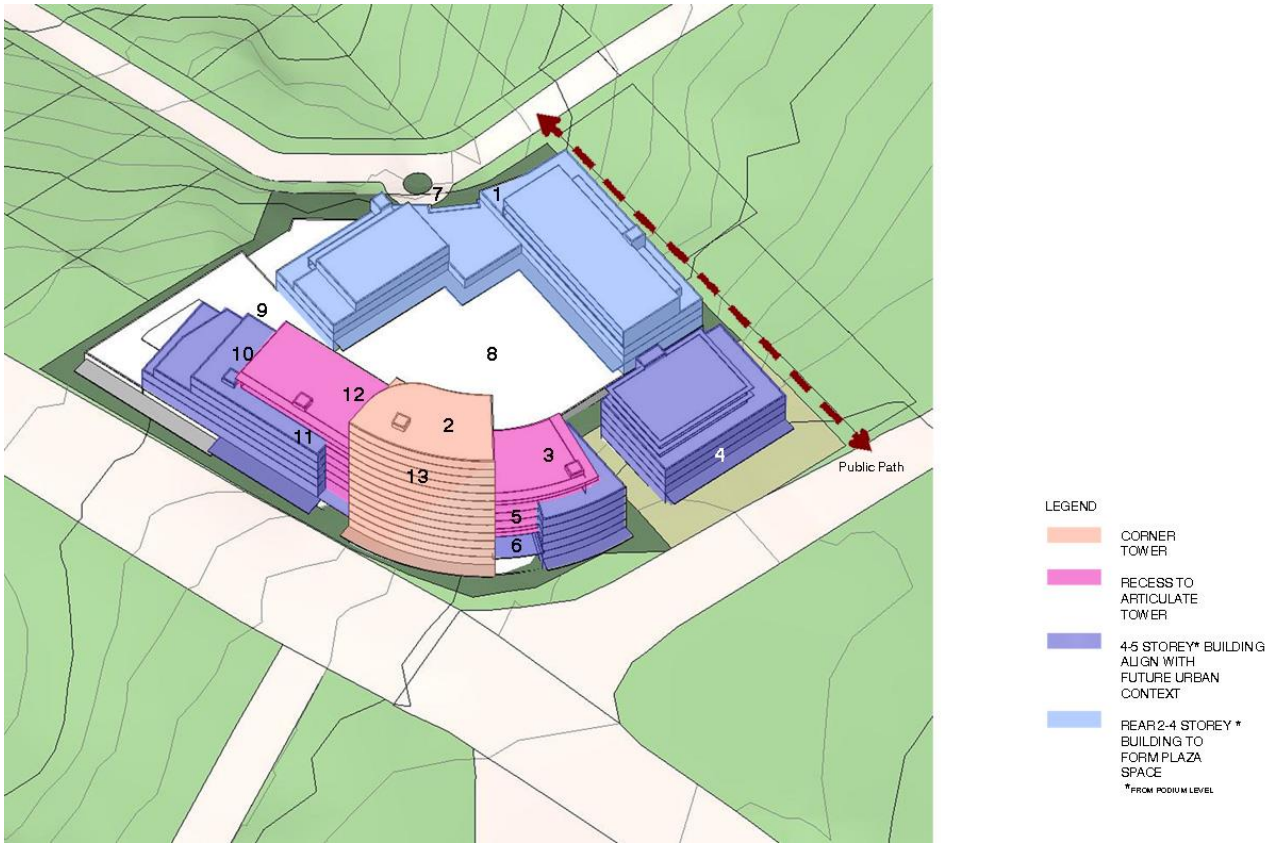

Figure 9 Design principles of development

6. OBJECTIVES AND DEVELOPMENT CONTROLS

The objectives and development controls for development of the Target Site are set out in the following sections.

In addition to the policies, guidelines and documents specified in Section 1.4 of Part A – Introduction, this Section is to be read in conjunction with other relevant Sections including:

- Part B Section 5 – Residential Flat Buildings
- Part B Section 6 - Business
- Part C Section 1 - Parking
- Part C Section 3 - Landscaping
- Part C Section 4 – Heritage
- Part C Section 6 – Flood Controlled Land
- Part D Section 10 - Baulkham Hills Town Centre

Where any provision of this Section of the DCP is inconsistent with provisions in other Sections of the DCP, the provisions of this Section shall prevail.

6.1. BUILDING AND CEILING HEIGHTS

OBJECTIVES

(i) To minimise overshadowing of adjoining properties.

(ii) To create a landmark building within Baulkham Hills Town Centre.

(iii) To vary the height of the building to respond to the topography of the site, and to be compatible with the height of future adjoining development.

(iv) To provide adequate clearance at the ground level to all buildings to permit flexibility in the use of ground floor spaces.

DEVELOPMENT CONTROLS

Note. Refer to Clauses 4.3 *Height of buildings*, Clause 7.7 *Design excellence* and Height of Buildings Maps of The Hills LEP 2012.

(a) Maximum building heights above the podium level shall be in accordance with the building heights shown in Figure 10.

(b) The height of the podium when viewed from Yattenden Crescent shall be no more than 3 storeys.

(c) The ceiling height of the ground floor at the podium level shall be a minimum of 3.3m to promote flexibility in use.

(d) The public plaza (podium) level of the podium will be at the level of Seven Hills Road.

(e) The floor level of any residential room must be no lower than 1 metre below natural ground level.

(f) On Site 1 the frontage of the building facing the western boundary should not exceed six storeys as measured above natural ground level, in accordance with Figures 13 to 22. The upper two storeys must be set back in accordance with Figures 17 and 18 (Level 3 and 4 setbacks) to reduce perceived bulk and scale.

(g) On Site 1 the building street frontage to Yattenden Crescent, should not exceed six storeys above natural ground level. Levels above the podium are to be set back in accordance with Figures 16 and 17 (Level 2 and 3 setbacks) to reduce perceived bulk and scale.

(h) The controls in (f) and (g) do not apply to any portion of the building that is a lift shaft, lift well or lift overrun.

SUBMISSION REQUIREMENTS

A Heritage Impact Statement addressing the impact of the development on the Bull and Bush Hotel.

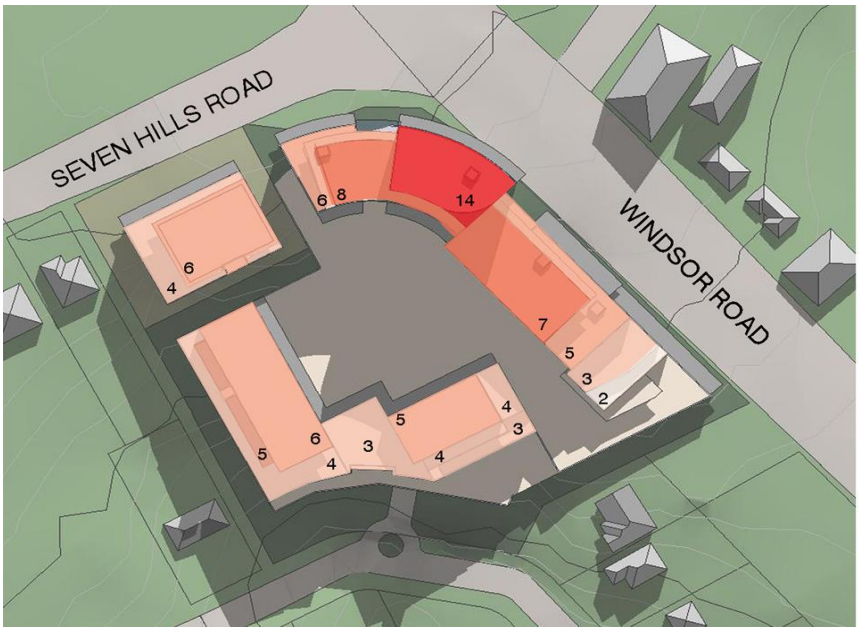

Figure 10 Proposed height in storeys

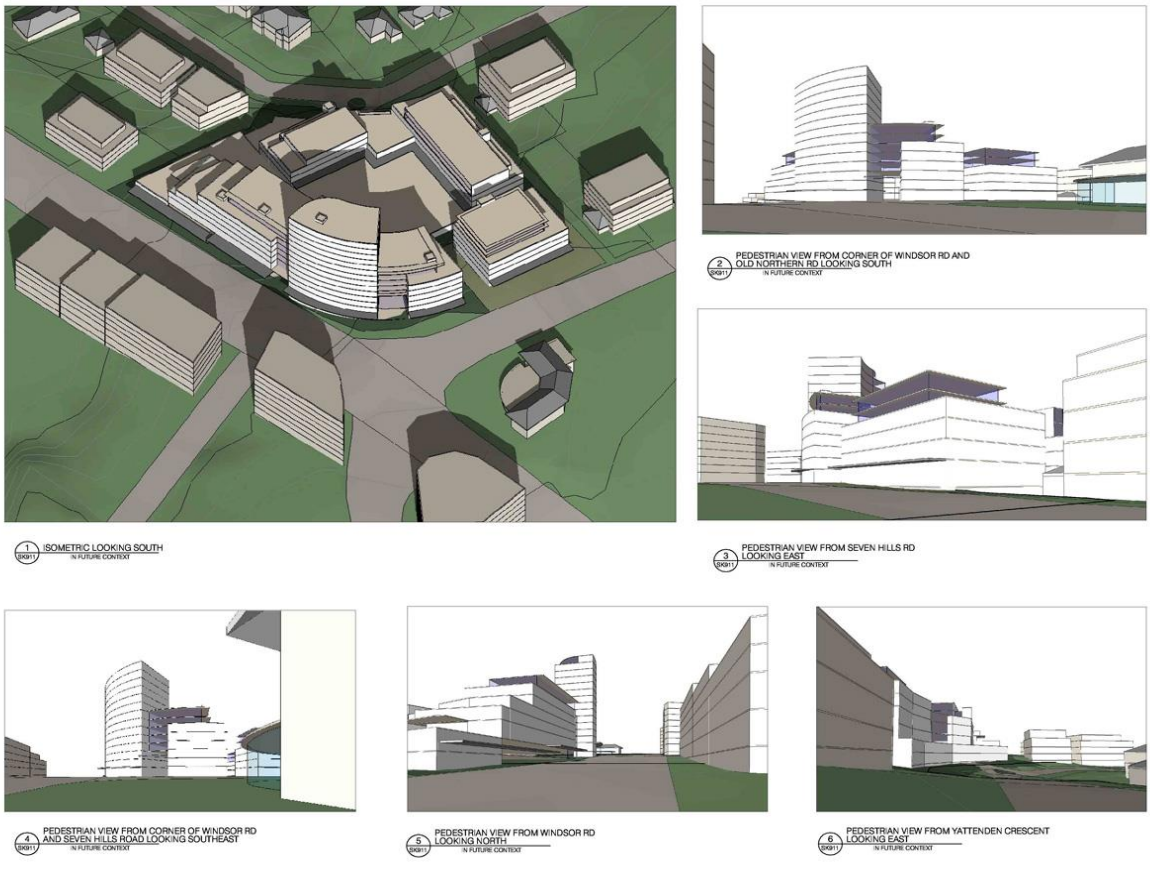

Figure 11 Indicative heights and massing

6.2. DENSITY AND FLOOR SPACE RATIO

This provision specifies yields for the entire target site regardless of ownership of the lots included in the site.

OBJECTIVES

(i) To provide sufficient unit density and commercial floor space to create a landmark building on the northern corner of the subject site.

(ii) To provide residential apartment building development with a high level of amenity.

(iii) To provide high density residential and commercial development to take advantage of proximity to Town Centre jobs, services, amenities and public transport.

DEVELOPMENT CONTROLS

Refer to Clauses 4.4 *Floor space ratio*, Clause 7.7 *Design excellence*, and Floor Space Ratio Maps of The Hills LEP 2012.

6.3. COORDINATION OF DEVELOPMENT

OBJECTIVES

(i) To ensure that the site (sites 1 and 2) develop in a coordinated manner.

DEVELOPMENT CONTROLS

(a) Site 1 consists of Lot 21 DP 588810, No 2 Seven Hills Road, Lot 1 DP 619055, Nos 346 - 350 Windsor Road, Lot 18 DP 659904, No. 344 Windsor Road, and Lot 9 DP 28197, No. 27 Yattenden Crescent. Site 2 consists of Lots 2, 3 and 4 DP 216713, Nos 6 - 8 Seven Hills Road and Lot 22 DP 588810, No 4 Seven Hills Road and benefits from an existing right of way.

(b) Development on the site must demonstrate that in the development of either site, that Site 1 and 2 will be compatible in design and function, particularly with regard to the uses of the podium and vehicular and pedestrian access.

(c) Development either site must not restrict or adversely impact upon the ability of the other site to function or develop to its envisaged potential.

SUBMISSION REQUIREMENTS

- Any application for development of Site 1 or 2 shall clearly illustrate the relationship between the two sites.

6.4. DISTRIBUTION OF USES

OBJECTIVES

(i) To ensure that uses within the site will be complementary, function efficiently, minimise impacts on the adjoining properties and provide amenity and convenience to residents and visitors to the Town Centre.

(ii) To ensure that uses are well located within the site and contribute to an active plaza area and street frontage.

DEVELOPMENT CONTROLS

(a) The distribution of uses within the development shall be generally in accordance with Figure 12.

(b) Active frontages are to be provided within the plaza and arcade areas, and ground, first and second levels fronting Windsor and Seven Hills Roads.

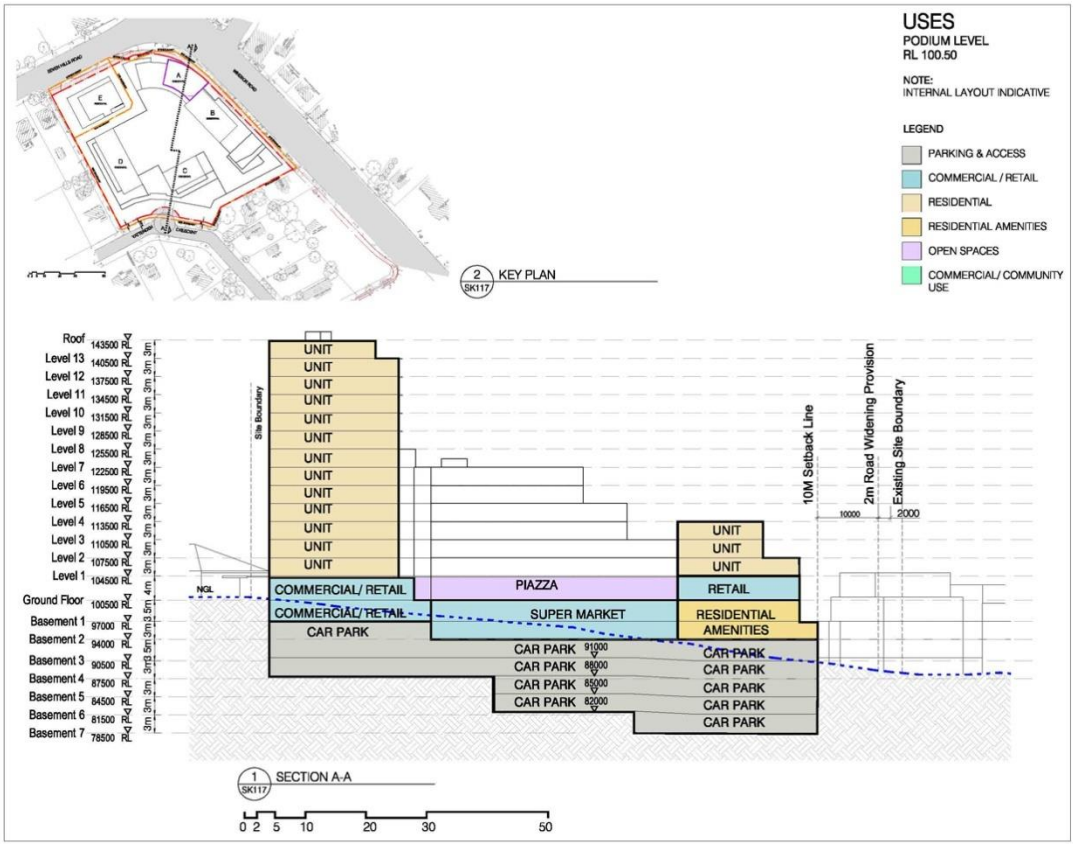

Figure 12 Proposed development land uses

(c) A variety of uses are to be incorporated into the site to encourage an active and vibrant pedestrian plaza.

(d) The supermarket shall be easily accessible from the plaza and basement parking areas, and designed so that it supports the activation and viability of the uses located within the plaza.

(e) Commercial and retail uses on site shall be easily accessible from the plaza and basement parking areas.

(f) The Yattenden Crescent frontage of the development shall be activated with residential uses and amenities and commercial / retail uses wherever possible to minimise the presentation of basement parking to the street.

Building Uses

Figure 12 shows the proposed building uses:

6.5. SETBACKS

OBJECTIVES

(i) To provide setbacks to Windsor Road and Seven Hills Road that indicates the commercial areas of the site.

(ii) To provide setbacks that minimise adverse impacts such as overshadowing and loss of privacy to adjacent residential development.

DEVELOPMENT CONTROLS

(a) Building setbacks shall be in accordance with the setbacks shown in Figures 13 - 22 (over page).

Note. All setbacks are subject to finalisation of the proposed road widening by the RMS that affects the frontage of the subject site.

6.6. BUILDING SEPARATION

OBJECTIVES

(i) To ensure privacy between buildings, particularly to living spaces and private open space.

(ii) To minimise the visual impact of apartment buildings by reducing their apparent bulk and scale and promoting suitable landscaping between buildings.

DEVELOPMENT CONTROLS

(a) The minimum separation between buildings shall comply with the requirements of SEPP65 and enable the provision of a central plaza as illustrated in Figures 13 to 22.

6.7. BUILDING DEPTH

OBJECTIVE

(i) To provide adequate amenity for future building occupants in terms of sun access and natural ventilation.

DEVELOPMENT CONTROLS

(a) Building depth shall be in accordance with setback dimensions shown on Figures 13 to 22.

6.8. BUILDING ARTICULATION

OBJECTIVES

(i) To produce buildings of high architectural quality that makes a positive contribution to the urban design of the Town Centre.

(ii) To ensure that building elements are integrated into the overall building form and façade design.

(iii) To ensure that buildings respond to environmental conditions such as noise, sun, breezes, privacy and views.

DEVELOPMENT CONTROLS

(a) Facades are to be designed with a minimum 500mm in depth of articulation measured either horizontally or vertically, to limit the expanse of flat surfaces.

(b) Columns, beams, floor slabs, balconies, window openings and fenestration, doors, balustrades, roof forms and parapets, should be used to modulate the façade with a high quality architectural resolution and use of materials and finishes.

(c) Facades are to be composed with an appropriate scale and proportion, which respond to building use and the desired character by:

- Expressing the internal layout of the building, for example, vertical bays or its structure;
- Articulating building entries with awnings, porticos, recesses, blade walls and projecting bays;
- Selecting balcony types which respond to the street context, building orientation and residential amenity. Cantilevered partially recessed, or wholly recessed will all create difference façade profiles;
- Using a variety of window types to express the various elements of new buildings; and
- Incorporating architectural features which give human scale to the design of the building at street level. These can include entrance porches, awnings, colonnades, pergolas and fences. Recessed balconies and deep windows may be used to create articulation and define shadows, thereby adding visual depth to the façade.

(d) Facade design is to reflect the orientation of the site using elements such as sun shading as environmental controls.

(e) Building services such as drainage pipes, lift towers, air conditioners, vents etc are to be integrated into the design of the building to minimise their prominence.

(f) A breezeway with extended ceiling height of 2-3 storeys shall be provided at the corner of Seven Hills Road and Windsor Road, aligned with Old Northern Road providing a direct line of sight into the plaza.

