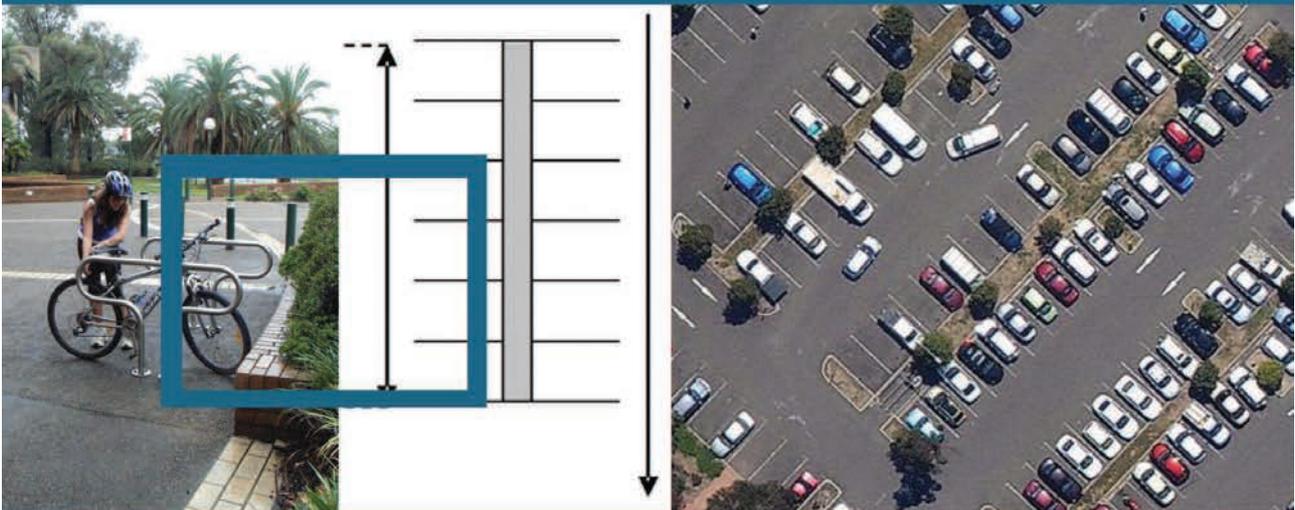


The Hills Development Control Plan (DCP) 2012

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ATTACHMENT 3

Sydney's Garden Shire
THE HILLS



Part C Section 1
Parking

DRAFT

C1

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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) 2012 and to all permissible parking activities as defined in the LEP 2012. 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.

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 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.
- (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.

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.

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 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 in Centre (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, Shop Top Housing and Mixed Use Development – Castle Hill North Precinct	1 space per unit 1 visitor 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 LEP 2012.
Commercial	Commercial premises (including business premises, office premises)*	1 space per 25m ² GFA
	Centre Commercial	1 space per 40m ² 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 4)
Retail	Shops * # (including shopping centres and general business retail)	1 space per 18.5m ² GLFA

Land Use Class	Land Use	Required Minimum Provision
	Service Station & Convenience Store	6 spaces per work bay, plus <u>with Convenience Store</u> - 1 space per 20m ² GFA, plus <u>with Restaurant</u> - 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
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

Land Use Class	Land Use	Required Minimum Provision
	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

Notes.

1. Centre parking rates apply to Castle Hill Major Centre, Baulkham Hills Town Centre and Rouse Hill Major Centre as identified in Sheet 1, 2 and 3 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. Land within the Castle Hill North Precinct is identified within Appendix C – Castle Hill North Precinct to this Section.
4. To encourage provision of employment uses there is no minimum requirement for car parking for 'commercial premises' where provided as a mixed use development within 'residential flat buildings'.

Land Use Class	Land Use	Required Minimum Provision
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 3.5)	1 space per 25m ² of GFA.
	Restaurant or cafe within a retail shopping complex	1 space per 18.5m ² of GLFA.
	Restaurant or café within Main Street Precinct, Castle Hill outdoor dining component (see note 3.5)	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.

Land Use Class	Land Use	Required Minimum Provision
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)
	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.

Land Use Class	Land Use	Required Minimum Provision
	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.

3.5. 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.

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)
<u>Retail/Commercial</u> 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%
<u>Transport</u> Railway stations, bus/rail interchanges	3%
<u>Community</u> Civic centres, town halls, community centres, senior citizen's clubs, and health care.	3%
<u>Recreation</u> Leisure centres, gymnasiums, swimming pools, parks, gardens, foreshore, and sporting venue.	3%
<u>Education</u> Schools	3%
Tertiary institutions	2%
<u>Entertainment</u> Theatres, libraries, art galleries, sports centres, entertainment centres	4%
<u>Medical</u> Hospitals	4%
Medical Centres (including community health centres, radiology units, rehabilitation units)	3%
<u>Places of Public Worship</u> Individual churches or religious centres	3%

Notes.

- Percentages in Table 2 apply to the total number of parking spaces to be provided.
- Small car parks must provide a minimum of 1 space for disabled persons.

2.3. BICYCLE PARKING**OBJECTIVES**

- To provide convenient and accessible on-site bicycle parking and appropriate associated facilities.
- 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

- The provision of bicycle parking must in accordance with Table 3.
- Bicycle parking should be located in close proximity to building entrances and clustered in lots not exceeding 16 spaces.
- 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.

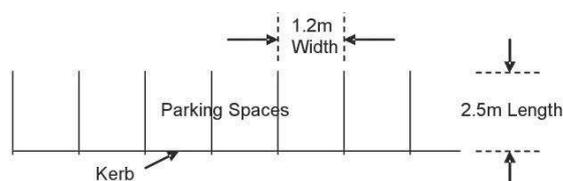


Figure 1 Motorcycle Parking Dimensions At 90 Degree Angle

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.

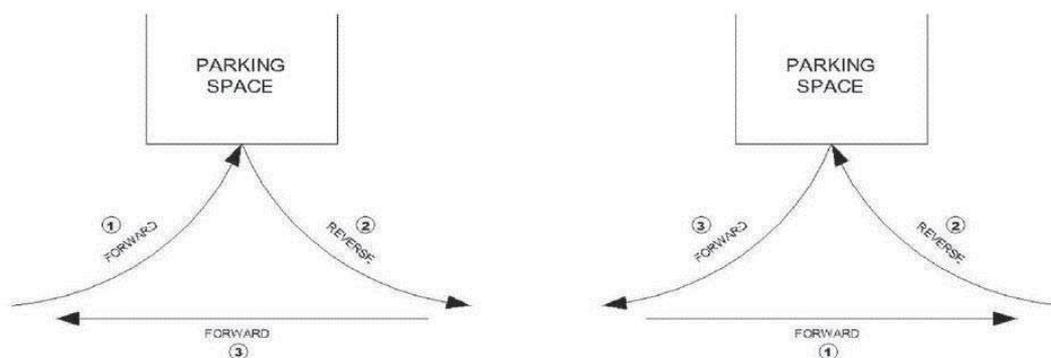


Figure 2 Vehicle Movements In And Out Of Parking Spaces

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

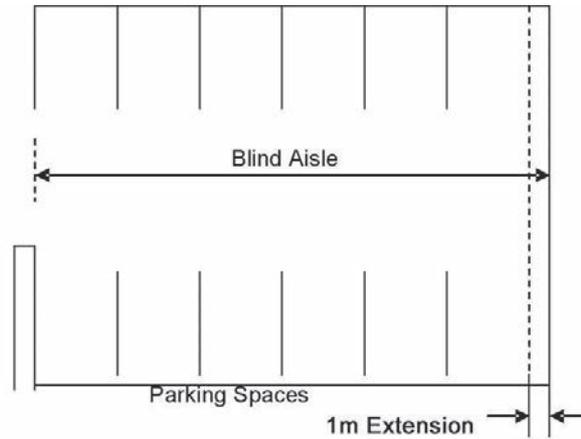


Figure 3 Blind Aisle Extension

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

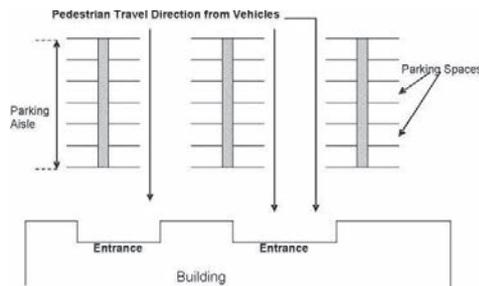


Figure 4 Example Of Direct Pedestrian Access To Entrance

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 AUSTRROADS 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.

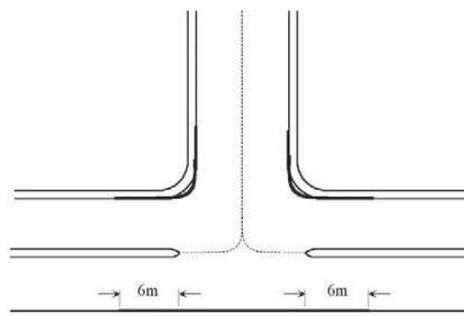


Figure 6 Driveways Prohibited On The Opposite Side Of The Road Or Within 6m Of Median Opening

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.

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.

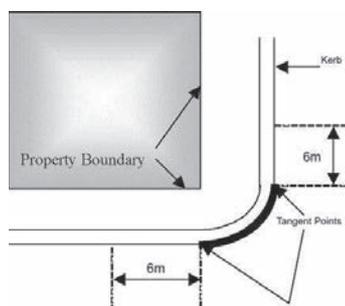
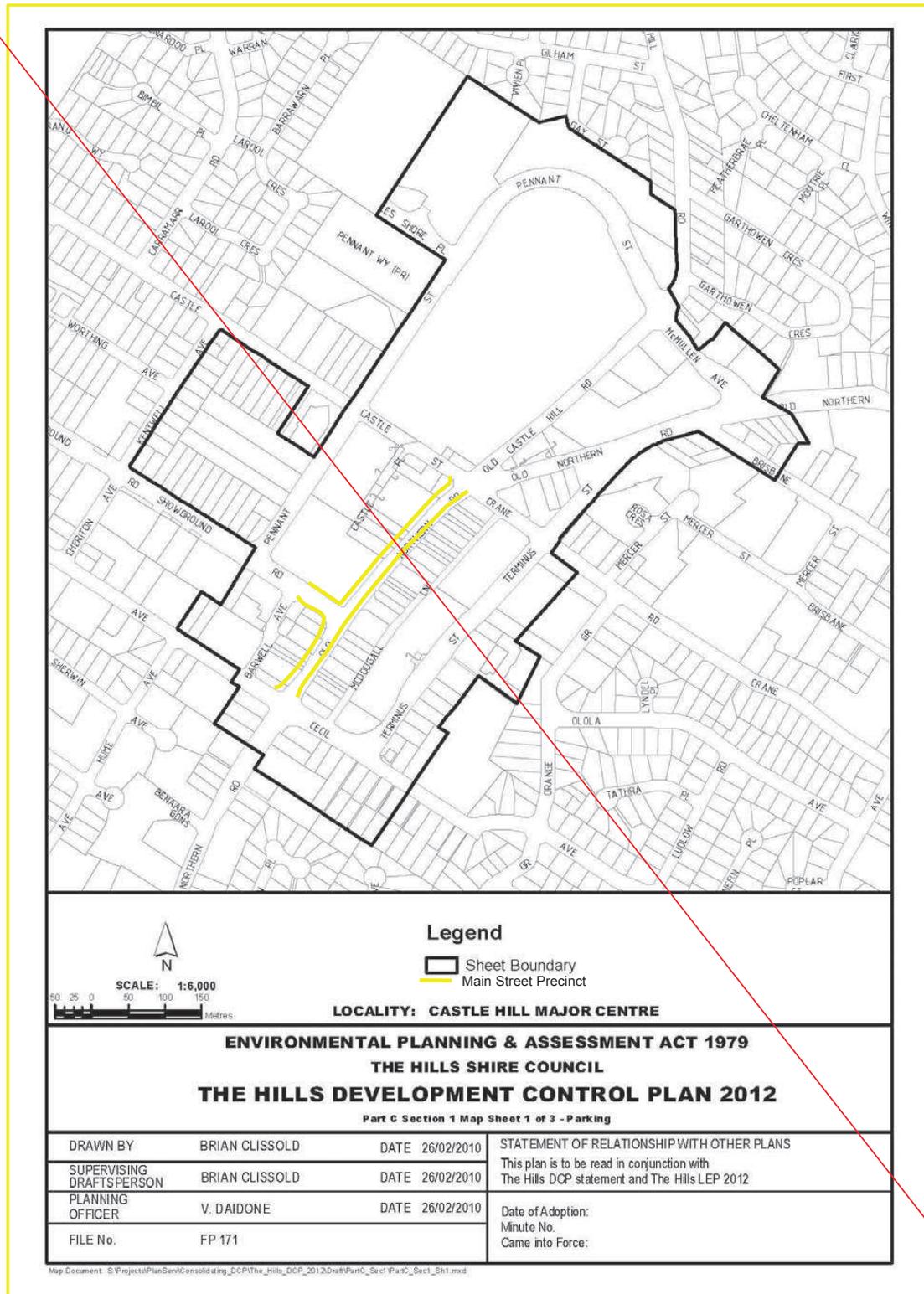
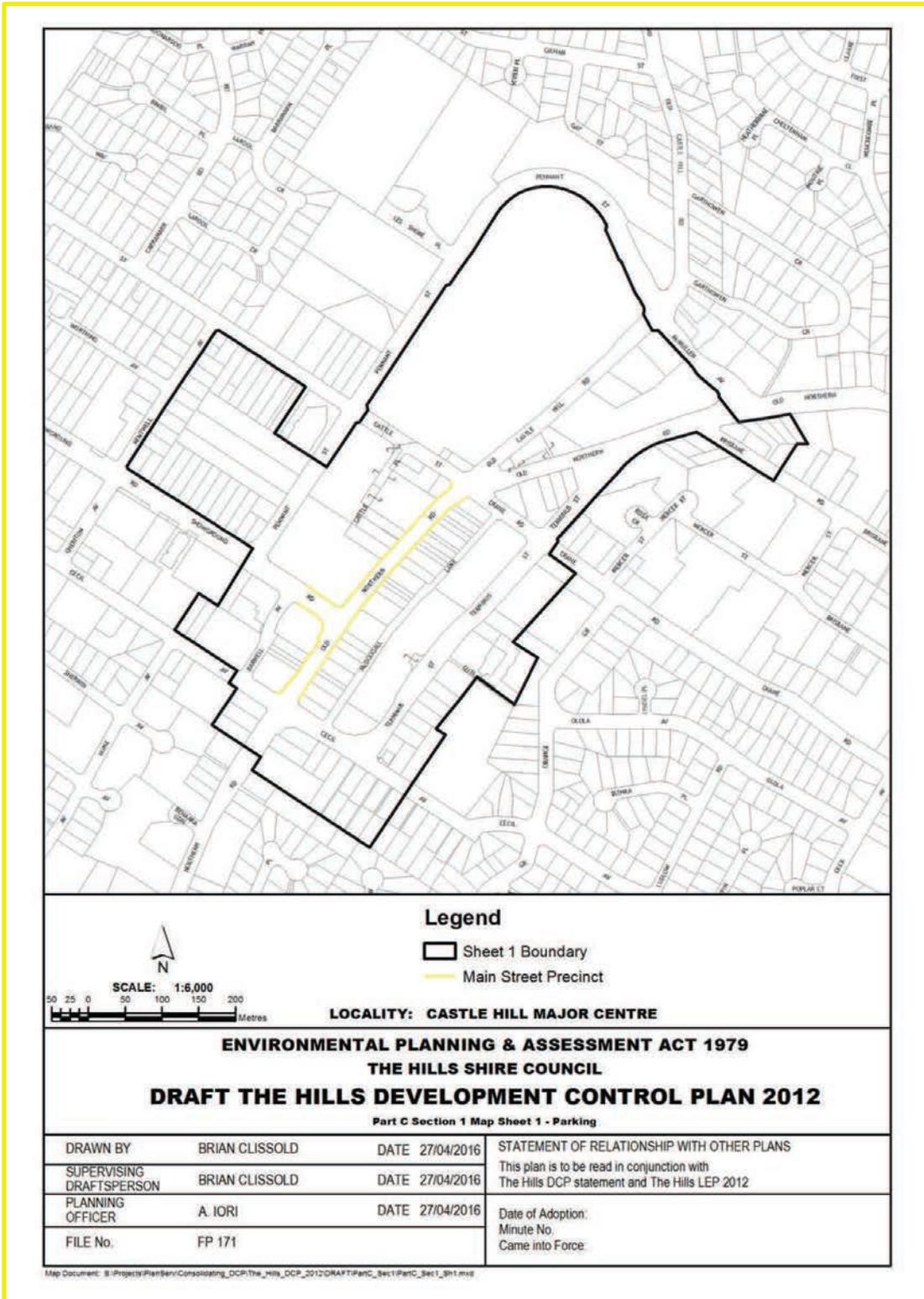