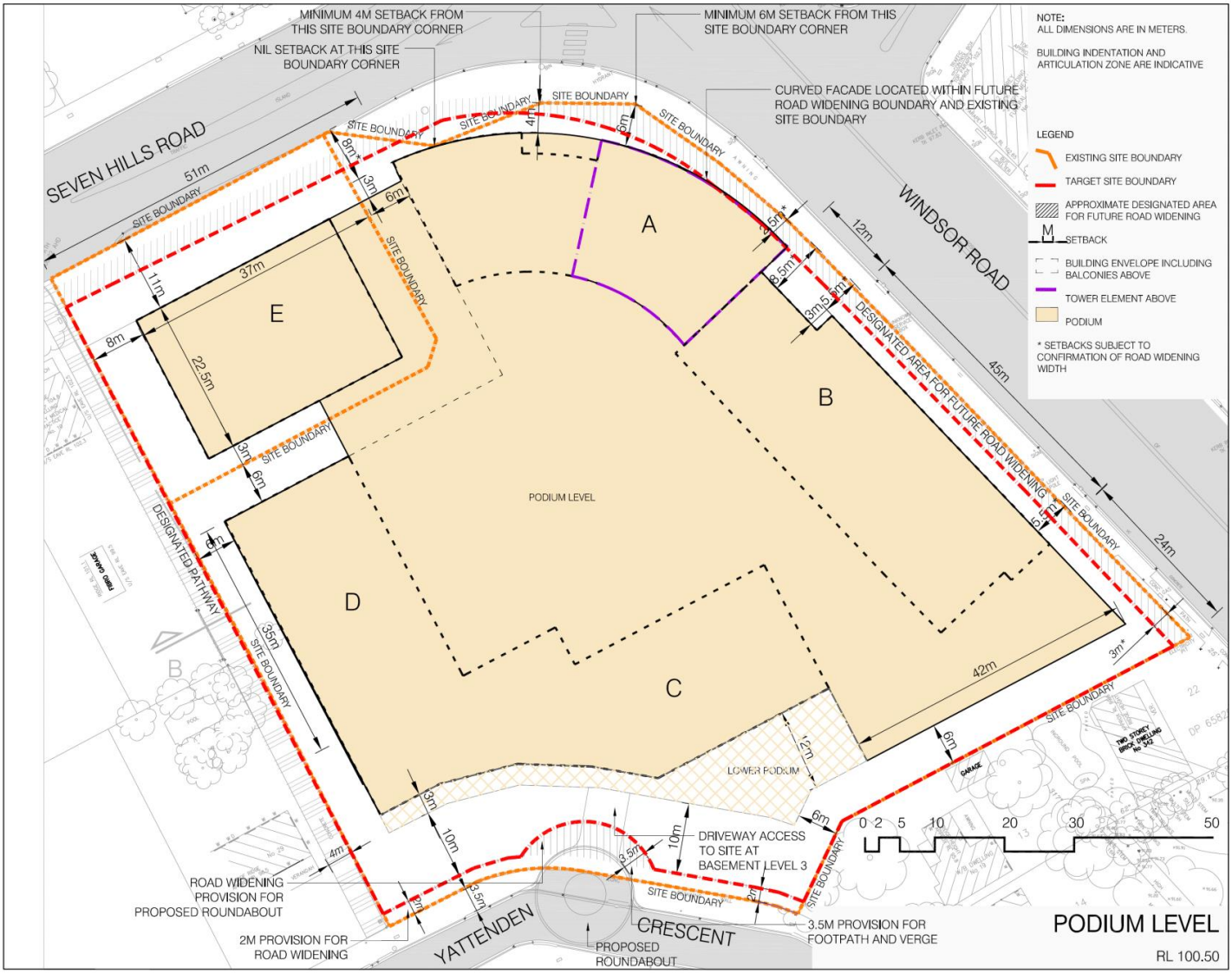

Figure 13 Podium level building setbacks

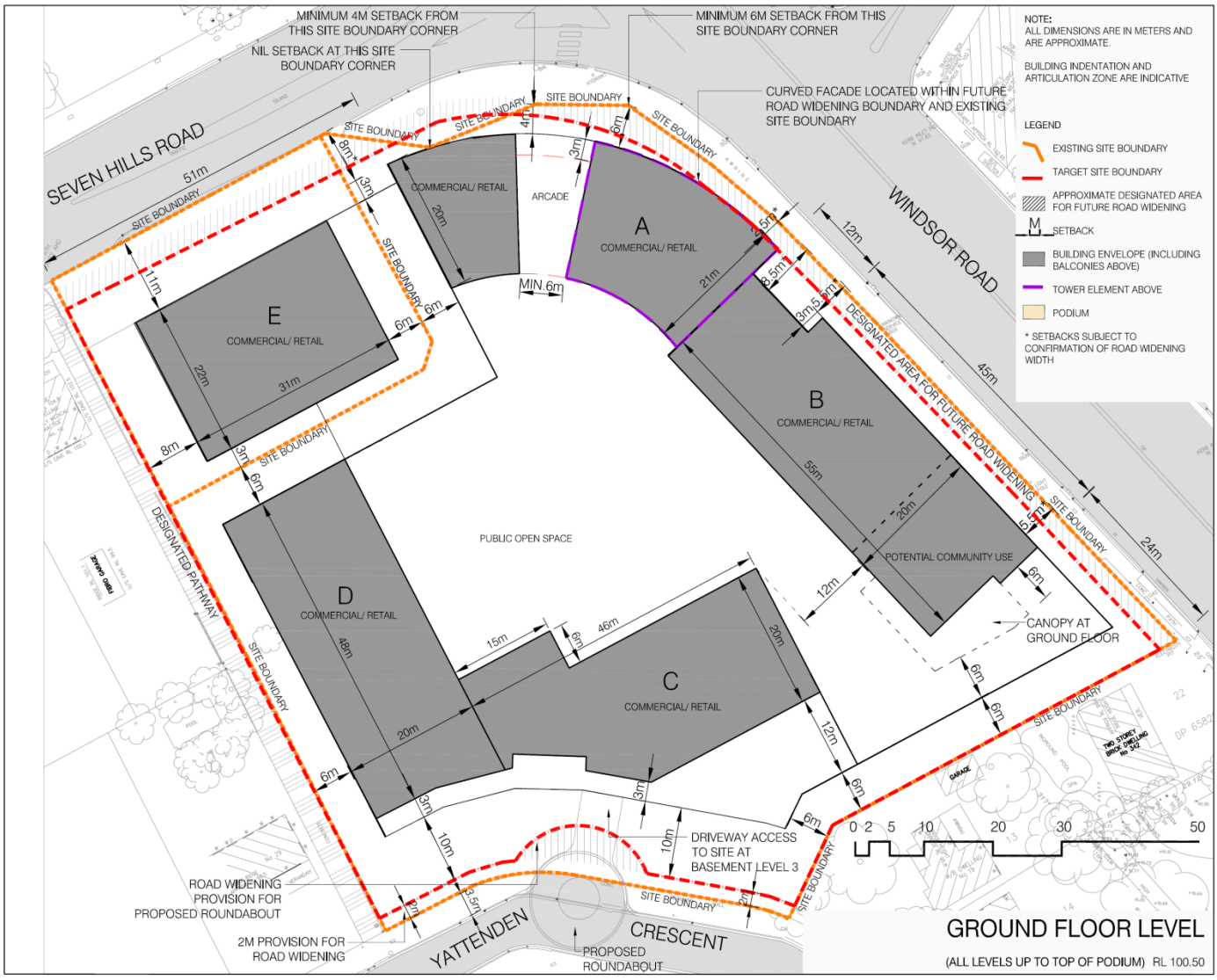

Figure 14 Ground floor setbacks

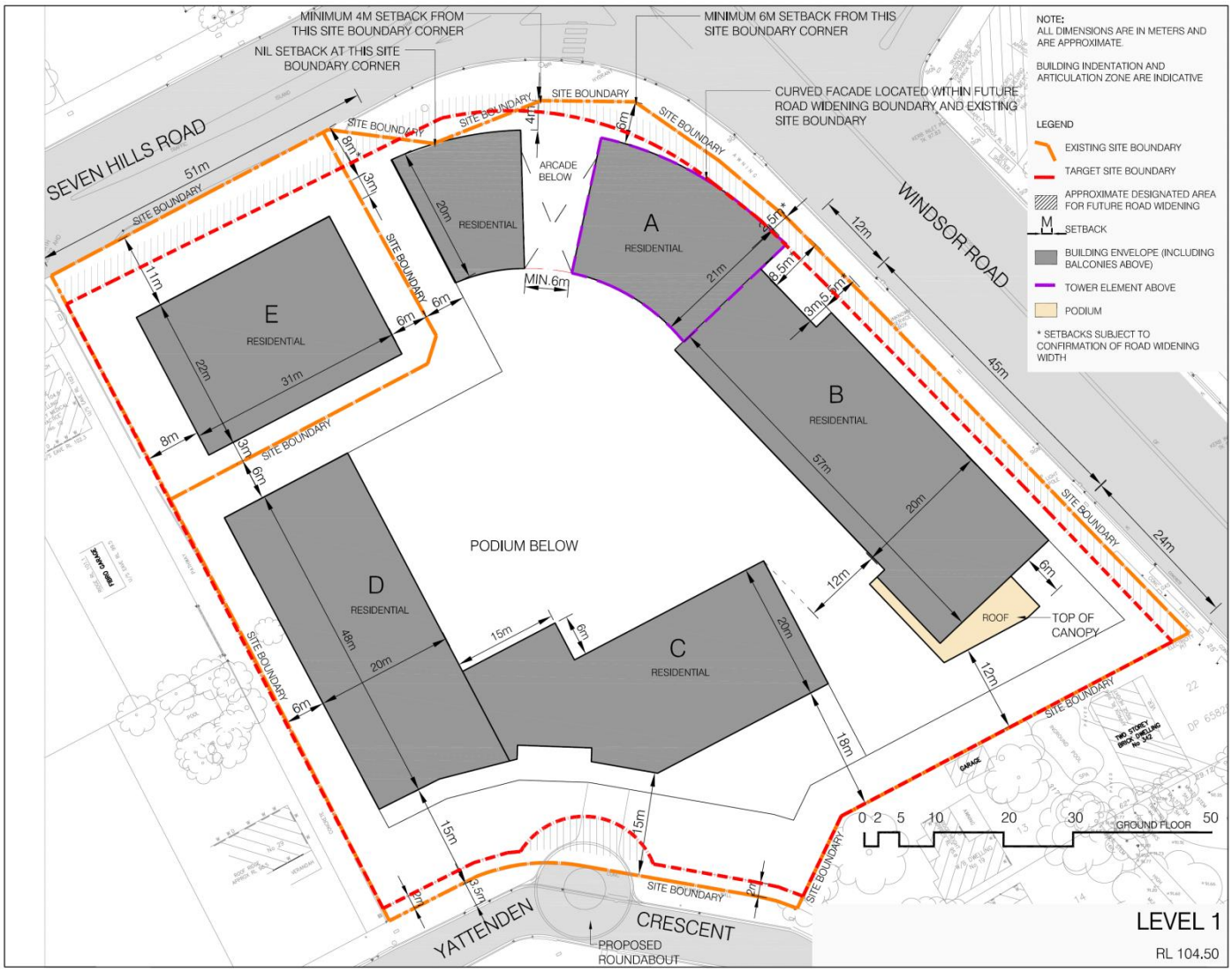

Figure 15 Level 1 setbacks

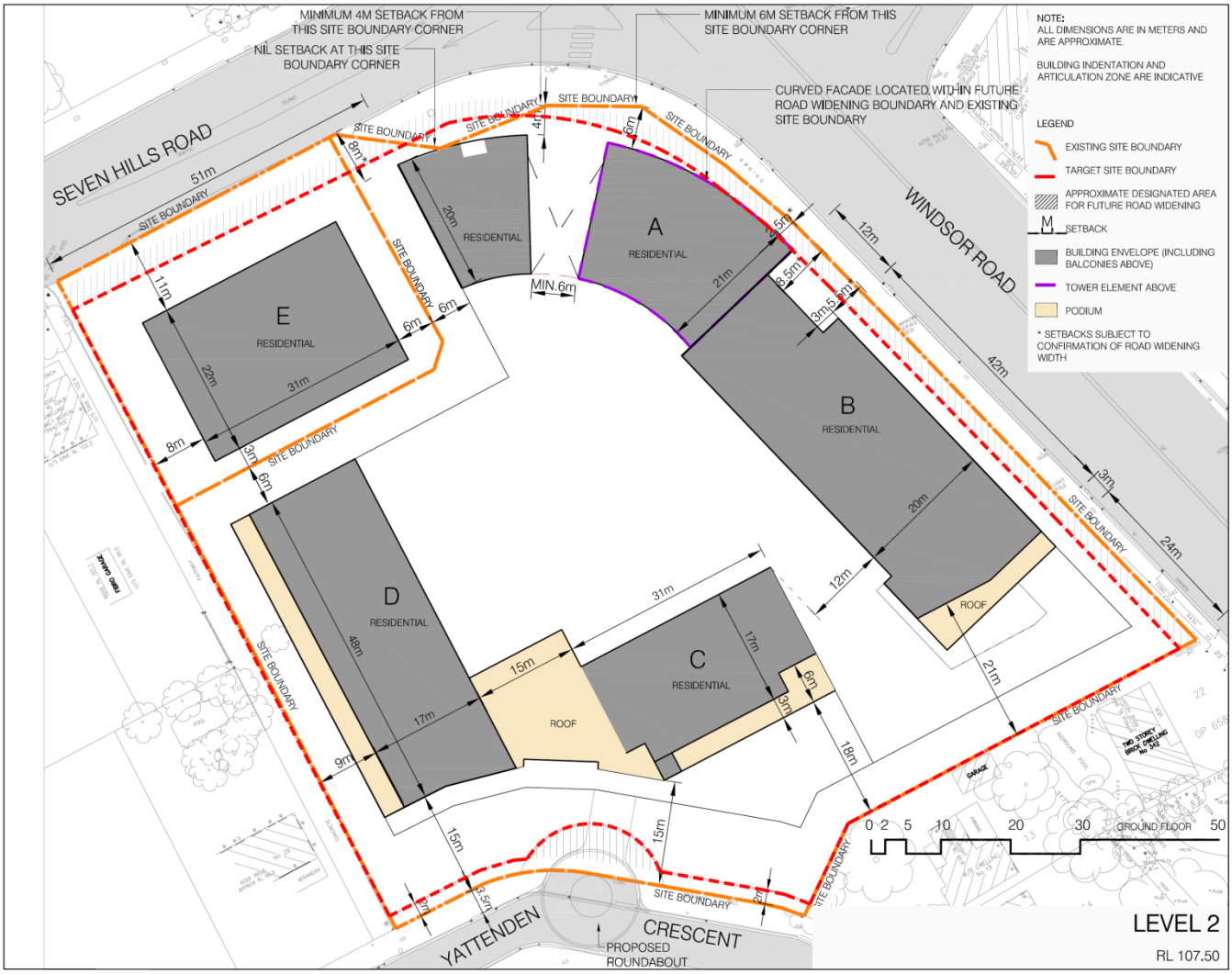

Figure 16 Level 2 setbacks

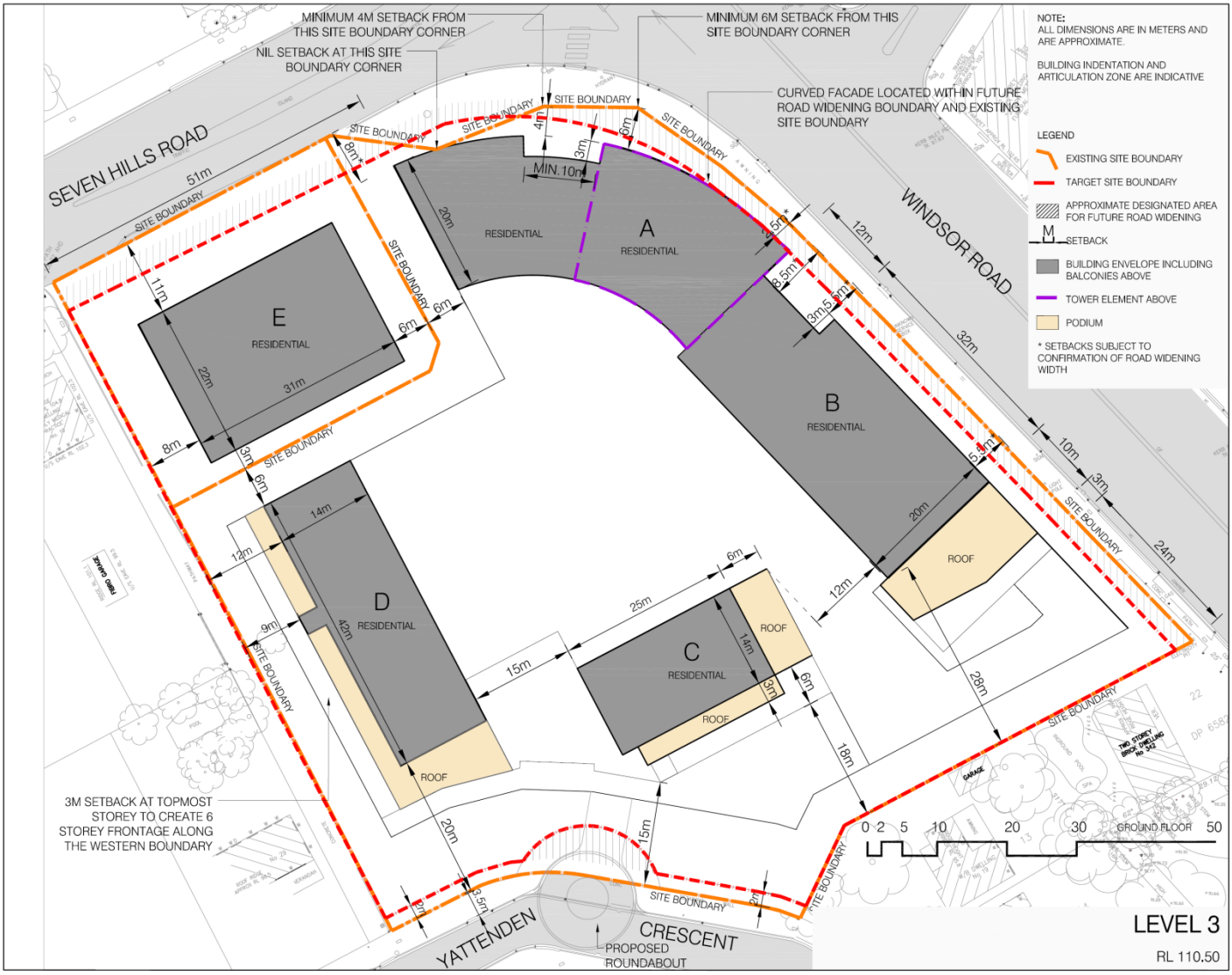

Figure 17 Level 3 setbacks

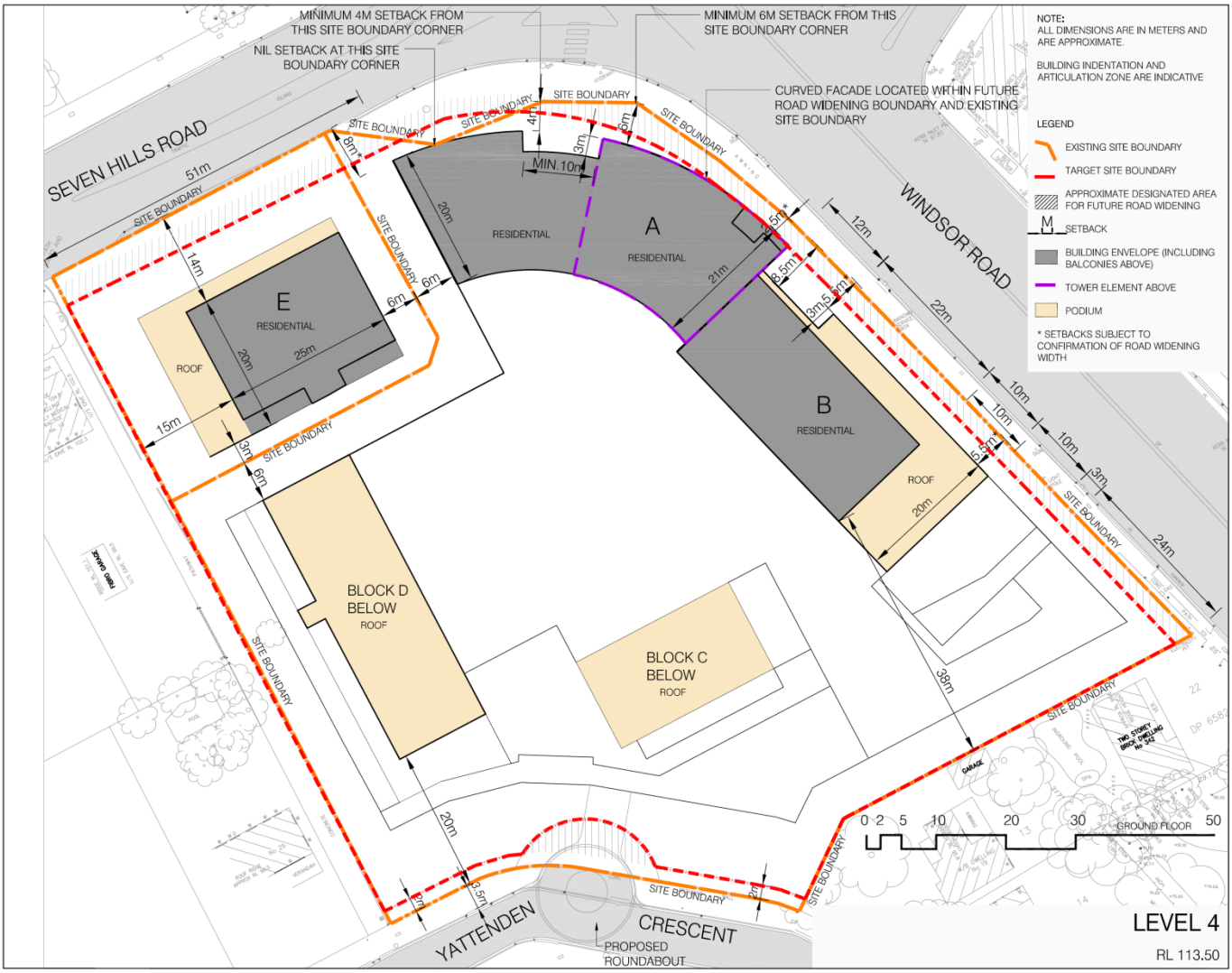

Figure 18 Level 4 setbacks

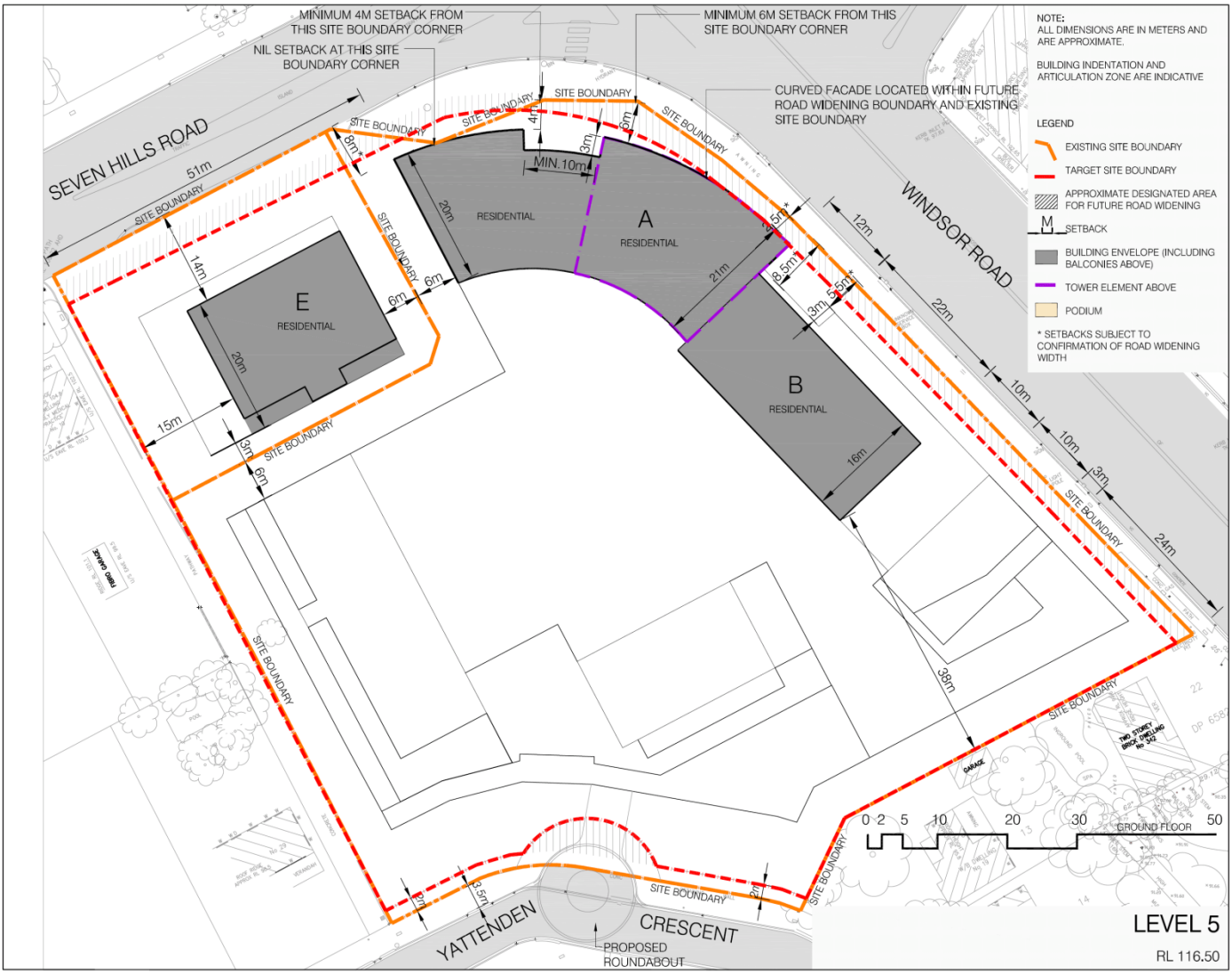

Figure 19 Level 5 setbacks

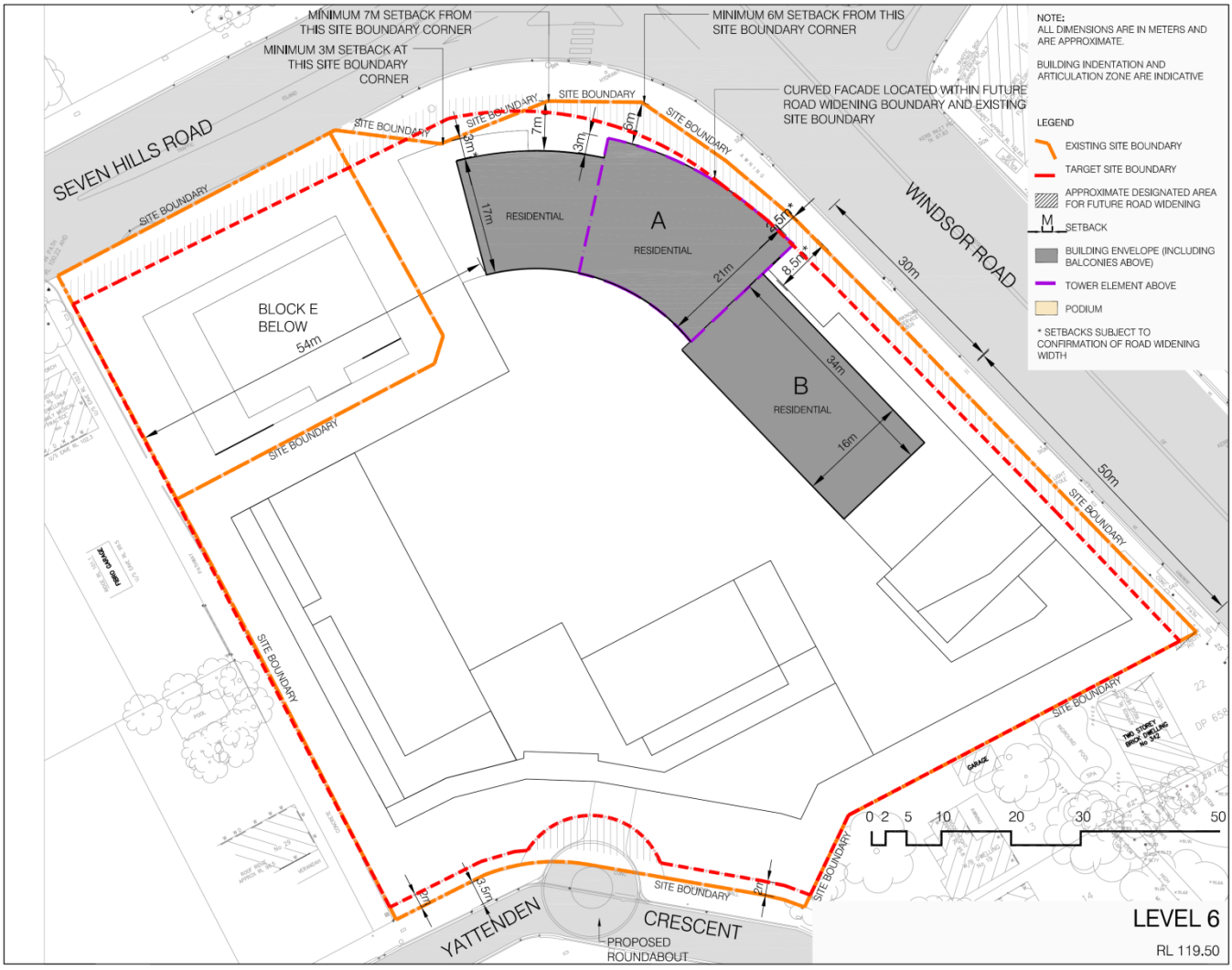

Figure 20 Level 6 setbacks

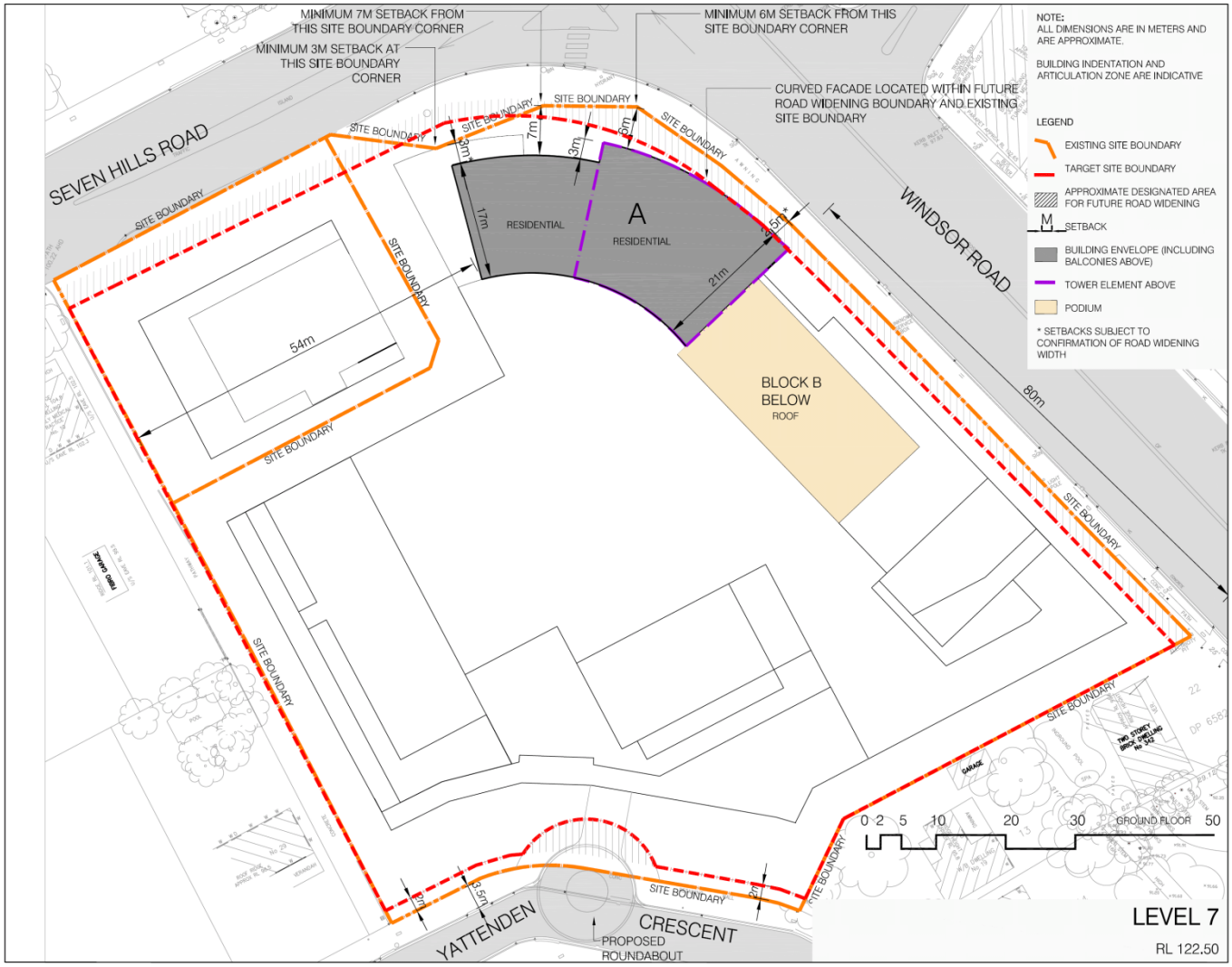

Figure 21 Level 7 tower setbacks

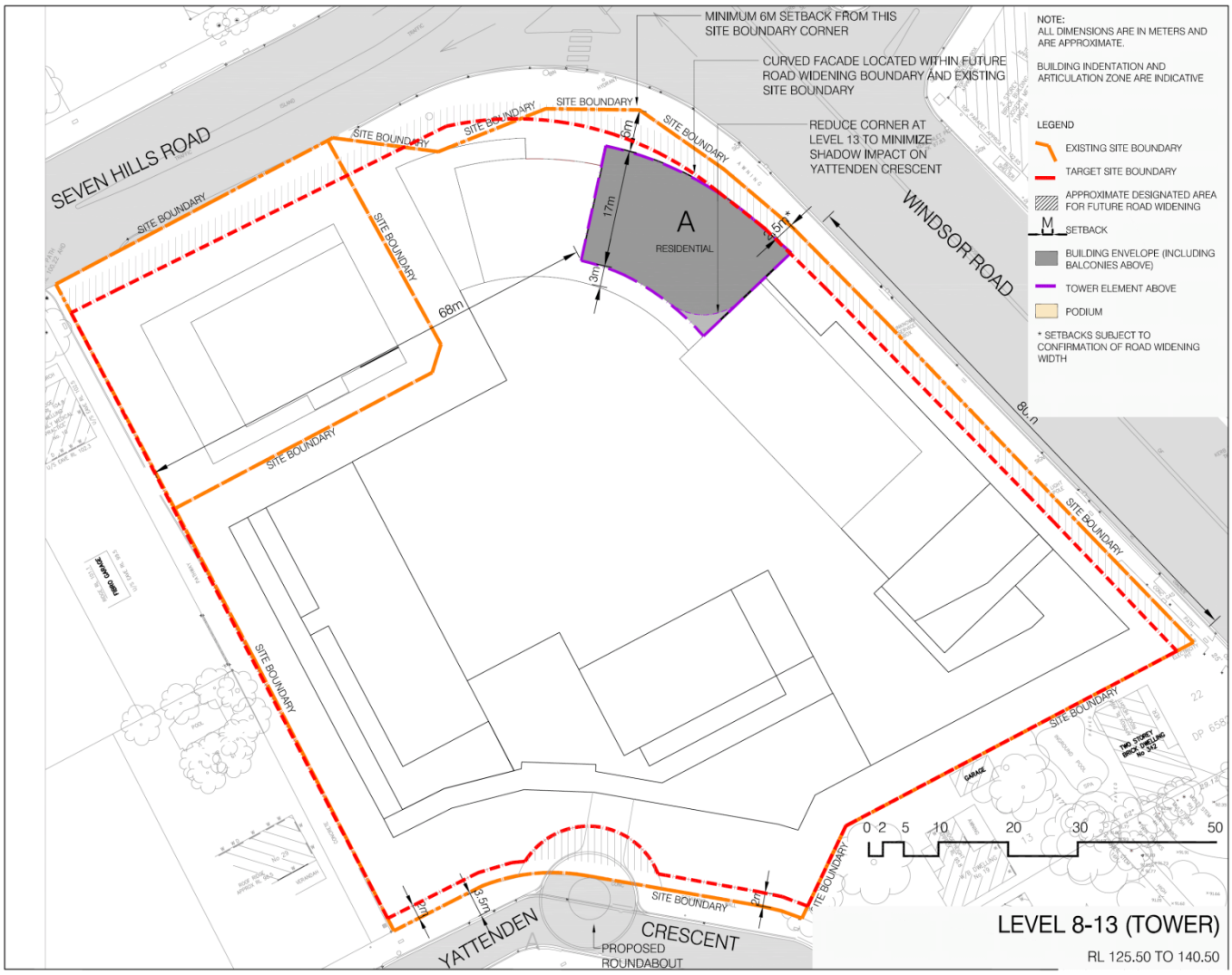

Figure 22 Level 8 tower setbacks

6.9. UNIT LAYOUT AND DESIGN

Refer to Part B Section 5 - Residential Flat Buildings.

6.10. PEDESTRIAN ACCESS

OBJECTIVES

(i) To improve the existing pedestrian link from the corner of Seven Hills and Windsor Road to Yattenden Crescent.

(ii) To facilitate interesting, safe and pleasant walking routes as identified by the Baulkham Hills Town Centre Masterplan.

(iii) To ensure that residents, including disabled persons, users of strollers and wheelchairs and people with bicycles, can enter the site and apartments with minimal effort.

DEVELOPMENT CONTROLS

(a) Pedestrian access to the site shall be provided in accordance with Figure 23 including the provision of a publicly accessible link from Yattenden Crescent to Windsor Road.

(b) Pedestrian entries to residential buildings shall be designed to be clearly differentiated from entries to public buildings.

(c) Pedestrian entries to residential buildings shall be designed to allow safe and secure access for residents.

(d) Convenient access from the podium to lower levels is to be provided by lift and a travelator with a light well.

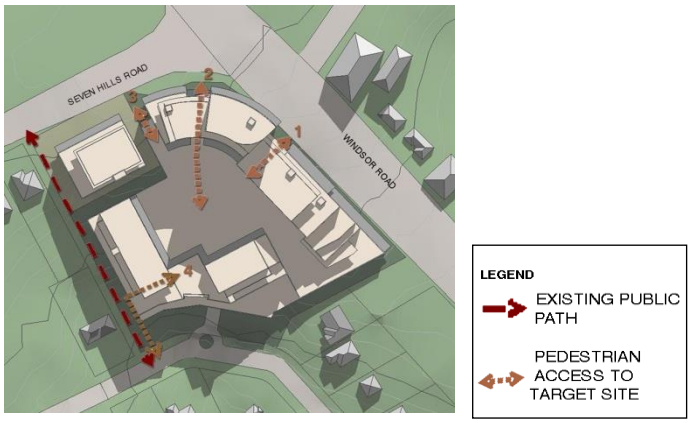

Figure 23 Pedestrian Movement Diagram

1. Arcade entry

2. Primary plaza entry

3. Secondary plaza entry

4. Pedestrian access from Yattenden Crescent (via publicly accessible pathway, lift and stairway)

Development Type	Maximum Parking Rate
1 bedroom unit	1 space per unit
2 bedroom unit (smaller sized 95-109m^2)	1.5 spaces per unit
2 bedroom unit (std size 110m^2 +)	2 spaces per unit
3 bedroom unit	2 spaces per unit
Visitor Parking	1 space per 5 units
Commercial	2.2 spaces per 100m^2 GLFA
Retail	4.5 spaces per 100m^2 GLFA

6.11. VEHICULAR ACCESS AND PARKING

OBJECTIVES

(i) To ensure that vehicular access can be gained to the site based on sound traffic management principles.

(ii) To ensure that vehicular movement is conducted in a safe and efficient manner.

(iii) To ensure that all car parking demands generated by the development are accommodated on the site.

DEVELOPMENT CONTROLS

(a) Parking is to be provided in the development at the following rates:

(b) Provide vehicular access points and traffic arrangements in accordance with the RMS requirements at the following locations:

- *Windsor Road Access and Deceleration Lane*

A deceleration lane along Windsor Road northbound is required fronting Windsor Road immediately south of the target site's southern boundary. This deceleration lane is to provide access to an 'entry only' general vehicle access

driveway which in turn would provide access to the basement parking areas.

A second driveway immediately north of the general vehicle driveway is to be provided for entry and exit access for service and commercial waste vehicles. Windsor Road is to provide the only service vehicle access for the site when it is amalgamated.

- *Seven Hills Road Access*

The existing left in / left out driveway is to be retained in Seven Hills Road with no right turn movements permitted out of the site. This driveway is to provide access to the basement parking areas of the target site.

- *Yattenden Crescent Access*

A new entry / exit driveway is to be provided in Yattenden Crescent. This access is to provide general, passenger and residential garbage vehicle access only to the basement parking areas.

- *Vehicle Access Generally*

Each vehicular entry to the site may allow both residential and non residential passenger vehicles.

All residential parking will be secured and segregated from non residential parking. Maximum use of any visitor spaces and the like should be considered with access to such spaces.

SUBMISSION REQUIREMENTS

- Site plan showing the number of car parking spaces, calculations and the dimensions of all parking spaces and driveway widths.
- Traffic study identifying the impact of the proposed development on arterial and local streets.

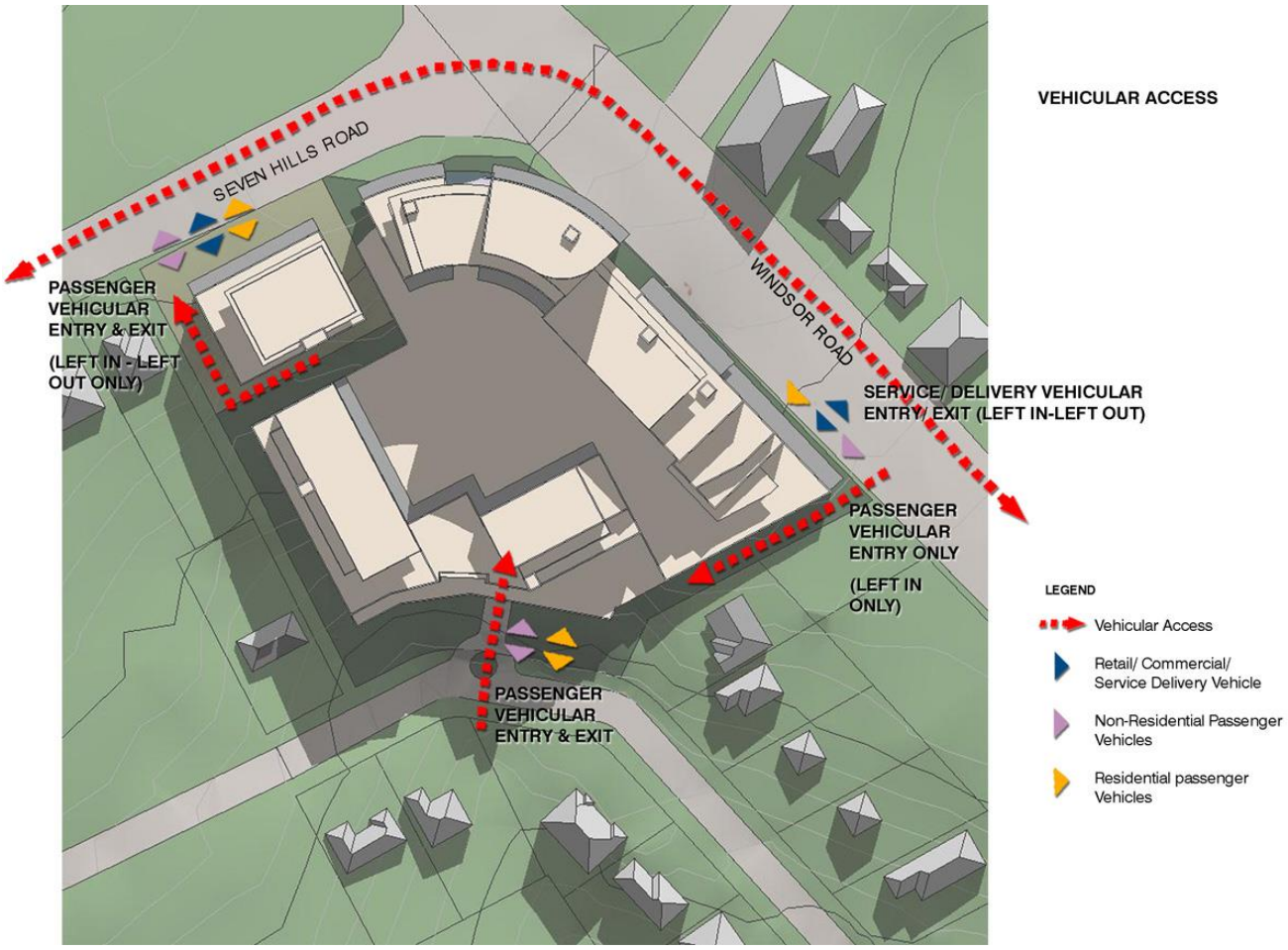

Figure 24 Vehicular access diagram

6.12. OPEN SPACE AND COMMUNAL RESIDENT FACILITIES

6.12.1. PUBLIC OPEN SPACE: PLAZA

OBJECTIVE

(i) To provide a publicly accessible plaza that provides opportunities for entertainment, passive recreation, retailing and dining.

DEVELOPMENT CONTROLS

(a) A publicly accessible plaza is to be provided as shown in Figure 25. The plaza shall be accessible from Seven Hills Road, Windsor Road and Yattenden Crescent.

(b) The plaza shall be provided with suitable landscaping and be architecturally designed to create a pleasant and active environment.

6.12.2. PRIVATE OPEN SPACE & COMMUNAL FACILITIES

OBJECTIVES

(i) To provide private open space for each unit that is an extension of the dwelling for the enjoyment of residents.

(ii) To provide residential communal outdoor space suitable for informal and passive recreation for all residents of the development.

(iii) To provide communal recreational facilities for the enjoyment of residents.

DEVELOPMENT CONTROLS

(a) Private open space shall be provided for all residential units. At least one balcony or terrace

space per unit shall have a minimum area of 10m^2 and a minimum depth of 2.5m.

(b) Residential communal outdoor open space shall be provided on rooftops generally in accordance with Figure 25. The total of such shall be equivalent to the rate of 2m^2 per dwelling.

(c) The design and location of common open space is to ensure privacy to nearby units and adjacent properties is maintained.

(d) The orientation and location of common open space should maximise solar access during winter and provide shade in summer.

(e) Common open space areas must be sufficient in size to enable them to be used for passive recreational activities, or be capable of growing substantial vegetation to be provided in roof gardens designed to provide for a range of appropriate recreational uses.

(f) All residential communal open spaces must be accessible by a residential lift.

(g) A gym that is accessible to all residents shall be provided on the site.

(h) The placement of any gym or swimming pool is to give priority to the minimisation of noise and disturbance to residents and neighbours.

SUBMISSION REQUIREMENTS

- Plans are to indicate those areas including dimensions of any part of the site to be used for private and common open space.

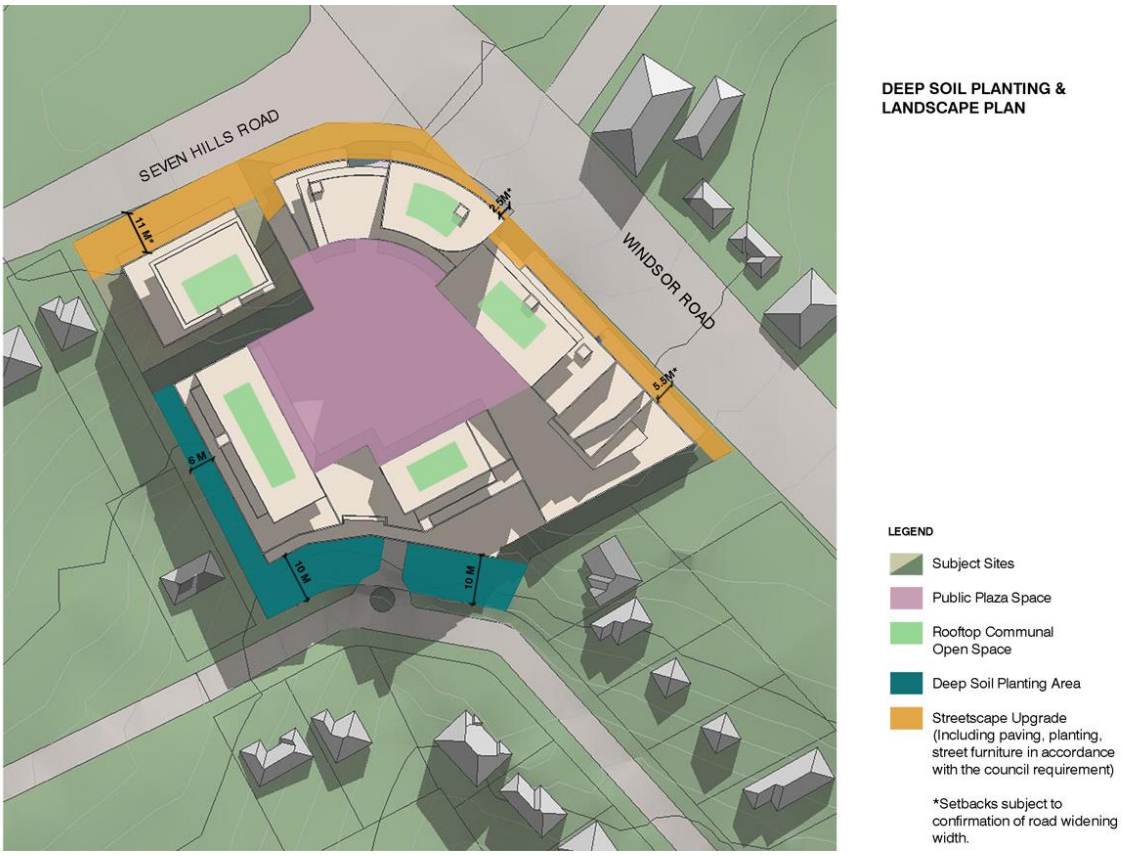

Figure 25 Deep soil planting and landscape plan

6.13. PUBLIC IMPROVEMENT ROADWORKS

OBJECTIVES

(i) To provide public improvement road works to contribute to the orderly development of the site and effectively manage additional traffic.

(ii) A condition of development consent may be imposed if it requires the carrying out of works (whether or not being works on land to which the application relates) relating to any matter referred to in Section 79C(1) applicable to the development the subject of the consent (Section 80A(1) (f) of EP&A Act 1979)

DEVELOPMENT CONTROLS

(a) The following public roadwork improvements shall be provided prior to the completion and occupation of the development: -

- Widening of the carriageway of Yattenden Crescent on the northern side (from the development site up to and including No. 45 Yattenden Crescent) by 1.7m.
- A roundabout at the entrance to the development site on Yattenden Crescent.
- A 1.2m wide concrete footpath from the development site to Arthur Street on the northern side of Yattenden Crescent and along the eastern side of Arthur Street to Seven Hills Road.
- An extension of the median island in Seven Hills Road to restrict the access to left-in-left out.

(b) The design of the development shall include the provision of a footprint for the pedestrian bridge at a location and appropriate elevation that meets the requirements of the RMS and provides convenient access for pedestrians travelling through the subject site, and from the street.

6.14 SOLAR ACCESS AND OVERSHADOWING

OBJECTIVES

(i) To orient the development in a way that best allows for appropriate solar access and shading, to ensure energy efficient outcomes in accordance with Council's ESD objective 5.

(ii) To maximise solar access to internal living areas and open space on the Target Site and to adjoining sites on 21 June.

(iii) To enforce the provisions of SEPP 65- Residential Flat Building Design Code in relation to all adjoining developments, including the requirements for daylight access.

(iv) To provide adequate shading to internal areas and private open space during summer.

DEVELOPMENT CONTROLS

(a) To ensure that daylight access is provided to all habitable rooms and encouraged in open spaces.

(b) Buildings must be designed to ensure that adjoining residential buildings (including those on Yattenden Crescent), and the major part of their landscape receive at least four hours of sunlight between 9am and 3pm on 21 June.

(c) Orient and design living areas within buildings to maximise access to direct sunlight where possible. Ideally, face the living areas up to 30 degrees east and 20 degrees west of true north.

(d) Shading devices shall be incorporated into the design of the development including eaves, verandahs. pergolas, awnings , plantings, blade walls and louvres (horizontal for north facing and vertical for east and west facing windows) .

(e) Rooftop residential communal open space areas must receive at least four hours of sunlight between 9am and 3 pm on 21 June.

(f) The plaza area is to receive at least three hours of sunlight between 11am and 3 pm on 21 June.

SUBMISSION REQUIREMENT

- Shadow diagrams indicating the effect of shadows at 9am, 12pm and 3pm on June 21 at a minimum.

6.15 PRIVACY – VISUAL AND ACOUSTIC

OBJECTIVES

(i) To site and design buildings to ensure visual privacy between dwellings and buildings in accordance with ESD objective 7.

(ii) To avoid overlooking of living spaces in dwellings and private open spaces.

(iii) To contain noise within dwellings and communal areas without unreasonable transmission to adjoining dwellings.

(iv) To ensure that building appearance and internal amenity of public plaza is not impacted by acoustic measures.

DEVELOPMENT CONTROLS

(a) Minimise direct overlooking of main internal living areas and private open space of dwellings both within and between buildings through building design, window locations and sizes, landscaping and screening devices.

(b) Consider the location of potential noise sources within the development such as common open space, the plaza, service areas, driveways and road frontages, and provide appropriate measures to protect acoustic privacy such as careful location of noise sensitive rooms (bedrooms, main living areas) and double glazed windows.

(c) Dwellings that adjoin arterial roads are to be designed to acceptable internal noise levels, based on AS 3671- Road Traffic Noise Intrusion Guidelines.

(d) Where acoustic treatment such as double glazing is proposed, mechanical ventilation shall be provided in accordance with the requirements of AS 1668.2: Mechanical Ventilation for Acceptable Indoor Air Quality.

(e) Air conditioning plant and equipment is to be located and screened so as to avoid a negative visual impact on the building appearance when viewed from public space including the on-site plaza. A centralised system is required.

(f) Conflicts between noise, outlook and views are to be resolved by using design measures such as double glazing, operable screens to balconies and privacy walls where they do not conflict with streetscape or other amenity requirements.

(g) Developments are to be designed to minimise noise transmission between apartments by locating similar uses next to each other and by using storage or circulation zones within an apartment to buffer noise from adjacent apartments, mechanical services or corridors and lobby areas and minimising the amount of party (shared) walls with other apartments.

(h) The buildings shall be designed to minimise noise from known noise sources at any time and as far as possible minimise noise entering open windows and doors.

SUBMISSION REQUIREMENT

An Acoustic Report / Noise Impact Statement is to be submitted with a development application for:

- Commercial / shop uses that require to operate in the evening or are located within the plaza; and residential uses.
- The report is to address and make recommendations with regard to noise and vibration generated by heavy vehicles and the adjoining area using Windsor and Seven Hills Roads. The recommendations of the report are to be incorporated into the design and construction of the development through appropriate noise shielding and attenuation techniques.
- The report shall also address AS3671 – Road Traffic Noise Intrusion Guidelines and AS 1668.2 – The use of mechanical ventilation and air conditioning in buildings – mechanical ventilation for acceptable indoor air quality.

6.16 SAFETY BY DESIGN

OBJECTIVES

(i) To ensure principles of CPTED are incorporated into the design of the development.

(ii) To ensure that the development provides a safe environment for residents, employees and visitors.

DEVELOPMENT CONTROLS

(a) The safety and security of the public domain/roads/open space network is enhanced by increased activity and surveillance provided by:

- Retail and commercial uses at ground level shall address the internal plaza area and Windsor and Seven Hills Roads to provide passive surveillance, encourage movement and increase safety;
- Kitchens and living rooms, frequently with balconies, shall be located at the front of the apartments, overlooking all public areas and communal courtyards to provide passive surveillance, increase safety and add amenity; and
- Provide sufficient lighting in public and community areas to enhance security and permeability.

SUBMISSION REQUIREMENT

- Applications for the redevelopment of the site shall address Council's "Designing Safer Communities: Safer by Design Guidelines".
- The application should particularly consider the safety, security, management, visibility and access to all through-site pedestrian links and the pedestrian plaza.

6.17 LANDSCAPING

OBJECTIVES

(i) To provide a satisfactory relationship between buildings, landscaping areas and adjoining developments.

(ii) To minimise stormwater runoff and provide the opportunity for on-site groundwater recharge in accordance with Council's ESD objective 3.

(iii) To ensure a high standard of environmental quality or apartment building developments and the overall visual amenity and character of the neighbourhood.

(iv) To ensure that landscaped areas can be efficiently maintained.

(v) To ensure that existing trees are given every opportunity to be retained on the site.

(vi) To ensure that vegetation removed as a part of the land development process is replaced by suitable indigenous species in accordance with Council's ESD objective 4.

(vii) To minimise bulk and scale of the development.

DEVELOPMENT CONTROLS

(a) Landscape design is to relate to the scale of the development and should consist of both softscape (trees, shrubs, groundcovers and grass) and hardscape elements.

(b) Vegetation adjacent to Yattenden Crescent is to be retained and supplemented.

(c) Landscaping shall be provided on the podium level.

(d) Deep soil planting shall be provided to the Yattenden Crescent frontage and along the western boundary of the site as shown on Figure 25.

(e) Street trees shall be provided in accordance with Council's guidelines.

(f) Indigenous species are to be used to maintain a strong natural theme for the neighbourhood, owing to their low maintenance characteristics, relative fast growth, aesthetic appeal and suitability to the natural habitat.

(g) Landscaping is to be provided in accordance with Part C Section 3 – Landscaping of this DCP.

(h) The landscape design shall take into consideration the safety of residents and permit natural surveillance of common areas and pathways.

SUBMISSION REQUIREMENTS

- Landscape Plan

6.18 WATER SENISITVE URBAN DESIGN

OBJECTIVES

(i) Ensure waterways and downstream drainage systems are protected during construction and post construction phases of development.

(ii) Ensure new developments do not place an increased flood risk to private and public property, and where possible, reduce the impacts of nuisance flooding to a level acceptable to the community.

(iii) Reduce potable water demand through water sensitive urban design initiatives.

DEVELOPMENT CONTROLS

(a) The best practice principles of WSUD are to be applied during the construction and post construction phases of development. Schemes that promote water capture, reuse initiatives and water quality management measures, as described in documents including, but not limited to the following:

- *On-site Stormwater Detention Handbook, Version 4 2005, UPRCT;*
- *Australian Runoff Quality, Engineers Australia, 2006;*
- *Water Sensitive Urban Design – Technical Guidelines for Western Sydney, May 2004, Prepared for UPRCT by URS.*

are required for all new commercial and residential development, or where the increase in impervious area over a site is greater than 150 square metres. Common open space and publicly accessible courtyard areas may be utilised for WSUD initiatives.

7. INFORMATION REQUIRED FOR A DEVELOPMENT APPLICATION

In preparing plans applicants must address submission requirements listed in section 6 of this Section of the DCP in addition to the following:

DEVELOPMENT APPLICATION

- Fees
- Consent of all owners

COMPETITION BRIEF FOR AN INVITED COMPETITION

STATEMENT OF ENVIRONMENTAL EFFECTS

SITE PLANS

SITE ANALYSIS

ARCHITECTURAL PLANS

- Internal layout & floor areas
- Elevations
- Illustrate relationship between Sites 1 & 2
- Delineate public and private spaces

HERITAGE IMPACT STATEMENT

TRAFFIC STUDY

SHADOW DIAGRAMS

MODEL

STREETSCAPE PERSPECTIVE

ACOUSTIC REPORT / NOISE IMPACT ASSESSMENT

LANDSCAPE PLAN

EARTHWORKS PLAN

ENGINEERING DRAINAGE PLANS

- Including on-site detention

ECONOMIC ANALYSIS

WASTE MANAGEMENT PLAN

SIGNAGE PLAN

Note. Refer to Part A – Introduction section 4.0 for general lodgement requirements and detailed requirements to be included in each of the above documentation.

The Hills Development Control Plan (DCP) 2012

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THE HILLS Sydney's Garden Shire





Part D Section 15
Crane Road Precinct

D15

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1. INTRODUCTION

This Section of The Hills Development Control Plan has been prepared to provide direction and control to the development of the Crane Road Precinct, located in the Castle Hill Major Centre.

This section of the DCP must be must be read in conjunction with Part A – Introduction of the DCP.

1.1 LAND TO WHICH THIS DCP APPLIES

The Plan applies to the area outlined in red, being the area bounded by Old Northern Road, Terminus Street and Crane Road as shown in Figure 1 (DP785110, DP701677, DP151502, DP821398 and a portion of the Old Northern Road road reserve) and referred to in this Section of the DCP as the *Crane Road Precinct*.

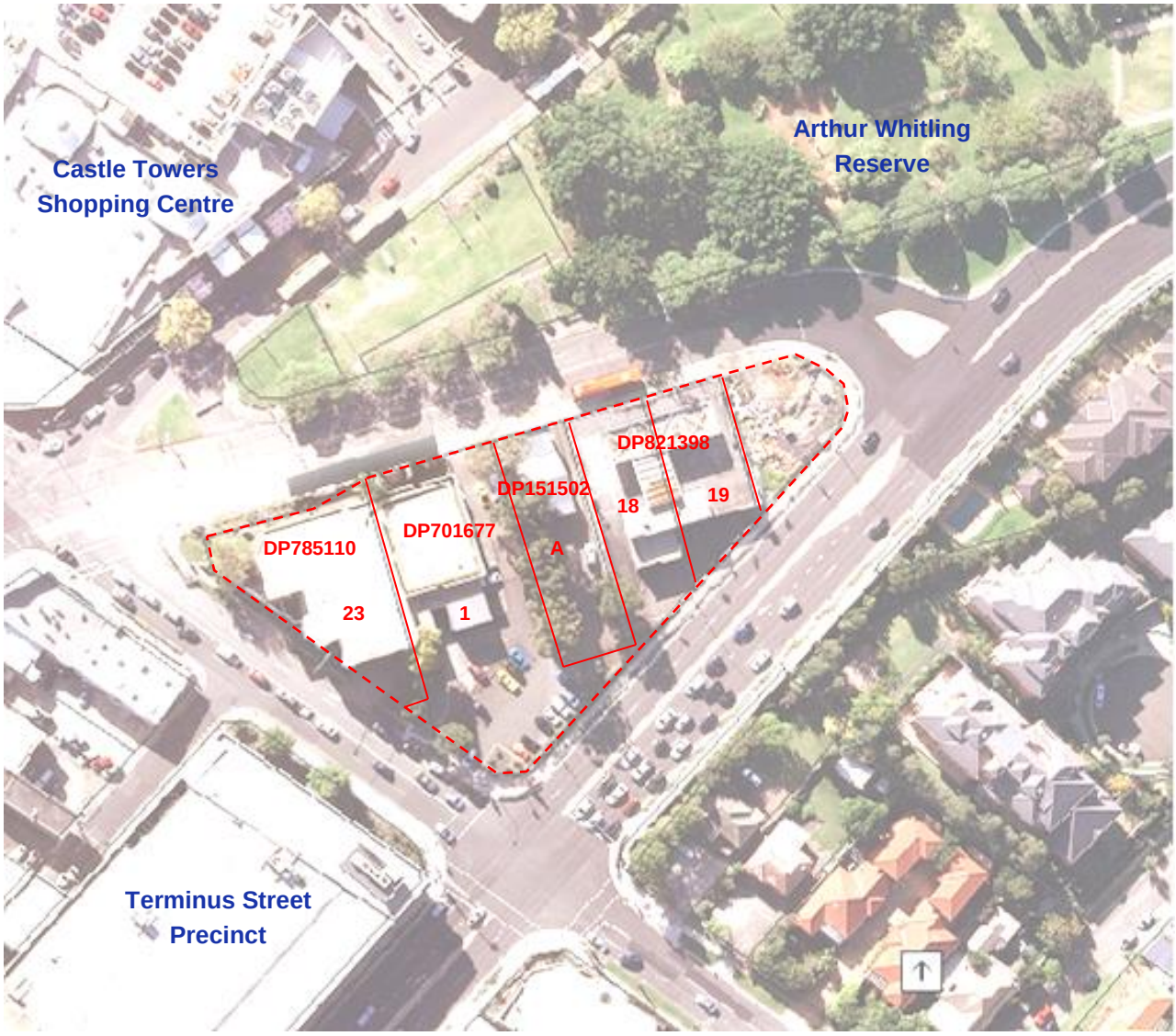

Figure 1 Crane Road Precinct

1.2 AIMS AND OBJECTIVES OF THIS SECTION OF THE DCP

The objectives of this Section of the DCP are:

(i) To provide a clear vision and desired future character for the revitalisation of the Crane Road Precinct;

(ii) To encourage innovative and high quality architectural outcomes that add to the character of the Precinct with particular emphasis on landmark features, landscape areas, public, semi-public and private spaces and pedestrian amenity;

(iii) To provide detailed design guidance for the creation of an iconic, high quality public domain, particularly regarding the interface of built structure with the proposed bus interchange on Old Northern Road (Figure 2);

(iv) To encourage all developments to address the public street frontage and provide an attractive, safe pedestrian environment;

(v) To ensure that development accommodates and supports the designated functions of the Precinct;

(vi) To encourage a broad mixture of uses, including commercial and retail, hospitality and residential uses;

(vii) To encourage transport-oriented development in close proximity to the future transport interchange;

(viii) To encourage an active interface with Alfred Whitling Park and encourage enjoyment of the park;

(ix) To encourage the establishment of a destination development that will integrate with established and future pedestrian circulation patterns;

(x) To ensure development will not detrimentally affect the environment of any adjoining land and that satisfactory measures are incorporated to ameliorate any impacts arising from the proposed development; and

(xi) To ensure that development incorporates the principles of Ecologically Sustainable Development (ESD).



Figure 2 Perspective view of potential built form – Crane Road Precinct

1.3 RELATIONSHIP WITH OTHER PLANS AND POLICIES

In addition to the policies, guidelines and documents specified in Part A – Introduction to the Hills Shire DCP, this Section is to be read in conjunction with other relevant Sections of the DCP, including:

- Part B Section 5 – Residential Flat Buildings
- Part B Section 6 - Business
- Part C Section 1 - Parking
- Part C Section 2 - Signage
- Part C Section 3 - Landscaping
- Part C Section 4 - Heritage

Where any provision of this Section of the DCP is inconsistent with any provision of any other Section of the DCP, the provisions of this Section of the DCP shall prevail to the extent of that inconsistency.

This Section should also be considered in relation to DCPs and plans applying to adjoining land including upgrades of Old Northern Road the Castle Hill Major Centre (see Figure 3) and the Terminus Street Precinct (see Figure 4).



Figure 3 Castle Hill Major Centre Precinct Master Plan

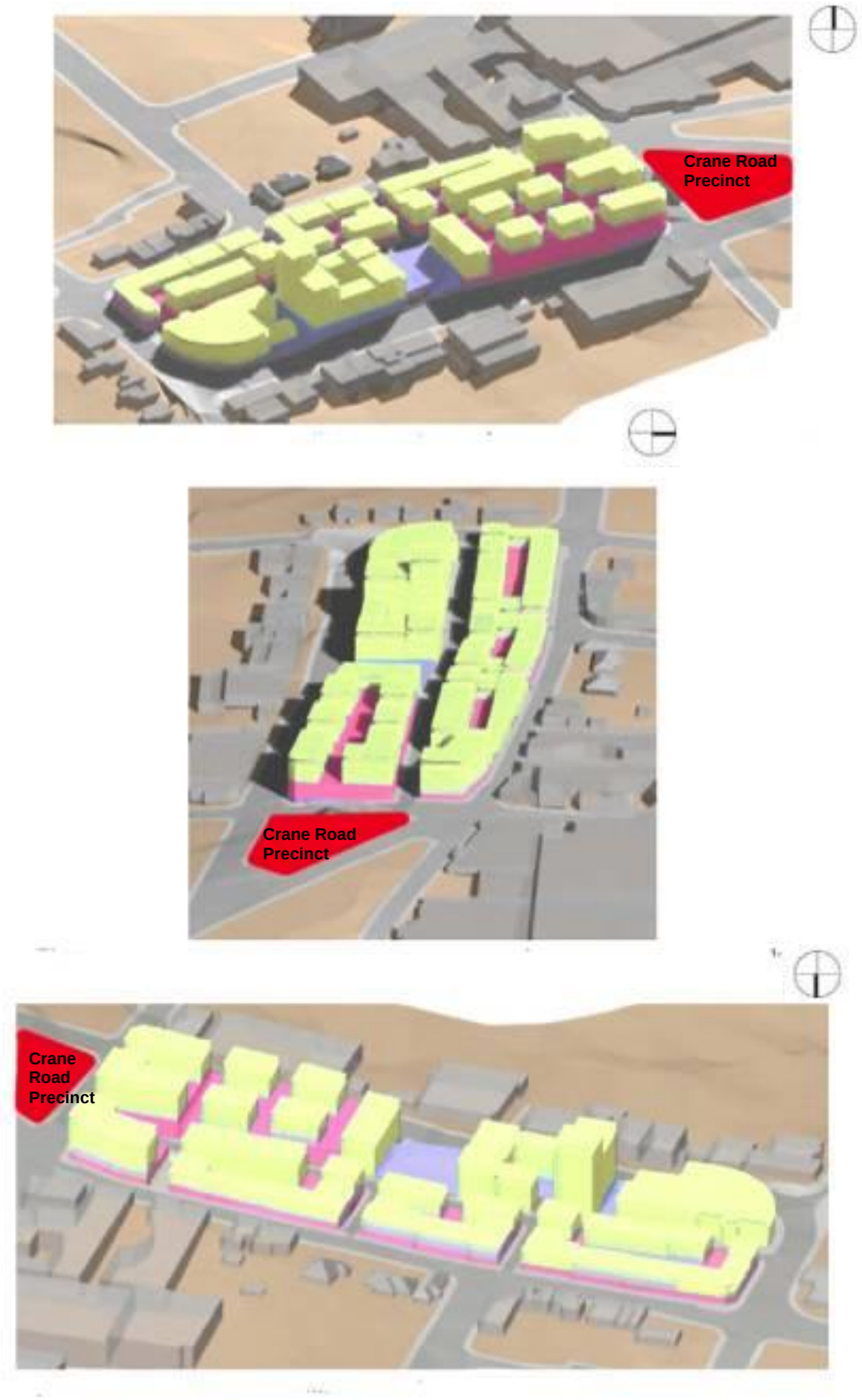

Figure 4 Terminus Street Precinct – potential built form outcomes (source: Part D Section 11 Terminus Street Precinct)

2. URBAN CONTEXT

2.1 CASTLE HILL MAJOR CENTRE

The Crane Road Precinct is situated at the northern gateway of the Castle Hill Major Centre ('The Centre'). The Department of Planning has identified Castle Hill as a Major Centre in the North West Sub Regional Strategy (December 2007).

Castle Hill is the major civic and retail facility within The Hills Shire Local Government Area and accordingly warrants high quality urban development, an efficient local road network and the provision of quality civic infrastructure.

The North West Rail Link (NWRL) will strengthen Castle Hill's role as a major centre by supporting growth in and around the centre.

Castle Hill consists of retail, commercial, residential and community uses. Over the past two decades the Centre has experienced rapid growth in the quantity of retail floor space, predominately as a result of the expansion of the existing Castle Towers Shopping Centre.

Continued growth of the Centre is anticipated in the future, including an expected growth in traffic volumes and a growth in demand for retail, commercial and Major Centre support functions including hospitality, medical services and serviced apartments.

There is a need for the Centre to meet the needs for an aging population by incorporating medical services and health services facilities, as well as other professional spaces within the areas close to the bus interchange.

Major developments anticipated in the Centre include the Castle Towers Stage 3 expansion, the bus interchange, the planned Bus Transit Way link, the Castle Hill Main Street Project , the completion of the Castle Hill Ring Road, the redevelopment of the Terminus Street Precinct including new civic square and the planned widening of Showground Road.

The Crane Road Precinct is adjacent to the proposed Bus Interchange and Arthur Whitling Park. It is a strategic site that will benefit the future development of the larger Castle Hill Major Centre.

As a gateway property, an opportunity exists to treat the site as a landmark development with a variety of mixed uses including food, beverage, retail entertainment, commercial, hospitality, medical services and residential uses.

As a relatively large site, the area may be developed in stages. Staging of any development should be undertaken in such a way that the pedestrian connection to the bus interchange is not unduly impacted.

2.2 CASTLE TOWERS SHOPPING CENTRE

The Crane Road Precinct's close proximity to Castle Towers Shopping Centre (Figure 5) and Castle Mall creates an opportunity for a mix of uses complementary to those nearby.



Figure 5 Piazza entrance to castle towers looking east along Old Northern Road

2.3 TERMINUS STREET PRECINCT

The redevelopment of the Terminus Street Precinct (Figure 6) is an opportunity for public domain improvements and complementary uses to be considered for the south eastern side of Old Northern Road.

The Crane Road Precinct is an integral neighbour to the Terminus Street Precinct and development

will be required to complement the civic uses being considered in this general area.



Figure 6 Terminus Street Precinct Master Plan

2.4 OPPORTUNITIES AND CONSTRAINTS

The outcomes of an opportunities and constraints analysis undertaken for the Crane Road Precinct are presented in this Section of the DCP. The objectives of this exercise are:

- To encourage a comprehensive approach to site planning, design and assessment of the development;
- To facilitate assessment of how future buildings relate to their immediate surroundings and one another;
- To facilitate development of a design that minimises the negative impacts on the amenity of adjoining development;
- To ensure that development is appropriate to the sites' capability and suitability for the development proposed; and
- To minimise impacts of the development on the environment with regard to the principles of Ecologically Sustainable Development (ESD).

The analysis also considers the Precinct's immediate surrounds. The following elements have been analysed:

- Landform
- Views
- Surrounding Development/ Infrastructure/Uses
- Traffic and Access
- Landscape and Vegetation
- Drainage

2.5 LANDFORM

The Crane Road Precinct is located east of the ridgeline that generally follows Old Northern Road. The land within the Precinct has a cross fall of approximately 9 metres from the highest point at Old Northern Road and Crane Road to the lowest point at the corner of Terminus Street and Crane Road. Figure 7 indicates the slope of the site along the Crane Road frontage. Figure 8 shows the topography of the site in its surrounding context.



Figure 7 Existing development along Crane Road showing sloping topography from Old Northern Road down toward Terminus Street

2.5.1 OPPORTUNITIES

The highest point of the Precinct provides a focal point for the Major Centre and the opportunity for a landmark development in close proximity to the site identified as the future bus interchange.

The Precinct falls away from the ridgeline toward Terminus Street. Heights can be concentrated at the higher portions of the site to improve legibility of the Centre and support the urban character

which is envisioned for Castle Hill as a major centre.

The unique triangular configuration of the site and the geometry of roads leading to the site create the opportunity to experience a dynamic built form from a variety of vantage points and dramatic angles.

The unique geometry, topography and convergence of pathways to the site should be utilised to its full potential in any architectural or other design consideration.

2.5.2 CONSTRAINTS

Vehicular access is constricted by the limited road frontage and the location of intersections. Vehicular access should be on Crane Road, with limited truck access to loading docks from Terminus Street.



Figure 8 Crane Road topography

2.6 VIEWS

Given the Precinct's location on the ridgeline above Old Northern Road, direct views towards the east, north-west and west are available, refer to Figure 9. The frontage to Arthur Whitling Park is also important to the amenity of the site.

2.6.1 OPPORTUNITIES

The Precinct occupies a visually dominant position within the Castle Hill Major Centre. The Precinct is suitable for a gateway/landmark building offering district views to the Blue Mountains to the west (Figure 9a) and Sydney city skyline views to the east.

Views and interaction with Castle Towers Shopping Centre and Arthur Whitling Park provides high amenity views from lower floors and encourages connectivity for pedestrians.

Castle Towers Shopping Centre is well orientated to the south westerly aspect from the Precinct (Figure 9b) and Arthur Whitling Park oriented to the north (Figure 9c).

2.6.2 CONSTRAINTS

The visual setting of the building on a major ridgeline and visible from other urban areas should be considered and its relative visual impact considered from a number of vantages including views from the north and east of the site.



Figure 9a Potential to capture Blue Mountains views on upper levels of development



Figure 9b Existing sightline from corner of Old Northern Road and Crane Road to the southwest towards Castle Towers

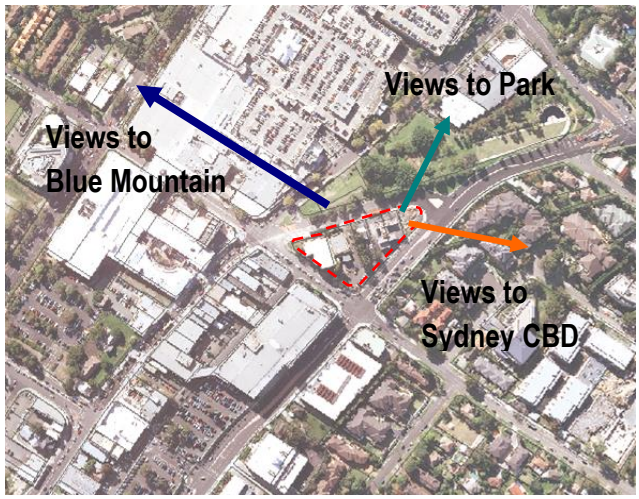

Figure 9 Views

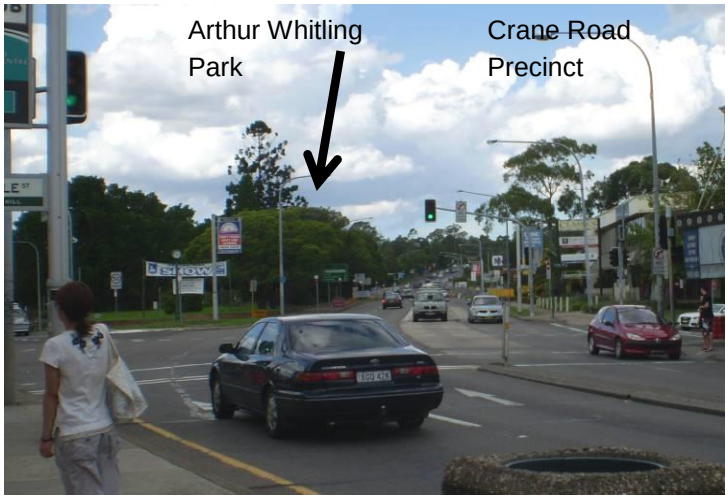

Figure 9c View from Castle Towers entrance to northeast showing existing interface between Crane Road Precinct and Arthur Whitling Park

2.7 SURROUNDING DEVELOPMENT, INFRASTRUCTURE AND USES

2.7.1 SURROUNDING LAND USE ZONES

The surrounding development consists primarily of commercial and retail uses and medium density residential to the east side to Terminus Street.

The land zoning surrounding the Castle Hill Major Centre permits residential flat buildings, and multi dwelling housing.

These residential zonings allow for the development of higher density housing and increased population adjacent to public transport and major activity areas.

2.7.2 EXISTING LAND USE ZONES WITHIN CRANE ROAD PRECINCT

Refer to The Hills Local Environmental Plan 2012.

2.7.3 CAPACITY FOR CHANGE IN CASTLE HILL

A number of proposed changes within the Castle Hill Major Centre will provide the necessary infrastructure and additional development to contribute to its Major Centre status and will provide an important catalyst for the future development of the precincts within the Centre.

2.7.4 OPPORTUNITIES

The Crane Road Precinct is in two ownerships and may proceed to be developed more quickly compared to developments that require a higher degree of lot consolidation and/ or public/ private partnerships to commence.

This Precinct has the benefit of three road frontages, with Crane Road providing major vehicular access to the site.

In this respect the Crane Road Precinct could function as a major catalyst for future development of the Centre.

The development of key infrastructure in the Centre has a catalysing effect on the viability of development of the Crane Road Precinct including:

- Castle Hill railway station with access via Arthur Whitling Park
- The bus interchange along the Crane Road Precinct's longest and primary frontage;
- The construction of the Eastern Ring Road along Terminus Street;
- The Castle Hill Main Street Project on Old Northern Road; and
- The proposed Stage 3 expansion of the Castle Towers Shopping Centre.

Thus the context of the site presents the following opportunities:

- To design a high quality public domain that links to Arthur Whitling Park, Castle Hill Railway station and the bus interchange;
- To provide a mixed use site with retail, food, entertainment, commercial, hospitality, health services facility as well hotel and/or residential uses;
- To provide through-site linkages from the Crane Road Precinct to surrounding residential areas, railway station and the bus interchange; and
- To promote orderly development of a gateway site that provides a suitable landmark development for Castle Hill.

2.7.5 CONSTRAINTS

- The residential zoning of the existing northern portion of the site is seen as a constraint for development.
- The building envelope will be designed to demonstrate a reasonable attainment of solar access to the nearby and adjacent properties.
- As the site is located on a ridge it will be necessary to demonstrate that the site and the design of proposed buildings will not create wind tunnel effects on the surrounding streets, and that suitable pedestrian amenity can be achieved on windy days.
- The land use located adjacent to the bus interchange must be compatible with the interchange to facilitate movement to and from the interchange and also to the Arthur Whitling Park.

2.8 TRAFFIC AND ACCESS

Road Network

The Crane Road Precinct is bounded by Old Northern Road on its northern boundary, Crane Road on its southwestern boundary and Terminus Street on its southeastern boundary.

Old Northern Road is a classified State arterial road providing a high capacity link between Baulkham Hills in the south and the Hawkesbury River in the north.

The completion of the Castle Hill Ring Road redirected the majority of traffic from the northern frontage of the site but heavy volumes of traffic are present along Terminus Street on the southern boundary of the site.

A portion of the Old Northern Road frontage adjacent to the site will be occupied by the proposed bus interchange.

Refer to Figure 11 which presents the road hierarchy within the Castle Hill Major Centre.

Public Transport

A regional public transport hub including Castle Hill railway station and the bus interchange is proposed at the northern end of the centre at the northern edge of the Crane Road Precinct.

The Eastern Ring Road provides access on Old Northern Road between Crane Road and Terminus Street and will eventually be closed to all through traffic except buses when this section is further developed into the proposed new bus interchange.



Figure 11 Road hierarchy

Old Northern Road is designated in blue. Terminus Street and Pennant Street are designated in purple as the ring roads around the Centre.

Pedestrian facilities

Pedestrian movement and amenity are to be enhanced throughout the Precinct through the provision of additional pedestrian linkages that consider changes in topography and active street frontages.

Council has prepared the Castle Hill Main Street Project (June 2008). Council's vision for the Castle Hill Centre is as follows:

'The CBD as the heart of the community should be a vibrant and energetic place with pedestrian activity, restaurants, cafes, retail services and places for people to enjoy and meet taking full advantage of existing and proposed public transport opportunities and significant heritage items'.

The creation of through pedestrian linkages in the Crane Road Precinct is consistent and important to the achievement of Council's vision for the Centre (Figure 12).

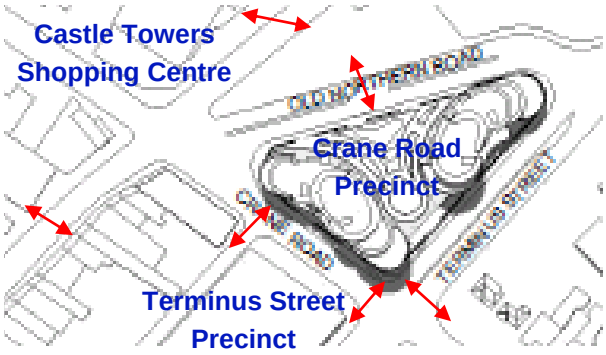

Figure 12 Key pedestrian linkages

2.8.1 OPPORTUNITIES

- Limited vehicle access will improve the pedestrian safety within the Precinct and create a more pedestrian friendly environment along Old Northern Road;
- Provide better traffic flow conditions for a the bus interchange;
- Limited vehicle access will provide better access facilities for other forms of transport (bicycles);
- Provide better pedestrian access and flow conditions to the future development of the Precinct;
- Improve pedestrian connectivity between Castle Towers, Terminus Street Precinct and Alfred Whitling Park;

- Residents and workers traveling to the Precinct will have greater access by public transport to a wide variety of facilities, reducing the need to use private vehicles; and
- The Castle Hill Main Street Project will create an opportunity for uses such as cafes.

2.8.2 CONSTRAINTS

- Vehicle access from Old Northern Road will not be provided as per the Eastern Ring Road plan; and
- The reclassification of Terminus Street and Old Northern Road will result to the loss of any potential on-street parking.

2.9 LANDSCAPE AND VEGETATION

The quality of the landscape in the Major Centre is currently limited. However, Arthur Whitling Park forms a green edge at the northern end of the Centre and Crane Road Precinct, and contains many mature trees.

Plans for improvement to the public domain of the Centre are contained in the Castle Hill Main Street Project (Environmental Partnership, 2007) and in plans for street tree planting as part of the Eastern Ring Road works, both of which will affect landscaping along the edges of the Crane Road Precinct.

The requirements for street tree planting along Old Northern Road will be primarily affected by the requirements for the bus interchange.

All planting plans must be coordinated with the landscape plans for the bus interchange.

2.9.1 OPPORTUNITIES

- Provide street tree planting in coordination with Council, and integrate both hard and soft planting with the Bus Interchange;
- Creation of attractive pedestrian arcades plazas atriums in the site which augment the public open spaces along Old Northern Road and Crane Road;
- Provide a focal public open space centrally located within the development and accessible from Old Northern Road, Crane Road and Terminus Street; and
- Prove a strong physical and visual connection to the adjoining bus interchange and Castle Hill Railway Station.

2.9.2 CONSTRAINTS

- Integration of landscape with existing utilities and services;
- Integration of tree plantings with awnings along street frontages; and
- Integration of landscaping with the functional needs of the proposed bus interchange.

2.10 DRAINAGE

The Crane Road Precinct is located within the Parramatta River catchment. The Precinct consists of predominantly hard surface area and generally drains towards the south-southeast.

2.10.1 OPPORTUNITIES

- Provision of roof gardens to contribute to the provision of quality open space and landscaping on structures; and
- Use of Water Sensitive Urban Design measures to promote water capture, re-use initiatives and water quality management measures.

2.10.2 CONSTRAINTS

Development of the site should not increase the volume and rate of offsite storm water drainage downstream.

3. URBAN DESIGN PRINCIPLES

3.1 DEVELOPMENT FRAMEWORK

The opportunities and constraints to development noted in Section 2 set out the development framework for the Crane Road Precinct.

Development that occurs within the Precinct must represent a high quality urban design solution and must demonstrate that adequate regard has been given to the following aspects of the design:

- Visual impact
- Urban structure
- Land use
- Access

- Landscape
- Security and Safety

The urban design principles that apply to how future development integrates with the whole centre are as follows.

3.1.1 VISUAL IMPACT

Future development must:

- Provide a strong visual character for the site as a gateway to the northern section of Castle Hill is consistent with the importance of Castle Hill as a major centre in the Sydney metropolitan area;
- Complement the scale of development anticipated in the redevelopment of the Terminus Street Precinct, and in particular relate to the heights and positions on the corner of Old Northern Road, Crane Road and the intended realignment of McDougall Lane;
- Provide high quality facades at the street level as well as the upper portions and principal facades which convey the civic quality intended for the Centre;
- Provide a dynamic skyline that will complement the ridge top setting of Castle Hill;
- Provide a suitable backdrop to the Arthur Whitling Park when viewed from the park and the areas near the park; and
- Consider opportunities for illumination to express the landmark quality of the site.

3.1.2 URBAN STRUCTURE

Future development must:

- Provide an appropriate transition in scale from the existing buildings surrounding the site; the key relationships in scale are to the northeast of the site towards Mercer Street and Rosa Crescent, towards the southeastern side of Terminus Street and the southwestern side of Crane Road;
- Assist in facilitating convenient pedestrian connections between the Castle Towers Shopping Centre, Arthur Whitling Park, across Old Northern Road towards the Terminus Street Precinct and the residential areas to the east of the site; and
- Provide commercial, retail and recreational places, including a high quality central plaza that have an important sense of place and encourage the civic and mixed use development of Castle Hill.

3.1.3 LAND USE

Future development must:

- Ensure a mix of uses that will provide social activity throughout the day and into the evening in a manner that is compatible with the role of Castle Hill as a major centre in the Sydney metropolitan area;
- Provide a transport oriented mixed use precinct to cater to residents, commuters and visitors;
- Provide development which is in keeping with and compatible to the surrounding residential and mixed use development to the east of the site; and
- Consider the needs for an aging population by incorporating medical services and consulting rooms as well as other professional spaces.

3.1.4 ACCESS

Future development must:

- Provide an opportunity for convenient and direct movements to and from the proposed Bus Interchange on the east and west sides of Old Northern Road;
- Respond to the realignment of McDougall Lane in the Terminus Street Precinct to allow safe and convenient access for pedestrians across Crane Road;
- Provide through-site links which allow safe and convenient movement for pedestrians from the lower portions of the site at the corner of Crane Road and Terminus Street to Old Northern Road;
- Minimise the impact of bus, private vehicular and service access on pedestrian amenity and the overall quality of the environment;
- Provide opportunities for casual surveillance, enhancing safety of pedestrians moving within the precinct; and
- Allow for the staged development of the overall precinct, by allowing Rights of Way benefiting future development for vehicular access from the Crane Road entry.

3.1.5 LANDSCAPE

Future development must:

- Provide a network of public spaces that deliver a high level of amenity and connectivity for pedestrians that may be used during the day and into the evening;
- Establish a vibrant centre for passive recreation and as a meeting place, involving a central public plaza incorporating high quality landscape treatments including water, soft landscape and paving that are complemented by the architecture of wide balconies, arcades, and plazas which are designed in order to encourage people to sit and relax;
- Provide upgrades to the footpaths and public domain areas linking with Alfred Whitling Park and the Bus Interchange;
- Integrate with the public domain standards planned for the public areas of Old Northern Road and Terminus Street;
- Provide high quality vibrant 'urban landscape' elements that are simple and robust in design to cater for large volumes of people and that are safe during both day and night; and
- Provide a high quality public domain based on sound Ecologically Sustainable Development and energy efficiency principles.

3.2 DESIGN PRINCIPLES

The design principles that underpin future development within the Precinct are to:

(i) Enhance the quality of the public domain in the area, particularly at the interface of the precinct, the bus interchange and incorporating the upgrade of Terminus Street, Old Northern Road and McDougall Lane;

(ii) Create a landmark structure at the northern gateway of Castle Hill that is characterised by design excellence and expression of unique architectural form;

(iii) Provides suitable articulation of facades to assist in providing a suitable scale to the building, and to reduce perceived building bulk;

(iv) Strengthen indoor and outdoor pedestrian circulation through the centre by creating direct access and pedestrian friendly areas that both compliment and draw people through Castle Towers Shopping Centre towards the Crane Road and Terminus Street Precincts;

(v) Provide retail and in particular dining and entertainment areas directed towards the park that allow the park to be enjoyed and contribute to passive surveillance of the park;

(vi) Create a consistent alignment of buildings through the Centre and use podiums to maintain a consistent street edge through the centre;

(vii) Provide weather protection to the public; and

(viii) Minimize overshadowing of private open spaces associated with residential development.



Figure 13 Potential built form (eastern elevation)



Figure 14 Potential built form (northern elevation)

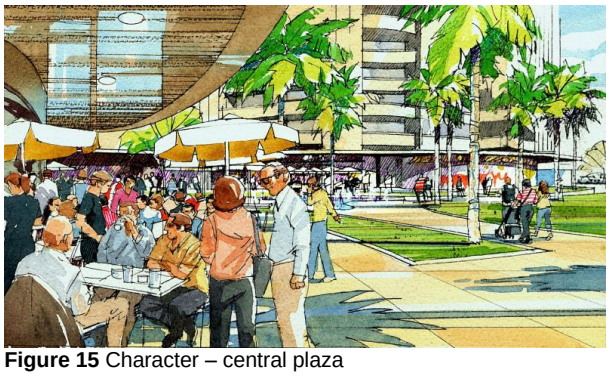

Figure 15 Character – central plaza

3.2.1 DESIGN EXCELLENCE

i. Refer to Clause 7.7 *Design excellence* of The Hills Local Environmental Plan 2012.

4. DEVELOPMENT CONTROLS

The objectives and development controls for development of the Crane Road Precinct are set out in this section of the DCP.

4.1 DESIRED FUTURE CHARACTER

4.1.1 EXISTING CHARACTER

The Crane Road Precinct contains a diverse range of uses with a poorly coordinated visual appearance.

The existing uses in this Precinct include a 3 storey commercial building, a tyre outlet, a tattoo parlor and a petrol service station.

The existing low scale buildings and uses in this precinct are not consistent with the desired future character of the gateway to the Centre. (Figures 16-17)



Figure 16 Existing Old Northern Road frontage viewed from the northeast.



Figure 17 Existing Crane Road frontage viewed from the south east.

4.1.2 FUTURE CHARACTER

Old Northern Road

The desired future character for Old Northern Road is to promote the civic, commercial, retail and residential frontages as high quality civic frontages.

The road frontages should be designed as an important entrance to Castle Hill Major Centre.

The uses should be compatible with Castle Hill railway station and the Bus Interchange as well as the adjacent Park, and have awnings that provide suitably scaled weather protection.

There should be an emphasis on pedestrian amenity and safety with suitable illumination while maintaining active street frontages.

Crane Road

The desired future character for Crane Road is to include:

- Retail and commercial ground level uses to provide activity and visual interest to the pedestrian; and
- Visual interest and a range of materials, colours and finishes in the upper level facades.

Terminus Street

The desired future character for Terminus Street is to include:

- A boulevard character with street trees on both sides and a wide footpath;

- A pedestrian friendly environment with easy access to Old Northern Road, bus interchange and park;
- Ground level commercial uses to provide activity and visual interest to the pedestrian; and
- Visual interest and a range of materials, colours and finishes in the upper level facades.

4.2 STREETSCAPE

OBJECTIVES

Buildings in the Crane Road Precinct are to:

(i) Reinforce the desired future character of the area they are located in being the Castle Hill Major Centre;

(ii) Have a distinctive landmark character denoted by quality architecture and publicly accessible interior space;

(iii) Provide a rich addition to the skyline of Castle Hill when viewed from the surrounding areas;

(iv) Provide richness of detail and architectural interest, particularly at visually prominent elements of the building, such as corners, entries, lower parts of the building and at the rooftop; and

(v) Utilise building materials that are lightweight, transparent and energy efficient.

DEVELOPMENT CONTROLS

(a) Embellishment of the public domain fronting the site is to be carried out as part of the development in accordance with the existing landscape plans for the bus interchange, Alfred Whitling Park, Terminus Street Precinct, Castle Hill Main Street Project Terminus Street upgrades and the Castle Hill Public Domain Plan. As well as all sections of this Plan addressing aspects of the streetscape, including:

- Building and Ceiling Heights;
- Land Uses;
- Building Articulation;
- Pedestrian Access and Linkages;
- Public Domain;
- Landscaping;
- Active Street Frontages; and
- Awnings.

(b) Allowance is to be made for the adjustment of the Old Northern Road property boundary as per Section 4.6 Building Alignments of this Plan, to accommodate road widening and access to services associated with the construction of the bus interchange.

SUBMISSION REQUIREMENTS

All development applications are to show elevations from all street frontages and schedule of colours and finishes.

4.3 BUILDING AND CEILING HEIGHTS

OBJECTIVES

(i) To create a strong gateway element at the northeastern entrance to Castle Hill Major Centre and a major centre within the Sydney region;

(ii) To emphasise the corner of Old Northern Road and Crane Road as a major street intersection in the Castle Hill Centre, as having close proximity to the proposed bus interchange and as an entry point to the Centre;

(iii) To create a point of architectural interest within the Centre which is a creative expression of individual form but which complements the overall character and objectives of Castle Hill;

(iv) To visually reinforce the primary frontage of the Precinct along Old Northern Road;

(v) To minimise overshadowing of surrounding development whilst recognising that buildings in the Precinct will partially overshadow portions of Crane Road and Terminus Street at noon in midwinter;

(vi) To create good amenity in buildings in terms of natural light penetration towards the centre of the building and natural ventilation with sufficiently high ceilings; and

(vii) To create a minimum ceiling height which allows for a flexible use where internal spaces can be easily transitioned to new and appropriate uses in the future.

DEVELOPMENT CONTROLS

(a) Provide minimum 4.5 m ceiling heights at ground (Level 1) and first floor (Level 2) in all buildings to allow flexibility in internal uses.

4.3.3 SUBMISSION REQUIREMENTS

All development applications are to indicate floor to ceiling heights dimensions for each floor including ground levels and roof levels.

4.4 FLOOR SPACE RATIO

OBJECTIVES

(i) To provide for a level of floor space that is appropriate development to the built form and guidelines in this Plan;

(ii) To ensure that proposals for new buildings are assessed with due regard to urban design and built form controls;

(iii) To develop a viable development for the site that meets economic outcomes and achieves the social imperatives for the community, architectural excellence, and environmental outcomes;

(iv) To achieve a landmark building form; and

(v) To achieve a suitable building height compatible with the future role of Castle Hill and a major centre in the Sydney metropolitan area.

DEVELOPMENT CONTROLS

(a) Refer to Clause 4.4 *Floor space ratio* of The Hills Local Environmental Plan 2012.

SUBMISSION REQUIREMENTS

Applications shall be supplemented by suitable economic assessments, visual assessments, solar assessments, and traffic impact assessments that demonstrate the suitability of the FSR nominated.

4.5 LAND USES

OBJECTIVES

(i) To promote pedestrian movement and a high level of pedestrian amenity throughout the Crane Road Precinct, with active street and bus interchange frontages at ground level;

(ii) To create active, pedestrian friendly uses within public and semi-private access ways through the precinct;

(iii) To allow for mixed uses, including medical support, hospitality and commercial uses in buildings in the Precinct;

(iv) Provide residential uses in the Centre close to the existing retail facilities and commercial spaces; and

(v) Facilitate staged development to allow the development to be staged in the precinct.

DEVELOPMENT CONTROLS

(a) Provide active street/public open space frontages (such as retail, cafes or restaurants) at ground floor level.

(b) Provide minimum 4.5m ceiling heights at ground (Level 1) and first floor (Level 2) in all buildings to allow flexibility of internal uses.

4.6 BUILDING ALIGNMENTS

OBJECTIVES

(i) To improve the quality of the public domain and retailing opportunities for commercial tenants;

(ii) To allow ample space along bus interchange street frontage;

(iii) To affect proper readjustment of property boundaries in accordance with road widening and bus interchange construction; and

(iv) To achieve a dramatic and iconic form where the architectural profile of the building controls permit a certain level of design freedom; but compliance with the Building Code of Australia and consideration of the environmental effects of building profile will need to be duly considered by the proponent and Council.

DEVELOPMENT CONTROLS

(a) Buildings to have street frontages built predominantly to the street alignment.

(b) Council must be satisfied with boundary adjustments to the Old Northern Road

frontage to facilitate access to services and accommodate the bus interchange.

(c) Council must be satisfied with the upper levels setbacks of the building, following review of the solar effects, building separation distances and visual merits of the application.

(d) Setbacks for upper levels should alleviate downdrafts from high building facades. Wind tunnel testing must demonstrate that wind effects at pedestrian level are suitable for pedestrian comfort.

SUBMISSION REQUIREMENTS

- All development applications are to indicate property boundary adjustments in accordance with the Terminus Street upgrade and bus interchange report.

4.7 BUILDING SEPARATION

OBJECTIVES

(i) To ensure privacy between buildings, including windows in commercial office buildings and particularly for living spaces and private open spaces in residential buildings;

(ii) To provide appropriate separation and landscaping between buildings; and

(iii) To promote articulation of the facades to achieve suitable scale of the buildings.

DEVELOPMENT CONTROL

(a) The minimum separation between windows or balconies in commercial buildings and other windows or balconies in commercial buildings is to be 12 m. Variances from these distances may be acceptable where it can be demonstrated that visual privacy and acoustic privacy has been addressed by other means including screening, awnings, or other physical devices.

4.8. BUILDING ARTICULATION AND DESIGN

OBJECTIVES

(i) To create richness of detail and architectural interest, especially at visually prominent parts of buildings such as at street level areas lower façade areas and parapets;

(ii) To maintain a pedestrian scale in the articulation and detailing of the lower levels of the building;

(iii) To emphasise building entries, corners and other prominent locations in the Castle Hill Centre;

(iv) To make Alfred Whitling Park a major focus for public life in Castle Hill;

(v) Coordinate with the siting of the bus interchange to encourage an effective transit orientated development; and

(vi) To develop buildings that address Old Northern Road that will demonstrate design excellence.