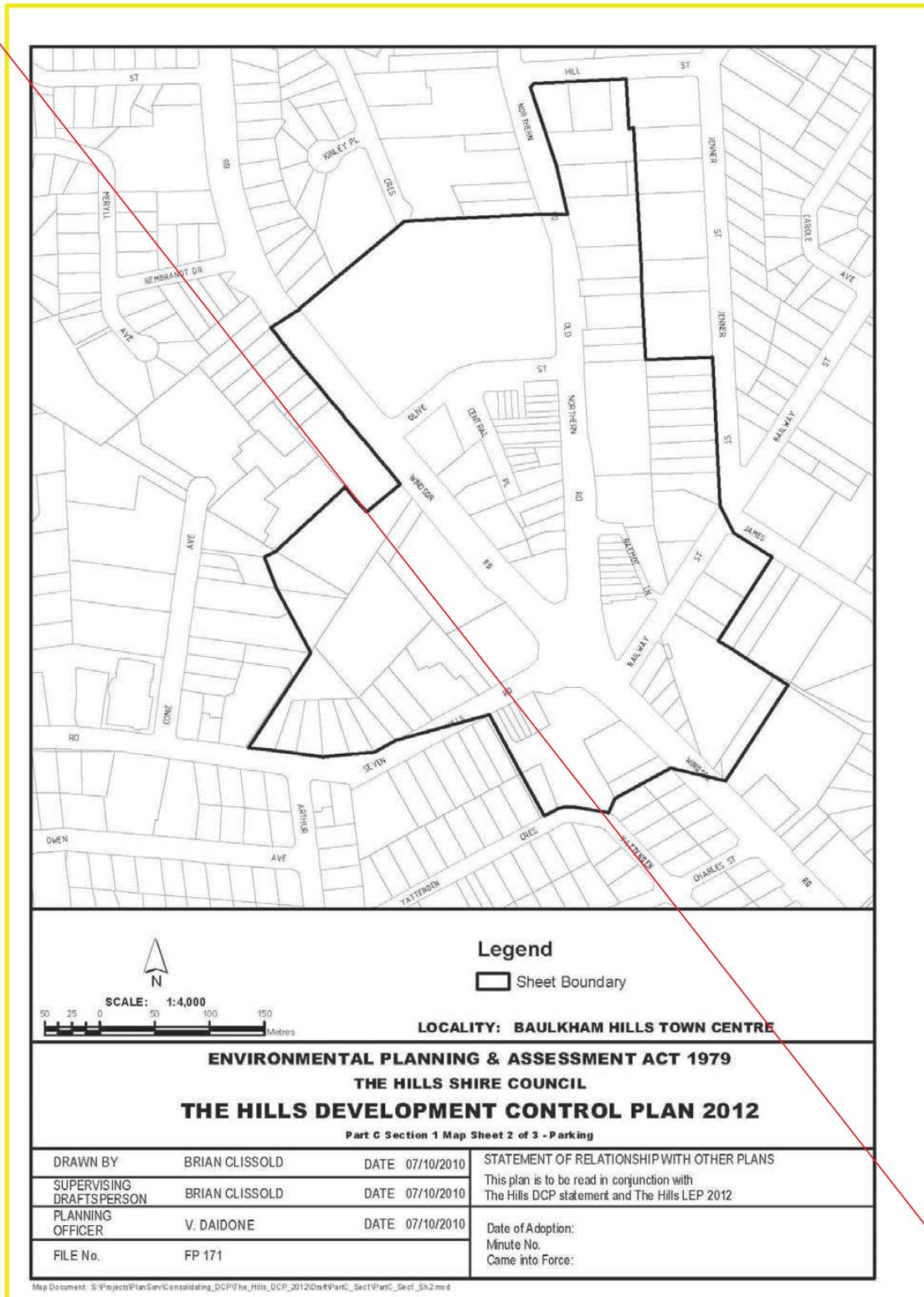
Figure 5 Driveways Prohibited Within 6 Metres From Tangent Points Of Kerb

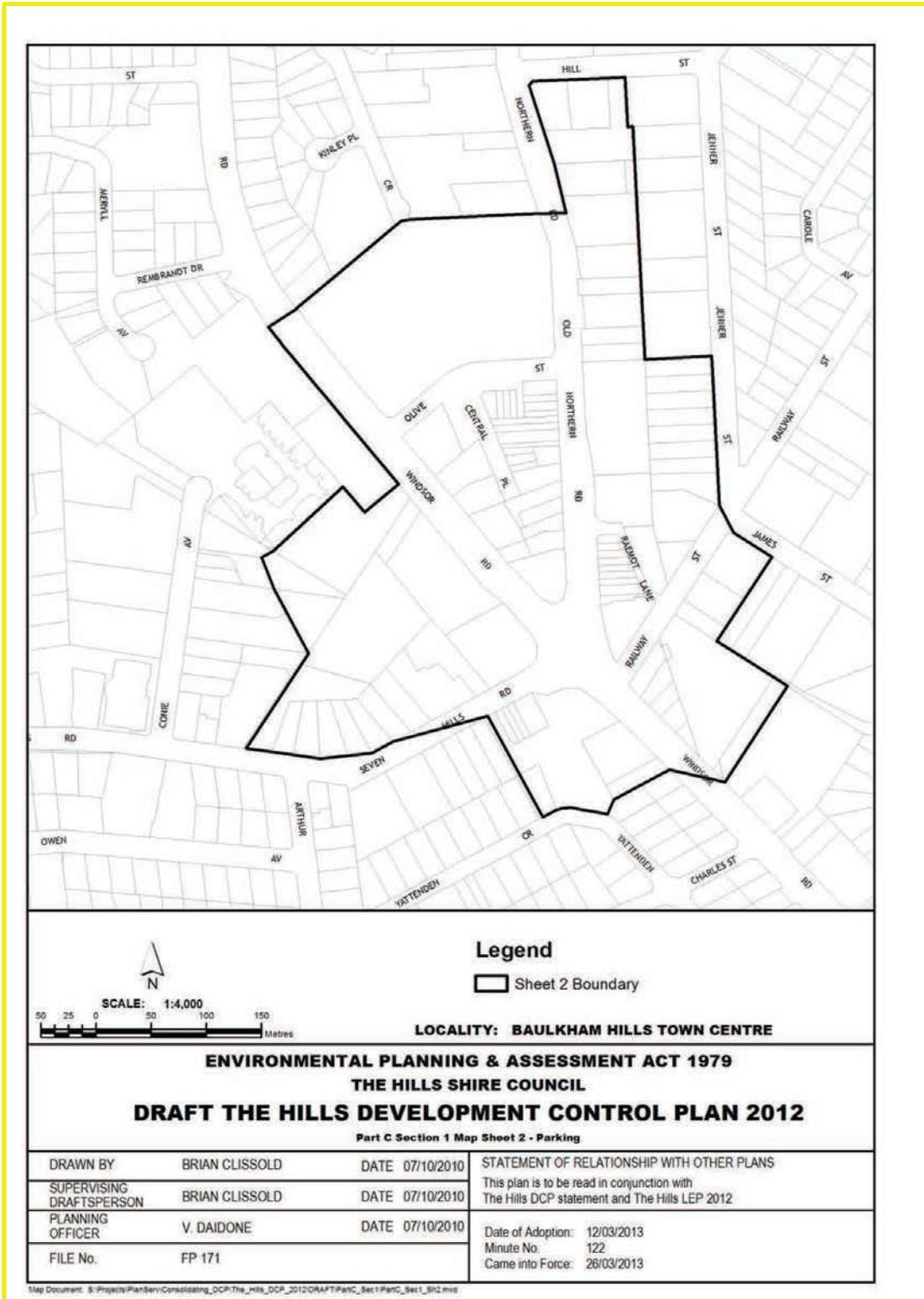
Source: AS 2890.1 – 1993 Parking Facilities – Part 1: Off-Street Car Parking