DEVELOPMENT CONTROLS

(a) Define the building envelope as to the overall proportion of the building, using lighter materials and colours.

(b) The facades addressing the bus interchange are to contain:

- Active frontages at ground level for the full length of the façade facing the park;
- Generous and continuous pedestrian shelter in the form of colonnades or awnings at ground level or ground level and first floor level;
- High quality facades;
- A balance between window openings and solid wall of approximately 40% window to 60% wall;
- A balance between horizontal and vertical proportions in the composition of the facades; and
- A roof design that creates a distinctive top to the building.

(c) The facades addressing the park are not to contain:

- Car park entries, fire stair exits or blank facades at ground level;
- Concrete block, white or light coloured brickwork or painted brick or block work; and
- Primarily blank walls or primarily glazed walls for the entire façade.

(d) Articulate building entries, corners and other prominent locations with awnings, porticos and recesses.

(e) Locate building entries to relate to the street and to be a clearly identifiable element of the building in the street.

(f) Locate primary building entry at the bus interchange and cross walk along Old Northern Road with a prominent and clearly identifiable architectural element.

(g) Select balcony types that respond to the street context, building orientation and residential amenity.

(h) Design balconies so that they are recessed behind the building façade.

(i) Provide balconies along park interface frontage for café seating overlooking park and above bus interchange.

(j) Integrate service elements such as lift over runs, service plants, vent stacks, telecommunications infrastructures, gutters and down pipes into the overall design of the roof.

SUBMISSION REQUIREMENTS

- All development applications are to show elevations from all street frontages and a schedule of colours and finishes.

4.9 SAFETY AND SECURITY

OBJECTIVES

(i) To ensure that the centre is safe and secure for residents and visitors by incorporating crime prevention through environmental design.

DEVELOPMENT CONTROLS

(a) All development shall be designed to ensure the safety and security of residents and visitors within individual developments and in the public domain during the day and at night.

(b) Certain developments due to their size, function or location may be referred to NSW Police for comment. These types of developments include, but are not limited to:

- Transportation facilities;
- Large residential flat buildings and multi dwelling housing developments (50 or more dwellings);
- Large mixed use developments (50 or more dwellings);
- Major shopping centre developments;
- New educational establishments and hospitals;
- Large recreation facilities;
- Registered clubs and hotel/motel accommodation; and
- Service stations, convenience stores and other high-risk businesses.

SUBMISSION REQUIREMENTS

- All development applications shall refer to Council's Designing Safer Communities: Safer by Design Guidelines (2002) and demonstrate how the proposed development incorporates measures to increase safety and reduce opportunities for crime through building design, landscaping, lighting, surveillance etc.

4.10 PEDESTRIAN ACCESS AND LINKAGES

OBJECTIVES

(i) To promote pedestrian movement in the public realm of the Castle Hill Centre;

(ii) To increase the number of pedestrians within the Crane Road Precinct, Alfred Whitling Park, Castle Hill railway station and bus interchange;

(iii) To increase the permeability of the existing urban blocks, making pedestrian access to and from the railway station and bus interchange and Terminus Street as well as access to the new Town Square more direct and providing choice in the route taken;

(iv) Build on circulation patterns established inside Castle Towers Shopping Centre and the Terminus Street Precinct to strengthen patterns of pedestrian circulation through the Centre;

(v) To increase the linear length of street frontage, particularly of ground floor retail, to increase the amount of active street frontage in the Centre; and

(vi) To provide pedestrian connectivity with surrounding residential areas.

DEVELOPMENT CONTROLS

(a) Locate the primary 'entrance' of the development at the centre of bus interchange at pedestrian crossing and offer uses that cater to commuters.

(b) Provide a direct visual connection and pedestrian link from the intersection of Old Northern Road and Crane Road and the new Town Square.

(c) Developments should demonstrate where possible that pedestrian connectivity to surrounding residential areas is provided.

(d) The minimum width of the through pedestrian link is to be 6 metres

SUBMISSION REQUIREMENTS

- Plans are to show the incorporation of pedestrian links into overall site design/layout.

4.11 VEHICULAR ACCESS AND PARKING

OBJECTIVES

(i) To provide safe vehicular access;

(ii) To minimise the impact of vehicular access and parking on the design of buildings and in particular on ground level active frontages and footpaths;

(iii) Provide parking for land uses to ensure the viable development of the project and future operation; and

(iv) Consider parking arrangements to suit parking operators.

DEVELOPMENT CONTROLS

(a) Parking provisions on site should be provided in accordance with Part C Section 1 – Parking of this Development Control Plan.

(b) The design for the car parking space, access driveway and manoeuvring areas will be in accordance with the current Australian Standards and Road and Maritime Services (RMS) Guidelines.

(c) There is to be no vehicular ingress or egress from Old Northern Road.

(d) Show Rights of Way to allow for vehicular access through the site to accommodate staged development.

SUBMISSION REQUIREMENTS

- All development applications with on-site parking are to include a Traffic and Parking Report.
- Elevations to show car park structures from all street frontages and the area of active street frontage.

4.12 SOLAR ACCESS AND OVERSHADOWING

OBJECTIVES

(i) To allow sunlight access to key areas of the public and private domain; and

(ii) To incorporate energy efficiency principles to ensure sustainability in design.

DEVELOPMENT CONTROL

(a) Ensure that properties on the eastern side of Terminus Street, between 9 am and 3 pm, on June 22nd have more than 3 hours of solar access to habitable rooms.

SUBMISSION REQUIREMENTS

- Shadow diagrams indicating the effect of shadows at 9 am 12 noon and 3 pm on June 22 as a minimum.

4.13 PUBLIC DOMAIN

OBJECTIVES

(i) To provide a high quality public domain that continues the standards established for the Centre in the Castle Hilll Main Street Project and any other public domain plans for the Centre; and

(ii) To provide a high quality principal public open space with appropriate public domain treatments.

DEVELOPMENT CONTROL

(a) Development of the public domain fronting the site is to be carried out as part of the development in accordance with the existing or proposed plans for the Old Northern Road bus interchange, Castle Hill Railway Station, Alfred Whitling Park, Terminus Street Precinct, Castle Hill Main Street Project, Terminus Street upgrades and the Castle Hill Public Domain Plan. The landscape of the site should integrate with those landscape plans, but seek to create a space with an individual character and a distinctive image in the Major Centre.

SUBMISSION REQUIREMENTS

- Provide details of proposed public domain treatments including but not limited to a high quality public domain plan that incorporates and responds to proposed or existing plans for the Old Northern Road bus interchange, Castle Hill Railway Station as well as elements of Castle Hill Main Street Project and Castle Hill Public Domain Plan including landscaping, paving, street furniture, and lighting.

4.14 LANDSCAPING

OBJECTIVES

(i) To provide high quality landscaping that continues the standards established for the Centre;

(ii) To provide private open space that complements internal living spaces, and creates opportunities for outdoor leisure and community recreation; and

(iii) To integrate existing landscape plans for areas of the Crane Road Precinct already drafted in association with the Bus Interchange, Terminus Street Precinct DCP and Castle Hill Main Street Project and Terminus Street upgrades.

DEVELOPMENT CONTROLS

(a) Provide large evergreen trees for the western side of streets and deciduous trees for the eastern side.

(b) All commercial, retail and mixed use developments to incorporate deep soil zones which shall comprise a minimum of 5% of the total development site area.

(c) Deep soil zones are to allow for future planting of mature trees.

(d) Landscaping for Crane Road Precinct shall be consistent with the Castle Hill Main Street Project and the Castle Hill Public Domain Plan.

SUBMISSION REQUIREMENTS

- Provide a landscape plan, prepared by a qualified landscape architect, for each public and private open space within the development.

4.15 LANDSCAPING ON STRUCTURES

OBJECTIVES

(i) To contribute to the quality and amenity of communal open space on roof tops, podiums and internal courtyards;

(ii) To encourage the establishment and healthy growth of trees in urban areas; and

(iii) Utilise climate appropriate and low maintenance and low water demand planting when possible particularly when planting green roof areas in order to mitigate heat island effect and micro-climate conditions.

DEVELOPMENT CONTROLS

(a) Design for optimum conditions for plant growth by:

- Providing soil depth, soil volume and soil area appropriate to the size of the plants to be established;
- Providing appropriate soil conditions and irrigation methods; and
- Providing appropriate drainage.

(b) Designing planters to support the appropriate soil depth and plant selection by:

- Ensuring planter proportions accommodate the largest volume of soil possible. Minimum soil depths will vary depending on the size of the plant however, soil depths greater than 1.5 metres are unlikely to have any benefits for tree growth; and
- Provide square or rectangular planting areas rather than long narrow linear areas.

(c) Increase minimum soil depths 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, particularly the frequency of irrigation;
- Anchorage requirements of large and medium trees; and
- Soil type and quality.

SUBMISSION REQUIREMENTS

- Submit a Drainage Plan for roof top planting or other structures.

4.16 ACTIVE STREET FRONTAGES

OBJECTIVES

(i) To provide active frontages to streets, squares and lanes, enhancing the quality of the pedestrian environment in the public domain;

(ii) To provide visually open street frontages, creating transparency and visual interest in building facades; and

(iii) To create spaces that is safe for pedestrians throughout the day and evening.

DEVELOPMENT CONTROLS

Buildings with designated active frontages are to:

(a) Contain shops, restaurants, cafes and other uses that allow interaction with the public and a physical connection between the public domain and the interior of the building at ground level;

(b) Restrict vehicular entries for car parking and service vehicles, fire escapes and other services from locating on designated "active frontages"

(c) Provide active frontages flush with the footpath, for a minimum length of the entry doors to the ground floor level.

(d) Locate security grilles inside the shop front; and

(e) Provide transparent grilles.

(f) Provide a plaza area with retail spaces and other activities that activate the space.

Buildings with designated visually open street frontages are to:

(a) Allow appropriately located vehicular entries for car parking and service vehicles, fire escapes and other services where necessary;

(b) Limit vehicular access to one access point per building by combining service vehicle access with parking access;

(c) Footpath crossings for vehicular access are to be a single crossing with a maximum width of 3 metres. In exceptional circumstances a double crossing with a maximum width of 5.4 metres may be permitted for safety reasons;

(d) Provide visually interesting street frontages, with clear glazed windows, window displays, display cases, artworks and articulated facades with extensive architectural detail; and

(e) Avoid solid wall panels greater than 100m^2 without windows.

SUBMISSION REQUIREMENTS

- Elevations.
- Schedule of proposed/potential ground floor uses.
- Site plan, showing all setbacks, car park access points.

4.17AWNINGS

OBJECTIVES

(i) To provide pedestrian weather protection and shading for shop fronts; and

(ii) To create cohesive streetscapes with relatively continuous awning form.

DEVELOPMENT CONTROLS

(a) Provide high level and extended awnings to the full extent of the street frontages on Old Northern Road to ensure suitable weather protection to pedestrians, to allow high quality retailing facades and to maintain views to the park over the bus interchange from the first floor.

(b) Integrate new awnings with existing awnings to achieve continuity of weather protection and built form.

(c) Create awnings that are horizontal in form, all metal or with flat glazed sections to allow light to penetrate to the footpath.

(d) Avoid steeply sloped, barrel vaulted or arched awnings.

4.18 ENERGY EFFICIENCY

OBJECTIVE

(i) The design of the building shall target a high level of proven energy consumption and conservation principles.

DEVELOPMENT CONTROLS

(a) The design shall target a 4.5 star rating and submit a verification statement from qualified experts.

4.19 STORMWATER MANAGEMENT

OBJECTIVES

(i) Ensure waterways and downstream drainage systems are protected during construction and post construction phases of development;

(ii) Ensure new developments do not place an increased flood risk to private and public property, and where possible, reduce the impacts of nuisance flooding to a level acceptable to the community; and

(iii) Reduce potable water demand through water sensitive urban design initiatives.

DEVELOPMENT CONTROLS

Water Sensitive Urban Design

The best practice principles of WSUD are to be applied during the construction and post construction phases of development.

Schemes that promote water capture, reuse initiatives and water quality management measures, as described in documents including, but not limited to:

- On-site Stormwater Detention Handbook, Version 4 2005, UPRCT;
- Australian Runoff Quality, Engineers Australia, 2006; and
- Water Sensitive Urban Design – Technical Guidelines for Western Sydney, May 2004, Prepared for UPRCT by URS.

are required for all new commercial and residential developments, or where the increase in impervious area over a site is greater than 150m^2. Common open space and publicly accessible courtyard areas may be utilised for WSUD initiatives.

The Hills Development Control Plan (DCP) 2012

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Part D Section 16

No. 301 Samantha Riley Drive, Kellyville

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1. INTRODUCTION

This Section of The Hills Development Control Plan (DCP) has been prepared to provide direction for development of No. 301 Samantha Riley Drive, Kellyville and must be read in conjunction with Part A – Introduction of this DCP.

1.1. LAND TO WHICH THIS SECTION APPLIES

This section provides new development controls that apply to the site identified in Figure 1. The development controls are in addition to other sections of the DCP.

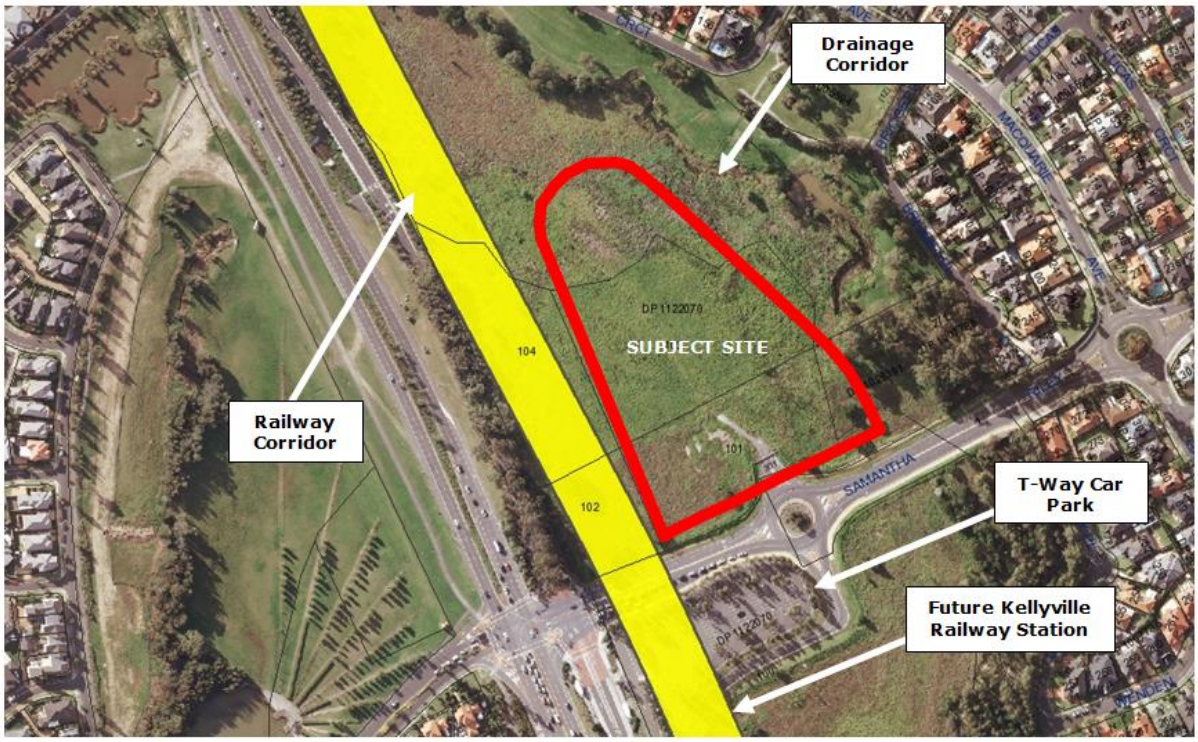

Figure 1:
No. 301 Samantha Riley Drive, Kellyville

1.2. AIMS AND OBJECTIVES OF THIS SECTION

The objectives of this Section of the DCP are:

(i) To provide a clear vision for the desired future character of the site at No. 301 Samantha Riley Drive, Kellyville;

(ii) To ensure that future development capitalises on the site's proximity to high frequency public transport services;

(iii) To encourage innovative and high quality design and architectural outcomes;

(iv) To ensure that future development integrates with surrounding land uses and public transport infrastructure;

(v) To ensure that future development addresses public streets and provides a safe and attractive pedestrian environment;

(vi) To ensure that future development does not detrimentally impact the amenity of adjoining land uses and that satisfactory measures are implemented to mitigate any impacts which may arise from the proposal;

(vii) To provide guidelines for innovative and high quality open space areas for future residents and workers at the site.

1.3. RELATIONSHIP WITH OTHER PLANS AND POLICIES

This Section is to be read in conjunction with other relevant Sections of the DCP, including:

- Part B Section 5 – Residential Flat Building
- Part B Section 6 – Business
- Part C Section 1 – Parking
- Part C Section 2 – Signage
- Part C Section 3 – Landscaping
- Part C Section 6 – Flood Controlled Land

Where any control of this Section of the DCP is inconsistent with any control of any other Section of the DCP, the controls of this Section of the DCP shall prevail to the extent of the inconsistency.

Plans applying to the Kellyville Railway Station Precinct should be considered in conjunction with this Section of the DCP.

2. URBAN CONTEXT

2.1. SURROUNDING DEVELOPMENT

To the south of the subject site, on the opposite side of Samantha Riley Drive, is the Transitway (T-way) parking station and vacant employment land. To the west of the subject site is the railway corridor and Old Windsor Road. The land to the west of Old Windsor Road contains open space and the Newbury residential suburb within the Blacktown Local Government Area.

A drainage reservation containing both Elizabeth Macarthur Creek and Caddies Creek surrounds the north, east and western boundaries of the site. Beyond the drainage reserve, to the north and east of the site, is an existing residential area.

2.2. URBAN STRUCTURE

The Kellyville Railway Station site will have a Village Centre designation within Council's Centres Hierarchy. Future development at the subject site will support the future operation of the proposed Kellyville Railway Station by accommodating a sufficient residential population within close proximity to high frequency public transport services. The locality is to become a stop for both the T-way and the North West Rail Link and will also provide for the daily needs of commuters in addition to the local population.

2.3. KELLYVILLE RAILWAY STATION

The future Kellyville Station will be located at the junction of Samantha Riley Drive and Old Windsor Road, to the east of the existing T-Way bus stops and car park. Approximately 1,360 car parking spaces (including 160 spaces to replace the existing t-way car park) will be located close to the station. A two level park and ride facility will be located to the east of the station entry, with a further two on-grade facilities located beneath the rail viaduct north and south of Samantha Riley Drive.

Platforms on either side of the track will be elevated approximately 13m above street level and will be accessed from the ground level station entry and concourse. The station entry will address a new boulevard connector parallel to Old Windsor Road. A pedestrian bridge will be built over Old Windsor Road and the T-Way at the intersection with Samantha Riley Drive and Newbury Avenue to provide pedestrian access to and from residential areas within the Blacktown City Area.

The following traffic management facilities have been identified:

- Construction of the station precinct access road ('new road A'), running parallel to Old Windsor Road, off Samantha Riley Drive. This road will provide a single traffic lane and parking lane in each direction. This road will

provide only left in and left out access at its intersection with Samantha Riley Drive.

- Provision of traffic signals at the intersection of Samantha Riley Drive and the new road close to Elizabeth Macarthur Creek ('new road B'), providing all movements.
- Removal of the existing roundabout along Samantha Riley Drive at the existing entrance to the T-Way Car Park;
- Kiss-and-ride and taxi parking along the station access road.
- Provision of at-grade and multi-storey car parks on both sides of the station access road as well as north of Samantha Riley Drive, under the rail viaduct.

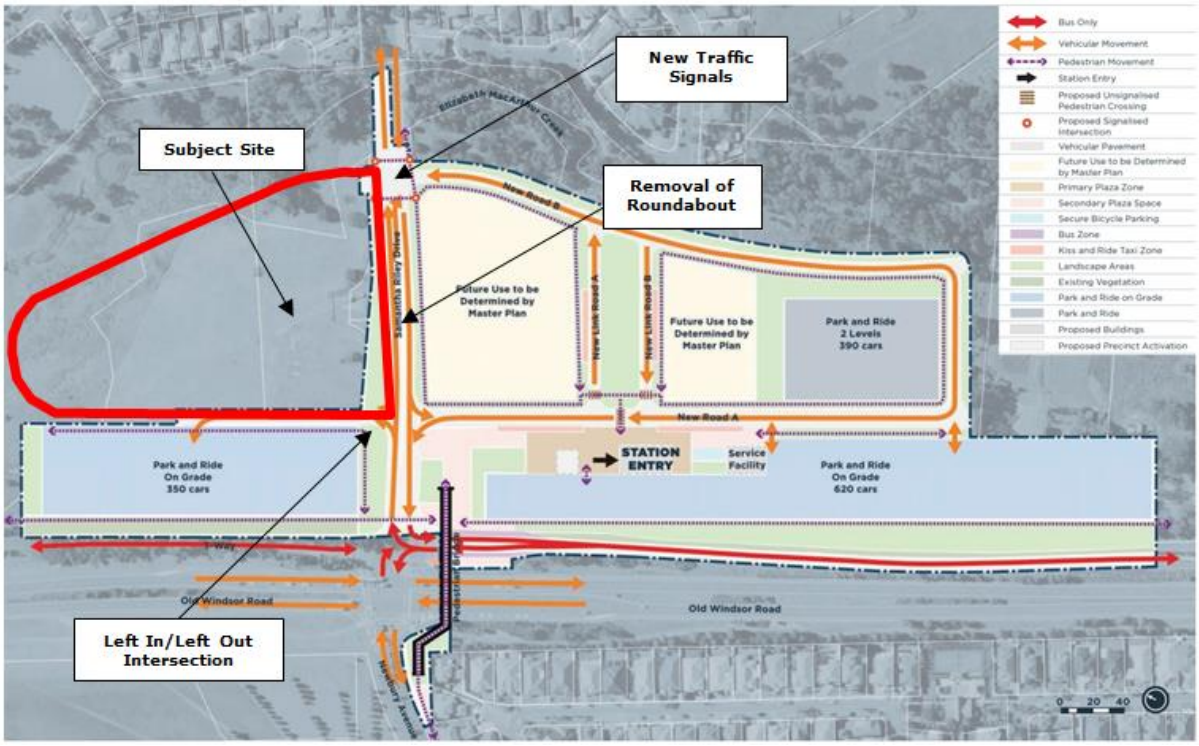

Figure 2
Kellyville Station – Indicative Layout

3. DESIRED FUTURE CHARACTER

The following principles outline the desired future character for the site and its surrounds. Future development must address the following principles in addition to the controls specified within subsection 4 of this Section of the DCP.

Role and Function of the Centre

- A variety of land uses will be provided to contribute to village centre proposed for the site of the Kellyville Railway Station. The centre will provide a high density environment where residents and workers will have access to high frequency public transport services.

Public Domain

- The public domain and interface activities will be attractive, safe, functional and accessible for residents, workers and commuters. The public domain and pedestrian environment will be characterised by excellence in design and high quality materials.

Integration with Surrounding Areas

- The site will provide pedestrian links to the future Kellyville Railway Station Precinct. These links will be convenient and accessible to all future residents and workers. The site will also provide pedestrian links to surrounding residential areas to the north and east of the site.

Open Space

- The development will provide a variety of innovative and well-designed areas of shared and private open space. The provision of open space will both soften the impact of the built form and improve the amenity for residents and workers within the development. The open space provision will include a central open space area, roof top gardens and recreational facilities.

Transport and Accessibility

- Future development will respond to the road layout proposed for the Kellyville Railway Station Precinct and will ensure that vehicular movement within and surrounding the site is safe and efficient.

Treatment of Interfaces

- Future development must activate public streets through the provision of active uses such as cafes, restaurants and commercial uses which attract pedestrians. This will provide visual interest from the street and will create a visual connection between public realm and future development.
- Development must be designed so as to minimise the potential visual impact on adjoining residential areas.
- Development must be designed so as to mitigate potential interface impacts between future development and the Railway Corridor. This will include measures to mitigate noise impact.

Built Form

- Setbacks shall be used to create distinct podium and tower elements. Podiums must be incorporated into building design to minimise the bulk and scale of development and to enable a more slender built form.
- The treatment and articulation of facades must demonstrate architectural expression and must contribute to the public realm.
- Building height elements are to be varied across the site to provide visual interest and to ensure that the built form is not repetitive.

Environmental Performance

- Development will achieve maximum environmental performance through the use of best practice environmental design.

4. DEVELOPMENT CONTROLS

The objectives and controls for development at No. 301 Samantha Riley Drive, Kellyville are set out within this Section of the DCP.

4.1. SITE PLANNING

Objectives

(i) To achieve a site layout that maximises residential development opportunities whilst providing ample, quality open spaces.

(ii) To create a coherent and legible site layout that is easy for users to understand and navigate.

(iii) To integrate future development with surrounding land uses.

(iv) To create development that is responsive to sensitive interfaces.

(v) To create a landmark development that integrates with the future Kellyville Railway Station.

Development Controls

(a) Future development must response to the road layout identified within Figure 3.

(b) A central common open space area is to be provided in accordance with Figure 3.

(c) Development is to address all edges of the site.



Figure 3
DCP Site Plan

4.2. ADDRESSING THE STREET AND PUBLIC DOMAIN

Objectives

(i) Ensure that development contributes to the activity, safety, amenity and quality of streets and the public domain.

(ii) To ensure that car parking and servicing access occurs in locations which do not impact on the pedestrian environment.

(iii) Ensure that all buildings within the development provide a clear public address.

Development Controls

(a) Buildings are to be designed to address public roads. This will increase safety and provide the opportunity for active uses such as cafes, restaurants and commercial uses which attract pedestrian users.

(b) Building design must maximise opportunities to provide entries, visible internal uses at ground level, public art and high quality finishes to enhance the interface with the street or public domain.

(c) Pedestrian and communal areas are to be well lit to minimise opportunities for concealment.

(d) The extent of blank walls (without windows or entries) at ground level is to be minimised. Where development exposes the blank side of an adjoining building or incorporates a wall that will be visible from the public domain, a visually interesting treatment of high quality design is to be applied to that wall.

(e) Residential developments should have a street address. Where a development comprises a number of buildings with a variety of orientations, a major part of the overall development is to face the street.

4.3. FUNCTION AND USES

Objectives

(i) To develop and promote a vibrant, mixed use development that provides a range of retail and business uses to serve the daily needs of residents within the development and the local population.

(ii) To ensure ground floor frontages are pedestrian oriented and add visual interest and vitality to streets.

(iii) To provide fine grain active frontages at ground level.

Development Controls

(a) Provision of a range of supporting uses is encouraged including childcare centre and ATM.

(b) Active frontages at ground level are to be provided to public streets along the Samantha Riley Drive and the Railway Corridor interfaces.

(c) Awnings or colonnades are to be provided in locations where active street frontages are provided.

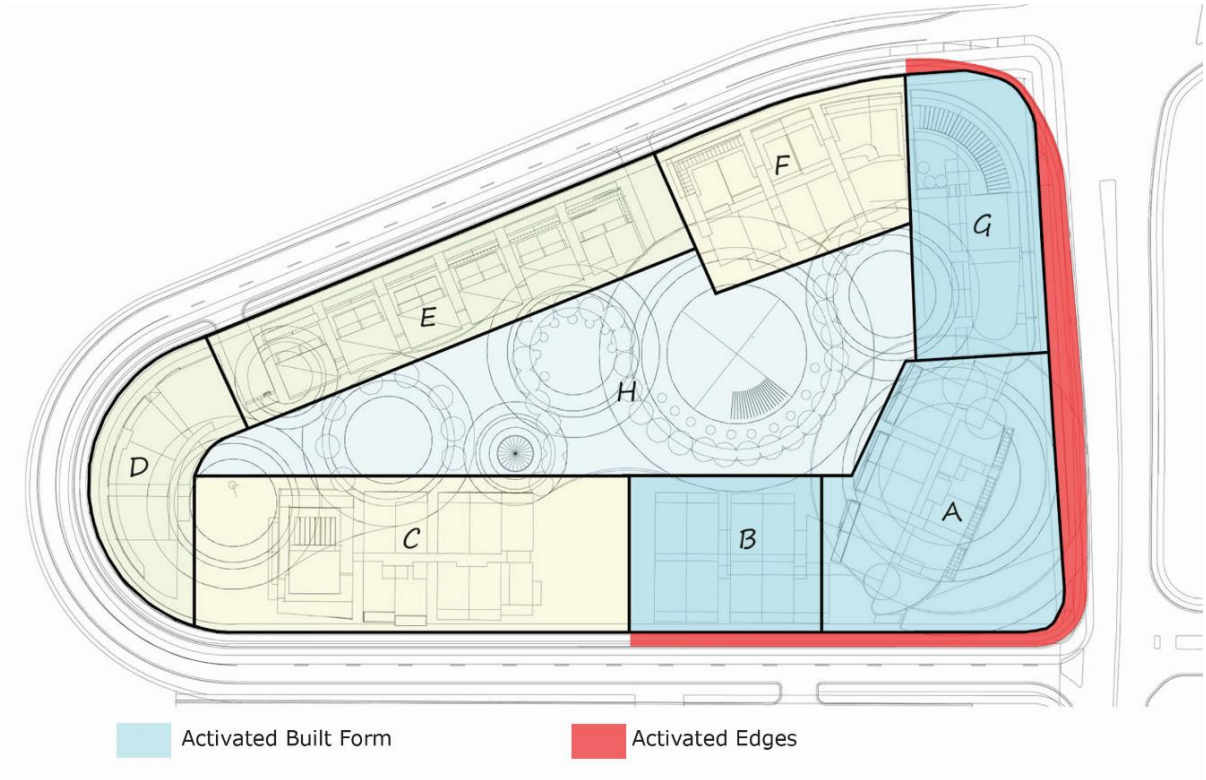

Figure 4
Active Frontages

4.4. SETBACKS

Objectives

(i) To provide setbacks that complements the setting of the Kellyville Railway Station Precinct.
(ii) To allow for flexibility in the siting of buildings.
(iii) To enable future development to provide an active frontage along Samantha Riley Drive the road adjoining the railway corridor.
(iv) To minimise overshadowing and to protect the visual quality of open space areas and the riparian corridor.
(v) To provide setbacks that minimise adverse impacts such as overshadowing and loss of privacy to adjacent residential development.

Development Controls

Setbacks to Samantha Riley Drive

(a) Development to be built uniformly to the property line.

Setbacks to Perimeter Road (Railway Corridor Interface)

(b) Buildings may be built uniformly to the property line.

Setbacks to Perimeter Road Interface (SP2 Stormwater Management Interface)

(c) Buildings may be built uniformly to the property line up to the fourth storey. Any storey above the fourth storey must be setback 5 metres.

4.5. BUILDING HEIGHT

Objectives

(i) To enable buildings of a height that creates a landmark development on the site.
(ii) To facilitate Transit Oriented Development within locations which have access to high frequency public transport services.

(iii) To minimise the perceived height of development when viewed from surrounding residential areas.

(iv) To minimise adverse impacts on the public realm.

Development Controls

(a) Building heights are to be varied over the site to ensure a visually interesting skyline and to prevent a repetitive built form.

(b) The podiums and tower elements shall have building height transition as identified in Figure 4.

(c) The combined height of the podium and tower shall be a maximum of 18 storeys (65 metres) in accordance with *The Hills Local Environmental Plan 2012*.

(d) The highest tower element shall be located closest to the future Kellyville Railway Station, at the south west corner of the site. The height of other tower elements shall graduate downward toward the riparian interface to the north and east of the site.

(e) Towers shall be designed to limit the impact of overshadowing and overlooking on the sensitive uses which surround the site.

(f) The building height and roof form shall be designed to reduce the bulk and scale of development.

Tower	Storeys	Height (metres)
A	15	46
B	12	37
C	9	25
D	4	12
E	6	18
F	6	18
G	8	25
H	2	10

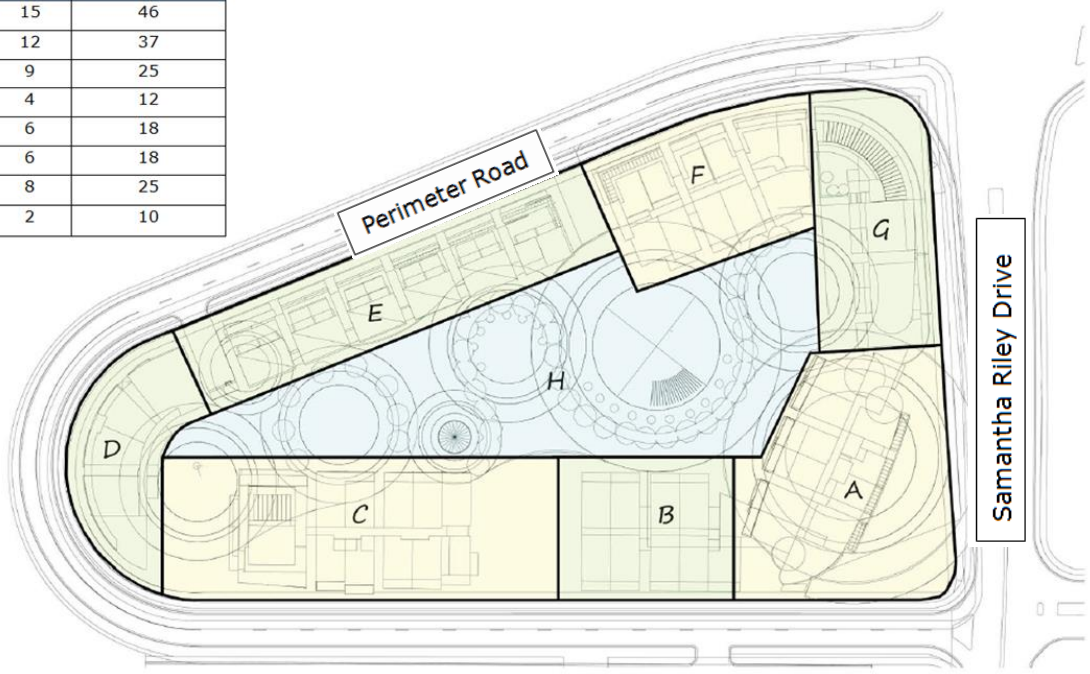

Figure 5
Building Height Transition

4.6. PODIUM AND TOWER ELEMENTS

Objectives

(i) To ensure that the height and design of podium and tower elements are responsive to the desired character of the area.

(ii) To ensure that towers minimise the bulk and scale of the proposed development and reflect a slender built form.

Development Controls

(a) Podium elements shall be incorporated into the design of development along the interface of the drainage corridor,

(b) The podium design shall be deliberately distinctive and separate from the building forms above.

(c) Tower elements shall have a narrow footprint to create slender building forms with a maximum footprint of 1,000m^2.
(d) Tower elements shall comprise various building heights to create a unique feature and reduce the visual bulk of development.

4.7. BUILDING SEPARATION AND TREATMENT

Objectives

(i) To ensure that new development is scaled to support the desired character of the site with appropriate massing and spaces between buildings.
(ii) To provide visual and acoustic privacy for existing and new residents.
(iii) To control overshadowing of adjacent properties and private or shared open space.
(iv) To allow for the provision of open space of an appropriate size and proportion for recreational activities for building occupants.
(v) To facilitate the provision of deep soil zones for storm water management and tree planting.

Development Controls

The following minimum rules of building separation are to be complied with:

(a) Up to four storeys (up to 12 metres)
- 12 metres between habitable rooms/balconies
- 9 metres between habitable/balconies and non-habitable rooms
- 6 metres between non-habitable rooms

(b) Five to eight storeys (up to 25 metres)
- 18 metres between habitable rooms/balconies
- 13 metres between habitable rooms/balconies and non-habitable rooms
- 9 metres between non-habitable rooms

(c) Nine storeys and above (over 25 metres)
- 24 metres between habitable rooms/balconies
- 18 metres between habitable rooms/balconies and non-habitable rooms
- 12 metres between non-habitable rooms.

4.8. LANDSCAPE AREA

Objectives

(i) To enhance the quality of life of residents by providing privacy, pleasant outlook, views and a range of open spaces.
(ii) To improve storm water quality and reduce the quantity of run-off.
(iii) To improve the microclimate and solar performance within the development.

Development Controls

(a) The landscaped area shall be a minimum of 50% of the site area. The calculation of landscaped area excludes roof top gardens.
(b) Areas less than 2 metres in width will be excluded from the landscaped area calculation.
(c) All setbacks and any above ground car parking areas are to be landscaped and maintained to a high standard.

4.9. PLANTING ON STRUCTURES

Objectives

(i) To contribute to the quality and amenity of communal open spaces on rooftops, podiums and internal courtyards.
(ii) To encourage green roofs and walls to contribute to common open space and to improve the amenity for future residents.
(iii) Ensure any habitable green roof areas, such as private or common open space,

are designed to minimise any potential adverse impacts.

Development Controls

(a) Green walls are encouraged on podium walls along active frontages to soften the interface between future development and the public realm.
(b) A minimum of 40% of the roof space must be used as a rooftop garden.
(c) Rooftop gardens must be adequately enclosed and accessible to occupants of the development.
(d) Plant growth is to be optimised by:
- providing soil depth, soil volume and soil area appropriate to the size of the plants to be established.
- providing appropriate soil conditions and irrigation methods.
- providing appropriate drainage.

(e) Planters are to be designed to support the appropriate soil depth and plant selection by:
- ensuring planter proportions accommodate the largest volume of soil possible.
- providing square or rectangular planting areas, rather than long narrow linear areas.

(f) Minimum soil depths are to be provided in accordance with the following:

Large trees (16 metres canopy diameter at maturity)	
minimum soil volume	150 cubic metres
minimum soil depth	1.3 metres
minimum soil area	10 metre x 10 metre area or equivalent
Medium trees (8 metre canopy diameter at maturity)	
minimum soil volume	35 cubic metres
minimum soil depth	1 metre
approximate soil area	6 metre x 6 metre or equivalent
Shrubs	
minimum soil depth	500-600mm
Ground cover	
minimum soil depth	300-450mm
Turf	
minimum soil depth	100-300mm

** Any subsurface drainage requirements are in addition to the minimum soil depths quoted above.*

Table 1
Minimum Soil Depths

4.10. DEEP SOIL AREA

Objectives

(i) To ensure development incorporate deep soil areas of sufficient size and dimension to accommodate trees and other significant landscaping elements.

Development Controls

(a) The minimum amount of deep soil, meaning an area of natural ground with relatively natural soil profiles and excluding pools and areas above underground structures, is to be 15% of the site area.
(b) Deep soil zones are to accommodate existing mature trees, as well as allow for planting of mature trees.
(c) Where possible deep soil areas are to be consolidated into one area to facilitate drainage and deep soil planting.

4.11. BUILDING DEPTH

Objectives

(i) To provide adequate amenity for building occupants in terms of solar access and natural ventilation.

(ii) To provide for dual aspect/cross ventilated residential flats.

Development Control

(a) The maximum depth of the residential components of each building is 18 metres, excluding balconies, parapets and awnings.

4.12. BUILDING DESIGN AND STREETSCAPE

Objectives

(i) To ensure roof form contributes to the character of the site and provides visual interest and continuity within future development.

(ii) To add visual interest to the skyline of the precinct when viewed from street level and surrounding areas.

(iii) To ensure that building elements are integrated into the overall building form and façade design.

(iv) To promote integration of building and private open space.

(v) To support the integration of appropriate retail and commercial uses with housing;

(vi) To create more active lively streets which encourage pedestrian movement, provide for the needs of the residents and increase the area's employment base; and

(vii) To ensure that the design of mixed use developments maintains residential amenity and preserves compatibility between uses.

Development Controls

Roof Design and Roof Features

(a) Roof features should be designed to generate an interesting skyline and enhance views from adjoining developments and surrounding areas.

(b) Lift over-runs and all other service equipment shall be incorporated into the roof design and be obscured from general view.

(c) The roof form for each tower should be consistent.

(d) Roof top gardens are required to provide interest and to contribute to the provision of communal open space.

(e) Roof forms should not add excessive bulk to the building.

Architectural Style and Character

(f) Columns, beams, floor slabs, balconies, window openings and fenestration, doors, balustrades, roof forms and parapets, should be used to create interest in the façade.

(g) Facades are to be composed with an appropriate scale and proportion, which respond to building use and the desired character by:

- expressing the internal layout of the building, for example, vertical bays or its structure.
- articulating building entries with awnings, porticos, recesses, blade walls and projecting bays.
- selecting balcony types which respond to the street context, building orientation and residential amenity. Cantilevered, partially recessed, or wholly recessed will all create different façade profiles.
- using a variety of window types to express the various elements of new buildings.
- incorporating architectural features which give human scale to the design of the building at street level. These can include entrance porches, awnings, colonnades, pergolas and fences. Recessed balconies and deep windows may be used to create articulation and define shadows, thereby adding visual depth to the façade.

(h) Facade design is to reflect the orientation of the site using elements such as sun shading as environmental controls, depending on the façade orientation.

(i) Building services such as drainage pipes are to be coordinated and integrated with the overall façade and balcony design.

(j) The podium levels and the upper storeys of any tower elements are to be sufficiently articulated (through varied setbacks, architectural treatments, materials and/or colours) so that they can be read as separate elements of the building.

(k) Development is to clearly define the building base, middle and top to achieve visual interest and articulation.

Streetscape and the Public Realm

(l) Buildings shall address any shared open space and adjacent public areas to increase the natural surveillance of these areas and contribute to their safety and security.

(m) The interface of development with any adjacent streetscapes and public spaces shall be clearly defined.

(n) Building design shall avoid creating opportunities for personal concealment.

(o) Public spaces, building entries, car parks and internal access ways shall be provided with adequate lighting.

(p) Lighting and directional signage shall be provided to all pedestrian paths, car parking areas.

Entrances

Refer to Part B Section 5 - Residential Flat Buildings.

Mixed Use Development

(q) Choose a mix of uses that complement and reinforce the character, economics and function of the local area, for example, food retail, small-scale commercial and residential.

(r) Small neighbourhood shops to meet the day-to-day needs of residents are desired for the ground floor storeys of buildings nearest to the railway station.

(s) Ensure the building positively contributes to the public domain and streetscape by:

- fronting onto major streets with active uses; and
- avoiding the use of blank walls at the ground level.

4.13. DENSITY

Objectives

(i) To ensure that residential flat building development does not over-tax services and facilities.

(ii) To provide residential flat buildings with a high level internal amenity.

(iii) Maximise the utilisation of public transport facilities.

Development Controls

(a) No more than 650 residential units may be provided on the site.

Note. The maximum density should not be considered as the desired yield for the site. The final yield will be dependent on identifying designs that address all of the objectives of this development control plan.

4.14. UNIT LAYOUT AND DESIGN

Objectives

(i) To provide a mix of residential flat types and sizes to accommodate a range of household types and to facilitate housing diversity.

(ii) To optimise the provision of housing to suit the social mix and needs in the neighbourhood.

(iii) To ensure that individual units are of a size suitable to meet the needs of residents.

Development Controls

(a) No more than 25% of the dwelling yield is to comprise either studio or one bedroom apartments.

(b) No less than 10% of the dwelling yield is to comprise apartments with three or more bedrooms.

(c) The minimum internal floor area for each unit, excluding common passageways, car parking spaces and balconies shall not be less than the following:

Apartment Size Category	Apartment Size
Type 1	
1 bedroom	50m^2
2 bedroom	70m^2
3 or more bedrooms	95m^2
Type 2	
1 bedroom	65m^2
2 bedroom	90m^2
3 or more bedrooms	120m^2
Type 3	
1 bedroom	75m^2
2 bedroom	110m^2
3 or more bedrooms	135m^2

(d) Type 1 apartments shall not exceed 30% of the total number of 1, 2 and 3 bedroom apartments.
(e) Type 2 apartments shall not exceed 50% of the total number of 1, 2 and 3 bedroom apartments.
(f) All remaining apartments are to comply with the Type 3 apartment sizes.

4.15. CEILING HEIGHT

Refer to Part B Section 5 - Residential Flat Buildings.

4.16. OPEN SPACE

Objectives

(i) To provide open space for recreation and for use by residents within residential flat buildings.
(ii) To enhance the quality of the built environment by providing opportunities for landscaping.

Private Open Space

Objectives

(i) To maximise the number of apartments with private open space.
(ii) To ensure balconies are functional and responsive to the environment thereby promoting the enjoyment of outdoor living for apartment residents.
(iii) To ensure that balconies are integrated into the overall architectural form and detail of residential flat buildings.
(iv) To contribute to the safety and liveliness of the street by allowing for casual surveillance.

Development Controls

(a) All balconies and/or roof top areas conveniently accessible from a main living area must have a minimum area of 10m^2, with a minimum dimension of 2 metres.
(b) Private open space may be in the form of courtyards, decks and/or balconies and is to be provided for at least 75% of dwellings in a development. Where private open space is not provided, dwellings are to be provided with a least one 'juliet' balcony to a full height window.
(c) Any balcony or terrace shall be no deeper than 3 metres to enable sub penetration into units.
(d) All balconies shall be provided with water and gas outlets.

Common Open Space

Objectives

(i) To provide residents with passive and active recreational opportunities.
(ii) To provide an area on site that enables soft landscaping and deep soil planting.
(iii) To ensure that communal open space is consolidated, configured and designed to be useable and attractive.
(iv) To provide a pleasant outlook.

Development Controls

(a) The area provided shall be equivalent to the rate of 20m^2 per dwelling.
(b) Common open spaces are to include equipment such as seating, shade structures, barbeques and children's' play equipment.
(c) A swimming pool, gymnasium, and other recreational facilities should be provided to meet the active recreational needs of residents.
(d) Common open space may be located on elevated gardens or roof tops provided

that the area and overall design is useful for the recreation and amenity needs of residents.

(e) The design of exterior private open spaces such as roof top gardens is to address visual and acoustic privacy, safety, security, and wind effects.

(f) Common open space is to be located and designed to:
- be seen from the street between buildings.
- provide for active and passive recreation needs of all residents.
- provide landscaping.

(g) The common open space is to be designed to:
- present as a private area for use by residents only.
- include passive surveillance from adjacent internal living areas and/or pathways.
- have a northerly aspect where possible.
- be in addition to any public thoroughfares.

4.17. SOLAR ACCESS

Refer to Part B Section 5 - Residential Flat Buildings.

4.18. LIGHTING

Refer to Part B Section 5 - Residential Flat Buildings.

4.19. STORMWATER MANAGEMENT

Objectives

(i) To control stormwater runoff to mitigate the effect on adjoining properties and existing local drainage systems before, during and after construction.

(ii) To ensure development does not increase flooding or prejudice the effectiveness of existing flood mitigation measures.

(iii) To provide for the management of stormwater in an efficient, equitable and environmentally sustainable way in accordance with Council's ESD objectives.

(iv) To encourage the storage and reuse of stormwater.

Development Controls

(a) The best practice principles of Water Sensitive Urban Design (WSUD) are to be applied during the construction and post construction phases of development. Schemes that promote water capture, reuse initiatives and water quality management measures are to be employed, as described in documents including, but not limited to:
- Australian Runoff Quality, Engineers Australia, 2006; and
- Water Sensitive Urban Design – Technical Guidelines for Western Sydney, May 2004, Prepared for UPRCT by URS.

These are required for all new commercial and residential developments, or where the increase in impervious area over a site is greater than 150sqm. Common open space and publicly accessible courtyard areas may be utilised for WSUD initiatives.

(b) The WSUD measures within the perimeter road are to integrate with the WSUD measures proposed as part of the planning for the Kellyville Railway Station Precinct.

(c) Rainwater tanks are to be installed to enable the reuse of rainwater. Overflow from rainwater tanks must be connected to a piped drainage system.

(d) Concentrated stormwater flows must discharge to a lawful point of discharge. This may require the creation of drainage easements over downstream properties.

(e) The finished level of the perimeter road must be above the 100 year Average Recurrent Interval (ARI) flood level.

4.20. VEHICULAR ACCESS

Objectives

(i) To ensure that vehicular access to and from the development is simple and does not compromise the safety or amenity enjoyed by more vulnerable road users.

(ii) To ensure that the vehicular movement integrates with the operation of the future Kellyville Railway Station.

Development Controls

(a) A perimeter road surrounding the site is to be provided in accordance with the site plan map within Figure 1.

(b) The road layout must integrate with the road network proposed in support of the future Kellyville Railway Station.

(c) Vehicular access points shall provide safe and efficient ingress/egress to the site.

(d) Direct vehicular access from Samantha Riley Drive is discouraged.

(e) The design of access points and parking areas shall minimise the visual impact of hard paved areas.

(f) Vehicular access points shall make provision for service vehicles.

(g) The design and configuration of access ways and driveways shall be in accordance with Part C Section 1 – Parking of this DCP.

4.21. CAR PARKING

Objectives

(i) To provide sufficient and accessible parking for residents and visitors so as to maintain the amenity of adjoining properties and the efficiency of the road network.

(ii) To reduce the reliance on private vehicles and to promote the use of public transport.

Development Controls

(a) On-site parking shall be provided at the following rates:

Dwelling Type	Parking Rate
1 bedroom apartments:	1 space per dwelling
2 bedroom apartments:	1.5 spaces per dwelling
3 bedroom apartments:	2 spaces per dwelling
Visitor parking:	2 space/5 dwellings for developments with up to 60 units. 1 space/5 dwellings for developments with more than 60 units.

(b) Car parking shall generally be provided underground.

(c) Driveway design shall provide safe and efficient access/egress to the site.

(d) The design of driveways and parking areas shall minimise the visual impact of hard paved areas.

(e) The design and configuration of access ways and driveways shall be in accordance with Part D Section 1 – Parking of this DCP.

4.22. STORAGE

Objectives

(i) To provide adequate storage for everyday household items within easy access of the apartment.

(ii) To provide storage for sporting, leisure, fitness and hobby equipment.

Development Controls

(a) In addition to kitchen cupboards and bedroom wardrobes, provide accessible storage facilities at the following rates:

- One-bedroom apartments – $6m^3$.
- Two-bedroom apartments – $8m^3$.
- Three plus bedroom apartments – $10m^3$.

4.23. PEDESTRIAN AND BICYCLE LINKS

Objectives

(i) To ensure pedestrian and cycle access to, from and through the development is simple, safe and direct.

(ii) To facilitate safe and convenient pedestrian access between development

on the site and the future Kellyville Railway Station.

(iii) To facilitate cycling trips in the area by providing adequate and secure bicycle storage.

Development Controls

(a) Separate pedestrian access shall be provided from the street independent of vehicular access.

(b) Pedestrian footpaths and bicycle links shall be provided along all road frontages and are to connect with existing bicycle and pedestrian infrastructure.

(c) Pedestrian access shall be legible, inviting, safe and provide visible interest.

(d) A pedestrian connection is to be provided to facilitate a safe, convenient pedestrian movement between the development site and the future Kellyville Railway Station.

4.24. PRIVACY – VISUAL AND ACOUSTIC

Objectives

(i) To provide reasonable levels of visual privacy externally and internally, during the day and at night.

(ii) To maximise outlook and views from principal rooms and private open spaces without compromising visual privacy.

(iii) To incorporate appropriate materials and construction techniques to minimise acoustic impacts from Old Windsor Road and the future North West Rail Link.

Development Controls

(a) Private open space and habitable rooms of proposed and adjacent existing dwellings shall be reasonably protected from overlooking by attending to, but not being limited to:
- Building layout;
- Location, size and design of windows and balconies;
- Screening devices; and
- Landscaping.

(b) Private open space areas and habitable rooms shall be reasonably protected from uncomfortable levels of external noise by attention to, but not being limited to, the following:
- Use of noise resistant wall, ceiling, floor and roof material;
- Site planning;
- Location of habitable rooms away from the noise source;
- Use of triple glazing; and
- Use of fencing porches and walls as noise buffers.

(c) Building design elements are to be applied to improve visual and acoustic privacy such as recessed balconies and/or vertical fins between adjacent balconies, vegetation and louvers and pergolas which limit overlooking of lower dwellings and/or private open space;

(d) External air conditioning units are to be located and screened in order to minimise noise and visual impacts on neighbours. Air conditioners must not exceed 5dB(A) above the background noise level.

(e) The buildings shall be designed and constructed to comply with the following criteria for all noise intrusion from external sources (including mechanical services from within the development itself), with windows and doors closed:

Internal Space	**Time Period**	**Repeatable Maximum*** **LAeq (1 Hour)**
Sleeping Areas	Night (10pm to 7am)	≤ 35 dB(A)
All other Areas (other than a garage, kitchen, bathroom or hallway)	Day or night	≤ 40 dB(A)

*Repeatable Maximum is the highest tenth percentile hourly A-weighted LAeq noise level.

(f) The buildings shall be designed to minimise noise from known noise sources

at any time and as far as possible minimise noise entering open windows and doors.

(g) In order to safeguard occupants from loss of amenity as a result of undue sound being transmitted, separating walls and floors between dwellings or sole occupancy units, shall be constructed in accordance with the requirements of the Building Code of Australia.

4.25. SAFETY AND SECURITY

Objectives

(i) To ensure that future development is safe and secure for residents and visitors by incorporating crime prevention through environmental design.

Development Controls

(a) All development shall be designed to ensure the safety and security of residents and visitors of the development and in the public domain during the day and night.

(b) All development applications are to refer to Council's Design's Safer Communities: Safer by Design Guidelines (2002) and demonstrates how the proposed development incorporates measures to increase safety and reduce opportunities for crime through building design, landscaping, lighting and surveillance'.

4.26. SERVICES

Refer to Part B Section 5 – Residential Flat Building of this DCP.

4.27. LOADING FACILITIES

Refer to Part B Section 5 – Residential Flat Building of this DCP.

4.28. WASTE MANAGEMENT

Refer to Part B Section 5 – Residential Flat Building of this DCP For residential development.

Refer to Part B Section 6 – Business of this DCP for commercial development.

4.29. BASIX

All development applications will be required to demonstrate that they meet the BASIX targets.

More information on BASIX can be found at the following website:
www.planning.nsw.gov.au

The Hills Development Control Plan (DCP) 2012

www.thehills.nsw.gov.au

THE HILLS Sydney's Garden Shire







Part D Section 17
Box Hill North

D17

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1. INTRODUCTION

This section of the Development Control Plan should be read in conjunction with the following parts of The Hills Development Control Plan (DCP) 2012:

- Part A - Introduction
- Part B
  - Section 2 - Residential
  - Section 3 - Dual Occupancy
  - Section 4 - Multi-Dwelling Housing
  - Section 5 - Residential Flat Building
  - Section 6 - Business
- Part C
  - Section 1 - Parking
  - Section 2 - Signage
  - Section 3 - Landscaping
  - Section 4 - Heritage
  - Section 5 - Telecommunication Facilities
  - Section 6 – Flood Control Lots
- Appendix A - Waste Management Plan
- Appendix B - Water Sensitive Urban Design

Consideration should also be given to the plans and policies that apply to the Box Hill Release Area (which adjoins the subject Box Hill North Precinct), particularly in relation to road connectivity through the precincts.

In the event of any inconsistency between this section of the Development Control Plan and any other sections of the Development Control Plan, the provisions of this section shall prevail only to the extent of the inconsistency.

1.1 LAND TO WHICH THIS SECTION OF THE PLAN APPLIES

The Plan applies to the area outlined in red, as shown in Figure 1 and referred to as Box Hill North.

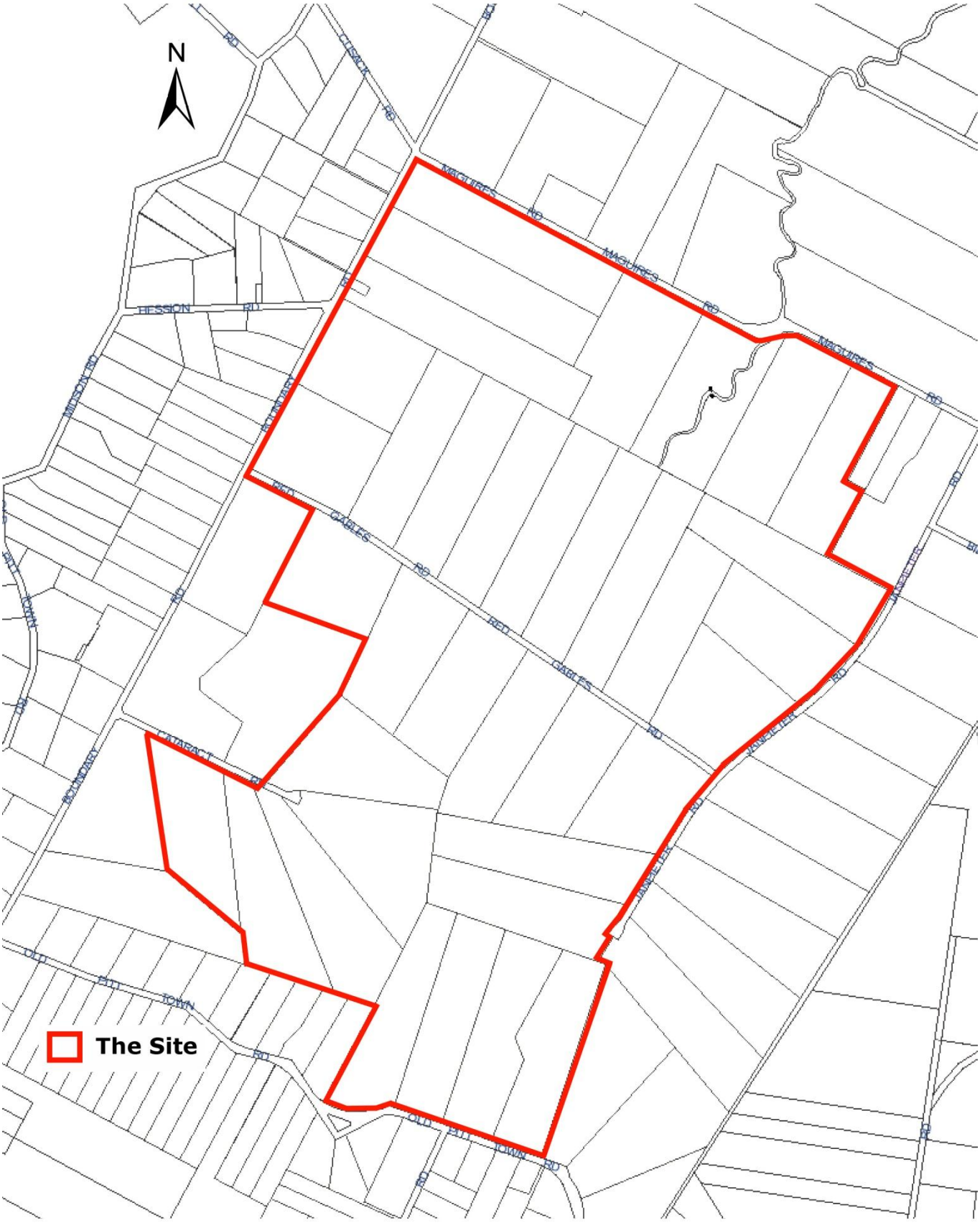


Figure 1 – Land to which this section of the DCP applies

1.2 THE PURPOSE OF THIS DCP

The purpose of this DCP is to:

- Communicate the planning, design and environmental objectives and controls against which The Hills Shire Council will assess future Development Applications;
- Promote high quality urban design outcomes within the context of environmental, social and economic sustainability;
- Ensure that development will not detrimentally affect the environment by ensuring that satisfactory measures are incorporated to ameliorate any impacts arising from the proposed development; and
- Provide safe and high quality environments for the residents, workers and visitors of Box Hill North.

1.3 AIM, VISION AND OBJECTIVES OF THIS SECTION OF THE DCP

AIM

The aim of this section of the Development Control Plan is to identify the built form parameters for Box Hill North and to facilitate the development of residential, open space, recreation, retail and commercial uses within the site. This section will identify Council's objectives for development within Box Hill North and provide relevant controls to ensure the vision and objectives are achieved.

VISION

To create a high quality, integrated and ecologically sustainable urban environment integrated with good public transport accessibility, open space, community facilities and employment opportunities.

OBJECTIVES

The objectives for development within Box Hill North in addition to those specified in Part A of this DCP are:

(i) To focus business and community activities in and around the Town Centre with a mix of retail, commercial and community uses.

(ii) To create a mixed use Town Centre which has main street characters, is pedestrian friendly and offers high levels of amenity for residents, workers and visitors.

(iii) To accommodate up to 10,000m^2 of non-residential floor space principally within the Town Centre.

(iv) Accommodate approximately 4,000 dwellings within a range of housing products and densities.

(v) Promote innovative housing types/design.

(vi) Encourage walking and cycling and use of public transport.

(vii) Provide a hierarchy of roads and paths with links to the surrounding area.

(viii) Create safe and walkable neighbourhoods.

(ix) Provide community and social infrastructure including schools, local parks, district sporting fields that provide for a range of facilities and opportunities.

(x) Accommodate water sensitive urban design measures, including the use of recycled water and integrated options for water supply, wastewater and stormwater servicing.

(xi) Protect and rehabilitate waterways and riparian corridors as natural systems.

2. INDICATIVE LAYOUT PLAN

The Indicative Layout Plan illustrates the broad level development outcomes for Box Hill North, and outlines the development footprint, land uses, open space, key transport linkages and location of community facilities and the proposed primary school.

OBJECTIVE

(i) To ensure development of Box Hill North is undertaken in a coordinated manner generally consistent with the structure of the Box Hill North Indicative Layout Plan in Figure 2.

DEVELOPMENT CONTROLS

a) All development is to be undertaken generally in accordance with the Indicative Layout Plan in Figure 2 subject to compliance with the objectives and development controls set out in this Development Control Plan.

b) Where variation from the Indicative Layout Plan is proposed, the applicant is to justify in writing indicating how the development is meeting the intention of the objectives of the relevant control and/or is generally consistent with the Indicative Layout Plan, the vision and development objectives for the area and the objectives and controls in Section 1.3 of this part of the DCP.

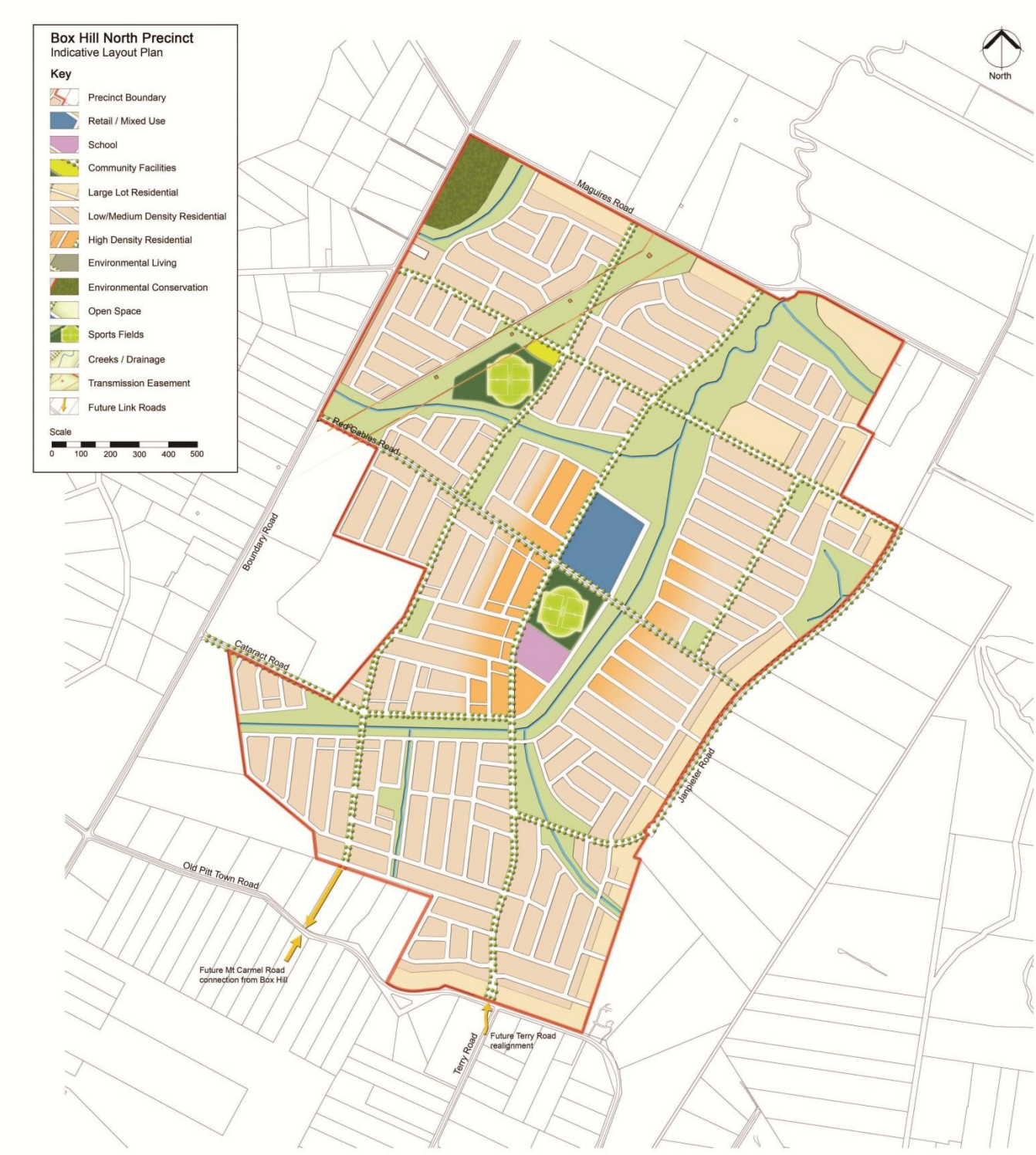


Figure 2 – Box Hill North Indicative Layout Plan

2.1 SITE ANALYSIS

OBJECTIVES

(i) To encourage a comprehensive approach to site planning, design and assessment of development.

(ii) To facilitate assessment of how future buildings relate to their immediate surroundings and to each other.

(iii) To facilitate development of a design that minimises the negative impacts on the amenity of adjoining development.

(iv) To ensure development is compatible with land capability

(v) To minimise adverse impacts on the environment.

DEVELOPMENT CONTROLS

a) Where variation is proposed from the Development Control Plan the applicant is to demonstrate that the proposed development is consistent with the vision and development objectives for the area and the objectives and controls in Section 1.2 of this part of the Development Control Plan.

b) Development should be designed to respect site characteristics such as topography, drainage, soil, landscapes, flora, fauna, salinity and bushfire hazard.

c) Watercourses should be protected from further degradation and their environmental function is to be improved to mimic natural systems. Disturbance to existing natural vegetation and landforms is to be minimised and disturbance to natural watercourses, wetlands and overland flow paths should be avoided.

d) Development on land adjoining bushland reserves should incorporate measures (such as setbacks and buffers) to prevent any impact on the reserves.

e) Development should be sited on the area of land requiring minimal earthworks.

f) Development should be sited away from steep slopes (particularly those containing natural vegetation) so that, where possible, these features can be kept in a natural state.

2.2 DEVELOPER CONTRIBUTIONS

Applicants should refer to Council's Section 94 Contribution Plan No.16.

2.3 TOWN CENTRE

Indicative layouts of the Box Hill North Town Centre are shown at Figure 3 & 4. The Town Centre is the key activity centre within Box Hill North. This section outlines the objectives and design principles relating to the Local Town Centre.

OBJECTIVES

(i) To create a compact, vibrant, safe and prosperous town centre.

(ii) To ensure an appropriate supply, distribution and mix of land uses within the town centre.

(iii) To encourage higher density living around transport, open space and service nodes.

(iv) To ensure development within the town centre is compatible with an integrated access network that encourages walking, cycling and the use of public transport.

(v) To ensure that the detailed design of the town centre is coordinated, and achieves a high quality urban design.

(vi) To provide a range of retail, commercial, entertainment, recreation and community uses.

(vii) Consider the needs of health and aged care providers, facilities for young people, civic and emergency services within the Town Centre.

(viii) To ensure that pedestrian streetscapes are provided through the Town Centre which are of a high amenity and provide effective pedestrian and cycle connections, and minimise walking distances.

DEVELOPMENT CONTROLS

a) The future design for the Box Hill North Town Centre is to incorporate the following key requirements:

- Street level activation is required in the core of the Town Centre, in particular, fronting the main street and open space.
- Concentrate small retail uses along and fronting key streets/plazas.

- The street layout is to emphasise sight lines to local landscape features, parks, places of key cultural significance, civic buildings and public open space.
- A range of building heights (up to 5 storeys, or 16m) with a transition to surrounding residential areas.
- A range of higher density housing is to be provided within the town centre, including apartments, terraces, multi-unit housing and small lot housing.
- All large format retail premises and decked parking areas, visible from prominent public areas, are to be sleaved with active uses. Blank walls visible from the public domain are to be limited.
- Bicycle parking shall be provided in accordance with Council's requirements as set out in Part C Section 1 - Parking of The Hills Shire Council Development Control Plan.

2.4 STREET NETWORK

OBJECTIVES

(i) To provide for the safe and efficient circulation of pedestrians, bicycles and motor traffic and on street parking requirements.

(ii) To provide a hierarchy of streets with good connectivity that utilises features and landmarks to enhance way-finding for pedestrians, buses, and private vehicles.

(iii) To minimise vehicular usage by enhancing pedestrian and bicycle connections to the Town Centre, schools and parks.

(iv) To ensure connectivity with Box Hill Release Area.

DEVELOPMENT CONTROLS

a) Street Network is generally to be in accordance with Figure 5.

b) Street design is to be in accordance with the indicative street cross sections at Figure 5 and Table 1. Alternative street designs may be permitted on a case by case basis if they preserve the functional objectives and requirements of the design standards.

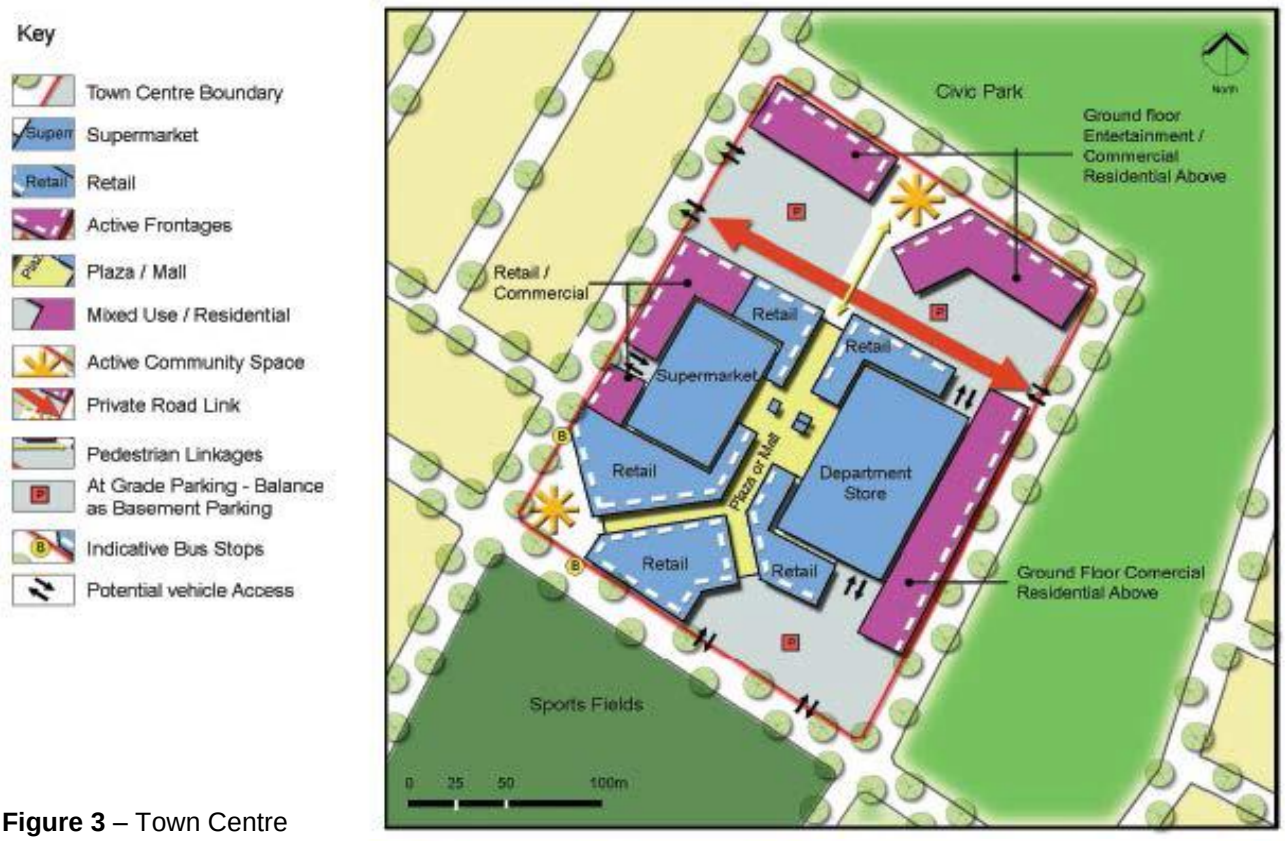


Figure 3 – Town Centre

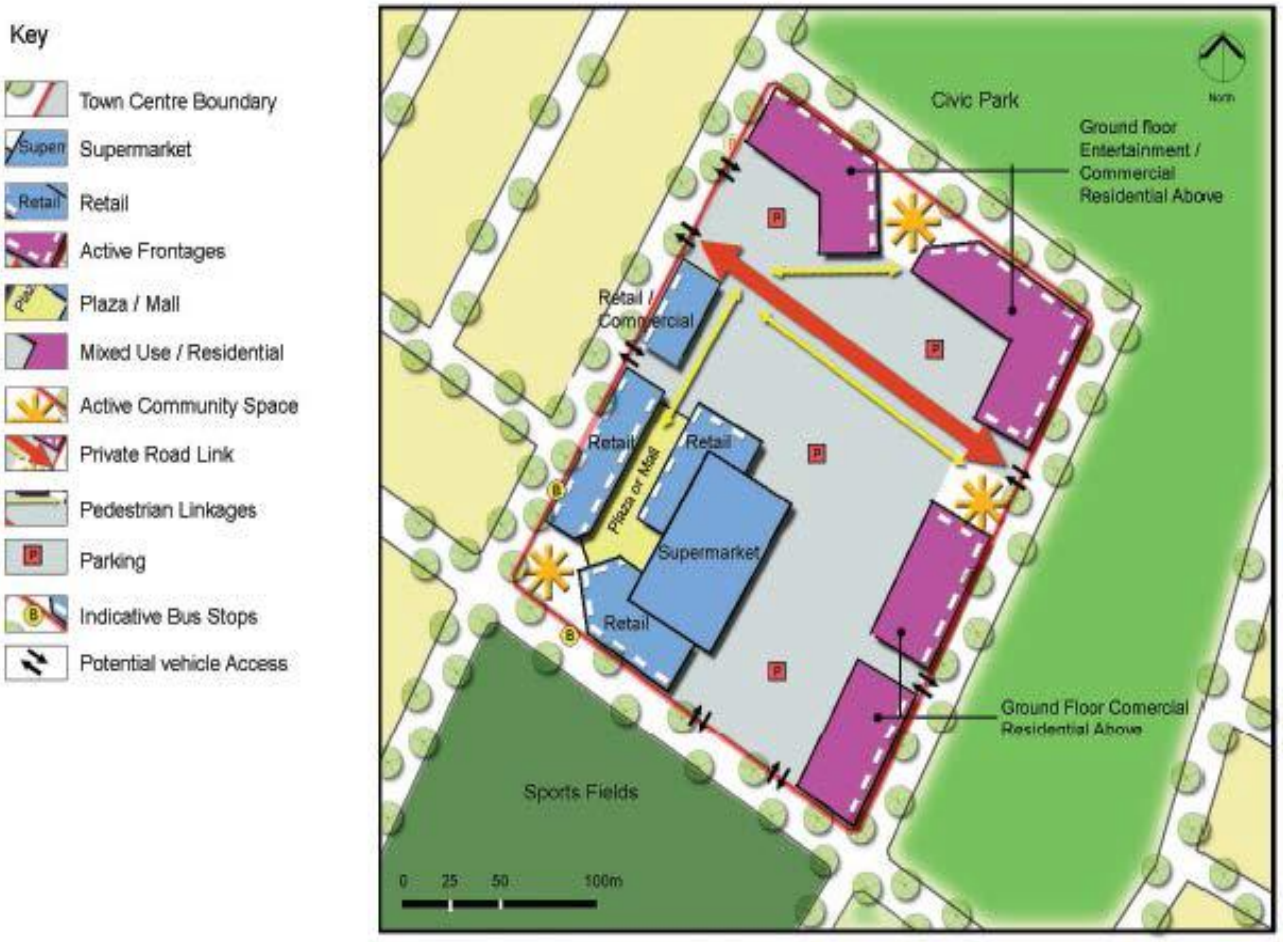
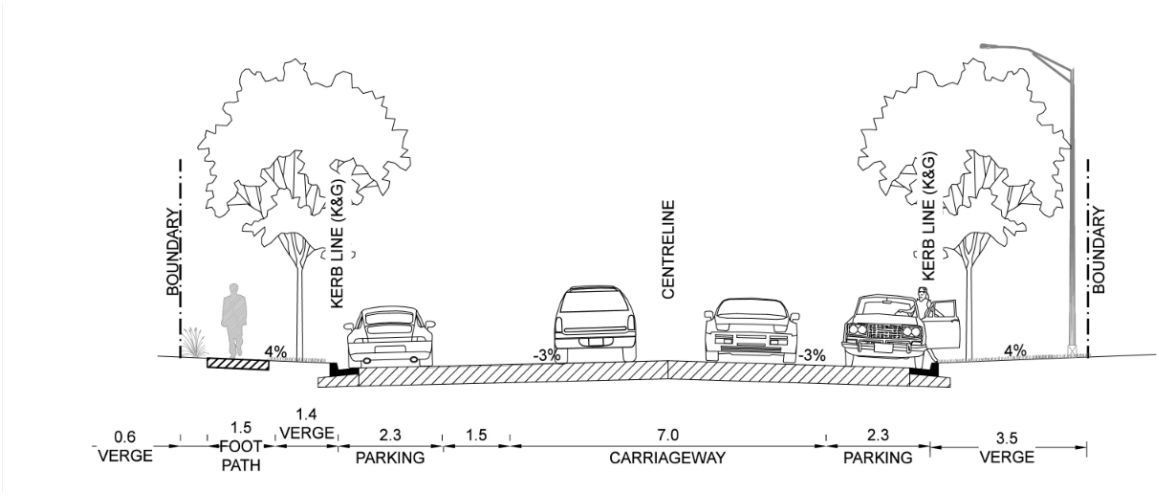