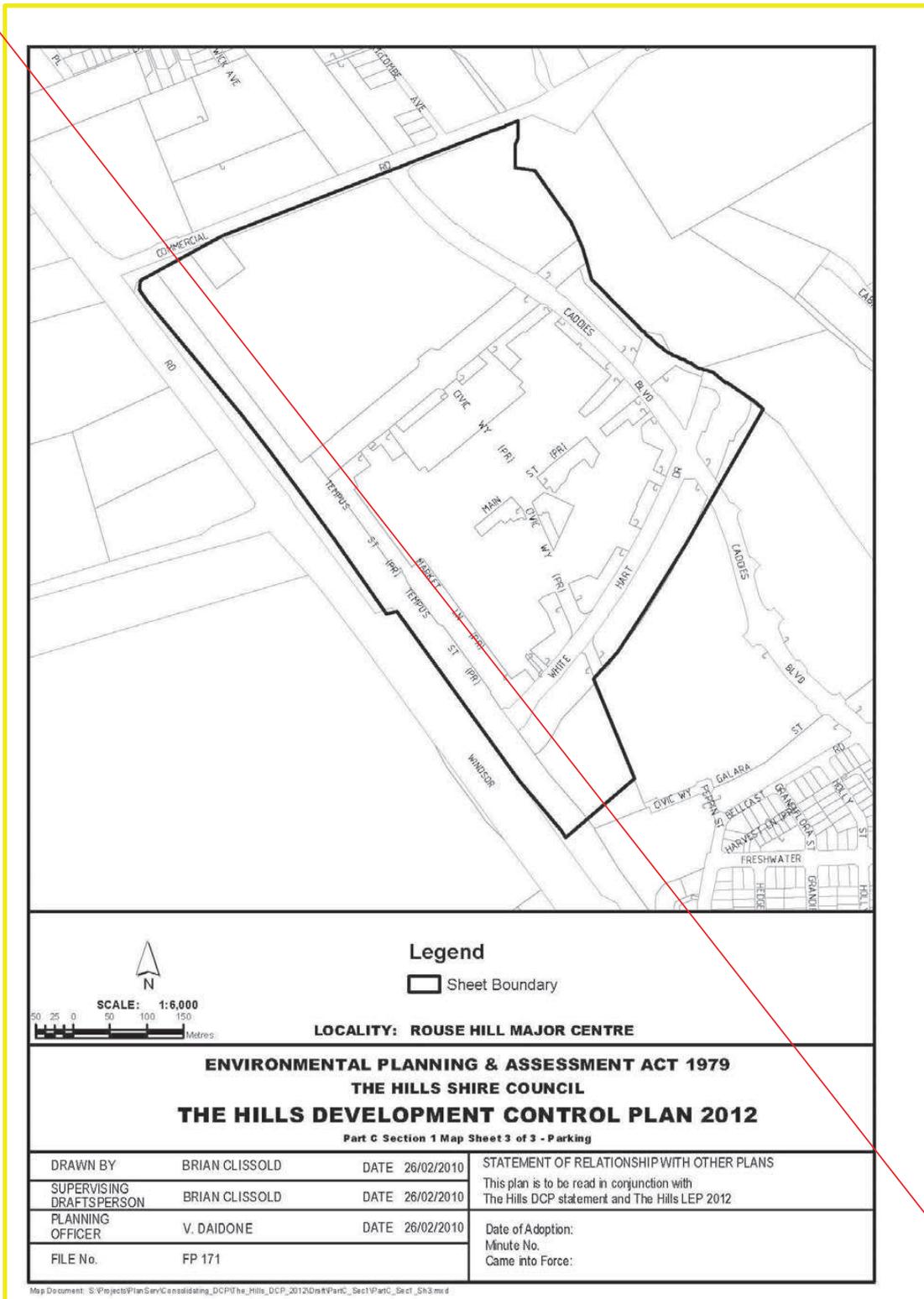
APPENDIX A – CENTRE MAPS

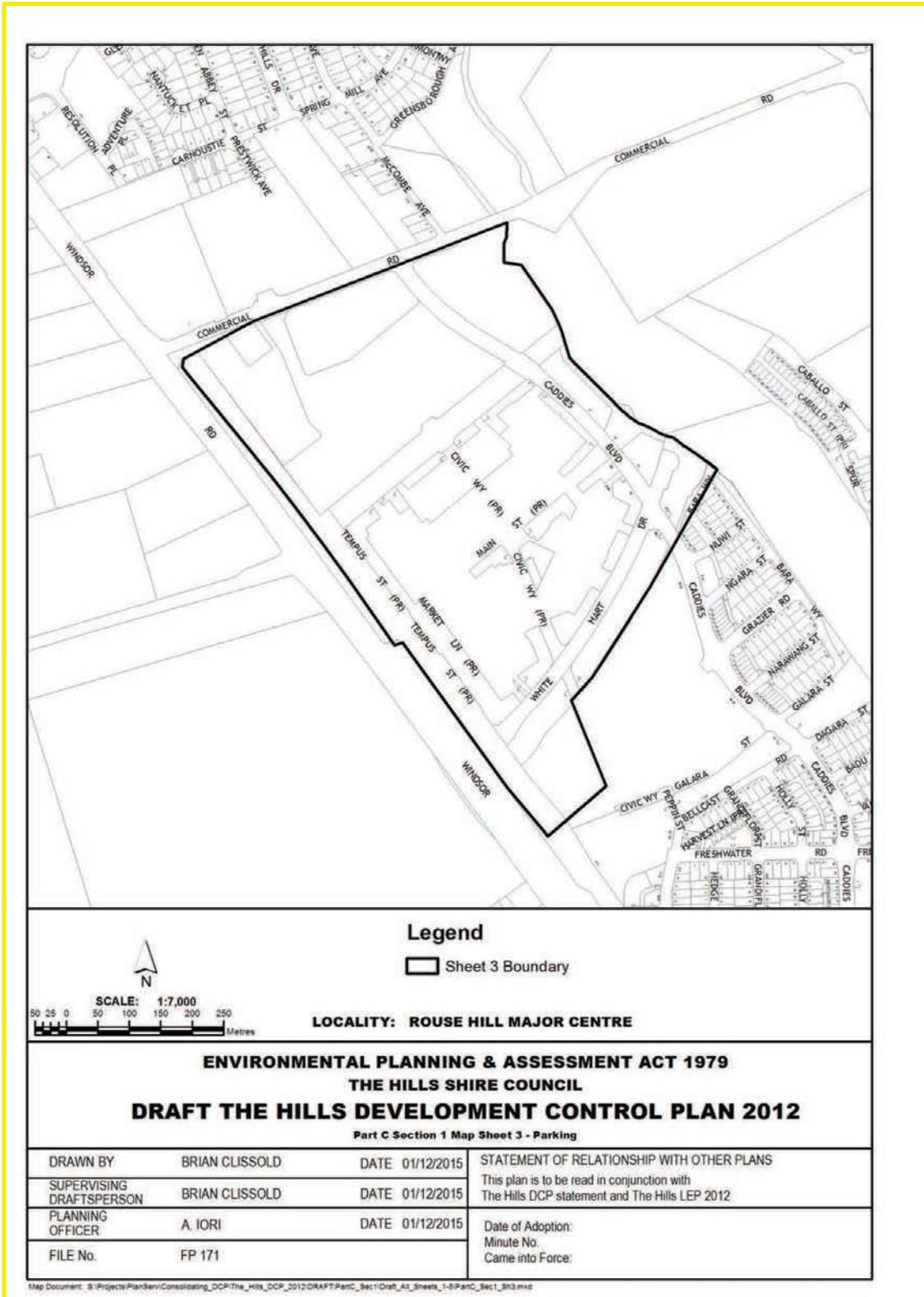




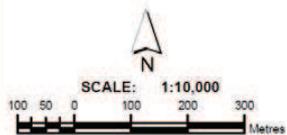
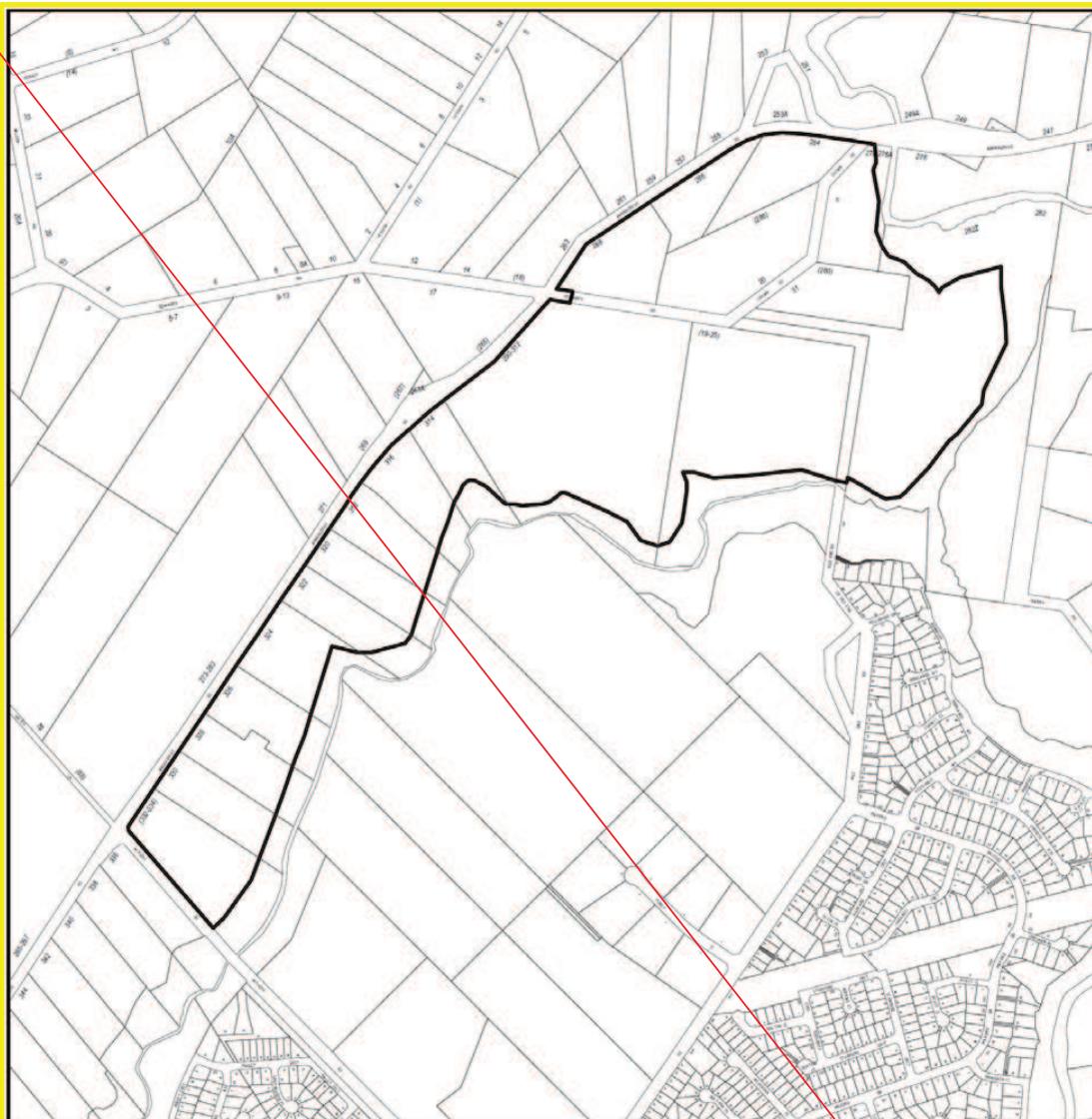








APPENDIX B – EDWARDS ROAD PRECINCT



Legend

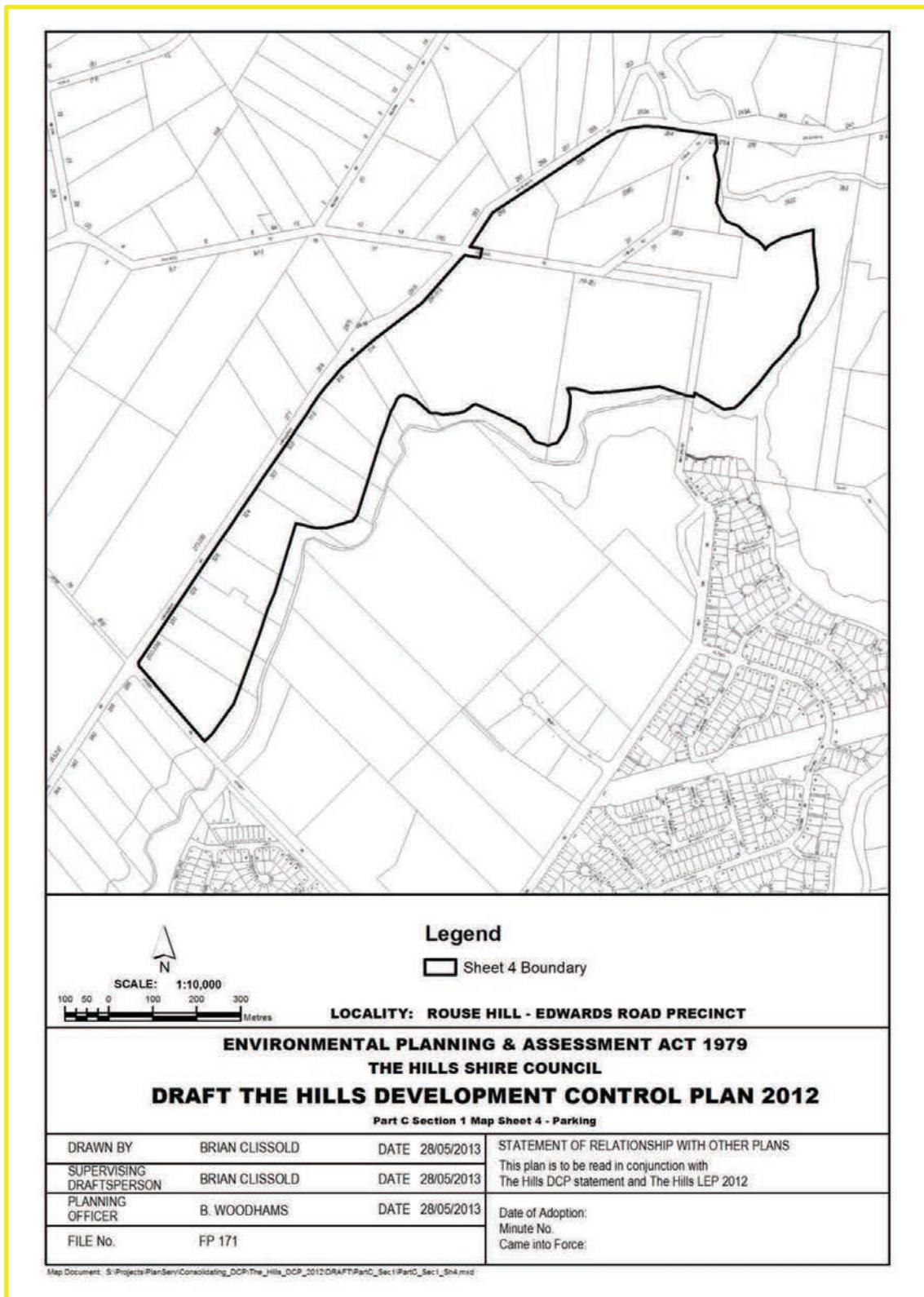
 Sheet Boundary

LOCALITY: ROUSE HILL - EDWARDS ROAD PRECINCT

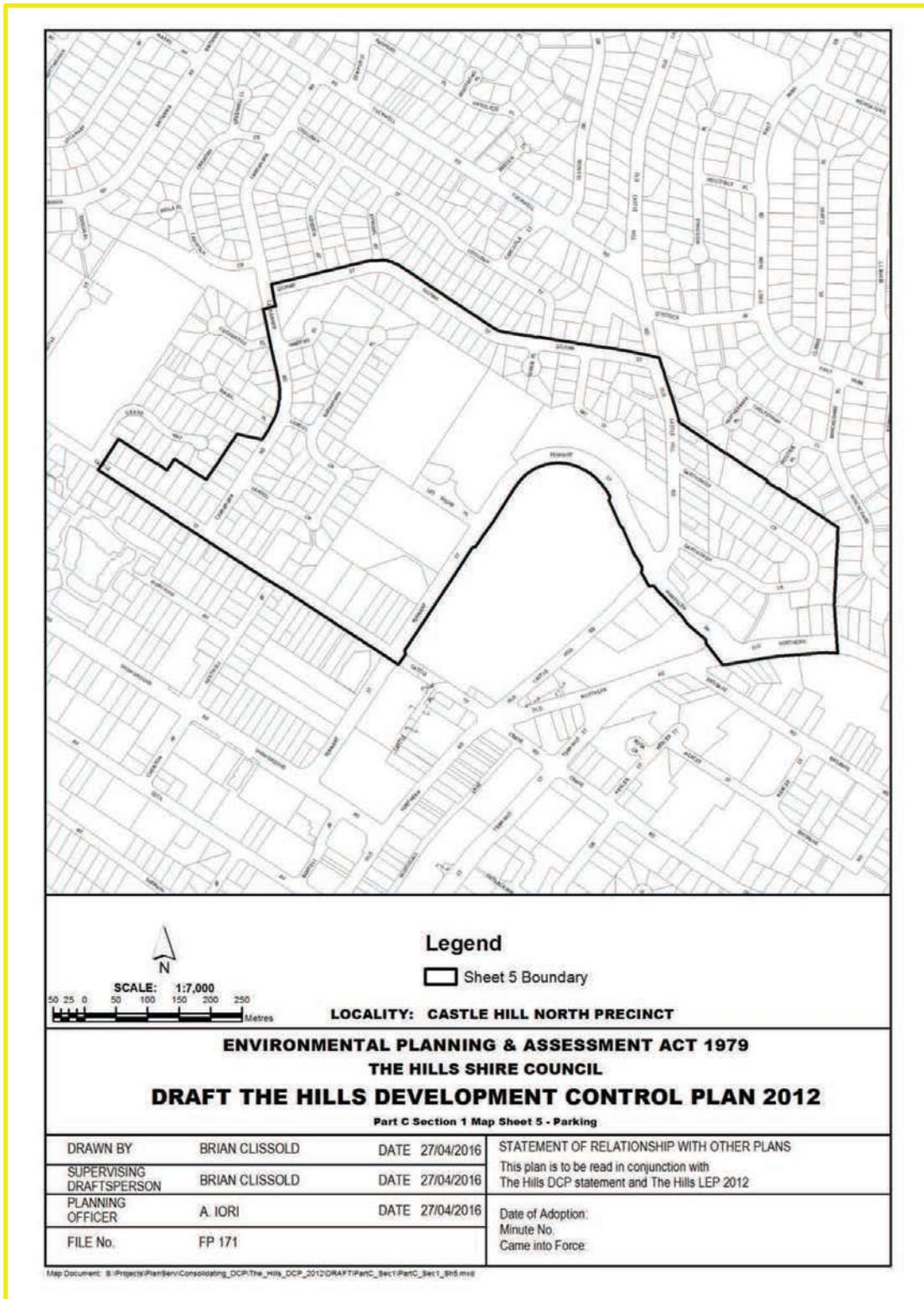
**ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979
THE HILLS SHIRE COUNCIL
THE HILLS DEVELOPMENT CONTROL PLAN 2012**

Part C Section 1 Map Sheet 4 of 4 - Parking

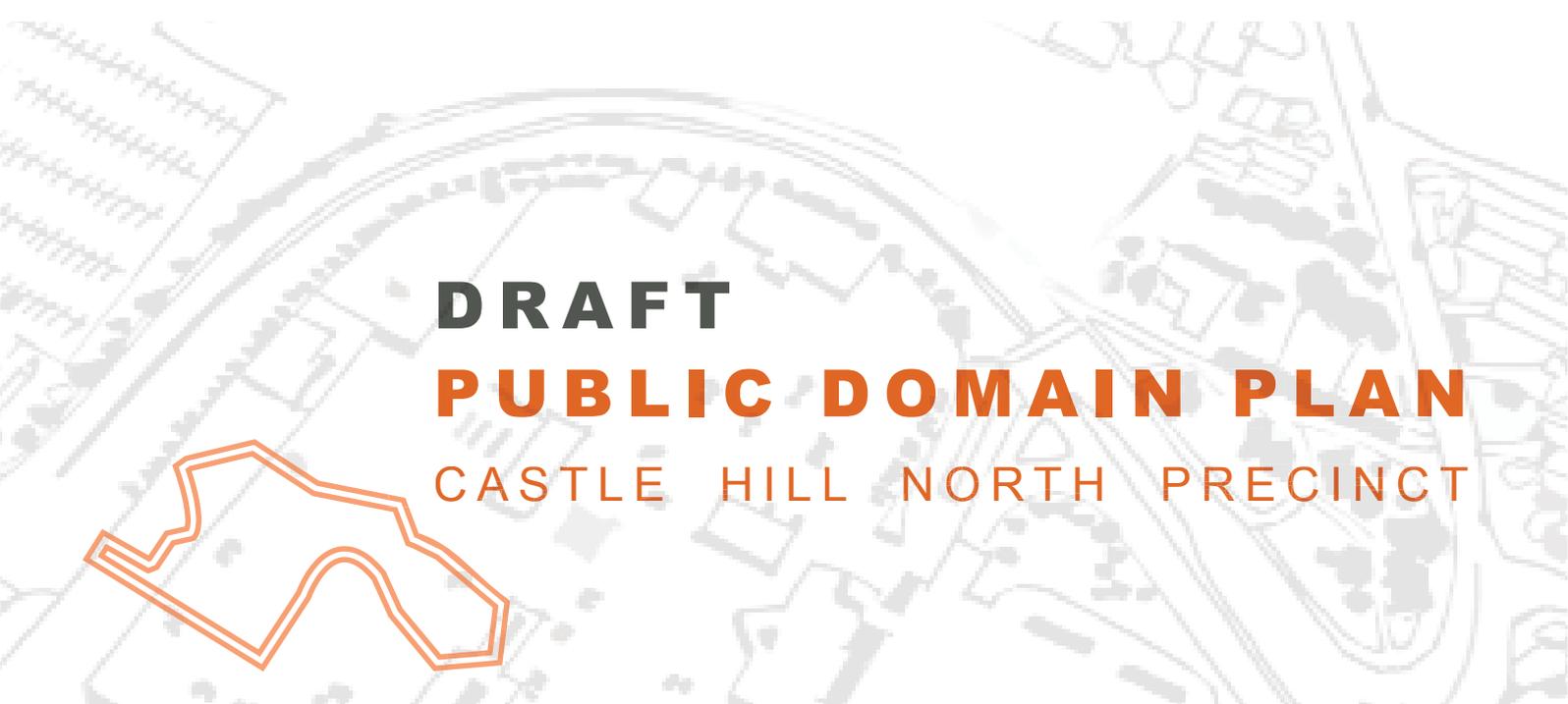
DRAWN BY	BRIAN CLISSOLD	DATE	28/05/2013	STATEMENT OF RELATIONSHIP WITH OTHER PLANS This plan is to be read in conjunction with The Hills DCP statement and The Hills LEP 2012
SUPERVISING DRAFTSPERSON	BRIAN CLISSOLD	DATE	28/05/2013	
PLANNING OFFICER	B. WOODHAMS	DATE	28/05/2013	Date of Adoption:
FILE No.	FP 171			Minute No.
				Came into Force:



APPENDIX C – CASTLE HILL NORTH PRECINCT



ATTACHMENT 4



DRAFT
PUBLIC DOMAIN PLAN
CASTLE HILL NORTH PRECINCT



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EXECUTIVE SUMMARY

Castle Hill is a Strategic centre in north west Sydney. It provides a rich mix of housing, public transport, shopping, employment and civic functions. The construction of the Sydney Metro Northwest creates an opportunity to provide increased density to take advantage of a new high frequency transport service. The vision for Castle Hill includes reconnecting people to each other and the environment around them, building on the centre's strength as an attractive metropolitan location to live, work and play and making citizens proud of the important places which they identify with.

This Public Domain Plan is the 'how to' guide that illustrates the public domain needed to create a high quality urban area.

The key issues relating to the public domain within the Castle Hill North Precinct are:

- The need to improve accessibility and circulation within the centre for pedestrians;
- Increase quality of public space;
- Improve legibility and promote the identity of the Precinct; and
- Provision of cohesive and attractive streetscapes.

The draft Public Domain Plan has been prepared to enhance the image and amenity of the Precinct through the provision of street trees, footpath paving, street furniture and landscaping to give the precinct an urban identity as part of the centre, while complementing the character of the surrounding area. The draft Public Domain Plan provides an overall direction for creating public domain spaces that are attractive, safe and vibrant within the town centre. Specifically, the Plan seeks to provide:

- Analysis of the current and desired future character of the Precinct;
- A design framework providing design direction for future development, including recommended design approaches, treatments and details; and
- A proposed implementation plan.