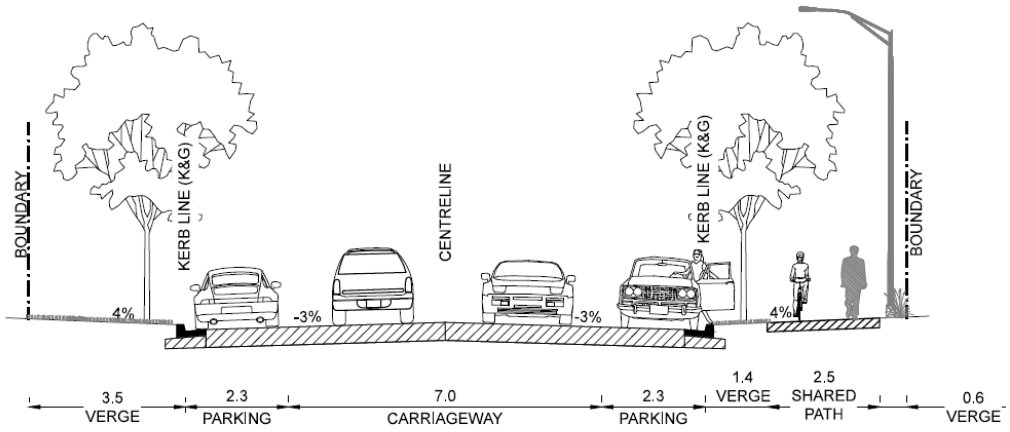
Figure 4 – Town Centre



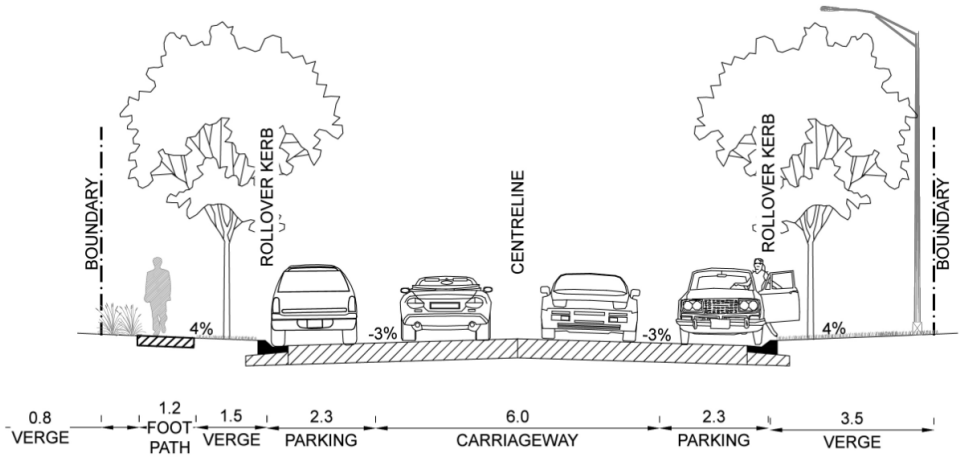
Figure 5 – Indicative Street Layout



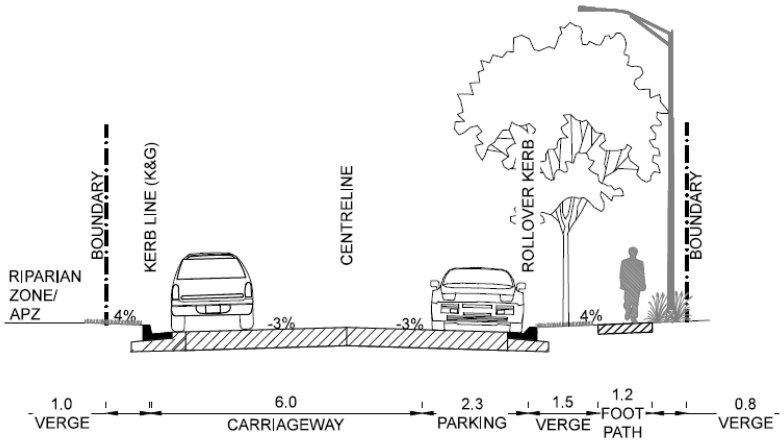
Typical Collector Road



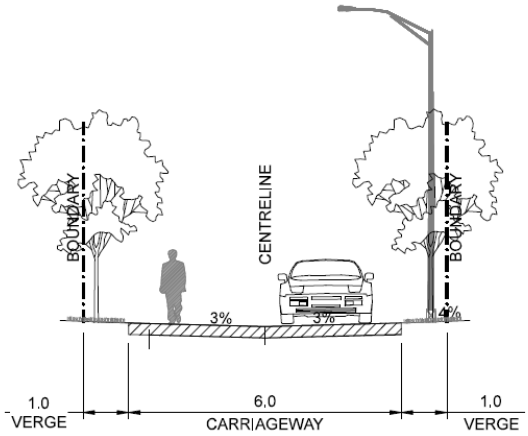
Typical Collector Road with Shared Path



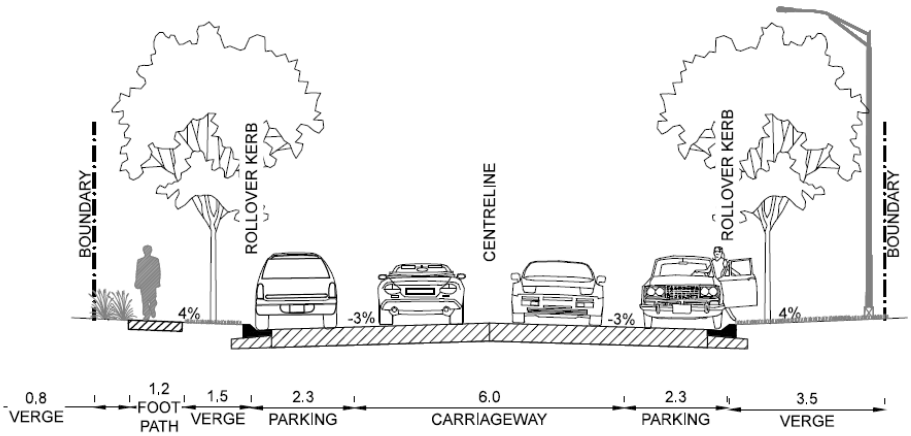
Typical Local Road with Parking on One Side



Typical Riparian Edge Road



Typical Rear Lane



Typical Local Road with Parking Both Sides

Figure 6 – Road hierarchy

Table 1 – Street Types

No	Street Type	Carriageway Width (metres)	Footpath Reservation Widths	Road Reserve	Concrete Footpath/Cycleway Required
1a	Collector Road	13.1 metres	3.5 metres	20.1 metres	1.5 metres one side
1b	Collector Road with Shared Path	11.6 metres	5.0 metres	20.1 metres	2.5 metres
2a	Local Road with Parking on Both Sides	10.6 metres	3.5 metres	17.6 metres	1.2 metres
2b	Local Road with Parking on One Side	8.3 metres	3.5 metres	15.3 metres	1.2 metres
3	Riparian Edge Road	8.3 metres	1 metre & 3.5 metres	12.8 metres	1.2 metres

2.5 LOCAL ROAD HIERARCHY

OBJECTIVES

(i) The road network is to be based on a hierarchy of three local road/street types, as shown in Figure 5, and includes:

- *Collector Road: is a road that collects traffic from access streets and carries higher volumes of traffic. A reasonable level of amenity and safety is to be maintained by restricting vehicle speeds through traffic-calming devices and intersection design;*
- *Local Road:* provide local residential access with shared traffic and pedestrian use*; and*
- *Riparian Edge Road:* adjoins a riparian corridor on one side with property access and footpath on opposite side only*.*

(ii) The specific objectives of locating roads adjacent to open space, riparian corridors and other public areas are:

- *To facilitate the orientation of lots and dwellings to front the open space and drainage areas.*
- *To enhance the outlook, setting and amenity of subdivisions adjoining open space, drainage areas and other public areas.*
- *To increase pedestrian accessibility to those public areas.*
- *To provide an acceptable level of access, safety and convenience for all street and road users within the release area, while ensuring acceptable levels of amenity, and minimising the negative impact of traffic.*
- *To provide a legible and permeable movement network for pedestrians and cyclists along streets and paths to points of attraction within and adjoining any development.*
- *To provide a suitable interface between the riparian corridors and urban development to minimise edge effects.*
- *To provide a bushfire asset protection zone between urban development and the riparian corridors.*

DEVELOPMENT CONTROLS

a) Internal intersections are to be T-junctions, roundabouts or controlled by other appropriate traffic management treatments to slow and control traffic.

b) For roads that cross natural drainage lines, the construction of bridges with raised approaches is preferred to culverts in order to maintain stream corridor function. Any works in or within 40 metres of a watercourse, or alterations to, natural drainage systems will require the necessary approvals of the Office of Water as well as consideration of the Fisheries Management Act 1944 for dredging or reclamation works.

c) Roads constructed across waterways are to be designed and constructed with reference to the Department of Primary Industries preferred waterway crossing design documented in "Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossing" (NSW Fisheries 2003) and the NSW Office of Water (2012) controlled activities guidelines for watercourse crossing on waterfront land.

d) Where culverts are required to be constructed across natural drainage lines:

- Light wells are to be provided in the centre of the road~~.~~;
- Natural bases and a combination of elevated dry cells and recessed wet cells are to be incorporated into the design to facilitate the movement of aquatic, riparian and terrestrial fauna.

e) Wherever shown on the Indicative Layout Plan and wherever else possible, roads are to be located along and adjacent to public open space, or other public lands. Where roads front open space, or riparian corridor land, the costs associated with their construction is the responsibility of the developer.

f) Driveway access is be avoided within 30 metres of signalised intersections.

g) Street networks are to conform to the requirements set out in Table 1: Street Types.

2.6 ROAD DESIGN AND CONSTRUCTION

OBJECTIVES

(i) To ensure sufficient carriageway and verge widths are provided to allow streets to perform their designated functions within the street

network and to accommodate public utilities and drainage systems.

(ii) To encourage the use of street by pedestrians and cyclists, and to allow cars, buses and other users to proceed safely without unacceptable inconvenience or delay.

(iii) To provide street geometry that is consistent with the needs of the street function, physical land characteristics and safety.

(iv) To encourage efficient and orderly development by providing for partial and temporary road construction.

DEVELOPMENT CONTROLS

(a) No retaining walls are to be constructed along the edge of roads fronting future or existing public open space, drainage areas or riparian corridor land.

(b) On access streets there will be only light traffic and the travelled way should allow for unobstructed movement in one lane as well as passing opportunities.

(c) The design of the carriageway is to discourage motorists from travelling above the intended speed by reflecting the functions of the street in the network. In particular the width and horizontal and vertical alignment is not to be conducive to excessive speeds.

(d) Roundabouts, street cross falls, longitudinal gradient, vehicle-turning movements and sight distances are to comply with Council's Design Guidelines Subdivisions/Developments (June 1997).

(e) Construction of roads and footpath/cycle paths fronting Open Space or Trunk Drainage are at the developer's expense.

(f) Street trees are to be provided in all subdivisions and will be required to be planted at the time of subdivision construction. Street trees will be protected with tree guards and a 12 month bond will be imposed for each tree.

(g) All collector roads are to be planted with a consistent species of tree in order to provide a boulevard treatment of the streetscape.

(h) All plans documenting proposed street tree planting must indicate the location of Sydney Water sewer and water pipes including where they enter a public road reservation. No planting of street trees is permitted within 1.5 metres of a Sydney Water pipe.

(i) Landscape works in roundabout islands may include low-maintenance groundcover planting and native grasses with a mature height of up 0.5 metres as well as clear-stemmed tree planting to maximise sited distances. A metered water supply point and subsurface drainage is required in all small island planter beds.

(j) Road verges provide opportunities for unifying the appearance and landscape character of the area and should be provided as a continuous design feature along the length of the arterial road.

2.7 PUBLIC TRANSPORT

OBJECTIVES

(i) To encourage public transport use through the provision of integrated bus, pedestrian and cycle routes.

(ii) To stage bus services in line with the development.

(iii) To locate public transport stops close to key nodes, community facilities, schools and medium density residential development.

(iv) To ensure clear, safe pedestrian and bicycle links to all public transport stops.

(v) Provide dedicated cycle routes and facilities, and a highly permeable and safe pedestrian network.

DEVELOPMENT CONTROLS

(a) Provide local bus routes (short, medium and long term) determined by Transport for NSW and Council.

(b) Provide aquequate provision for bus turning at intersections of Boundary Road with Red Gables Road and Cataract Road.

(c) Bus stops are to be:

- easily accessible and located close to major trip attractors;
- provided on-street and not within indented bays;
- generally at separation distances of around 400m;
- well connected with cycling and walking paths and crossing points of major roads, and positioned to ensure a high level of personal safety and security.

(d) Bus shelters are to be provided at key and installed at the subdivision construction stage by the developer to the satisfaction of Council.

(e) All roads that are accommodating buses are required to have the following:

- Corresponding bus stops (bus stops on both sides of the street);
- A 3 metre wide kerbside parking lane in each direction to allow for buses to serve bus stops without implementing movements of other vehicle/buses in a travel lane;
- Travel lanes on these roads should be 3.5 metres wide to adequately and safely accommodate buses.

2.8 PEDESTRIAN AND CYCLE NETWORK

OBJECTIVES

(i) To provide a clear pedestrian and cycle network that provides links between all key activities, community facilities, open space areas and the Town Centre.

(ii) To create an interconnected pedestrian and cycle network comprising streets and paths that are safe, legible, and comfortable.

(iii) To ensure a high level of pedestrian and cycle accessibility which is well lit, safe and clearly defined within the Town Centre.

(iv) To provide an efficient and safe network of pedestrian and cycleway paths for the use of the community, within and beyond the site.

DEVELOPMENT CONTROLS

(f) Pedestrian and cycle routes are to be provided in accordance with Figure 7. Alternate configurations can be provided subject to consistency with the objectives.

(g) A shared cycle / pedestrian path is to be a minimum width of 2.5m.

(h) Pedestrian and cycle paths are to be provided as part of the open space and recreation areas.

(i) Pedestrian and cycle ways, as well as pedestrian refuge islands should be designed so that they are fully accessible by all users in terms of access points and gradients, in accordance with AS 1428 (Part 1 to 4 Design for access and mobility).

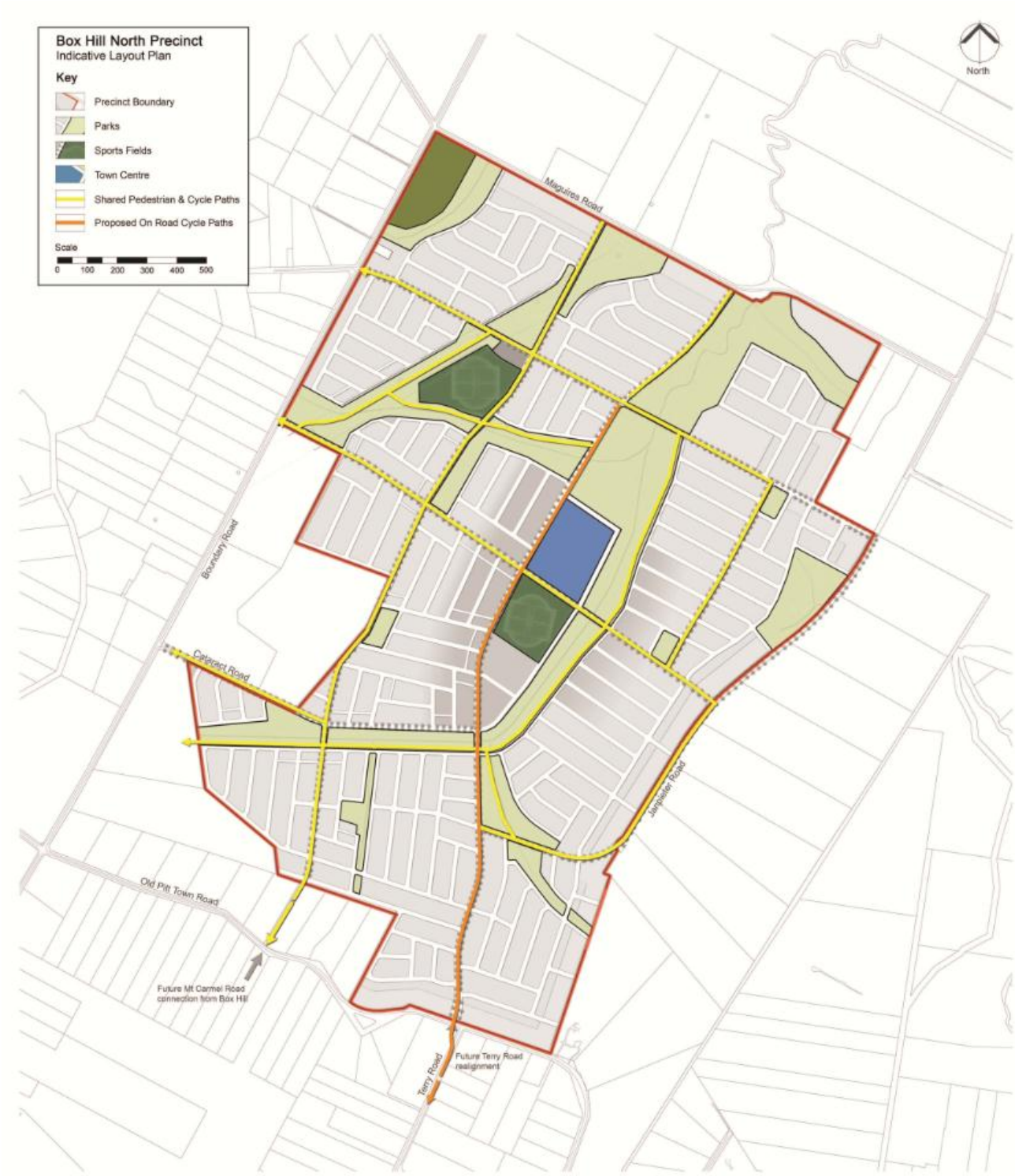


Figure 7 – Indicative Pedestrian and Cycle Network

2.9 PUBLIC DOMAIN

OBJECTIVES

(i) To provide places and spaces that are acceptable to all, accommodate a range of activities for residents and visitors and are capable of responding to changes in demand and future needs.

(ii) To incorporate environmentally sensitive areas such as riparian land, bushland, and archeologically sensitive sites into the open space network and provide appropriate protection and management mechanisms.

(iii) To establish open spaces that promote local character and identity as an interconnected network of open space comprising parks, squares and streets.

(iv) To ensure that public domain elements such as street trees, paving, street furniture, lighting and signage contribute to a consistent street character.

DEVELOPMENT CONTROLS

(a) Link the open spaces using streets, riparian corridors, pedestrian paths and cycle ways.

(b) Orient development surrounding open space towards the public domain to maximise opportunities for casual surveillance

(c) Provide perimeter streets to all parks on at least three sides. Where a street frontage is not provided the development must front the park to provide casual surveillance.

(d) Public domain elements such as street trees, paving, street furniture, lighting and signage are to be consistent and create local character.

(e) Incorporate public art in open space areas. Where appropriate artwork should serve a dual role (e.g. as play equipment for children, informal seating or a marker for a meeting place).

2.10 SPECIAL CONTROLS

Riparian Corridors

- Riparian corridors and conservation areas are to provide opportunities for pedestrian and cycle ways, fitness trails and additional open space in a manner that maintains the environmental significance of these areas and is consistent with the Office of Water Controlled Activity Guidelines (2012). A range of themed elements such as boardwalks, eco-pathways, and educational tracks should be utilised in appropriate locations (i.e. within the outer 50 percent of the Vegetated Riparian Zone at locations which cause minimal harm).
- Riparian corridors are to be protected for environmental conversation purposes and enhanced with species from the local native vegetation community.

Vegetated Management Plan - (VMP)

Any subdivision within land identified as Riparian Corridor Protection Area (Figure 8), or residential subdivision on land adjacent to such an area will be required to be accompanied by a Vegetation Management Plan and integrated with the required Landscape Plan, Bushfire Assessment, and Sedimentation & Erosion Control Plan.

The recommendations of the Vegetation Management Plan will be imposed as conditions of any consent that may be issued.

Watercourses

- The watercourses on the site are to be rehabilitated to mimic natural systems from the local area.
- Any new road crossings or the upgrade of existing road crossings are consistent with the Office of Water's Controlled activities guidelines for watercourse crossings on waterfront land and NSW DPI policy and guidelines for fish friendly waterway crossings for Class 1 and 2 waterways.

Detention Basins

- Office of Water requirements for detention basins as outlined in the 2012 Controlled Activity guidelines are to be incorporated into any proposals.
- Any proposed online basins need to be dry and vegetated.



Figure 8 – Riparian Corridor Protection Areas

Signage, Street Furniture, Lighting and Public Art

- Signage, street furniture and lighting is to be consistent with DCP 2012 Part C Sections 2 and 3 Signage and Landscaping.

Utilities

- Gas and water services may be located in a shared trench on one side of the street and electricity, power and telephone located in a shared trench on the other side of the street.
- All development shall incorporate underground electricity reticulation and telecommunications.
- Any existing aboveground electricity reticulation services shall be relocated underground with the exception of main transmission lines.
- Utilities and services are to be supplied and constructed in accordance with the requirements of the relevant authority.
- Development is to have a water supply for fire fighting purposes in accordance with the NSW Rural Fire Service's Planning for Bushfire Protection 2006(as amended).

Transmission Easement

- Adequate space is to be provided around each transmission tower to ensure there is a safe working platform to facilitate the use of cranes and elevated work platforms for conducting repairs and maintenance.
- Continuity of vehicular access along the easement must be preserved without hindrance from changes to ground levels or the construction of culverts.
- Written consent shall be obtained from Transgrid for any proposed development within the easement.
- Vegetation within the easement must not be capable of growing beyond a height of 4 metres at full maturity.

2.11 STORMWATER MANAGEMENT

OBJECTIVES

(i) To control stormwater runoff and discharge impacts on adjoining properties and into natural drainage systems before, during and after construction.

(ii) To prevent flood damage to the built and natural environment, inundation of dwellings and stormwater damage to properties.

(iii) To ensure that proposed development does not adversely affect the operational capacity of the downstream stormwater system.

(iv) To encourage reuse, recycling and harvesting of stormwater to reduce demand on potable water supply.

(v) To encourage and create an urban form where risks to life and property, as a result of either minor or major flooding, are minimised.

(vi) To maximise opportunities for a best practice Water Sensitive Urban Design approach at the individual lot, overall development and regional scales.

(vii) To reduce the impacts typically associated with urbanisation on receiving waterways, including a reduction in streamflow erosion potential.

(viii) The WSUD strategy prepared for all development is to take into account water quality and stream erosivity objectives, together with attenuating flow rates and runoff volumes to acceptable levels following urban development.

DEVELOPMENT CONTROLS

(i) Water Sensitive Urban Design (WSUD) elements are to be designed and constructed in accordance with the following publications:
   a. Australian Runoff Quality (Engineers Australia 2005).
   b. Water Sensitive Urban Design Technical Guidelines for Western Sydney (NSW Government Stormwater Trust and UPRCT, May 2004).

(ii) Discharge points are to be controlled and treated to prevent soil erosion, and may require energy dissipating devices on steeper topography, to Council's requirements.

(iii) The minor drainage system minimum design standard is to capture and convey flows produced by a 10-year Average Recurrence Interval (ARI) design storm.

(iv) Drainage reserves or local drainage links are required to discharge gap flows (the difference between the 100 year ARI storm event and half design pipe flow, allowing for blockage) from all ARI runoffs to the generally accepted maximum of the 100-year ARI storm event.

(v) Local drainage links within subdivisions are to be a minimum of 5 metres in width designed in accordance with details available from Council. The developer is required to dedicate to Council at no cost, the land, all associated drainage works, erosion control planting, pathways and tree planting. Details are to be submitted with the engineering designs.

(vi) Drainage facilities are to be of a standard acceptable to Council.

(vii) All drainage pits shall have access from the ground surface. Buried junction pits shall not be permitted.

(viii) All pipes to be dedicated to Council are to be located within public land.

(ix) All residential, employment and commercial developments will be required to provide rainwater tanks in accordance with the requirements of the publication "Box Hill North Precinct Water Cycle & Flood Management Strategy Report", J Wyndham Prince, July 2013.

(x) The natural form, characteristics and function of waterways, including riparian land, are to be retained, restored, protected and enhanced wherever possible.

(xi) Constructed waterways, including riparian land, are to replicate as close as possible the form, characteristics and function of existing waterways at that location.

(xii) Waterway rehabilitation and construction works are to apply 'Best Practice' combination of soft and hard engineering techniques establishing a water sensitive, geomorphically stable, diverse and functional waterway corridor that addresses urban influences and considers the immediate waterway corridor and aquatic systems both upstream and downstream of a subject site.

As a minimum, waterway design and construction ought follow the principles and guidelines in the Constructed Wetlands Manual (Department of Land and Water Conservation, NSW 1998) and A Rehabilitation Manual for Australian Streams (Cooperative Research Centre for Catchment Hydrology, 2000).

(xiii) Soil and Water Management Plans are to be submitted with all residential subdivisions and are to be designed in accordance with The Hills Shire Council's 'Works Specification, Subdivision/Development' and the Department of Housing manual, 'Managing Urban Stormwater: Soils and Construction'.

(xiv) During the construction phase of development, the relevant Stormwater Management Objectives for New Development as set out in the most up to date revision of "Managing Urban Stormwater: Soils and Construction" (NSW Department of Housing) must be complied with.

2.12 BUSHFIRE HAZARD MANAGEMENT

OBJECTIVES

(i) To reduce the risk to life and property in areas of bushfire risk.

(ii) In determining Development Applications, Council will have regard to any likely bushfire hazard.

DEVELOPMENT CONTROLS

(j) Proposed pubic road within the subdivision will need to comply with the access requirements within section 4.1.3 of Planning for Bushfire Protection 2006.

(k) A traffic report should be prepared which addresses the ability for emergency services to access the precinct whilst residents are evacuating the area, taking into account the additional traffic generated by the proposed development.

(l) Development subject to bushfire risk will be required to address the requirements of the NSW Rural Fire Service Guidelines entitled "Planning for Bushfire Protection 2006."

(m) Development applications on bush fire prone land within the precinct shall be supported by a bushfire assessment report which considers the provisions of Planning for Bush Fire Protection 2006.

2.13 CUT AND FILL

OBJECTIVES

(i) To minimise incidence of cut and fill and alterations in natural ground levels.

(ii) To ensure that dwellings are designed with regard to site conditions and minimise the impact on landform.

(iii) To lessen the visual impact of retaining walls on allotment boundaries.

DEVELOPMENT CONTROLS

(n) Cut and fill principles are illustrated in Figure 9.

(o) Cut and fill of land is to be minimised under the following numeric controls:

- maximum depth of any cut in the slope is 1 m, and
- maximum height of any fill of the slope is 1 m.

(p) Side boundary retaining walls for development on cross slopes should retain a cut no higher than 1 metre.

(q) Where the retaining of land is greater than 1 m in height, retaining walls should be tiered with a minimum distance of 600mm between walls and suitably landscaped.

(r) Embankments should have a maximum grade of 1:4 and be suitably landscaped to prevent erosion.

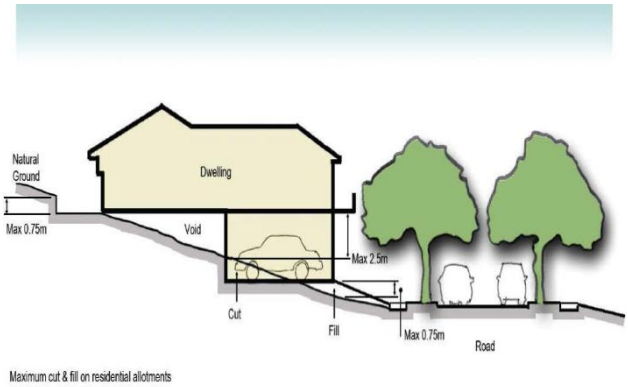


Figure 9 - Cut and fill principles

2.14 ABORIGINAL HERITAGE

Council shall require all subdivision development applications to include an Aboriginal Cultural/Archaeological Assessment including consultation and mitigation to comply with relevant legislation and associated requirements. The heritage assessment shall be prepared by a suitably qualified person.

Where the Aboriginal Assessment identifies a site as significant, submission of a letter from the relevant Aboriginal Lands Council is required expressing support or recommendations for the subdivision proposal.

3. RESIDENTIAL DEVELOPMENT

3.1 HOUSING TYPES AND DESIGN PRINCIPLES

A mix of housing types that range from residential flat buildings to large lot residential dwellings are to be provided within Box Hill North to facilitate housing diversity and choice and to meet the requirements of people with different housing needs. Generally, higher residential densities are to be located in the vicinity of the Town Centre and in areas with high visual or landscape amenity and proximity to facilities. Low density residential development is to be located along ridges and steeper slopes.

3.2 MINIMUM SUBDIVISION SIZE FOR R2 LOW DENSITY RESIDENTIAL - LARGE LOTS

OBJECTIVES

(i) To provide lots of a size conducive to residential living, having regard to any development constraints or environmental qualities of that land.

(ii) To ensure lots have sufficient area to provide adequate access, open space, a sufficient building platform and attractive presentation to the street.

DEVELOPMENT CONTROLS

(a) Minimum lot size: 2000 m²

(b) Minimum depth: 60 metres

(c) Minimum frontage: 30 metres

(d) Minimum front setback: 10 metres

(e) Minimum side setback: 5 metres

3.2.1 BUILDING PLATFORM

OBJECTIVE

(i) To ensure lots have a suitable area for the erection of a dwelling and associated structures, free of constraints or restrictions.

DEVELOPMENT CONTROLS

(s) The lot must be capable of providing a building platform of at least 20 metres by 15 metres clear of any restrictions or building line setbacks. The building platform shall be sited in an accessible and practical location suitable for residential building construction.

(t) Suitable graded vehicle access shall be provided from a public road to the identified building platform in accordance with Councils minimum driveway requirements.

3.3 ENVIRONMENTAL LIVING

OBJECTIVE

(i) To ensure that future development is designed and managed in a manner which respects the natural attributes of the environmental living zoned land area in Box Hill North.

DEVELOPMENT CONTROLS

Integrated Development Application

- A single integrated Development Application for the whole of the environmental living zone land area is to be submitted to Council. The development is to be accompanied by a detailed site analysis plan. Environmental living design principles are illustrated in Figure 10.

Development Envelopes

- A Development Envelope Plan is to be prepared for each individual lot within the environmental living zone land area. The plan is to set out the broad parameters such as the building envelope, maximum building height and any individual characteristics of individual lots.
- The footprint of any building and related structures (including out buildings, storage sheds and courtyards) must be sited wholly within the Development Envelope Plan for individual lots.

Services

- Building services (including drainage and utilities) are to be underground. Trenching is not permitted within the drip line of existing trees to minimize impact. Site plans are to show service trench location in relation to existing trees.

Tree Retention and Removal

- In the area of individual lots outside the Development Envelope, no native trees or native understorey vegetation is to be removed or lopped unless:
  - Removal of native trees or native understorey vegetation is to be undertaken as part of an ongoing program of vegetation/ fuel management (if required); or
  - Individual native trees can be demonstrated to be a clear risk to personnel safety and or property, or
  - Removal of native trees and understorey is essential to the provision of access to a lot.
  - Prior to any such removal of native trees you must obtain approval of Council in accordance with their Tree Preservation Policy.

Clothes Drying

- Outdoor clothes drying areas are to be located within the Development Envelope for an individual lot and located to the side or rear of the dwelling and adequately screened.
- There will be no clothes drying on balconies of units within residential flat buildings.

Waste Minimisation and Recycling

- Garbage storage and recycling facilities are to be provided within the Development Envelope for an individual lot. The area is to be adequately screened.

Rainwater Tanks

- Rainwater tanks are to be located within the Development Envelope for each lot and located adjacent to the dwelling or integrated into the design of the dwelling where possible.

Outbuildings

- Any additional storage or work spaces are to be located within your development envelope and generally to the rear of a dwelling

Swimming pools and tennis courts

- If a swimming pool or tennis court is proposed it must be located within the Development Envelope for an individual lot and to the rear or side of the dwelling only.

Existing Vegetation and Natural Ground Conditions

- If the siting of a dwelling requires the removal of trees, similar species are required to be planted elsewhere within the lot.
- Landscaping is to incorporate native grasses, understorey and ground cover vegetation and consistent with any bushfire fuel management requirements.
- Suitable Plant Species Endemic or suitable native plant species selected from the approved plant species list are to be used for revegetation of disturbed areas both outside of and within individual Development Envelopes.
- Non-invasive exotic species are only permitted within Development Envelopes and must be contained within defined edges (e.g. timber, steel or masonry edging).

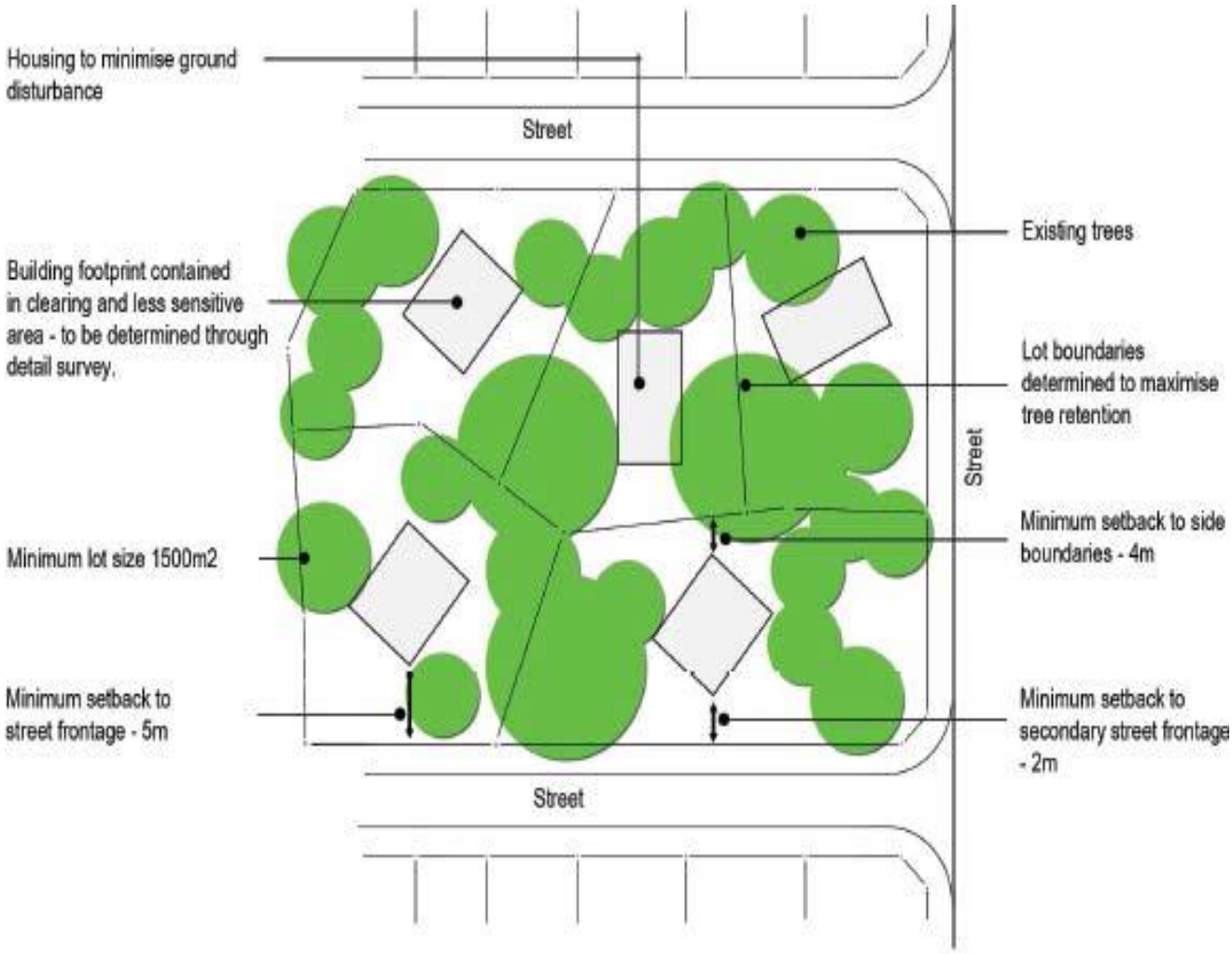




Figure 10 – Environmental Living Design Principles

3.3.1 CORNER LOTS

OBJECTIVES

(i) To ensure that dwellings sited on corner lots take advantage of their visually prominent location whereby the design addresses both street frontages.

(ii) To ensure that the dwelling façade along the secondary street frontage provides architectural relief to the streetscape.

DEVELOPMENT CONTROLS

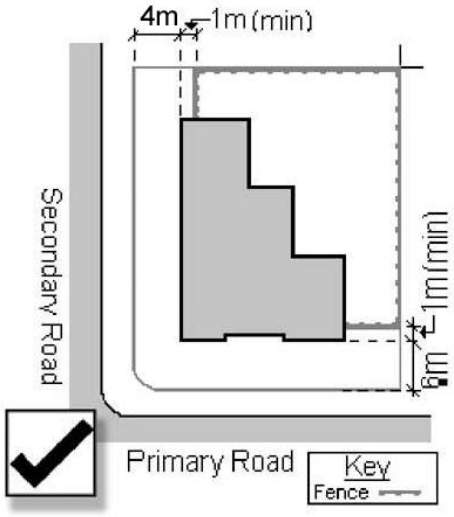
(i) On corner lots a minimum of three of the following design elements are to be included along the secondary frontage:

- Verandahs;
- Gables;
- Vertical elements to reduce the horizontal emphasis of the façade;
- Entry feature or portico;
- Balcony/window boxes or similar elements;
- Landscaping/fencing compatible with the frontage status of the elevation; and
- Windows.

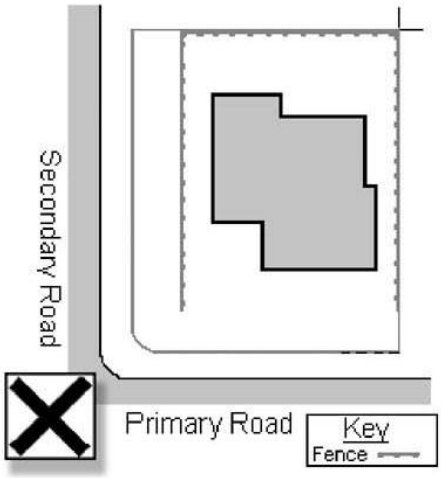
(ii) The following features are not to occur along either façade:

- Blank walls without relief;
- Windows or doors of utility rooms exposed to view; and
- Hot water services, air conditioning machinery or similar utility installations.

(iii) Fencing on each road frontage boundary will be limited to a maximum of 25% of the length of that boundary. Any such fencing will be located a minimum of 1 metre behind the closest wall of the building to that boundary (See Figure 11).



SET BACKS FOR CONER SITES AND STREET FRONTAGE TREATMENT



DESIGN ADDRESSES ONLY ONE FRONTAGE WITH SURROUNDING HIGH FENCES



VERTICAL ELEMENT THAT HELPS TO DEFINE THE CORNER



DESIGN SUCCESSFULLY ADDRESSES BOTH STREET FRONTAGES



DESIGN SUCCESSFULLY ADDRESSES BOTH STREET FRONTAGES



FAILS TO ADDRESS THE SECONDARY STREET FRONTAGE WITH BLANK WALL AND HOT WATER SERVICE LOCATED ALONG THE SECONDARY STREET FACADE

Figure 11 – Corner lots

3.4 RESIDENTIAL AMENITY, SOLAR ACCESS AND PRIVACY

OBJECTIVES

(i) To provide a high level of residential amenity with opportunities for outdoor recreation and relaxation within the property.

(ii) To enhance the spatial quality, outlook, and usability of private open space, including outdoor clothes drying.

(iii) To facilitate solar access to the living areas and private open spaces.

(iv) To minimise overshadowing of neighbouring dwellings and their private open space.

(v) To minimise the direct overlooking of internal and external living areas through site layout and building layout, location of windows and balconies, design of windows and use of screening devices.

(vi) To ensure that buildings are sited and designed so as to provide for solar access and both visual and acoustic privacy.

DEVELOPMENT CONTROLS

Solar Access and Cooling

- Dwelling design should:
  - include a living room or the like with a northern aspect,
  - ensure daylight access to habitable rooms and private open space, particularly in winter – use skylights, clerestory windows and fanlights to supplement daylight access,
  - incorporate cross ventilation,
  - incorporate shading and glare control, particularly in summer i.e. - using shading devices, such as eaves, awnings, colonnades, balconies, pergolas, external louvers and planting,
  - provide external horizontal shading to north-facing windows,
  - provide vertical shading to east or west windows.
  - provide an area with good solar access for outdoor clothes drying.

Privacy

- The siting of windows of habitable rooms on the first floor shall minimise overlooking to the private open space of neighbouring properties.
- Direct overlooking of main habitable areas and private open spaces of adjacent dwellings is to be minimised through building layout, window and balcony location and design, and the use of screening devices, including landscape treatments.
- Habitable room windows with a direct sightline to the habitable room windows in an adjacent dwelling within 3m of the property boundary are to:
  - be obscured by fencing, screens or appropriate landscaping,
  - be offset from the edge of one window to the edge of the other by a distance sufficient to limit views into the adjacent window; or
  - have fixed obscure glazing in any part of the window below 1.5m above floor level.
- A new balcony, deck, patio, pergola, terrace or verandah and any alterations to an existing balcony, deck, patio, pergola, terrace or verandah must have a privacy screen if it:
  - has a setback of less than 3m from a side or rear boundary,
  - has a floor area more than 3m², and
  - has a floor level more than 1m above ground existing ground level.
- A detached deck, patio, pergola, terrace or additions or alterations to an existing deck, patio, pergola, or terrace must not have a floor level that is more than 600mm above existing ground level.

3.5 FORMS, ROOFS AND FEATURE ELEMENTS

OBJECTIVES

(i) To create an attractive and cohesive streetscape (refer to Figure 12).

(ii) To ensure that buildings are designed to enhance the desired future built form character of the neighbourhood.

DEVELOPMENT CONTROLS

Porches and entries

- Should form an integral part of the dwelling, create a clear and visible entry area and where possible provide shelter for people entering the house.
- On corner lots, the main entry should ideally be on the long side of the lot to avoid a blank face to that street.

Verandahs and pergolas

- Be provided to all elevations that are exposed to western and northern sun.
- Appear as an extension of the house.
- Be made of durable materials such as timber or metal.

Balconies and terraces

- Should provide usable external living areas for upper levels of the home.
- Provide additional opportunities for outlook to the street and garden, improving safety by encouraging passive surveillance.

Roof eaves and sun shading

- Sunscreens and awnings, particularly on the northern and western elevations are encouraged.
- Eaves of at least 450mm (to the fascia) are required on all pitched roofs except where roof portion is zero lotted. However, where practical, 600mm eaves should be considered to achieve an increased degree of shading to windows and for enhanced aesthetic appeal.
- Where flat roofs are proposed, alternative shading devices are required.
- Eaves are not mandatory on garages where they are located on the southern side of the main house.

Materials and proportions

- Durability, detailing, appearance and diversity should be considered when selecting materials to ensure a high quality appearance over time.
- Variety and individuality are important, and considered materials selection creates a harmonious balance on the facades of the house.
- Well-balanced proportions are also important for improving the appearance of the dwelling, helping to relate various elements such as doors, windows and entries.

Aerials and other clutter

- Where possible, aerials, satellite dishes, water tanks, air conditioning units and solar hot water units should not generally be visible from the street or other public spaces.
- Careful attention is required to ensure optimum orientation for solar collectors, while avoiding the potential of such items being viewed as roof clutter.

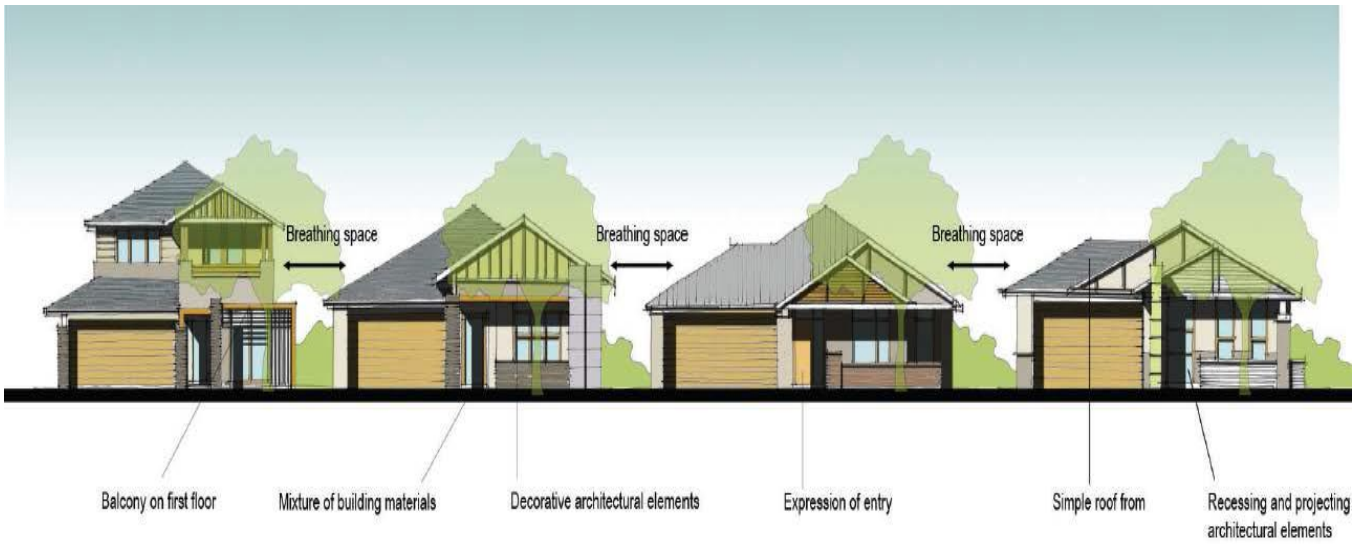


Figure 12 - Streetscape Elevation

3.6 FENCING

OBJECTIVES

(i) To enhance the quality of the streetscape through consistent and co-ordinated front fencing.

(ii) To define the public and private domain and provide a sense of enclosure to the front yard.

(iii) To ensure boundary fencing is of a high quality and compliments the streetscape.

DEVELOPMENT CONTROLS

(u) Side and rear fencing are to be a maximum of 1.8 m high and located not forward of the front building line.

(v) On corner lots the preferred outcome is for the dwelling to front both street frontages providing a better overall streetscape presentation. Where fencing to the secondary street frontage is proposed, it is not to exceed 1.8 m high for more than one third of the length of the secondary road frontage, if relevant.

(w) On corner lots the front fencing style is to be continued along the secondary street frontage to at least 1 m behind the building line of the dwelling.

(x) Where a dwelling is located adjacent to open space, the design of the fencing is to permit casual surveillance of the open space and provide the dwelling with outlook towards the open space. Fencing that adjoins open space is to permit casual surveillance. Colorbond or timber paling or lapped/capped fencing can only be used internally between dwelling lots.

(y) Where cut is proposed on the boundary of a lot, retaining walls are to be constructed with side fence posts integrated with its construction (relevant construction details are required with retaining wall approval). Otherwise retaining walls must be located a minimum of 450mm from the side or rear boundary of the lot containing the cut.

3.7 GARAGES AND CAR PORTS

OBJECTIVES

(i) To provide safe and secure parking for residents and visitors.

(ii) To reduce the visual impact of garages, carports, and parking areas on the streetscape and improve dwelling presentation.

(iii) To ensure the design of garages do not dominate the frontage of the house.

(iv) To encourage the use of studios over garages to provide surveillance, work from home or residential accommodation opportunities.

DEVELOPMENT CONTROLS

(z) Garage doors are to be set back a minimum of
- 1m from the front facade of the home
- 5.5m from the front boundary.

(aa) Garage doors are to be:

- less than 50% of the width of the house
- no wider than 6m
- a maximum height of 2.4m.

(bb) Double garages are only permitted on lots that are 12m wide or greater.

(cc) Single fronted tandem garages with one space behind the other are permitted.

(dd) Triple garages are only permitted on large residential lots with a minimum lot size of 2000m^2.

(ee) Garages located on corner lots should be accessed from the secondary street (unless solar orientation would be compromised).

(ff) Driveways should be a minimum of 1.5m from street trees.

(gg) Landscaping is to be provided between the driveway and side fences.

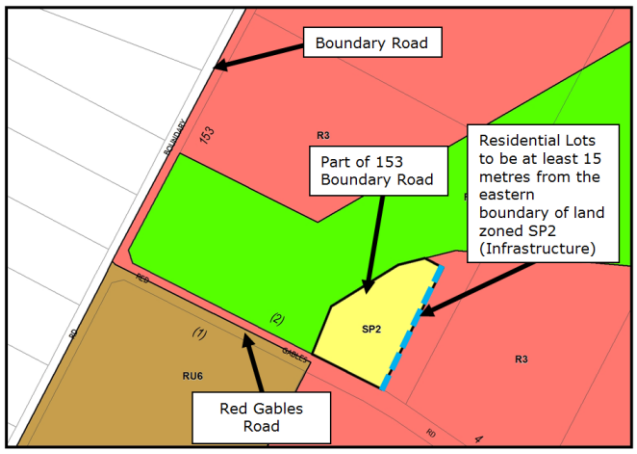
3.8 RESIDENTIAL DEVELOPMENT ADJOINING SEWAGE TREATMENT FACILITIES

OBJECTIVES

(i) To ensure that the amenity of residents, adjoining the water recycling facility at 153 Boundary Road, Box Hill, is appropriately maintained.

CONTROLS

(a) Residential lots to the east of land zoned SP2 Infrastructure, and containing a sewage treatment facility or water recycling facility, at 153 Boundary Road, Box Hill (Lot 10 DP593517), shall be at least 15 metres from the boundary of the site containing the sewage treatment facility or water recycling facility.



3.9 STREET TREES

OBJECTIVES

(i) Be consistently used to distinguish between public and private spaces and between different classes of street within the street hierarchy;

(ii) Minimise risk to utilities and services;

(iii) Be durable and suited to the street environment and, wherever appropriate, include endemic species;

(iv) Maintain adequate lines of sight for vehicles and pedestrians, especially around driveways and street corners;

(v) Provide appropriate shade; and

(vi) Provide an attractive and interesting landscape character without blocking the potential for street surveillance.

CONTROLS

(b) Trees should include endemic species; however suitability to the surrounding infrastructure should be paramount.

(c) All trees shall be sourced from a " NATSPEC " accredited nursery".

(d) Trees species should be selected that will not cause future damage to Council and private infrastructure eg: drainage culverts and private driveways.

(e) Street trees must be in accordance with Councils preferred planting list.

(f) Where nature strips have a footpath street trees should be planted in the centre, between the rear of kerb and the edge of footpath.

(g) Street trees are not to be planted within 9m from road corner or with in 3m of a driveway. (Refer figure 13 below).

(h) Street trees are to be planted away from street lighting and utilities such as storm water outlets and drainage culverts. (Refer figure 13 below).

(i) Street trees should be spaced approximately every 6 metres.

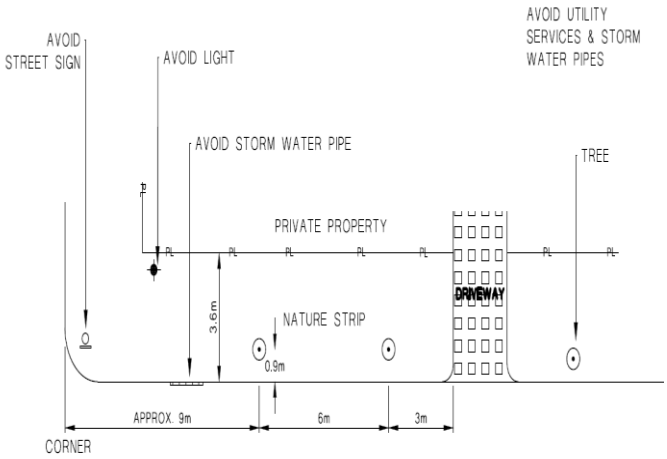


Figure 13 – Location of street trees

Footpaths

Local Roads

- Footpaths are required to be constructed on one side of the street only. On the side of the street where footpaths are constructed one tree per lot is to be planted in the centre of the lot frontage. Where there are no footpaths in the street two trees per lot spaced at 6 metre intervals are required.
- Footpaths to be 1.2m in width.

Collector/Sub-Arterial Roads

- Footpaths are required to be provided on both sides of the street.
- Footpaths are to be 1.5m in width.

SPECIES LIST FOR STREET TREES BOX HILL NORTH

Cumberland Plain Woodland – Larger mature size

Tree Species	Common Name	No Footpath	Footpaths	Cycleway
Eucalyptus crebra	Narrow-Leaved Ironbark	x		
Eucalyptus eugenioides	Thin-Leaved Stringybark	x		
Eucalyptus fibrosa	Broad-Leaved Stringybark	x		
Eucalyptus moluccana	Grey Box	x		
Eucalyptus tereticornis	Forest Red Gum	x		

Cumberland Plain Woodland – Small mature size

Tree Species	Common Name	No Footpath	Footpaths	Cycleway
Melaleuca decora	Feather Honey Myrtle		x	x

Eucalypt River Flat Forest – Larger mature size

Tree Species	Common Name	No Footpath	Footpaths	Cycleway
Angophora subvelutina	Narrow-Leaved Ironbark	x		
Angophora floribunda	Thin-Leaved Stringybark	x		
Eucalyptus elata	River Peppermint	x		
Eucalyptus moluccana	Grey Box	x		
Eucalyptus tereticornis	Forest Red Gum	x		
Eucalyptus ovata	Swamp Gum	x		
Eucalyptus longifolia	Woollybutt	x		
Eucalyptus amplifolia	Cabbage Gum	x		
Eucalyptus botryoides	Bangalay	x		
Casuarina cunnninghamiana	River She Oak	x		
Casuarina glauca	Swamp Oak	x		

Eucalypt River Flat Forest – Medium mature size

Tree Species	Common Name	No Footpath	Footpaths	Cycleway
Melia azedarach	White Cedar (Deciduous)		x	x
Melaleuca styphelioides	Prickly Paperbark		x	x
Melaleuca decora	Feather Honey Myrtle		x	x
Acmena smithii	Lilly Pilly (not CVs)		x	x

Eucalypt River Flat Forest – Small mature size

Tree Species	Common Name	No Footpath	Footpaths	Cycleway
Tristaniopsis laurina	Water Gum	x		
Callistemon salignus	White Bottlebrush	x		
Livistona australis	Cabbage Tree Palm	x		
Melaleuca lineariifolia	Snow in Summer	x		
Leptospermum polygalifolia	Tantoon	x		
Backhousia myrtifolia	Grey Myrtle	x		

Non –locally indigenous native trees

Tree Species	Common Name	No Footpath	Footpaths	Cycleway

Medium Size				
Callitris collumnaris	White Cypress Pine		x	x
Callitris rhomboidea	Port Jackson Pine		x	x
Brachychiton populneum	Kurrajong		x	x
Glochidion ferdinandii	Cheese Tree		x	x
Lophostemon confertus	Queensland brushbox		x	x
Backhousia myrtifolia		x		
Cupaniopsis anacardiodes		x		
Elaeocarpus eumundii		x		
Elaeocarpus reticulatus		x		
Melaleuca Revolution Series		x		
Small Size				
Syzygium luehmannii	Riberry		x	x
Backhousia citriodora	Lemon Myrtle		x	x
Waterhousia floribunda	Watergum		x	x
Tristaniopsis laurina 'Luscious'			x	x
Callistemon 'Kings Park Special'		x		
Callistemon viminalis		x		
Ceratopetalum gummiferum			x	x

Non Native Trees

Tree Species	Common Name	No Footpath	Footpaths	Cycleway
Medium Size				
Pyrus calleryana 'Capital'	Fastigate Ornamental Pear	x		
Quercus palustris 'Pringreen' Green Pillar®	Fastigate Pin Oak	x		
Ulmus parvifolia 'Todd'	Chinese Weeping elm	x		
Fraxinus pennsylvanica 'Urbdell'- Urbanite™	Ash		x	x
Calodendrum capense	Cape Chestnut		x	x
Fraxinus Raywood	Claret Ash	x		
Fraxinus angustifolia 'Raywood'	Claret Ash	x		
Acer platanoides 'Crimson Sentry'		x		
Acer x freemanii 'Jeffersred'		x		
Agonis flexuosa 'Burgundy'	Willow Myrtle	x		
Backhousia citriodora		x		
Brachychiton populneus		x		
Fraxinus pennsylvanica 'Lednaw' - Aerial™		x		
Glochidion ferdinandi		x		
Jacaranda mimosifolia			x	x
Lophostemon confertus		x		
Nyssa sylvatica		x		
Pistacia chinensis		x		
Prunus cerasifera 'Nigra'			x	x
Prunus cerasifera 'Oakville Crimson Spire'			x	x
Pyrus calleryana			x	x
Pyrus salicifolia			x	x
Quercus rubra			x	x

Syncarpia glomulifera			x	x
Syzygium luehmannii			x	x
Ulmus parvifolia 'Todd'		x		
Waterhousea floribunda			x	x
Zelkova serrata				
Acer rubrum 'October Glory'				
Magnolia × soulangeana		x		
Magnolia grandiflora			x	x
Small Size				
Acer campestre 'Elsrijk'	Field maple		x	x
Fraxinus griffithi	Ash		x	x
Acer platanoides 'Globosum'			x	x
Acer rubrum	October Glory		x	x
Lagerstroemia	Crepe Myrtle		x	x
Prunus x blireana	Flowering plum		x	x
Prunus x blireana			x	x
Fraxinus griffithii		x		
Lagerstroemia indica x L. fauriei		x		
Michelia doltsopa		x		



PART E
SITE SPECIFIC

Land Applying to the City of Parramatta
(former TheA Hills) Local Government Area

LIST OF AMENDMENTS

Amendment Number	Sections Affected	Description of Amendment	Date Approved by Council	Date in Force
1	Part E Section 1	Part E Section 1 - 23-25 Windsor Road, Northmead	7 February 2022	27 May 2022

PART E | SITE SPECIFIC

E Introduction

Part E contains new sections relating to specific sites or land applying to the City of Parramatta LGA that were within the former The Hills LGA. This section incorporates amendments made by the City of Parramatta.

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PART E
SITE SPECIFIC

Section 1 - 23-25 Windsor Road, Northmead

Land Applying to the City of Parramatta
(former The Hills) Local Government Area

Part E Section 1 - 23-25 Windsor Road, Northmead

Desired Future Character

The site-specific DCP applies to 23-25 Windsor Road, Northmead, which is located to the north of the Parramatta CBD at the juncture of Windsor Road and James Ruse Drive. The site provides the opportunity for the urban renewal of remnant industrial land, where all surrounding allotments have realised their residential zoning. Therefore, the redevelopment of this land for residential purposes will ensure that it exists more cohesively in its context. It will also revitalize this section of Windsor Road, with the site responding to its diverse location, on a major road, surrounded by residential and educational uses. Increased publicly accessible open spaces and linkages with the broader pedestrian network will result in a substantial improvement for the area a whole, with greater connectivity away from the major road system, providing increased comfort for pedestrians and cyclists to facilities such as the Northmead Performing Arts School to the east and the local shopping centre to the north.

Buildings will be located to benefit from the northern orientation of the site, consisting of two principle U-shaped forms, which enable the maximum amount of cross ventilation and solar access into individual dwellings. This also allows for the creation of central open space areas within the development, to create meaningful and well-oriented communal open spaces.

Encourage a through site link from the property to the south of the site, past the subject site and on through Northmead Performing Arts High School and a future connection across the Darling Mills Creek to public open space and active recreation facilities. This would provide a significant public benefit and should be included as part of wider public domain works including landscaping, shared paths, lighting, seating, children's playground and the like within publicly accessible open spaces. It would be reasonable that the monetary contribution may be used to implement these works, subject to the agreement of adjoining landowners.

The principle driveway along the northern side of the site enables ingress and egress in a consolidated manner, while allowing for separation with development to the adjoining site to the north. This driveway is to read as a public street, providing a legible address to all buildings. It is to be designed as a 2-way and 24hr publicly accessible access-way including parallel parking bays, facilitating longer term aspirations to provide a future connection to the adjoining high school.

Building separation is designed to create visual linkages within the development, while ensuring that adequate privacy within dwellings and to neighbouring sites is achieved, despite the position of building forms on adjoining sites that do not necessarily meet the relevant planning controls.

Building height will be at its highest at the eastern and western sides of the site, to book-end each end of the development. The middle forms will lower to respond to development to the north and still enable outlook to be achieved from the property directly south. This ensures that the location and form of the buildings is both responsive and respectful of the existing context, assuming that the adjoining sites are unlikely to undergo redevelopment.

The design of buildings is to ensure sufficient solar access is provided within the development to enable a suitable level of amenity to be achieved for future occupants. This is to be delivered understanding that solar access requirements as per the ADG may not be fully met at the proposed density due to the predetermined orientation of the allotment. The building design is to also incorporate opportunities for natural ventilation to contribute to the environmental efficiency of the development.

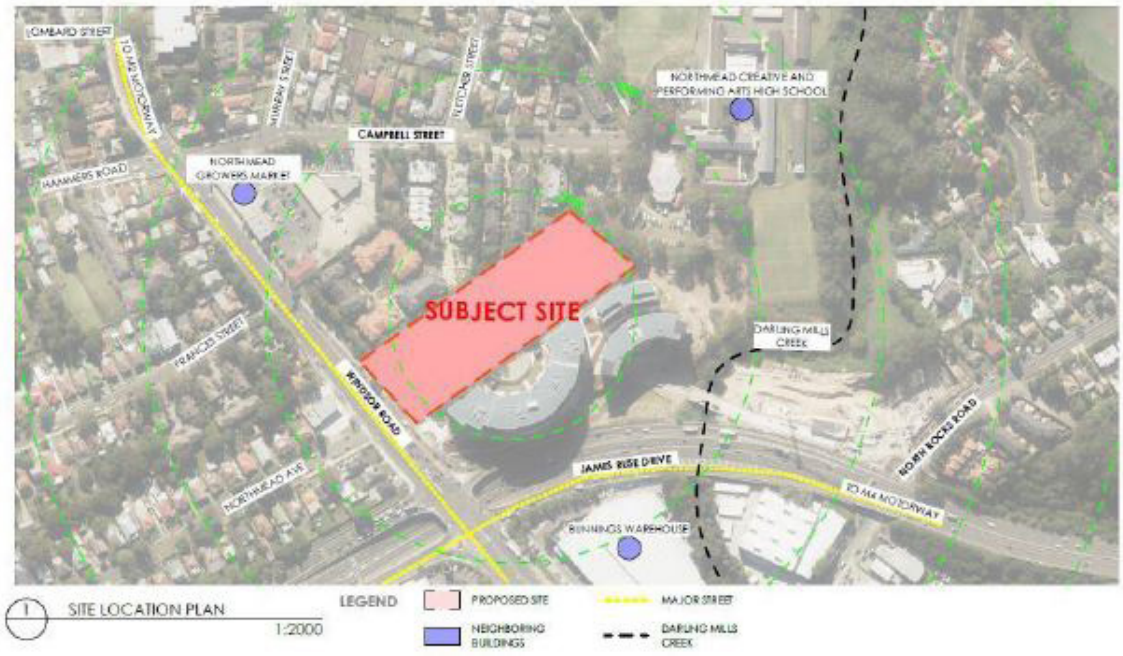

Figure 01: Site map

Objectives

In addition to general objectives listed in Section B, Part 5 of The Hills DCP 2012 for Residential Flat Buildings, specific objectives for this precinct are identified below. Ensure that new development:

O.1 Provides a built form that relates strongly within the confines of the site and is sensitive to existing residential and educational land uses on surrounding sites.

O.2 Provides a built form that delivers a high quality amenity outcome for residents, particularly to the west, where the development interfaces with Windsor Road.

O.3 Provides appropriate noise amelioration for residential uses to protect against existing noise in the surrounding precinct, particularly traffic noise generated from Windsor Road and James Ruse Drive.

O.4 Results in minimal overshadowing within the site, surrounding properties and public open spaces, to ensure that adequate levels of amenity are achieved throughout the year.

O.5 Achieves the desired orientation and organisation of the built form massing, noting that solar access requirements as per the Apartment Design Guide (ADG) may not be fully met.

O.6 Provides building separation that supports amenity and privacy, both within the development and to adjoining sites.

O.7 Provides communal and publicly accessible open space that incorporates opportunities for social gathering and passive recreation between buildings within the development.

O.8 Supports the predominant street pattern with buildings perpendicular to the lot, reinforcing the orthogonal grid in this location.

Built Form

The priority for this precinct is to deliver a built form that supports and rationalises the predominant subdivision pattern of this location, while providing a comfortable and amenable environment for both existing and future residents. The site's spatial context is to be reinforced through an orthogonal arrangement of built form and centrally located open space. Building outcomes on site should relate to a street wall typology, with appropriate upper levels setbacks.

As per the reference scheme below, regular U-shaped and north-west facing courtyards are to be maintained throughout the design development. All built form is to be designed perpendicular to the lot with the exception of the western wing, which is to be aligned with Windsor Road to create a legible continuation of the street wall as defined by the development to the south.

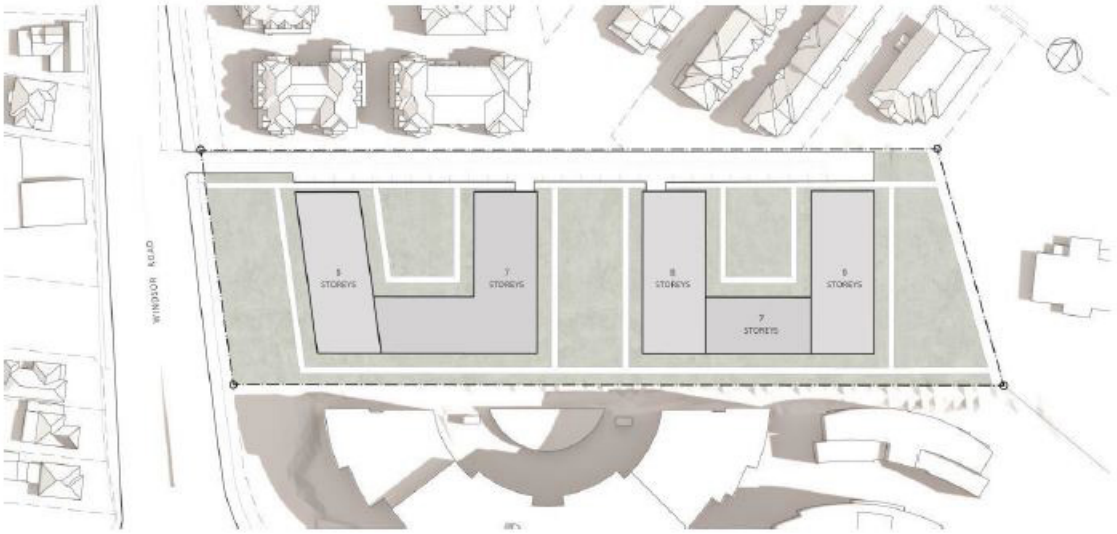

Figure 02: 23 - 25 Windsor Road Reference Scheme

Built Form Objectives:

Specific objectives for this site in relation to the built form are detailed below:

O.1 Prioritise the spatial definition of streets (public and private) and open spaces through the organisation of taller buildings, creating a continuation of the existing street wall.

O.2 Respond to and reinforce the existing urban form through a centrally located open space and minimising building height to the centre of site.

O.3 Ensure new development responds to the sloping topography, the context of surrounding development and the visual setting of the site between various residential buildings.

O.4 Ensure that new development responds to the constraints imposed by neighbouring sites and maximises positive visual outlook within the development and adjoining sites.

O.5 Ensure built form is organised in an orthogonal manner that supports the predominant subdivision pattern in this location.

O.6 Create a clear delineation between public, communal and private spaces.

O.7 Define and design the street alignment and setback area to achieve amenity and privacy for residents, as well as engagement with and passive surveillance of communal spaces.

O.8 Ensure the presentation of buildings to the internal streets provides clearly defined edges and corners, and an architectural resolution that relates to the ground plane with legible entries.

BUILT FORM CONTROLS:

NOTE: Development must comply with the controls set out below and any relevant controls in Parts B & C of The Hills DCP. Where there is any inconsistency between Parts B and C DCP, the controls within this Part will prevail where they apply to 23 - 25 Windsor Road, Northmead.

The Building Envelope:

The building envelope, resulting from the setbacks and heights outlined in this DCP constitute a three dimensional volume within which, together will all other applicable controls, a coherent built form is to be designed. Future built form should provide a high quality design solution and correlate with the indicative building envelopes shown at Figure 03.

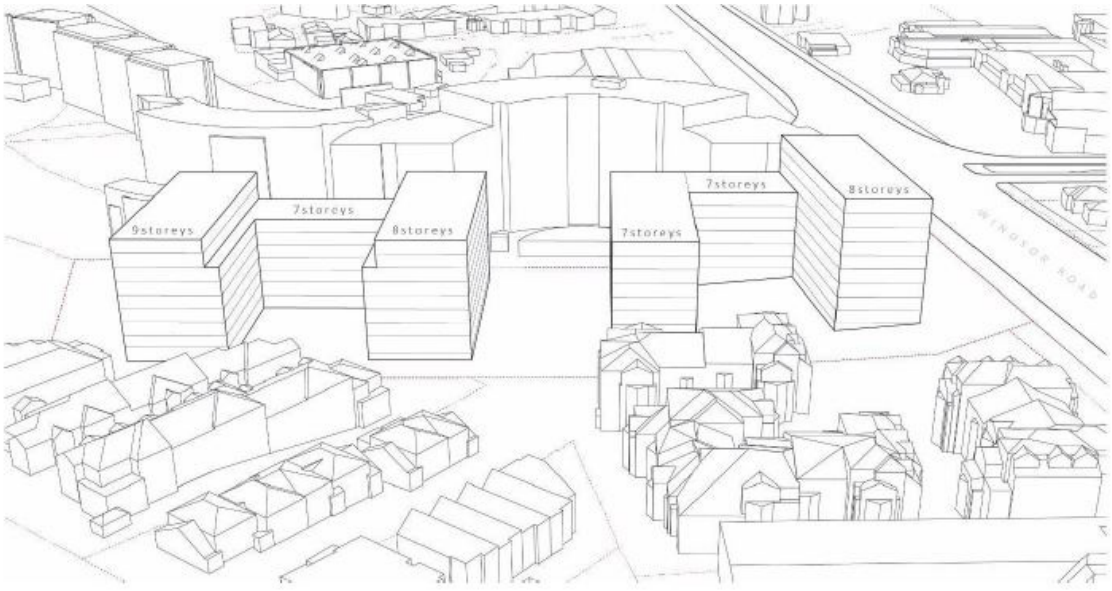

Figure 03: Building Envelopes

C.1 Maximum building heights shall be in accordance with Figure 03, utilising regular building forms that utilise the sloping topography and minimise the perceived density of development.

C.2 Height of new buildings are to ensure positive and cohesive relationships with other buildings,both on the site and off the site, and are to respond to the desired scale and character of the local area.

C.3 Floor to ceiling and floor to floor heights are to be in accordance with the NSW Apartment Design Guide.

C.4 Setbacks are to be measured perpendicular to the boundary to the outer faces of the building including balconies, winter gardens, screening and the like. A 1m articulation zone may be provided where primary private open spaces face communal open space.

C.5 Building setbacks are to be in accordance with Figures 04 to 07 and Table 01.

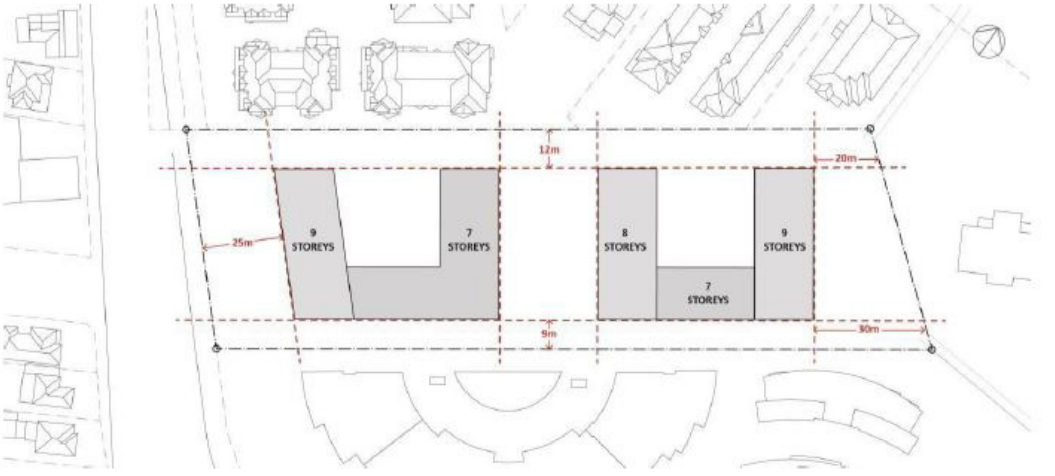

Figure 04: Building Heights and Setbacks

Front Setback:	**25m**	The front setback is to be parallel to Windsor Road, providing a continuation of the existing street wall. The area within the front setback is to allow space for a generous tree canopy, providing amenity for the street and residents.
Rear Setback:	**20m** at northern edge and **30m** at southern edge	The rear setback is to maintain a large curtilage to significant trees to the rear of the site, providing opportunity for additional large canopy planting.
Northern Setback:	**12m**	The northern setback is to allow for the maximum retention of trees on the shared boundary and provide the primary vehicular access, one lane of parallel parking and pedestrian thoroughfare on site.
Southern Setback:	**9m**	The southern setback provides for a separation distance that may be less than ADG requirements. Therefore, detailed schemes are to minimise the number of habitable rooms on this boundary. The southern setback at ground may be used for private open space opportunities for south facing ground floor units.

Table 01: Building Setback

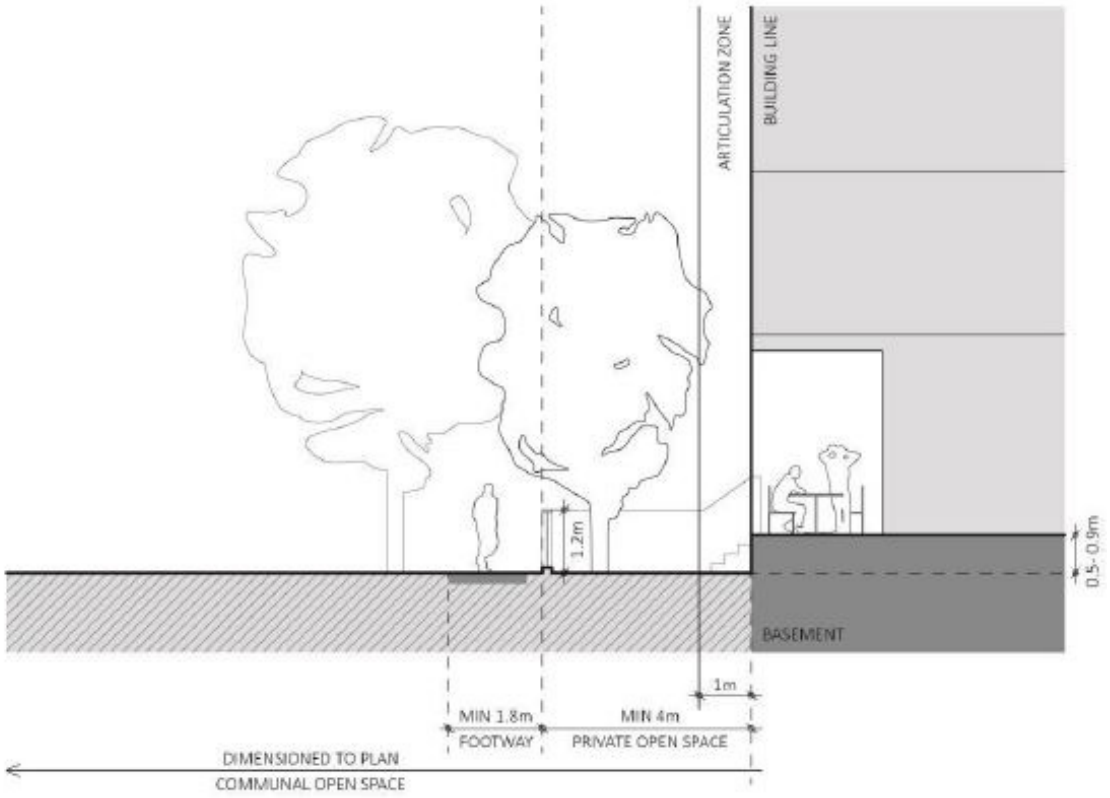

Figure 05: Communal Open Space Interface

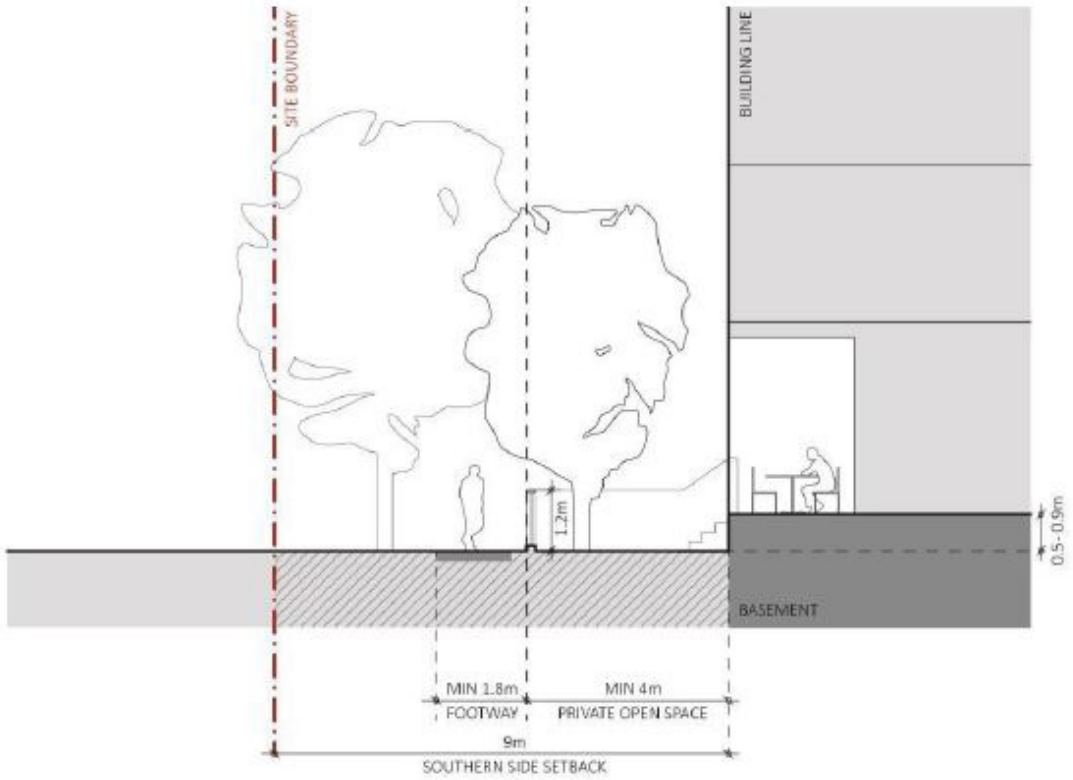

Figure 06: Southern Setback Condition

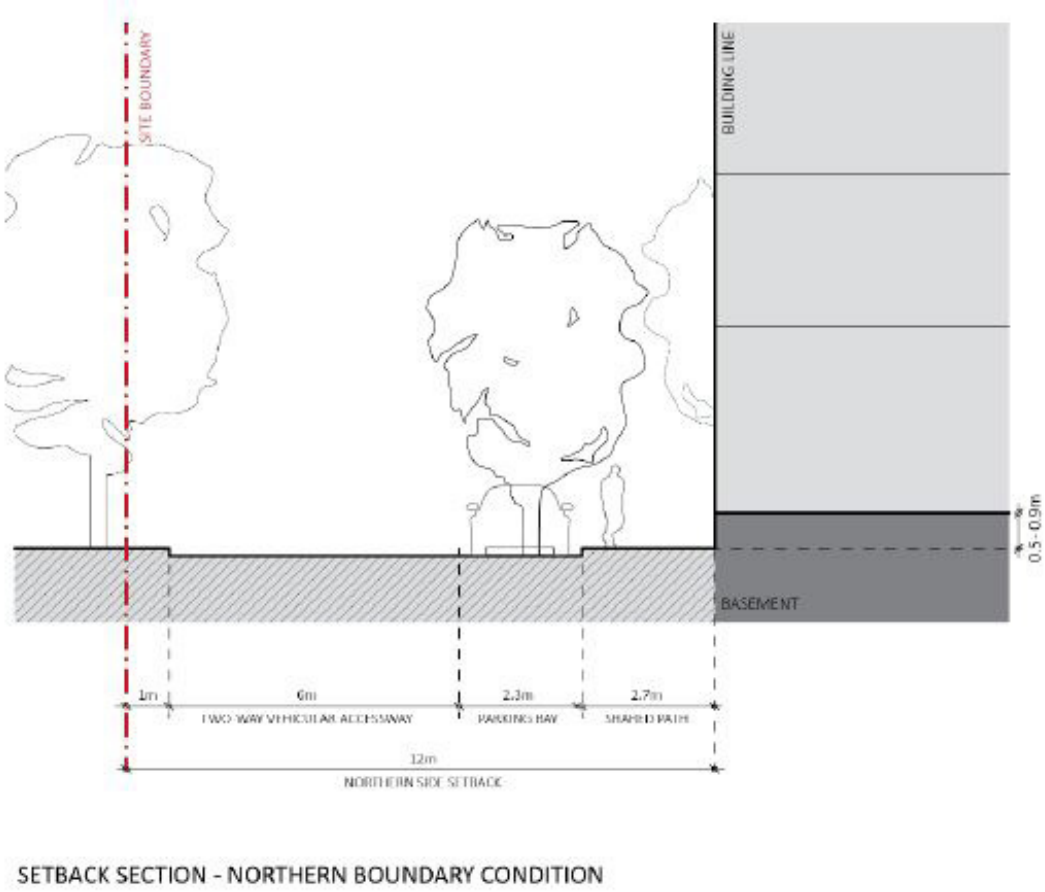

Figure 07: Northern Setback Condition

Building Separation:

To protect and manage the impact of new development on the public domain, neighbouring sites and between buildings on site, the following buildings separations requirements are to be met:

C.1 Minimum separation between buildings should be in accordance with Figure 08 and the NSWADG requirements.