THIS PLAN AIMS TO:

- Increase accessibility within the Precinct to promote the use of public transport, pedestrian and cyclists activity.
- Identify the desired future character of the Castle Hill North Precinct
- Guide future improvements to the Town Centre's public domain.
- Improve amenity and accessibility for local residents, workers and visitors.
- Assist in the ongoing viability of the Centre by encouraging investment, redevelopment and revitalisation.
- Provide for a high amenity and sustainable living environment



Desired Character for Public Domain
Source: Oculus

INTRODUCTION

This Public Domain Plan (The Plan) has been prepared to guide the future public domain design and planning. It establishes the key principles and elements that aims to achieve an improved public domain for the community, workers and visitors. This document will encourage enhancements in accessibility, identity, amenity, and visibility of the Precinct to ensure its ongoing growth and status as a Strategic Centre.

The Plan provides an overall direction for creating public spaces that are attractive, safe and vibrant within the centre. The Plan complements future development within the Precinct as envisaged by both Local Environmental Plan 2012 and the Development Control Plan 2012, and is part of a range of documents that will guide the transition of the area to a higher density urban environment with strong links to new transport infrastructure.

WHAT IS THE PUBLIC DOMAIN?

The public domain is space that is publicly accessible for the whole community such as footpaths, streets, roads, parks and building setbacks. Well designed and attractive public domain spaces can improve environmental amenity and accessibility, and encourage greater patronage of public areas. A high quality public domain can act as a core attractor for investment in economic activity and business development.

IMPLEMENTATION

The future public domain works will be funded through the Contributions Plan and will be delivered by Council via the Contributions Plan or developers through a works kind agreement.

STRATEGIC CONTEXT

In 2011, the State Government committed to the construction of the North West Rail Link which is set to be Australia's largest public transport infrastructure project with a completion date at the end of 2019.

As part of the on-going work in delivering the rail link the Department of Planning and Environment undertook a strategic review of development around each of the future rail stations and released the North West Rail Link Corridor Strategy in September 2013. The Corridor Strategy seeks to strengthen Castle Hill's status as the Major Centre for the North West, by encouraging further development of the retail centre and commercial core that will contribute to more jobs and opportunities for residents to work close to home. There is also a focus on increasing residential densities within walking distance of the station. A key goal is to introduce a variety of housing types and appropriate housing for all members of the community.

CASTLE HILL NORTH PRECINCT

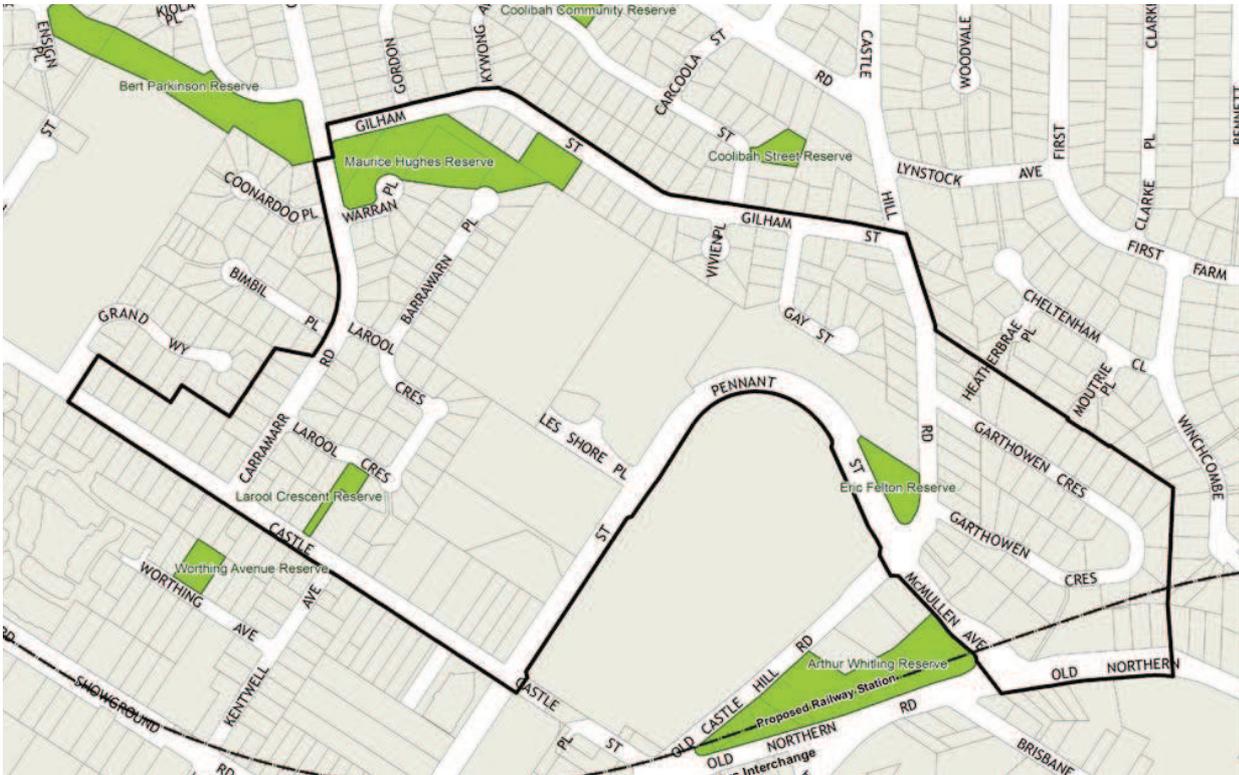
The Castle Hill North Precinct is located within the broader Castle Hill Railway Station Precinct. The Precinct is bound by Pennant Street and Castle Street to the south, Gilham Street to the north, Old Northern Road to the east and Carramarr Road to the west.

In determining the Precinct boundaries, an area extending north from Castle Street and Old Northern Road, within an approximate one kilometre radius of the future Castle Hill Station, was investigated. This area encompasses the northern boundary of the Castle Hill Station Structure Plan as identified in the North West Rail Link Corridor Strategy.

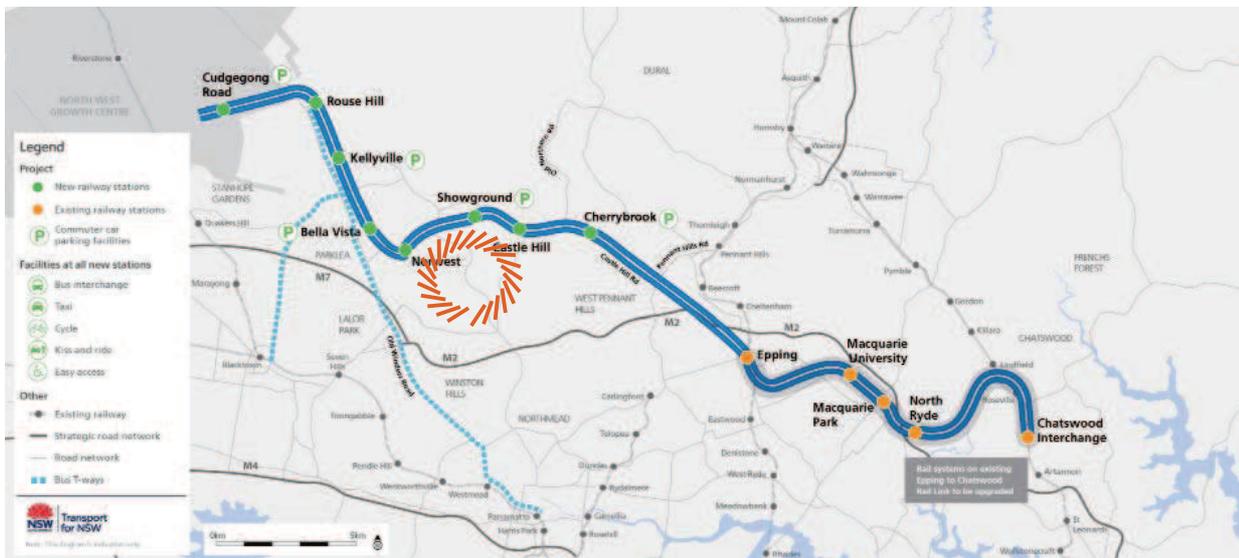
The Precinct boundaries have been refined to an area closer to the retail and commercial core having regard to actual walking distance and the constraints imposed by topography and the existing road network. Consideration has also been afforded to the age and condition of existing housing stock and titling arrangements which are likely to constrain the uptake of development opportunities.



Castle Hill North Boundary



North West Rail Link Corridor Strategy





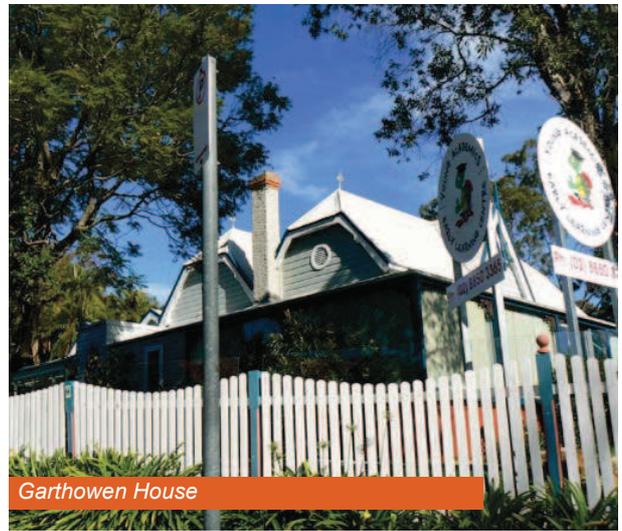
Larool Crescent Reserve



Eric Felton Reserve



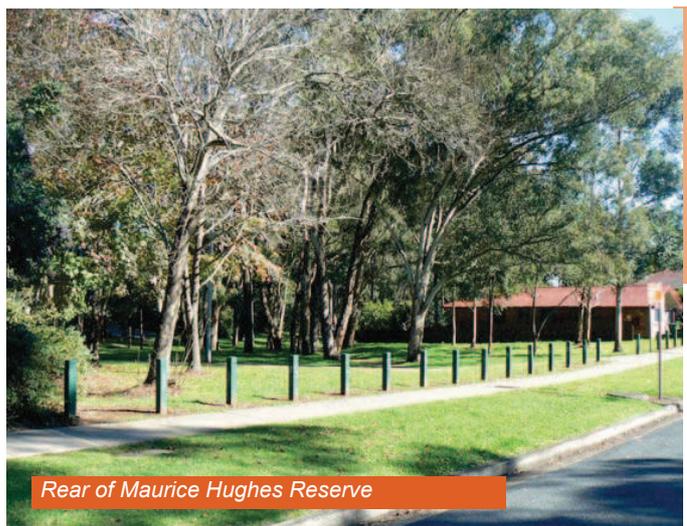
Maurice Hughes Reserve



Garthowen House



Paving Treatment, Old Castle Hill Road



Rear of Maurice Hughes Reserve



VISION AND OBJECTIVES

VISION FOR THIS PLAN

Castle Hill North will be a vibrant, safe and attractive place to live, work, visit and shop that reinforces the role of Castle Hill as a major civic and retail destination within the Hills Shire Local Government Area. The Precinct will be characterised by a high quality urban environment, with active street life, that promotes a positive sense of community with social inclusiveness.

OBJECTIVES FOR THIS PLAN

This Plan will assist in achieving this vision, aiming to achieve these objectives for the Precinct to achieve these via implementation of the public domain improvements outlined by this plan:

- Facilitate the creation of high quality public spaces that encourage social interaction and create a sense of place for residents and visitors to Castle Hill North;
- Promote the visual and physical integration of the public and private domain;
- Provide appropriate, equitable, safe and convenient access and egress points for pedestrians;
- Provide for improved pedestrian circulation patterns throughout the Precinct
- Ensure improved pedestrian connectivity between all major developments;
- Provide for improved pedestrian circulation patterns throughout the Centre.
- Soften the existing roadway environment with landscape treatments.
- Retain / enhance or reinstate the existing green canopy.

“Provision for a range of housing types within a 5 minute walk to the town centre. To ensure a well-connected Precinct that capitalises on the established and proposed infrastructure for Castle Hill”

Vision

Source: Precinct Plan for Castle Hill North, The Hills Shire Council (November, 2015)

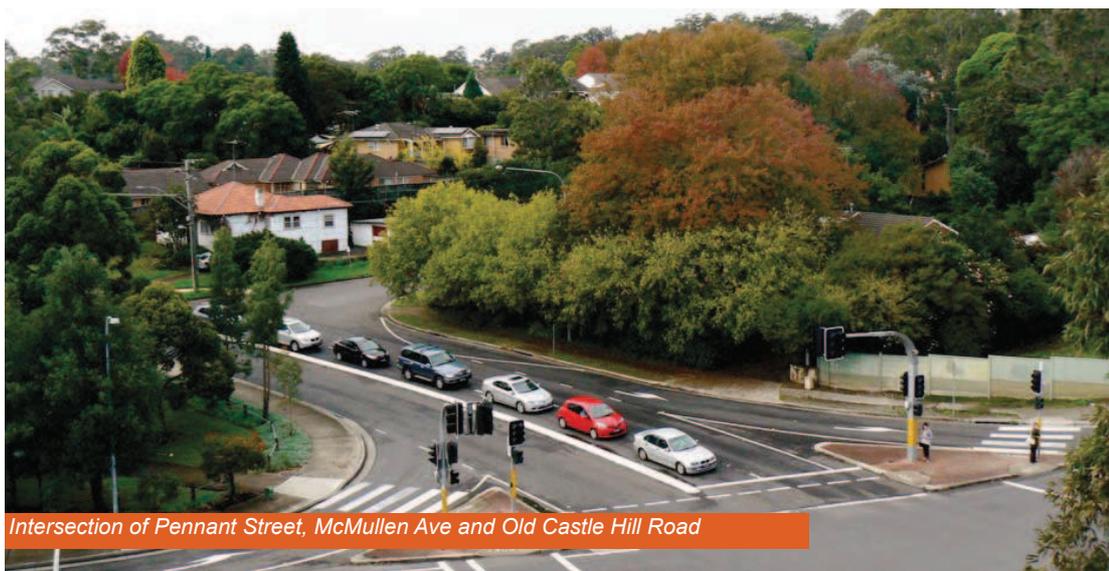
ANALYSIS

PLANNING AND INFRASTRUCTURE FRAMEWORK

The Hills Local Environmental Plan 2012 and Development Control Plan 2012 provides a planning and infrastructure framework for future development within Castle Hill North. The Local Environmental Plan identifies floor space ratios and development provisions and specifies what activities can be carried out on land. The Development Control Plan provides greater detail for matters such as building setbacks, car parking, site and density requirements.

The preparation of a public domain plan to guide the development of, and improvements to, the public domain and streetscape of centres is identified in Council's Centres Direction which forms part of a strategy that guides land-use planning and management of centres in the Shire. Together with the Development Control Plan and Contributions Plan, the Public Domain Plan will assist in achieving the key objectives of the Centres Direction, namely:

- C1 Create vibrant centres that meet the needs of the community
- C2 Make centres more attractive places to visit
- C3 Make centres accessible to the community
- C4 Improve the functioning and viability of existing centres



Intersection of Pennant Street, McMullen Ave and Old Castle Hill Road

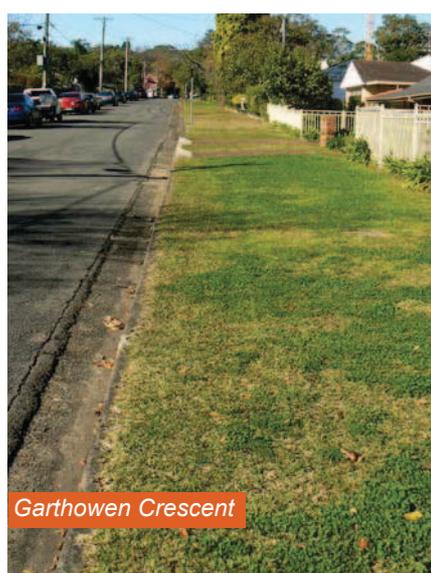
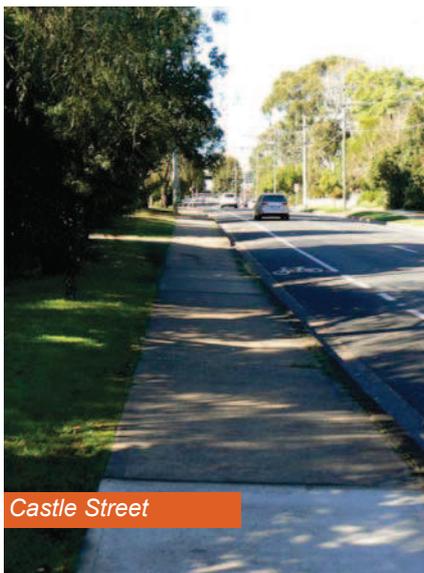
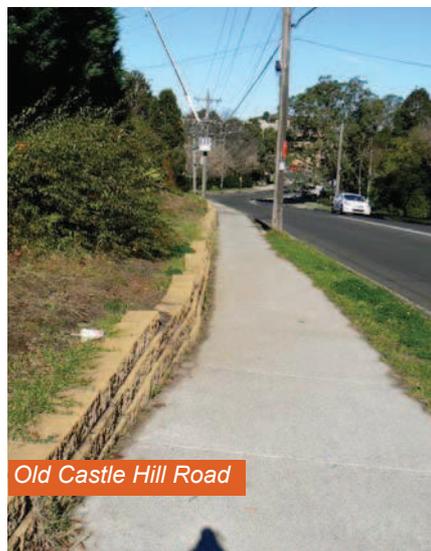
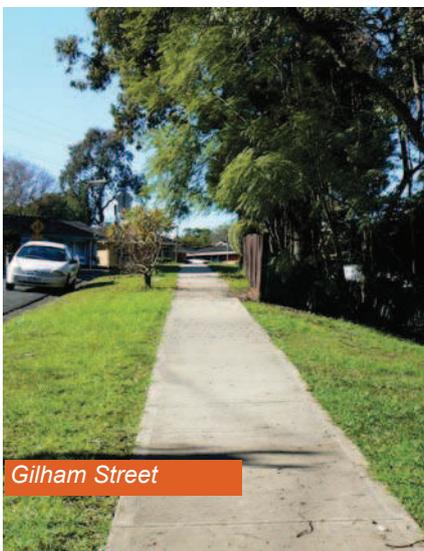


EXISTING BUILT ENVIRONMENT

STREETSCAPES AND PEDESTRIAN CONNECTIVITY

The Precinct consists typically of low residential suburban streetscapes with predominately single lot dwellings that have generous setbacks to the kerb. The pavement treatment and width of the existing footpaths varies from street to street providing an inconsistent pedestrian environment with little street activation.