C.2 Habitable spaces are to be carefully positioned within each unit to ensure that visual and acoustic privacy is maximized.

C.3 Setbacks and separation must be measured perpendicular to the building face, inclusive of balconies, wintergardens, vertical and horizontal circulation, internal voids and external walls.

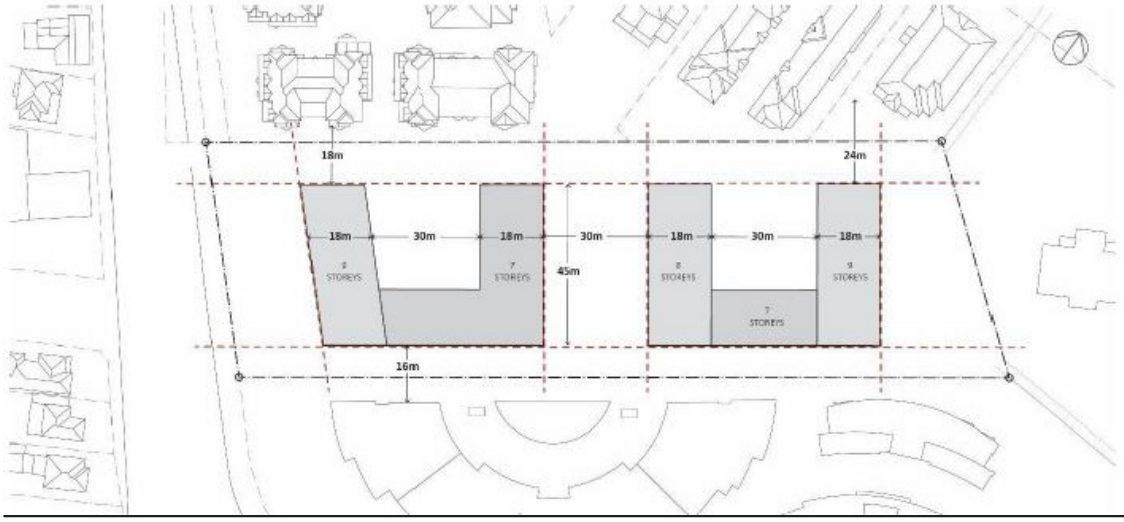

Figure 08: Building Separation

Private and Communal Open Spaces:

C.1 **Communal open space and landscaped areas should be provided between buildings as shown in Figure 09 to promote opportunities for community interaction within the development.**

C.2 **Areas between buildings should allow for pedestrians to comfortably move between the buildings, and promote the principles of passive surveillance. These communal areas should provide a safe and unobstructed path of travel, as opposed to private space.**

C.3 **Communal open spaces are to be designed to maximise solar access in mid-winter and canopy cover in mid-summer.**

C.4 **Opportunities for seating and gathering spaces for passive recreation, play and informal activities such as outdoor dining are to be provided within the internal circulation system of the development is to be provided where appropriate.**

C.5 **Water Sensitive Urban Design principles shall be implemented in communal open space areas.**

C.6 **Fencing fronting the communal open spaces must not exceed 1.2 metres in height, are to be of solid masonry construction and integrated with any dividing walls for private open spaces at ground. Higher fencing may be considered on Windsor Road, subject to context analysis. Fencing on side boundaries is to be provided to a maximum height of 1.8 metres.**

C.7 **All balconies are to meet the minimum dimensions required in the NSW ADG. Wintergardens may be permitted on Windsor Road to improve the amenity of apartments fronting this arterial road. The floor space of the wintergarden will be excluded from the FSR calculations provided that it complies with and does not exceed the ADG.**

C.8 **Council may consider allowing greater building depths where this will not unnecessarily add to the bulk of any building and where high quality building design, massing and articulation is achieved.**

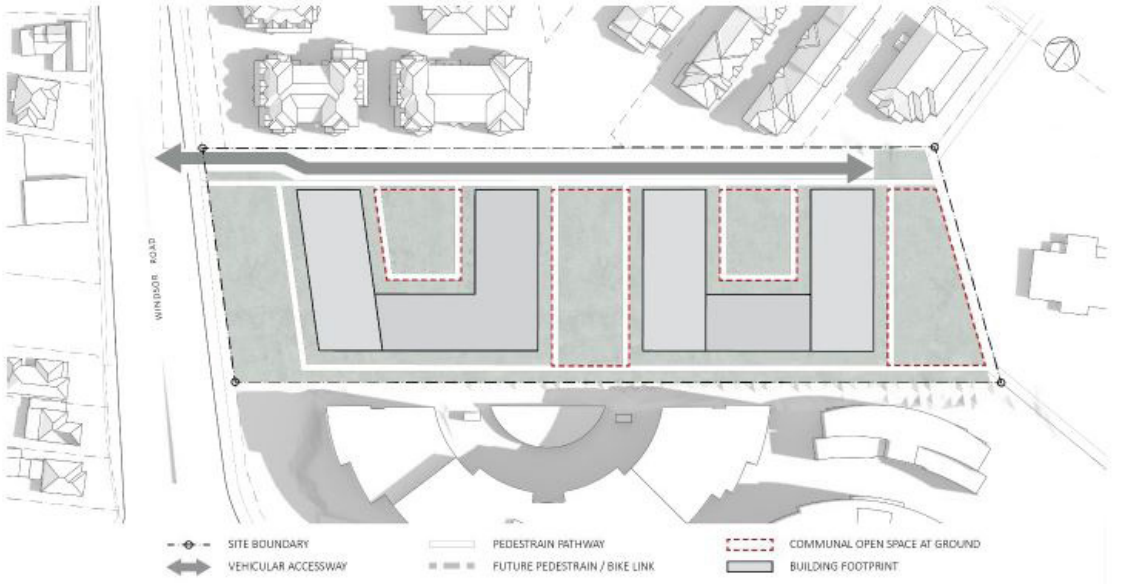

Figure 09: Communal Open Space

Landscaping and Deep Soil:

C.1 Landscaping and deep soil shall be provided in accordance with Part 3 of the Parramatta DCP2011, Figure 10 and Figure11.

C.2 A detailed landscape plan is to be prepared demonstrating the location of all contiguous deep soil areas with proposed landscaping, including retained and new canopy trees, submitted to the satisfaction of Council.

C.3 Deep soil is provided in a contiguous manner to facilitate healthy soils, uninterrupted flows of groundwater, and opportunity for existing and new trees to thrive and reach mature height.

C.4 Existing trees on the site are to be retained, as possible. Future development must not impinge on TPZ requirements of all trees in the neighbouring property must be protected and retained.

C.5 Landscaping should include endemic species suitable to the environmental constraints and orientation of communal open spaces shall be utilised throughout the site.

C.6 The front setback is to be planted with large shady trees capable of reaching a mature height of more than 13 metres to provide a visual buffer and shading of the public footpath along Windsor road.

C.7 The rear setback should be planted with large trees, capable of reaching a mature height of more than 13m to enable Council's vision of providing mature trees and natural shade in the LGA. Any new trees are to be planted more than 3 m away from any built structure.

C.8 Dual basements contained within the building envelope are to be provided, ensuring substantial and contiguous deep soil zones to the front, centre and rear.

C.9 Future redevelopment of the site is to meet the requirements of Parramatta LEP 2011,Parramatta DCP 2011, State Environmental Planning Policy No. 55 (Remediation of Land) and any other relevant legislation and guidelines.

C.10 Detailed design development must have regard to the sensitivity to flooding impacts, not impede overland storm water flows and able to meet the requirements of Council's Flood Plain Risk Management Plan, Parramatta LEP 2011 and Part 2 of the Parramatta DCP 2011.

C.11 A report is to be submitted by a suitably qualified ecologist at Development Application stage demonstrating that there are no adverse impacts from the development.

C.12 A minimum setback of 1m is required between the northern boundary and the driveway to allow for landscaping while still maintaining site access at the northern most point of the site off Windsor Road.

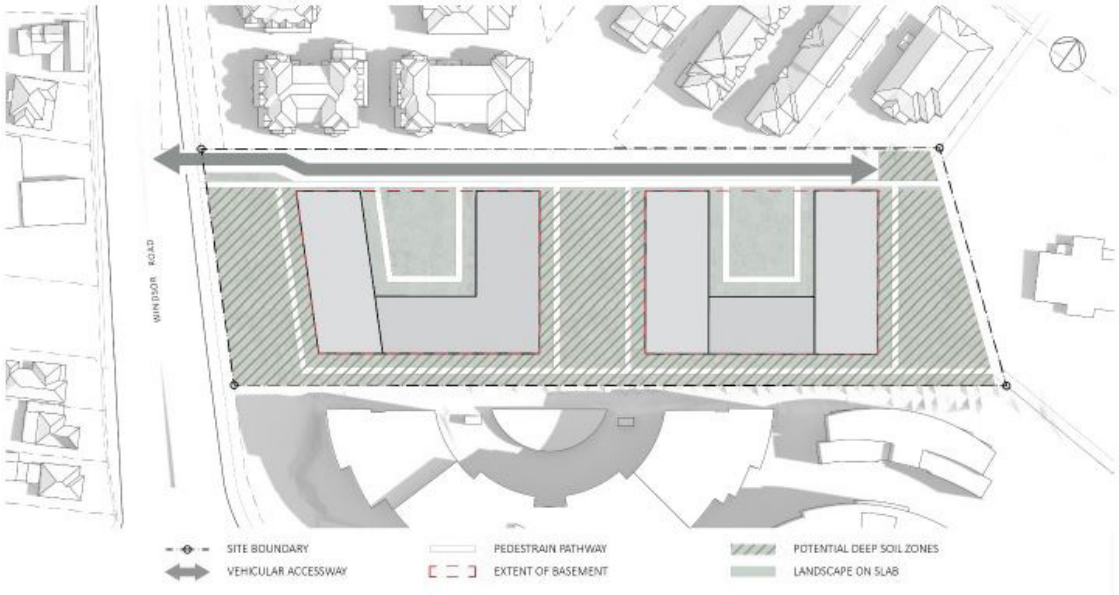

Figure 10: Potential Deep Soil Zones

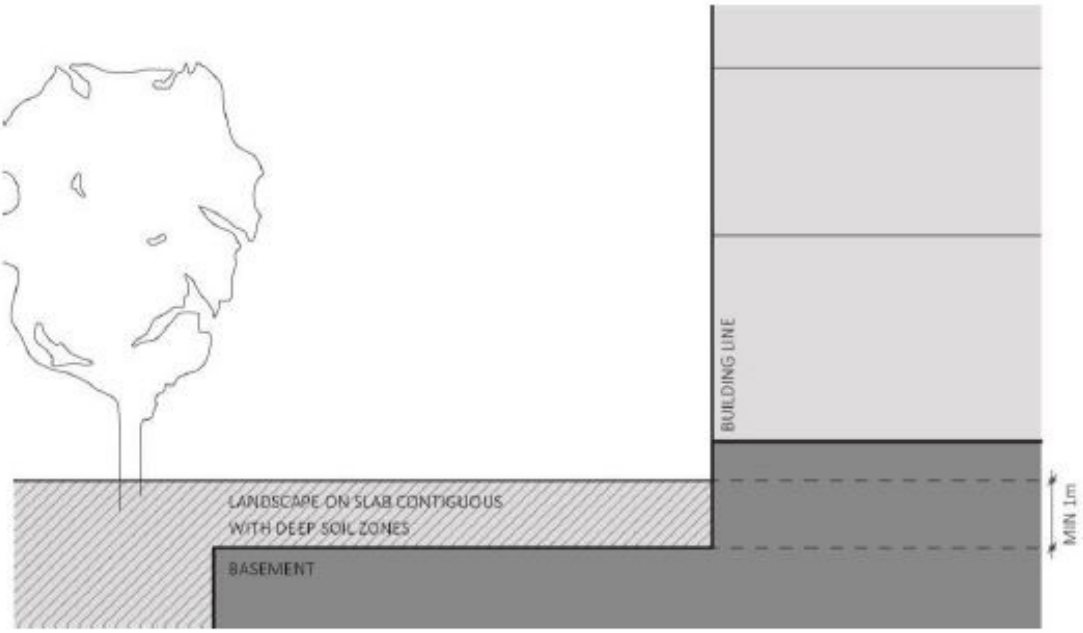

Figure 11: Landscaping on Slab Contiguous with Deep Soil Zones

Wintergardens:

C.1 Wintergardens must improve amenity of balconies in high rise apartments and apartments fronting noisy environments such as busy roads or railway lines.

C.2 Wintergardens are to be designed and constructed as a private external balcony with drainage,natural ventilation and finishes acceptable to an outdoor space and must not be treated as a conditioned space or weatherproof space.

C.3 Approximately 80% of vertical surface area of wintergardens are to be fully operable louvres or sliding glass panels.

C.4 A generous opening must be provided between the wintergarden and any adjacent living area to allow connection of the spaces when ambient conditions are suitable.

C.5 Acoustic control for living areas and bedrooms must be provided on the internal façade line between the wintergarden and the living area or bedroom.

C.6 Glazing in the external façade of a wintergarden must have a solar absorption of less than 35%glass to have solar heat absorption not greater than a clear float glass of the same composition.

C.7 The flooring of the wintergarden must be an impervious finish and provide exposed thermal mass.

C.8 Air conditioning units must not be located on wintergarden balconies.

Solar Access, Ventilation & Acoustic Amelioration:

C.1 Buildings are to be designed to ensure that solar access and cross ventilation requirements detailed in SEPP 65, the NSW ADG and Section 3 of this DCP are achieved for residential development both on and off the site.

C.2 Solar access must also be reasonably provided/ retained within the existing and future public domain areas and on adjoining sites to maximise solar access in mid-winter and canopy cover and shading in mid-summer.

C.3 The design of buildings must take account of the need for adequate acoustic amelioration measures for new development, particularly where buildings have an interface with major roads, including Windsor Road and James Ruse Drive or other non-residential uses in proximity to the site.

Pedestrian Connections and Vehicular Access way:

C.1 New pedestrian and vehicular connections are to be provided in accordance with Figure 12.

C.2 The vehicular access way is to be designed to have a fully public nature equivalent to the surrounding public domain and suitably designed to integrate with adjoining road and pedestrian networks.

C.3 New pedestrian connections are to be provided between the buildings, to enable linkages to recreated to both Windsor Road and the future pedestrian/bike link to the east and improve the development interface and amenity with all adjacent properties and frontages.

C.4 All site circulation must be provided as 24hr publicly accessible circulation - designed to provide building entries that are easily identifiable, with a clear sense of building address for residents and their visitors.

C.5 Main building entry points must be clearly visible and signalled appropriately with building address, lighting and high quality articulation. Steps, handrails or TGSIs must not protrude into or interfere with any vehicular or pedestrian access way.

C.6 The pedestrian link along the eastern boundary must be publicly accessible by 24/7 access easement in favour of Council in accordance with the Voluntary Planning Agreement prior to the first Occupation Certificate and is to be clearly delineated as public space.

C.7 **C.07 New development is to be sited to appropriately integrate with and address pedestrian links ensuring activation and casual surveillance. Tall fencing is not to be provided adjacent to the pedestrian links.**

C.8 **C.08 All internal pedestrian systems shall incorporate access in accordance with AS 1428 and any other relevant standard. These pathways are to enable a future connection to the school from the development to the south to the external pedestrian system surrounding the site.**

C.9 **Public domain alignment drawings are to be submitted to the satisfaction of Council. All levels are to be resolved and proposed public domain treatments shown in accordance with the requirements outlined in the Parramatta Public Domain Guidelines (Chapter 2).**

C.10 **A minimum width of 9 metres is to be provided to the vehicular access way, inclusive of two-way vehicular access and at least one lane of parallel parking.**

C.11 **A minimum width of 1.8 metres is to be provided for all pedestrian pathways.**

C.12 **A minimum width of 2.8 metres is to be dedicated for the future pedestrian and cycleway shared path along the new vehicle access way and eastern boundary. It should be publicly accessible by a 24/7 access easement in favour of Council in accordance with the Voluntary Planning Agreement prior to first Occupation Certificate.**

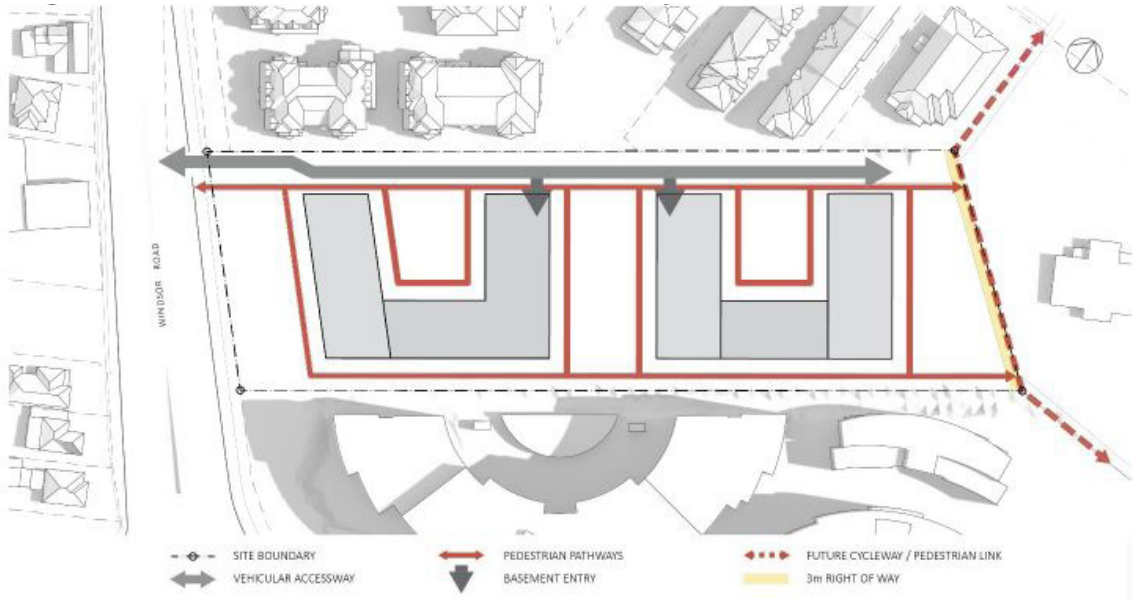

Figure 12: Pedestrian Connections and Vehicular Access way

Traffic, Access, Parking & Services:

C.1 **All car parking is to be provided at basement level to ensure that the visual appearance of car parking structures does not dominate the building design. Basement structures may not protrude any greater than 1 metre above natural ground.**

C.2 **Building services and access to car parking areas are to be minimized to the internal street frontages to ensure that a high level of design excellence is achieved and opportunities for passive surveillance are maximized. Pedestrian and vehicle conflict are to be minimised with limited vehicle crossings to the public domain and internal access way.**

C.3 **Vehicle crossings are to be provided in accordance with Figure 12 (above), or as otherwise agreed by Council.**

C.4 **Vehicle crossings must not provide conflict with pedestrian through site links or any pedestrian crossing.**

C.5 **The width and surface area of driveways and other hard surfaces associated with the movement and parking of vehicles is to enable 2 vehicles plus one lane of parallel parking.**

C.6 **Provision of loading bays or service vehicle areas, building service/plant areas, and building services (such as substation) must be adequately screened from any public domain areas, including the street, through site links.**

C.7 **The vehicular access way must maintain its potential to connect through the adjacent school to Campbell Street in the future. This access way is to terminate in a hammer head, rather than a cul-de-sac configuration, so as to maintain the visual continuity of this link and kerb lines.**

The Hills Development Control Plan (DCP) 2012

www.thehills.nsw.gov.au

THE HILLS Sydney's Garden Shire



Appendix A
Waste Management Plan

DEMOLITION, CONSTRUCTION AND USE OF PREMISES

The applicable sections of this table must be completed and submitted with your Development Application.

Completing this table will assist you in identifying the type of waste that will be generated and will advise Council of how you intend to reuse, recycle or dispose of the waste.

The information provided on the form (and on submitted plans) will be assessed against the objectives of the DCP.

For a copy of the Western Sydney Recycling Directory or if you would like any assistance completing your waste management plan, please contact the Construction and Demolition Waste Management Officer on ph (02) 9843 – 0505.

If space is insufficient in the table please provide attachments.

OUTLINE OF PROPOSAL

Site Address: _____

Applicant's name and address: _____

_____

_____

Phone: _____ Fax: _____

Buildings and other structures currently on the site: _____

_____

Brief Description of Proposal: _____

_____

_____

The details provided on this form are the intentions for managing waste relating to

this project.

Signature of Applicant: _____Date: _____

ESTIMATING WASTE QUANTITIES

In order to develop an effective waste management plan it is necessary to determine how much waste will be involved. Excavation material and green waste need only be estimated once in either the demolition or the construction section.

If both demolition and construction is occurring then estimates for building waste such as bricks, roof tiles, timber etc must be given separate estimates in each section. The tables on the following page can be used as guides to assist in making estimations based on the size and type of building.

A close study of waste expectations may assist in reducing the amount of waste created through careful purchasing of materials.

- The plan that you submit to council can state quantities in tonnes, square metres or cubic metres. The table to the right is for optional use only.

Material	**Conversion Factor (tonnes per cubic metre)**
Bricks	1.3
Cardboard/Packaging	0.05

STAGE ONE - DEMOLITION

This is the stage with the greatest potential for waste minimisation, particularly in Sydney where there are high levels of development, relatively high tipping charges and where alternative quarry materials are located on the outskirts.

Applicants should consider is whether it is possible to re-use existing buildings, or parts thereof, for the proposed use.

With careful onsite sorting and storage and by staging work programs it is possible to re-use many materials, either on-site or off-site.

Council is seeking to move from the attitude of straight demolition to a process of selected deconstruction, i.e. total reuse and recycling both off-site and on-site. This could require a number of colour-coded or clearly labelled bins onsite (rather than one size fits all).

Applicants should demonstrate project management that seeks to:

- re-use of excavated material on-site and disposal of any excess to an approved site;
- greenwaste mulched and re-used in landscaping either on-site or off-site;
- bricks, tiles and concrete re-used on-site as appropriate, or recycled off-site;
- plasterboard re-used in landscaping on-site, or returned to supplier for recycling;
- framing timber re-used on-site or recycled elsewhere;
- windows, doors and joinery recycled off site;
- plumbing, fittings and metal elements recycled off site;
- All Asbestos, hazardous and/or intractable wastes are to be disposed of in accordance with WorkCover Authority and EPA requirements;
- location of on-site storage facilities for material to be reused on-site, or separated for recycling off-site; and
- destination and transportation routes of all materials to be either recycled or disposed of off-site.

Applicants proposing any demolition work should complete the following table and the following details should be shown on your plans:

- location of on-site storage space for materials (for re-use) and containers for recycling and disposal.
- vehicle access to the site and to storage and container areas

Estimating Waste Quantities for Demolition

Building Type	Sandstone	Concrete	Bricks	Timber/ Gyprock	Steel	Roof Tiles	Other
2 B/room Town House (100m²)	67	4	3	18	0.7	N/A	3
3 B/room brick house (120m²)	90	4	123	13	0.7	9	0
Blocks of flats 1000m²	N/A	813	655	22	9	33	26
Factory per 1000m²	N/A	448	205	4	23	N/A	18
Office Block per 1000m²	N/A	7410	1485	124	29	N/A	155

Stage 1 - Waste Management Table to be Completed for all Demolition Works

Materials On-Site		**DESTINATION**		
		REUSE & RECYCLING		**DISPOSAL**
Type of Material	**Estimated Volume (m^3) or Area (m^2) or weight (t)**	**ON-SITE specify how materials will be reused or recycled on-site**	**OFF-SITE specify the contractor and recycling outlet**	**specify the contractor and landfill site**
*EXAMPLE *e.g. bricks	*e.g. $2m^3$	*e.g. clean & reuse for footings and broken bricks behind retaining walls	*e.g. sent by XYZ Demolishers to ABC Recycling Company	*e.g. nil to landfill
Excavation Material				
Green Waste				
Bricks				

Materials On-Site		**DESTINATION**		
		REUSE & RECYCLING		**DISPOSAL**
Type of Material	**Estimated Volume (m^3) or Area (m^2) or weight (t)**	**ON-SITE specify how materials will be reused or recycled on-site**	**OFF-SITE specify the contractor and recycling outlet**	**specify the contractor and landfill site**
Plasterboard				
Metals				
Asbestos				
Other Waste e.g. ceramic tiles, paints, plastics, PVC tubing, cardboard.				

How will waste be separated and/or stored onsite for reuse and recycling? How will site operations be managed to ensure minimal waste creation and maximum reuse and recycling?

e.g. Staff training, selected deconstruction v. straight demolition, waste management requirements stipulated in contracts with sub-contractors, on-going checks by site supervisors, separate area set aside for sorted wastes, clear signage for waste areas etc .

Note. Details of the site area to be used for on-site separation, treatment and storage (including weather protection) should be provided on plan drawings accompanying your application.

STAGE TWO - CONSTRUCTION

Estimating Waste Quantities for Construction

Building Type	Timber	Concrete	Bricks	Gyprock	Sand/ Soil	Metal	Other
2 B/room	0.25	0.35	0.55	0.20	1.30	0.05	0.30
3 B/room brick house 120m³	0.35	0.40	0.75	0.20	2.50	0.10	0.44
Block of Flats Per 1000m²	0.70	6.70	3.20	1.30	28.70	1.30	0.60
Factory per 1000m²	0.25	2.10	1.65	0.45	4.80	0.60	0.50
Office Block per 1000m²	5.10	18.8	8.50	8.60	8.80	2.75	5.0

Stage 2 - Waste Management Table to be Completed for all Construction Works

Materials On-Site		**DESTINATION**		
		REUSE & RECYCLING		**DISPOSAL**
Type of Material	**Estimated Volume (m^3) or Area (m^2) or weight (t)**	**ON-SITE specify how materials will be reused or recycled on-site**	**OFF-SITE specify the contractor and recycling outlet**	**specify the contractor and landfill site**
*EXAMPLE *e.g. bricks	*e.g. $2m^3$	*e.g. clean & reuse for footings and broken bricks behind retaining walls	*e.g. sent by XYZ Demolishers to ABC Recycling Company	*e.g. nil to landfill
Excavation Material				
Green Waste				
Bricks				

Materials On-Site		**DESTINATION**		
		REUSE & RECYCLING		**DISPOSAL**
Type of Material	**Estimated Volume (m^3) or Area (m^2) or weight (t)**	**ON-SITE specify how materials will be reused or recycled on-site**	**OFF-SITE specify the contractor and recycling outlet**	**specify the contractor and landfill site**
Tiles				
Concrete				
Timber- please specify				
Plasterboard				
Metals				
Other Waste e.g. ceramic tiles, paints, plastics, PVC tubing, cardboard.				

How will waste be separated and/or stored onsite for reuse and recycling? How will site operations be managed to ensure minimal waste creation and maximum reuse and recycling?

e.g. Staff training, recycled materials used in construction, waste management requirements stipulated in contracts with sub-contractors, on-going checks by site supervisors, separate area set aside for sorted wastes, clear signage of waste areas etc.

Note. Details of site area to be used for on-site separation, treatment and storage (including weather protection) must be provided on plan drawings accompanying your application.

STAGE THREE - DESIGN OF FACILITIES

- The following details should be shown on your plans:
  - Location of temporary storage space within each dwelling unit;
  - Location of Waste Storage and recycling Area(s), per dwelling unit or located communally onsite. In the latter case this could be a Garbage and Recycling room;
  - Details of design for Waste Storage and Recycling Area(s) or Garbage and Recycling Room(s) and any conveyance or volume reduction equipment; and
  - Location of communal composting area.
  - Access for vehicles.
- Every building shall be provided with a Waste Storage and Recycling Area that is flexible in size and layout to cater for future changes in use. The size is to be calculated on the basis of waste generation rates and proposed bin sizes.

Stage 3 - Design of Facilities – To be completed if designing waste facilities for the proposed development

Type of waste to be generated	Expected volume per week	Proposed on-site storage and treatment facilities	Destination
Please specify. For example: glass, paper food waste, offcuts etc.	Litre or m^3	For example: waste storage & recycling area garbage chute on-site composting compaction equipment	recycling disposal specify contractor

Note: Details of on-site waste management facilities should be provided on plan drawings accompanying your application.

ON-GOING MANAGEMENT

Describe how you intend to ensure on-going management of waste on-site (eg. lease conditions, caretaker/manager on-site).

For a copy of the Western Sydney Recycling Directory or if you would like any assistance completing your waste management plan, please contact the Construction and Demolition Waste Management Officer: ph (02) 9843 0505.

Thank you for the information.

The Hills Development Control Plan (DCP) 2012

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Appendix B
Water Sensitive Urban Design

WATER SENSITIVE URBAN DESIGN - MEASURES

The Development Controls in the Stormwater Management Section of this DCP require that two of the following Water Sensitive Urban Design Measures (WSUD Measures) be implemented in light industry development.

M1 - Low Impact Building Design

M2 - Low Impact Landscape Design

M3 - Porous Paving

M4 - Rainwater Utilisation – toilet, hot water

M5 - On-Site Infiltration System

M6 - Stormwater Treatment System

M7 - Infiltration or Retention Basin

M8 - Stormwater Utilisation – irrigation

When integrating the selected measures into the design of your development proposal you must ensure the following requirements are satisfied:

M1 LOW-IMPACT BUILDING DESIGN

The design and-construction of the building satisfies each of the following criteria:

- The building is designed to retain the existing landform, minimise disruption to soil drainage patterns and soil organisms and eliminate the need for periodic application of toxic termite treatments
- The natural or pre-existing land surface is retained beneath and immediately surrounding the building (that is, there is no cut or fill, other than excavation required for the installation of footings or underground services)
- The building is suspended above the ground by means of piers, posts, walls or other similar means
- The building incorporates a recognised physical (non-chemical) termite barrier system, such as metal capping or granite gravel barriers
- The design and layout of the building takes into account the space and locational requirements of other water-smart measures, such as rainwater utilisation and infiltration trenches.

M2 LOW-IMPACT LANDSCAPE DESIGN

The design and construction of landscaping satisfies each of the following criteria:

- landscaping is designed to retain or restore the natural landscape, provide habitat for indigenous species and minimise inputs of water, energy, fertilisers and herbicides
- natural landforms, watercourses and other water features are retained, restored or emphasised
- existing native vegetation (including understorey) is retained or restored, beyond three metres of the constructed hardstand surface areas.
- vegetated links are provided with native vegetation on adjoining or nearby land
- planting is substantially composed of locally indigenous species
- provision is made for fauna habitat measures such as ponds, wetlands, native shrubs, nest boxes or roost boxes
- control structures are installed to divert stormwater runoff from native vegetation so as to maintain suitable soil moisture and nutrient conditions
- grassed areas are planted with native grasses to eliminate fertilising, mowing and watering
- landscaping is designed to promote the capture and infiltration of runoff through the use of depressions, grassed channels, infiltration swales, rock channels, sedges, reed beds or similar
- where practical, low-lying areas are utilised for treatment ponds or wetlands
- areas likely to be subject to high water demand are fitted with a water-efficient irrigation system that incorporates an electronic controller and rain switch.

M3 POROUS PAVING

A porous pavement system is installed that satisfies each of the following criteria:

- at least two thirds of the area occupied by car parks, car parking spaces, driveways, courtyards, pathways or similar are laid with porous paving
- the porous paving consists of commercially available concrete or plastic modular pavers placed on a sand base in accordance with the manufacturer's recommendations.

M4 RAINWATER UTILISATION-TOILET

A rainwater utilisation system is installed for toilets, and satisfies each of the following criteria:

- rainwater is sourced only from roof surfaces via a tank storage system
- the system is fitted with an effective first flush device for removing roof surface contamination (Figure 1 and Table 1 below).
- the system must be connected to the toilet fixtures and may also be connected irrigation fixtures, but to no other fixtures.
- any consent required from the water supply authority must be obtained prior to installation of any rainwater tank (Sydney Water have advised that they wish to be advised of all rainwater tank installations).
- systems that use mains water as a backup supply are fitted with a backflow prevention device' that is satisfactory to the local water supply authority
- tanks and pumps are located so that they do not impact upon the safety of pedestrians or vehicles and do not impact upon the amenity of adjoining residential properties by reason of noise or visual appearance.
- overflow from tanks is directed to an infiltration trench or a public drainage system.

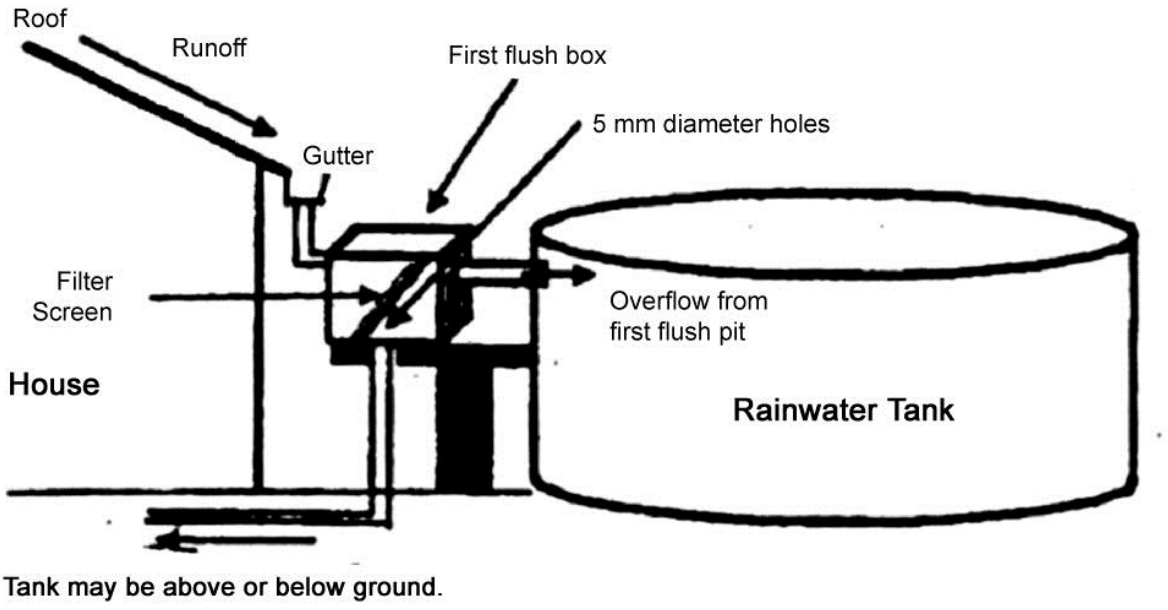

Figure 1 – First Flush Diversion Device in Rainwater Tank System

Table 1 – Recommended Dimensions of First Flush Devices Box

Roof Area (m2)	Depth (m)	Area (m2)	Infiltration Hole Diameter (m)
100	0.3	0.26	0.005
150	0.3	0.39	0.005
200	0.4	0.38	0.005
250	0.4	0.48	0.0005

M5 ON-SITE INFILTRATION SYSTEM

An on-site infiltration system is installed that satisfies each of the following criteria:

- runoff from roof surfaces and at least two thirds of all paved areas is diverted to an infiltration trench or leaky well
- the site does not include any of the soil or terrain conditions referred to in Table 2a.
- trench dimensions are in accordance with Table 2b.
- the distance between the trench/ leaky well and nearby buildings satisfies the minimum separations specified in Table 2c.
- the trench is located clear of large trees, stormwater flow paths, vehicle pathways or heavy traffic pedestrian areas
- the upper surface of the infiltration trench is at least 300 millimetres below the ground surface
- the inlet to the trench is fitted with a silt trap (with inspection cover)
- the trench is filled with 40-75 mm aggregate and lined with geotextile fabric
- an overflow pipe connects the trench to a public drainage system
- design and construction is generally consistent with section 9.4 of *Managing Urban Stormwater: Soils & Construction* (Department of Housing, 1998).

Table 2a **–** Unsuitable Conditions for Infiltration Trenches

Loose and unstable sands
Soils with an permeability of <10mm/hr unless structure is certified by an engineer
Bedrock exposed at surface
Shallow soil (< 2metres) over rock or shale Steep terrain (slopes> 10%)
High water table (depth < 1 metres below surface)
Contaminated sites

Table 2b – Trench Dimensions

Permeability test results(see method below)		**Allotment trench size (metres) (D/W/L,)**
Time (minutes)	**Difference in water depth (mm)**	
60	Empty in 15 minutes	1/2/3
60	Empty in 30 minutes	1/2/3
60	Empty in 45 minutes	1/2/3
60	Empty in 60 minutes	1/2/3
60	Contains 650 mm	1/2/3
60	Contains 680 mm	1.5/2/4
60	Contains 690 mm	1.5/2/4
60	Contains more than 690 mm	As-specified by a professional engineer

Note. This test that can be performed by developers, landowners, council officers or accredited certifiers. The results can be compared to the Table above to determine the required trench size and suitability. The test has 3 steps, as follows:

1. Using a spade dig a hole approximately 0.5m square and one metre deep,
2. Fill the Hole with 700 mm of water and measure the initial water depth.
3. After an hour, measure the water depth again and determine the trench required from Table 2b above.

Table 2c – Minimum Distance Between Infiltration Trenches and Buildings

Soil Types	**Minimum Distance from buildings**
Sand	1 metres
Sandy clay	2 metres
Medium clay	4 metres
Heavy clay	5 metres

M6 STORMWATER TREATMENT SYSTEM

A system is installed for the treatment of runoff from roads, car parks or other extensive paved areas, and satisfies each of the following criteria:

- the system includes components that are appropriate and adequate for the site, including:
- gross pollutant traps
- oil/sediment separators
- grassed swales
- vegetated filter strips
- constructed wetlands
- commercially available components are installed and maintained in accordance with the manufacturer's recommendations

- design, construction and maintenance of site-specific components is generally consistent with relevant sections of *Managing Urban Stormwater: Soils & Construction* (Dept of Housing, 1998) and *The Constructed Wetlands Manual* (DLWC, 1998).

M7 INFILTRATION OR RETENTION BASIN NON RESIDENTIAL

An infiltration or retention basin is installed that satisfies each of the following criteria:

- design, and construction and maintenance are consistent with section 9.4 of Managing Urban Stormwater: Soils & Construction (Department of Housing, 1998).
- there is sufficient site area to accommodate the basin (site area will generally need to be greater than 2 hectares)
- ponding depth 500mm maximum for infiltration basins and 1200 maximum (if not safety fenced) for retention basins
- the floor is graded level and covered with turf sod to promote infiltration, prevent erosion and bind sediments for infiltration basins
- runoff is distributed evenly over the basin floor to maximise infiltration and eliminate scour potential
- persistent flow is piped through the basin to prevent water logging and grass kill following frequent inundation in retention basins
- suitable overflow arrangements are provided for occasions when the infiltration capacity is exceeded
- basins located within waterway corridors are constructed 'offline'.
- the use of infiltration basins will not be permitted where soil profiles have a permeability >20mm/hr
- a sediment trap must be incorporated and maintained upstream of the installed infiltration basins.

M8 STORMWATER UTILISATION - IRRIGATION

A storm water utilisation system is installed for irrigation use, and satisfies each of the following criteria:

- the irrigation system serves an actively managed area of at least 1000 m2
- rainwater is sourced from roof, driveway or paved surfaces via a tank storage system
- the system is fitted with suitable treatment devices, such as a first flush pit, oil/ sediment separator, artificial wetland etc.
- fixtures are marked 'NOT SUITABLE FOR DRINKING'
- tanks and pumps are located in accordance with applicable requirements contained in other Council documents
- any consent required from the water supply authority must be obtained prior to installation of any rainwater tank (Sydney Water have advised that they wish to be advised of all rainwater tank installations).
- overflow from tanks is directed to an infiltration trench or a public drainage system.

Note. The measures described above were sourced from the Water Sensitive Urban Development: Model Planning Provisions prepared on behalf of the Lower Hunter and Central Coast Environmental Management Strategy.