Pedestrian circulation is largely characterised by movement from Castle Towers Shopping Centre and to Castle Hill Community Centre and Library. However, the pedestrian layout of the Precinct is not well defined or continuous.



LANDSCAPING AND STREET TREES

The area is largely cleared with some vegetation surrounding developments. There are small areas of biodiversity importance within the Precinct which contain pockets of significant vegetation and stands of well established canopy trees. The largest concentration is around the intersection of Carramarr Road and Gilham Street within the existing open space areas.

The proposed street trees will provide additional landscaping to create recognisable entrances and an attractive identity. The Plan also highlights areas for street trees landscaping in the residential areas which will improve the overall visual appeal of the streets and soften the hard paved areas.



PUBLIC DOMAIN STRATEGY

PEDESTRIAN CONNECTIVITY

PRINCIPLES

- Provide accessible pedestrian linkages to the station, local shops and cafes from the residential areas.
- Enhance and improve the walking environment for all users.
- Encourage pedestrian movement between various parts of the Precinct and to the centre.
- Reduce the dominance of cars within the Precinct.
- Remove trip hazards from uneven pathways.
- Minimise ongoing maintenance.
- Ensure that site redevelopment makes pedestrian connectivity and walkability between different parts of the Precinct a high priority.
- Provide lighting to all pedestrian walkways

STRATEGIES

- Provide wide concrete footpaths along both sides of Pennant Street, Castle Street and Old Castle Hill Road as sites redevelop to maximise opportunity for active frontages.
- Creation of through-site active 'pedestrian only' links and improved pedestrian connections from key sites.
- Use landscape edge treatments to soften the edges of busy roads.



Pedestrian walkways, Source: THSC



Hedge treatment to road edge, Source: City of Sydney



Hedge treatment to road edge, Source: THSC

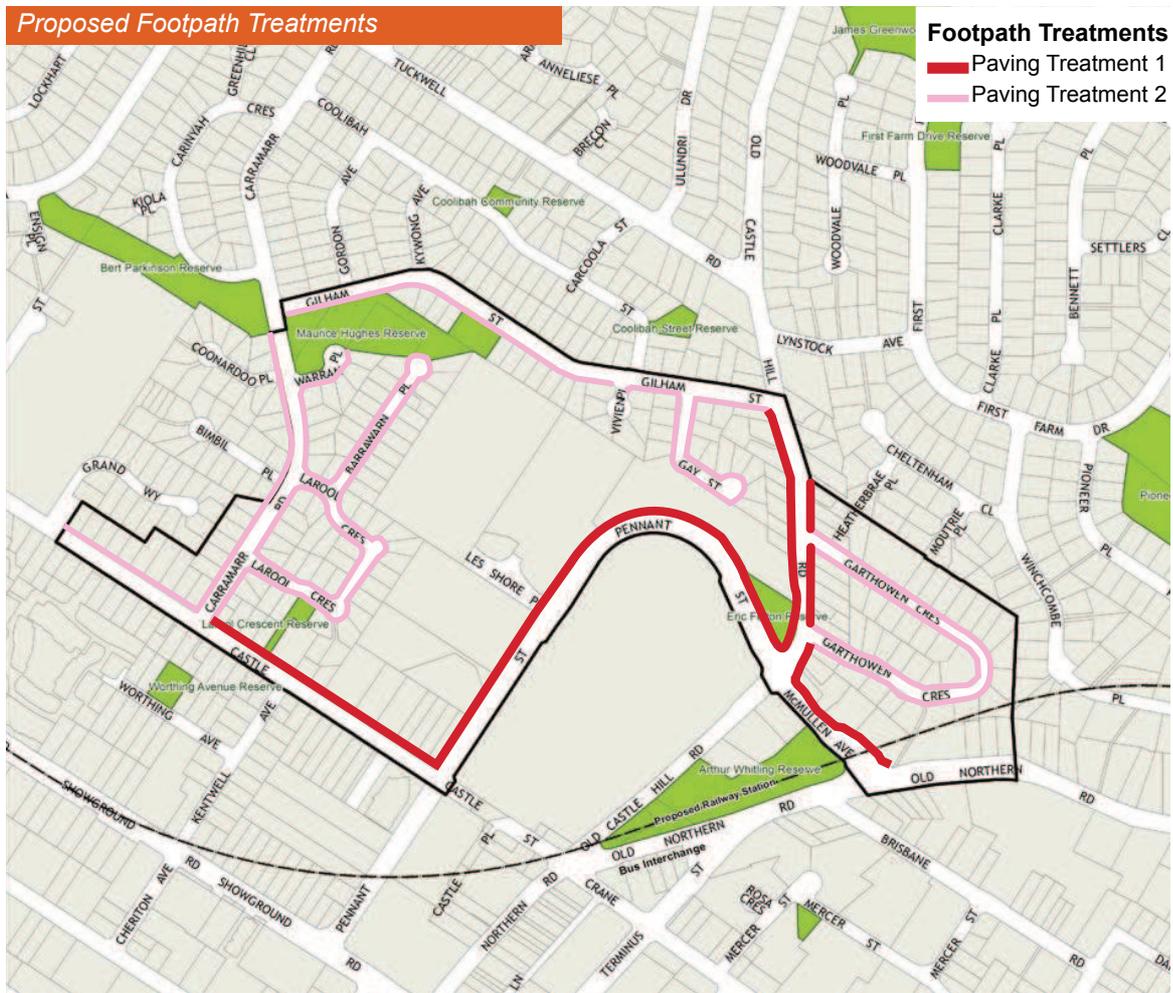


Landscaped interface to pedestrian domain, Source: Brent Toderian

Photomontage of an Urban Active Edge Streetscape

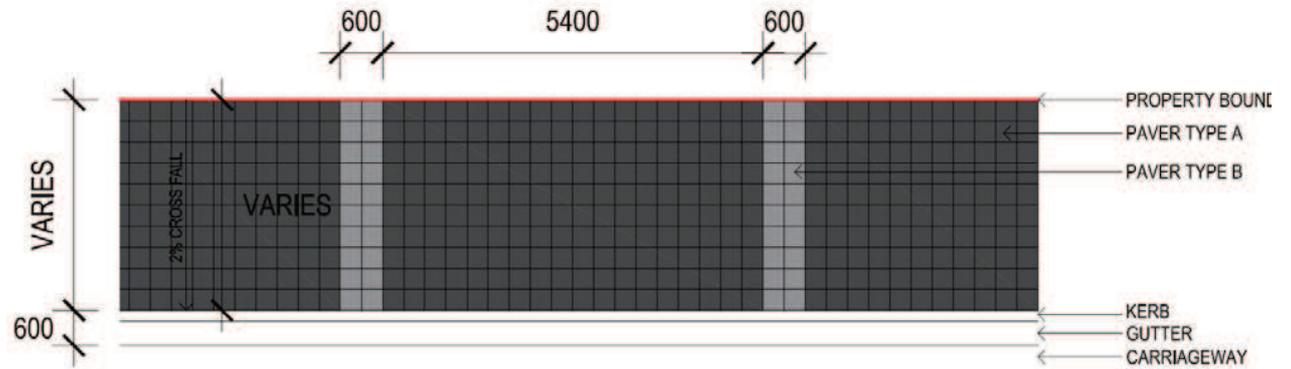


PEDESTRIAN PAVING



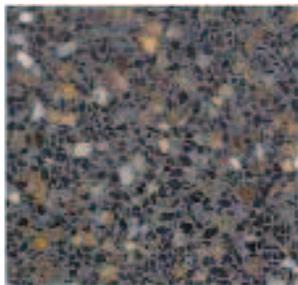
PAVING TREATMENT ONE

Paving treatment 1 to be used in high use pedestrian areas. Similar to Urbanstone Commercial Series



PAVING TREATMENT 1

SCALE 1:100



PAVER TYPE A - Golden Gunmetal

- Machine milled and sealed
- 400 x 400 x 60mm
- Kerb to property boundary

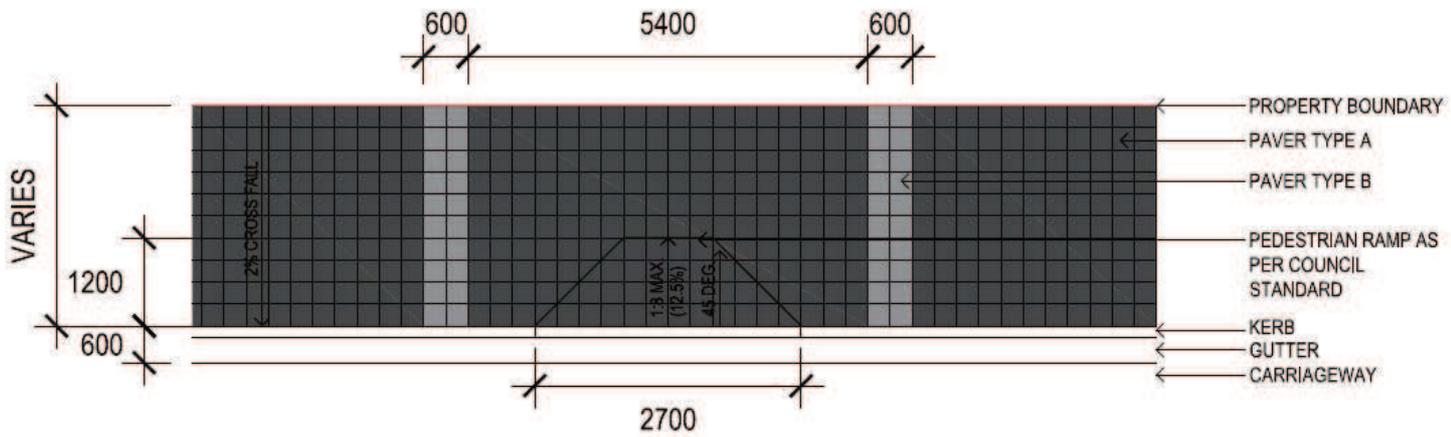


PAVER TYPE B - Bluestone (banding)

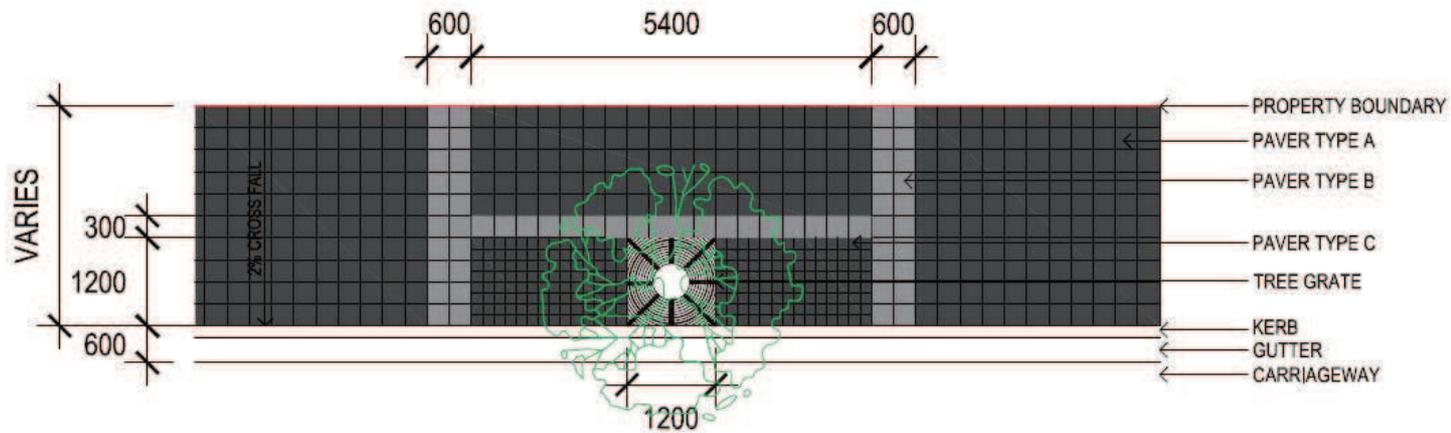
- Machine milled and sealed
- 300 x 500 x 600mm



Paving Details

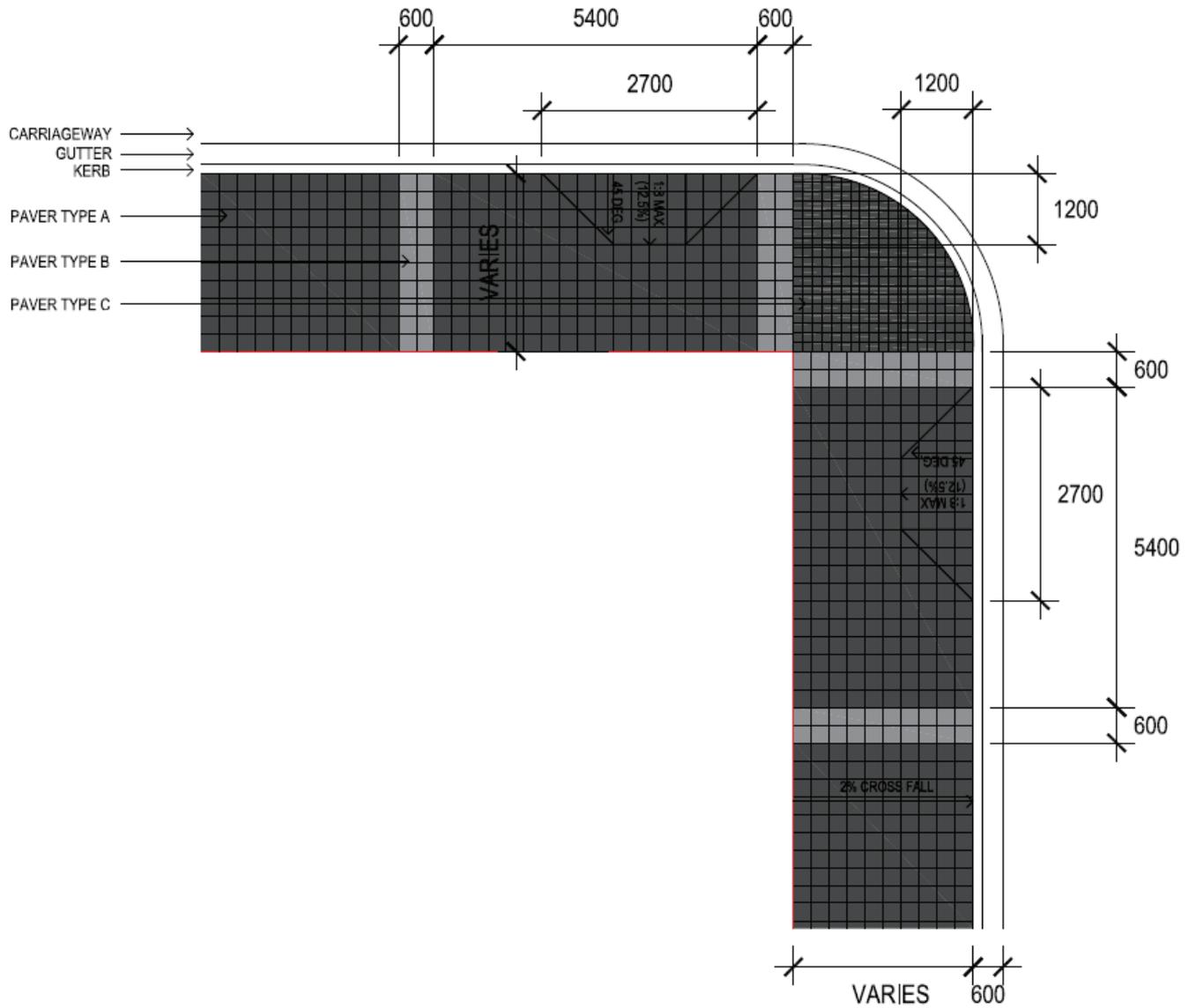


PAVING TREATMENT 1 - PRAM RAMP CROSSING
SCALE 1:100



PAVING TREATMENT 1 - LANDSCAPE PAVEMENT
SCALE 1:100

Paving Details



PAVING TREATMENT 1 - INTERSECTION

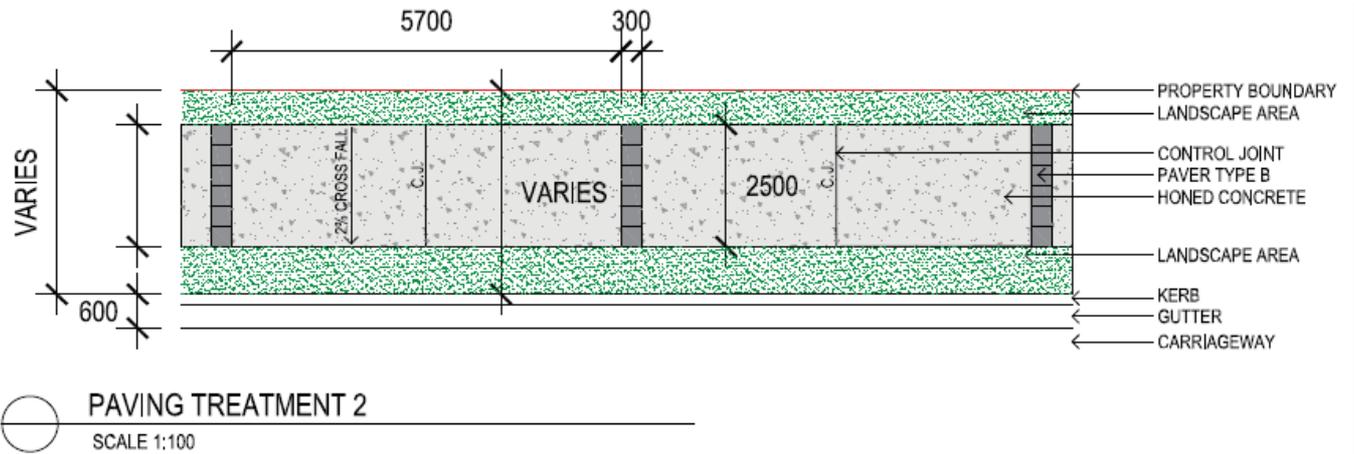
SCALE 1:100



PAVING TREATMENT TWO

Paving treatment 2 has been identified as concrete with blue stone pavers specified in medium use areas.

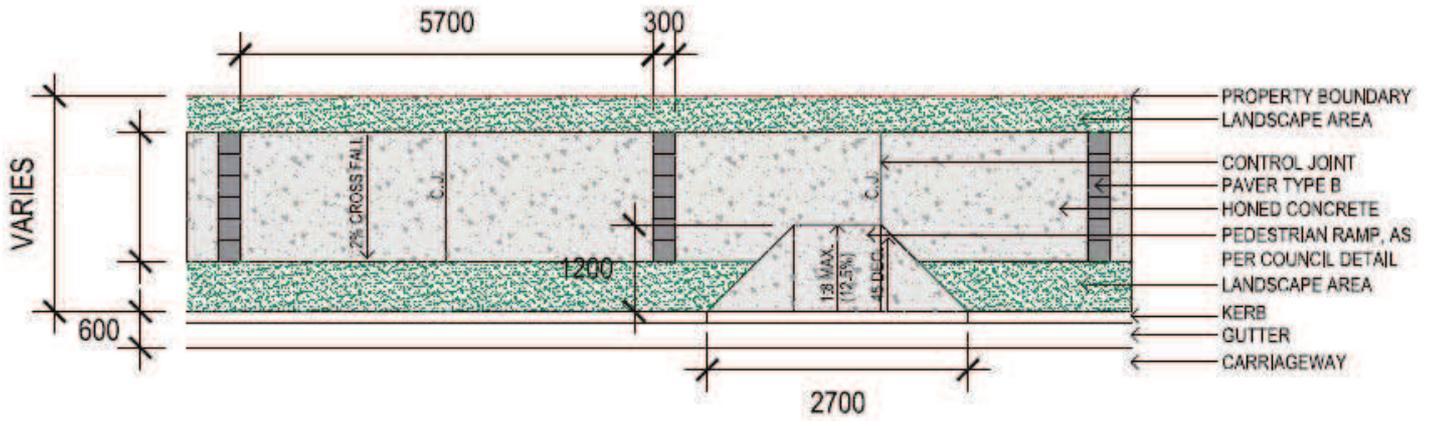
Similar to Australian Blue Stone.



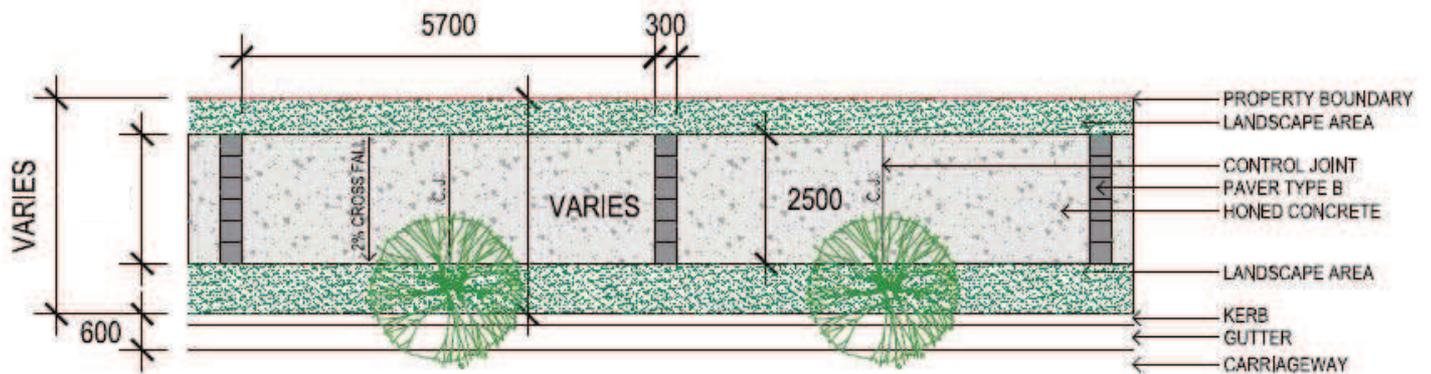
PAVER TYPE B - Bluestone (banding)

- Machine milled and sealed
- 300 x 500 x 600mm
- Width will vary

Paving Details



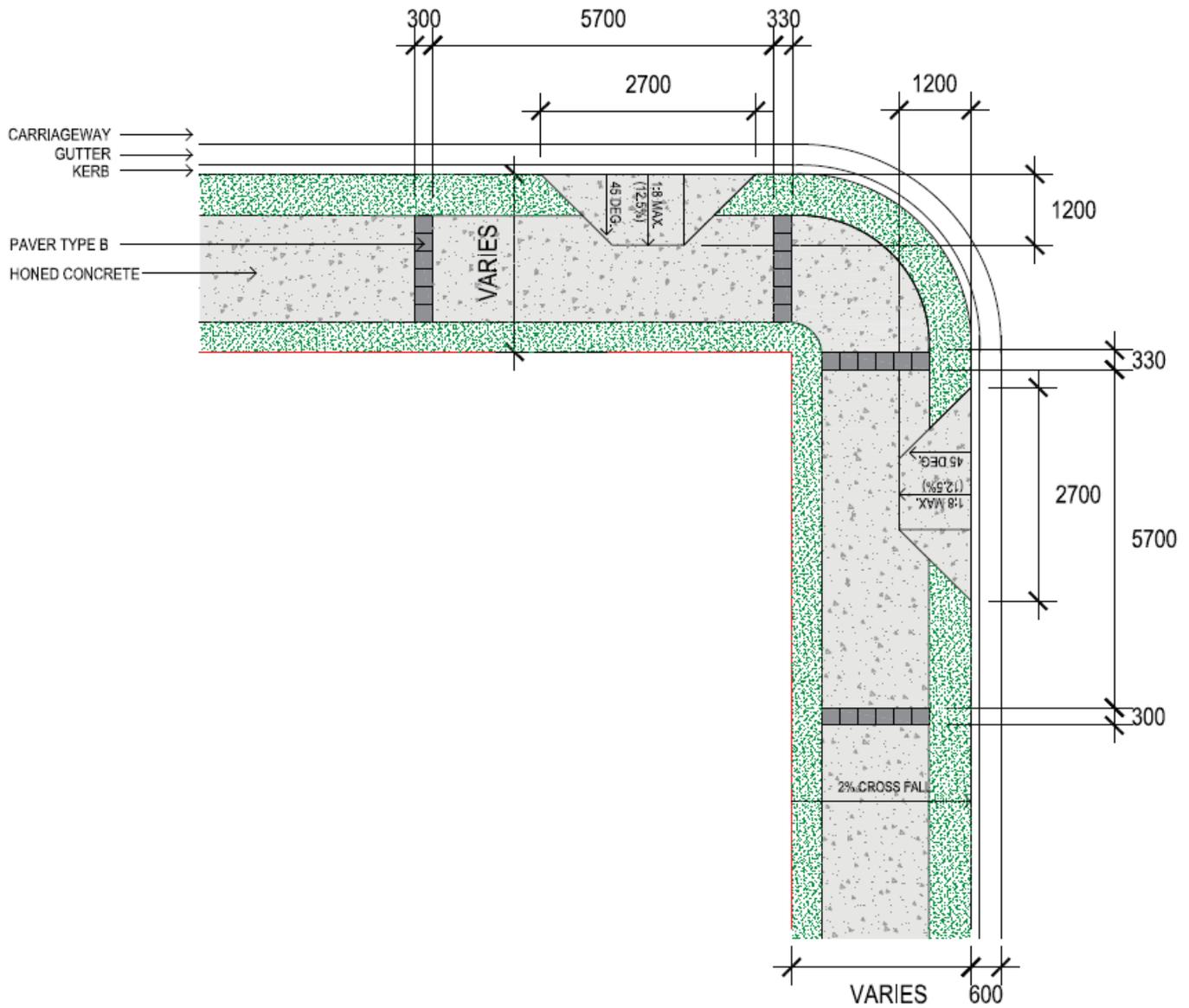
PAVING TREATMENT 2 - PRAM RAMP CROSSING
SCALE 1:100



PAVING TREATMENT 2 - LANDSCAPE PAVEMENT
SCALE 1:100

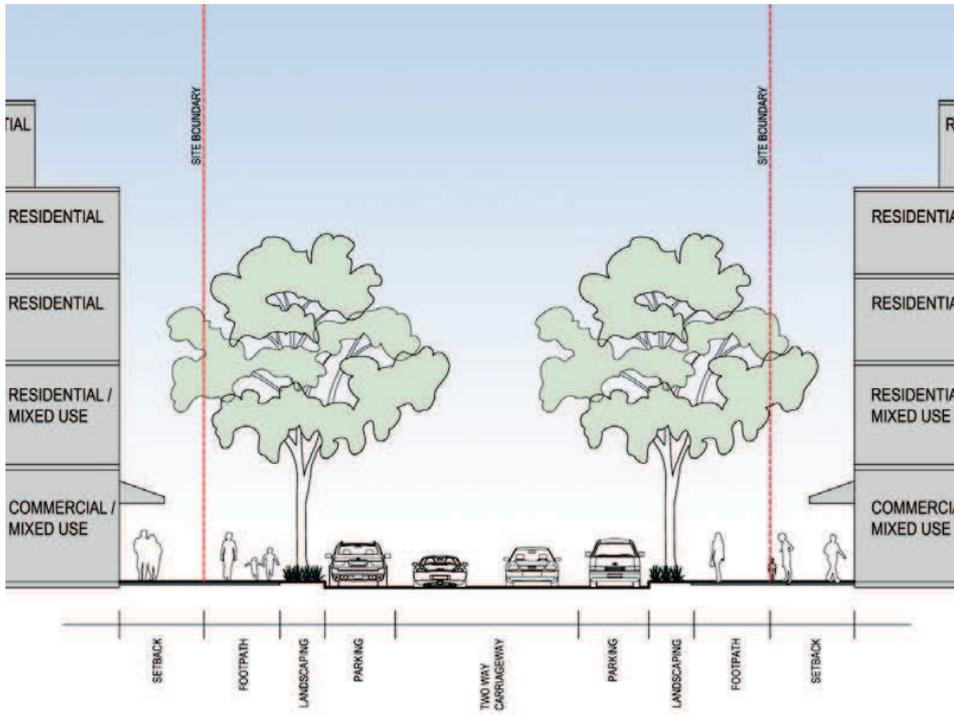


Paving Details

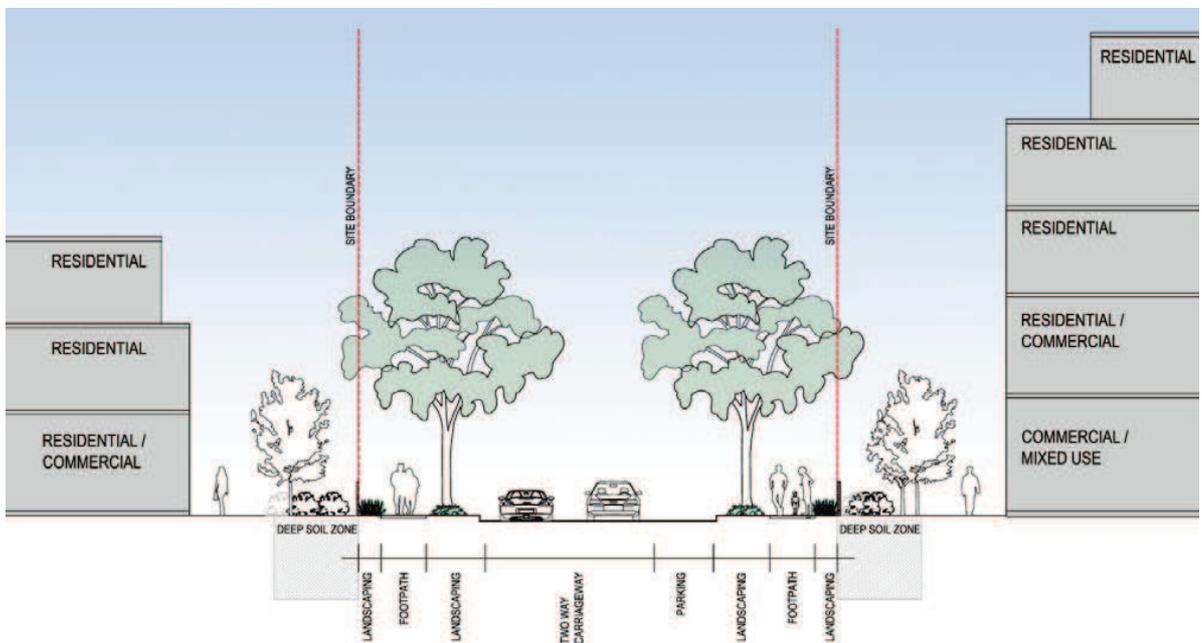


PAVING TREATMENT 2 - INTERSECTION
SCALE 1:100

INDICATIVE SECTION P1



INDICATIVE SECTION P2



CYCLEWAY AND PUBLIC TRANSPORT

PRINCIPLES

- Encourage alternate transport options through safe and accessible infrastructure.
- Link all existing cycleways within the Precinct to the regional cycleway network.
- Provide on-road and off-road cycleway facilities.
- Provide cycle storage at major transport and shopping hubs.

STRATEGIES

- Implement off-road and where practicable on-road grade separated cycleways as per the figure below;



STANDARD BI-CYCLEWAY TREATMENT

PRINCIPLES

- To minimise potential conflicts of use between pedestrians and cyclists on activated streets.
- To encourage the use of bicycles as a means of transportation by providing a pleasant and safe rider experience.
- To be provided where noted and on all cross site links where practicable subject to council review.

STRATEGIES

- Further develop cycle routes and cross precinct linkages as the area undergoes transition.
- On Castle Street provide the grade separated cycleway as illustrated below as per the street section and plan

DETAIL

- Provide 100-150mm kerb separating cycleway of 2.55m in width and parking lane and a second kerb of 100mm separating the cyclist and pedestrian footpath / landscape treated edge.



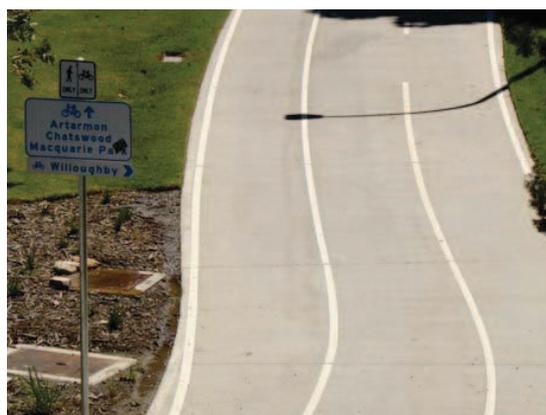
Grade separated cycleway Sydney, source: CoS



Grade separated cycleway, Harold Park source: THSC



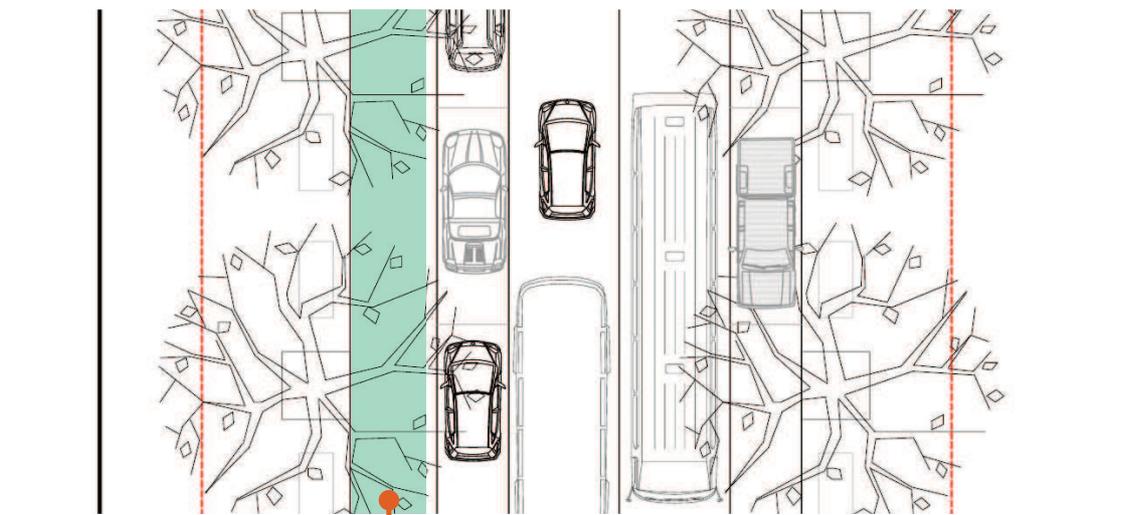
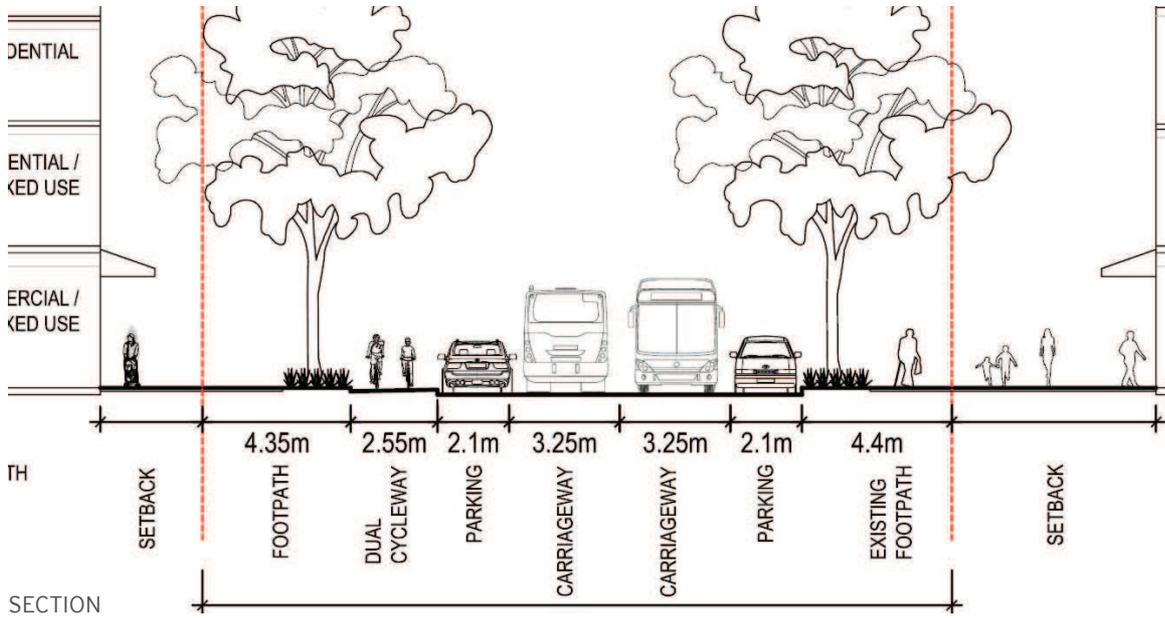
Commuter / recreation cycleway, Willoughby source: THSC



Commuter / recreation cycleway, Willoughby source: THSC



CASTLE STREET SECTION AND PLAN



Grade separated cycleway Sydney, source: CoS

PUBLIC TRANSPORT

PRINCIPLES

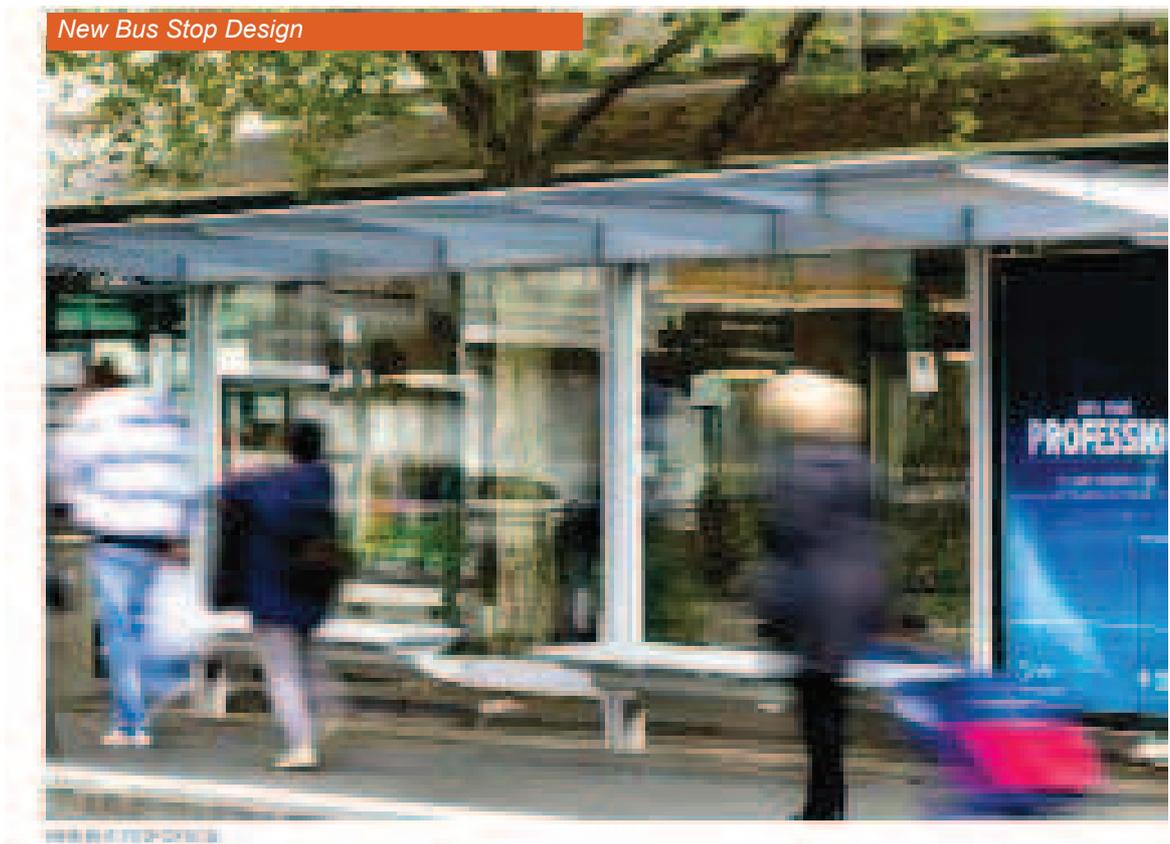
- To encourage the use of public transport for travel to and from the Precinct
- To provide a modern, comfortable, safe and accessible bus facilities for commuters.
- To provide alternative transport options in the town centre.

STRATEGIES

- Provide bus facilities which are covered, waterproof, well lit, and safe.
- Provide adequate facilities at bus stops throughout the town centre.

BUS SHELTER PRINCIPLES

- Provide shelters and rain protection.
- Incorporate seating.
- Predominantly steel frames with silver finish.
- Incorporate translucent panel elements.
- Opportunity for incorporation of colour into powder coat steel elements, translucent elements and permanent and temporary signage.



OPEN SPACE

GENERAL PRINCIPLES

- Provide a safe and high amenity environment.
- Respond to the anticipated higher densities through urbanisation of the open space.
- Encourage the community to use open space by improving the aesthetic quality.
- Locate incidental play elements at appropriate places along streets, within road reserves and setbacks.

STRATEGIES

- Upgrade existing open space facilities to cater for a diversity of users and provide valued places for active play and passive recreation.
- Protect sunlight access to existing public open spaces.
- Encourage cross site green corridor links to connect open space and linear park corridors.
- Provide a high quality greened pedestrian domain with dedicated street tree planting, landscape treatments and landscaped setback requirements.



Residential adjoining pedestrian / cycleway
source: Brent Toderian



Gathering spaces, Green Square: THSC



Park with play areas, Chatswood, source: THSC



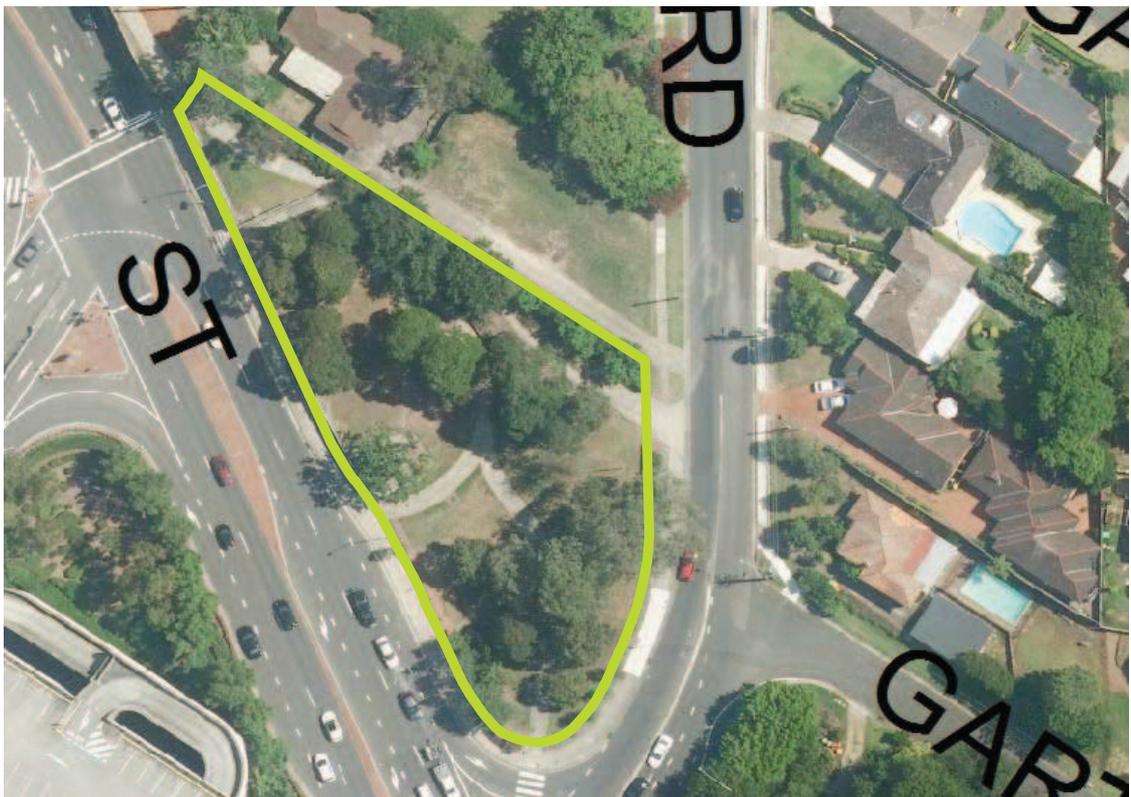
Park with water play, Pyrmont source: THSC

1. ERIC FELTON RESERVE

Eric Felton Reserve is located between Castle Towers, significant high density housing and is adjacent to Castle Street. It currently has pathways some seating and no lighting and is subject to anti social behaviour.

STRATEGIES:

- It is proposed to utilise Safer By Design principals by removing panelling along Castle Street and installing open fencing.
- Redesigning the pathway network with lighting , Exercise equipment, seating and public art would also provide an area where surrounding residents could recreate.



SOURCE: THSC



SOURCE: MIKYOUNG KIM DESIGN



SOURCE: OUTDOOR FITNESS



2. MAURICE HUGHES RESERVE

Maurice Hughes Reserve currently has a pathway running from Gilham Avenue to Carramarr Road with a small playground and no lighting.

STRATEGIES:

- It is proposed to urbanise the reserve with public art, cycle way, lighting, a larger playground, public seating, physical activity opportunities such as exercise equipment, solar BBQ's, and outdoor table tennis.



SOURCE: THSC



SOURCE: CITY OF RYDE



SOURCE: KU-RING-GAI COUNCIL

3. LAROOOL CRESCENT RESERVE

Larool Crescent Reserve is located between Larool Crescent and Castle Street. There is a small aged playground with a pathway and no lighting.

STRATEGIES:

- It would be proposed to install a larger playground provide ,lighting, seating, and some exercise equipment.



SOURCE: THSC



SOURCE: CITY OF RYDE



SOURCE: CITY OF RYDE



PLANTING TREATMENT ONE

GENERAL PRINCIPLES

- Improve the aesthetic appearance of the town centre by providing attractive avenue planting.
- Provide trees that do not conflict with heavy vehicle movements and the bushland environment.
- Provide street trees that minimise impact on paving, services and other infrastructure.
- Select landscaping species that have a high visual appeal but low maintenance requirements.
- Provide a diversity of tree species to mitigate risk from pests.

STRATEGIES

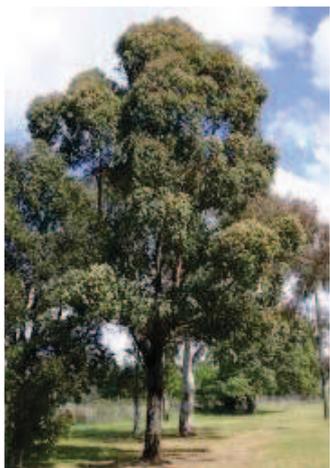
- Provide the following species at the following locations:



WATERHOUSIA FLORIBUNDA 'SWEEPER' -
10M(H) X 6M(W)



TRISTIANIOPSIS LAURINA 'LUSCIOUS' -
10M(H) X 5M(W)



EUCALYPTUS MICROCORYS TALLOWOOD
- 10M(H) X 5M(W)



PLANTING TREATMENT TWO



FRAXINUS OXYCARPA 'RAYWOOD' -
9M(H) X 6M(W)



PYRUS CALLERYANA 'CAPITAL' -
11M (H) X 6M(W)



PYRUS CALLERYANA 'CHANTICLER' -
11M (H) X 6M(W)

PLANTING TREATMENT THREE



GORDONIA AXILLARIS -
5M(H) X 4M(W)



LAGERSTROEMIA INDICA 'SPECIOSA' -
CREPE MYRTLE
5M(H) X 4M(W)



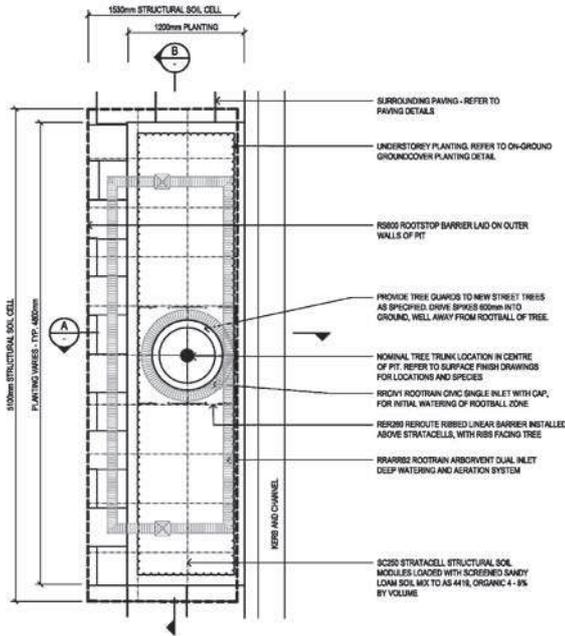
JLAGERSTROEMIA INDICA 'NATCHEZ' -
CREPE MYRTLE
8M(H) X 4M(W)



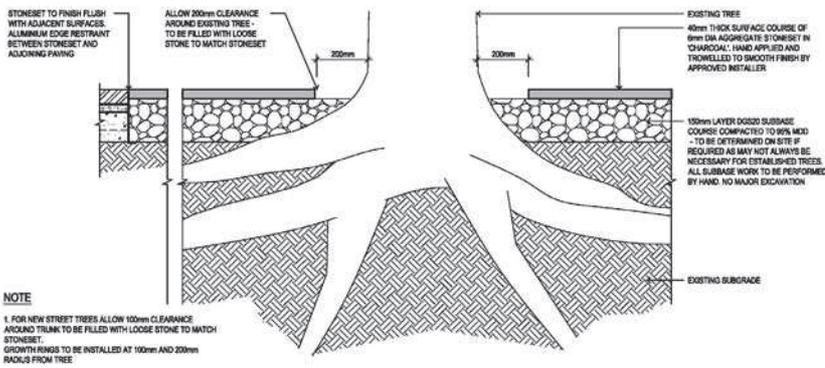
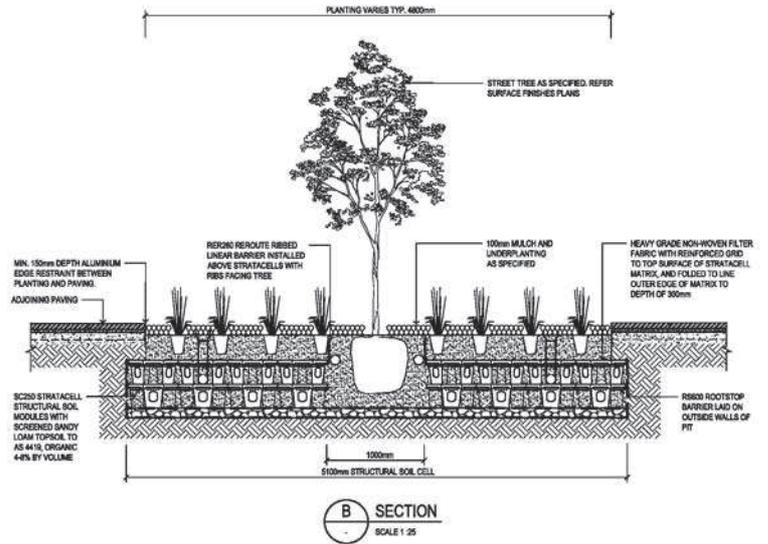
CALLISTEMON VIMALIS -
RED FLOWERING BOTTLEBRUSH
4M (H) X 3M (W)



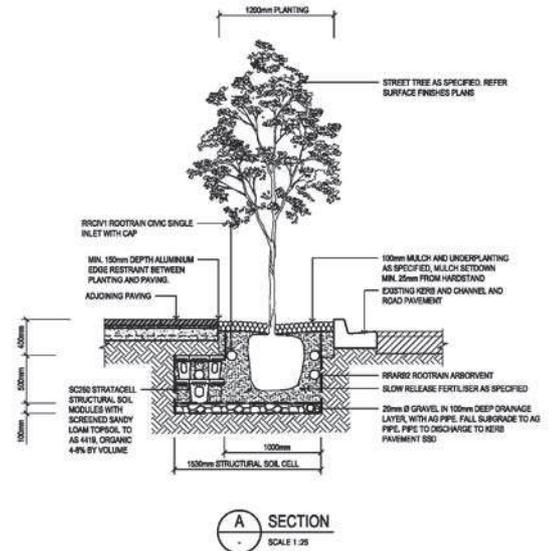
PAVING DETAILS



STREET TREE PLANTING PIT TYPICAL DETAIL PLAN
SCALE 1:25



EXISTING STREET TREES STONESET POROUS PAVING TYPICAL DETAIL
SCALE 1:10



OUTDOOR SEATING

PRINCIPLES

- Provide convenient high quality seating in appropriate locations.
- Encourage community interaction through the location of outdoor seating along P1 pavement treatment areas.
- Provide furniture that is durable in all conditions.
- Provide an abundance of seating to cater to disabled and elderly residents, as well as visitors to the area.
- Minimise ongoing maintenance.
- Provide benches for resting, gathering, observing and eating.
- Seats to be located in safe and accessible areas.

STRATEGIES

- Provide standard public seating along P1 Pavement Treatment.
- Provide seats which are appropriate to the character of the Castle Hill North Precinct.



Example of public seating

Material and finish:
Stainless Steel 'Tee' Legs and 'Angle' Arm Rests.
Wood-grain Aluminium Slats in 'Casuarina'
Size:
L 1750x D 615 X 795mm
Fixings: Sub-surface fixed with base plate to slab



BINS

PRINCIPLES

- Provide high quality bins in appropriate locations within the Precinct.
- Provide bins that are durable in all conditions.

STRATEGIES

- Provide bins which are easily accessible.
- Provide bins which are easily visible in high use areas

Note: The final design of the bins will include side and rear plates around the opening. This will reduce the potential for birds to remove rubbish from the bin.



Material and finish:

- Stainless Steel Lid and Infill Panels

Clear anodised aluminium body

Size:

Single 240L Enclosure W 710 x D 930 x H 1360mm

Fixings: Sub-surface fixed with base plate to slab

STREET AND PEDESTRIAN LIGHTING

PRINCIPLES

- Provide sufficient illumination within the town centre to encourage pedestrians to use the centre during the evening.
- Enhance passive surveillance by providing light to pedestrian walkways.
- Encourage pedestrians to use pedestrian-only walk ways and lane ways.
- Low maintenance and low energy consumption requirements.
- Improve the safety of pedestrians, residents and public transport users.
- To minimise the effect of excess light pollution on the night sky.
- Protect the natural wildlife by minimising the impact of lighting on nocturnal animals.

STRATEGIES

- Provide street lighting along all roadways within The Precinct.
- Provide pedestrian pavement lighting for pedestrians along walkways.
- Location of lighting fixtures to not adversely impact upon adjoining properties.

DETAIL

- Consider the selection of products which do not have an upward light output ratio in excess of 5%
- Select external luminaires with consideration of the night sky minimising light spill and excessive glare.



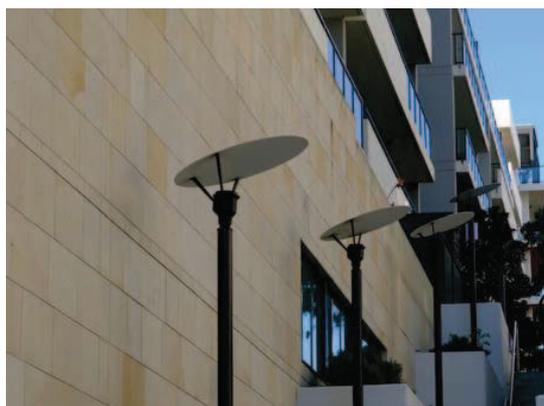
PARK LIGHTING SOURCE: CITY OF SYDNEY



PARK LIGHTING SOURCE: CITY OF SYDNEY



LIGHTING BOLLARDS SOURCE: THSC



PUBLIC LIGHTING SOURCE: THSC





LIGHTING CATEGORIES:

- V3 - Lighting used on arterial roads that predominantly carry through traffic from one region to another, forming principal avenues of communication for traffic movements.
- Operating characteristics:
- Through and local traffic.
- V5 - Lighting used on sub-arterial or principal roads which connect arterial or main roads to areas of development within a region, or which carry traffic directly from one part of a region to another part.

OPERATING CHARACTERISTICS:

Moderate traffic volumes.

- P4 and P3 treatments are to be used for lighting of local roads, or streets used primarily for access to abutting properties, including residential properties.

PUBLIC ART

Public art and outdoor cultural elements are very limited within the Precinct. The majority of activity within the centre occurs during weekday and weekend business hours.

PRINCIPLES

- Create an avenue for local artists and designers to have input into the built environment;
- Make use of local knowledge, experience and understanding of the region;
- Assist in the creation of ongoing professional experience and financial opportunities to strengthen the skills base and viability of the local arts industry;
- Set public art and design precedents in the public domain; and
- Assist in expanding the audience for local contemporary art and design.

STRATEGIES

Ensure public art:

- Is well integrated in public and private developments;
 - Provides positively to the experience of place; and,
 - Is community endorsed.
- Provide links with other metropolitan temporal art events such as Vivid and the Biennale.
 - Activate new urban spaces with temporary art installations.



CHIFLEY SQUARE, SOURCE: THSC



SOURCE: UNKNOWN

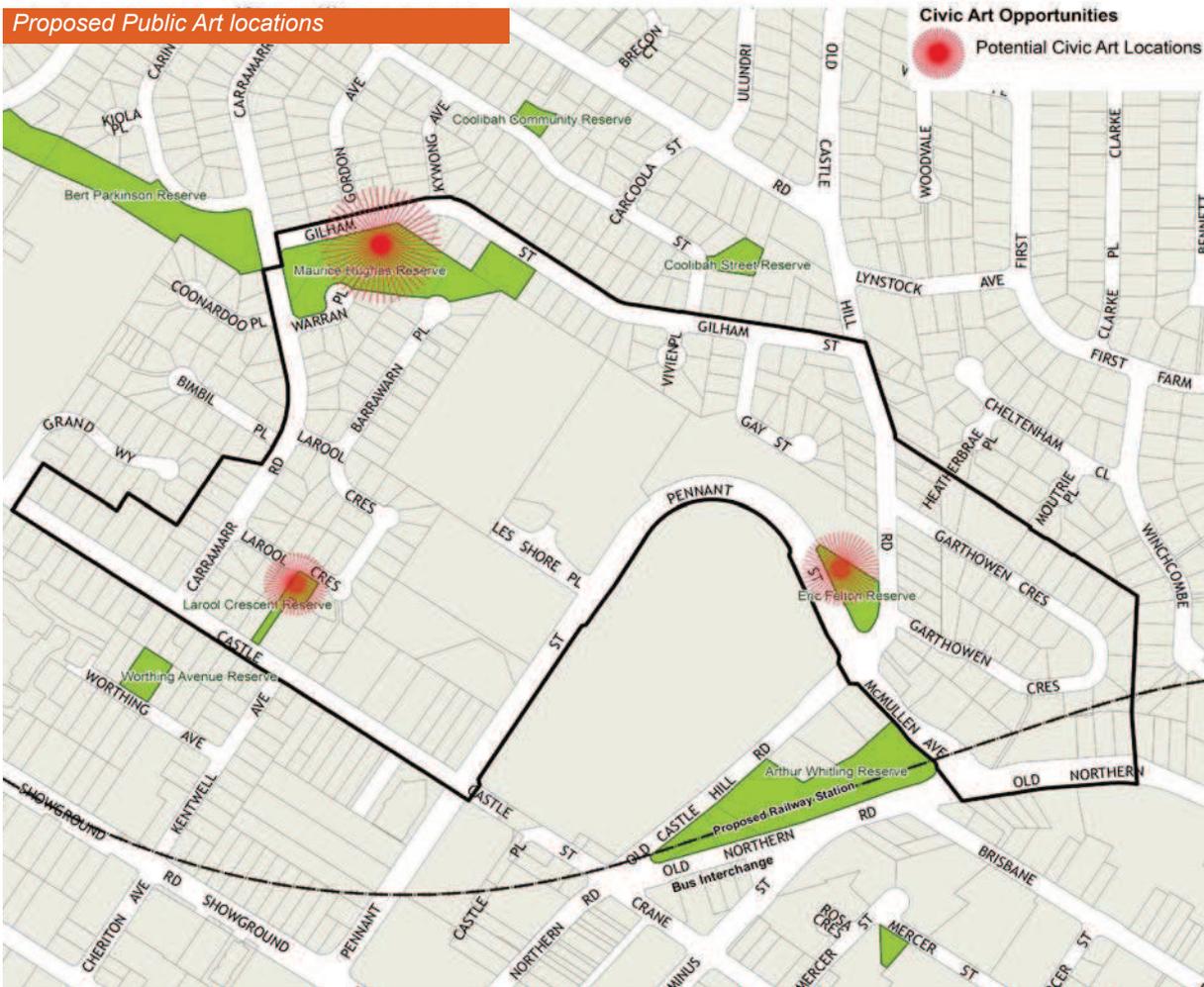


SCULPTURES BY THE SEA, SOURCE: JESSICA WYLD



SCULPTURAL SEATING, SOURCE: LATREILLE DELAGE





SOURCE: OUTDOOR MUSICAL INSTRUMENTS



SOURCE: THSC

PEDESTRIAN BRIDGES

PRINCIPLES

- To provide safe and convenient passage for pedestrians when existing topography makes road crossing difficult.
- Respect that pedestrian bridges are located in highly visual locations and impact on the visual identity of the precinct.

Bridge design is to:

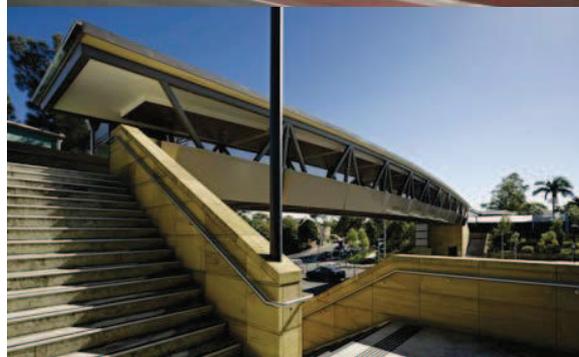
- be structurally efficient and expressive;
- be visually pleasing and of a high quality finish;
- be innovative, using modern materials and finishes and to use a minimal recessive color palette;
- provide high quality detailing of the bridge structure to break up bulk and scale of structure;
- provide night lighting within the structure of the bridge (such as within hand rails or set within the pavement)

STRATEGIES

- Provide pedestrian bridges where noted on the 'Indicative Street Network and Hierarchy Map', in the Castle Hill North Precinct DCP.
- Provide high quality public domain and landscape treatments to the area surrounding the stairs and lift access.
- Where a pedestrian bridge is intended to also cater for cyclists, ensure the width of the passageway is in compliance with RMS guidelines for shared paths (Note this is a minimum width requirement).

DETAIL

- Stairs and wall structure to be clad in a high quality architectural finish such as sandstone.
- Colours to be recessive in nature to minimise visual obstruction of structure.
- All concrete is to be painted in a recessive colour palette subject to council approval.
- Provide a roof covering.



LANE COVE PEDESTRIAN BRIDGE, SOURCE: KI STUDIO



IMPLEMENTATION OF WORKS

INTRODUCTION

The guiding vision, aims and objectives contained within this Plan form the basis from which detailed design works, public consultation and funding sources may be established for the long-term implementation of the public domain improvements.

The staging and implementation of the proposed works will be influenced by:

- Availability and allocation of funding for maintenance and new works;
- Construction of Castle Hill Train Station;
- Community expectations and engagement;
- Formation of partnerships with representatives from the corporate sector and/or state and federal government;
- Political and socioeconomic forces at the state and local level;
- Council priorities, for example the need to address risks and liabilities such as uneven pavement surfaces, and;
- Major construction works, such as redevelopment within the 'Gateway Sites'.

STAGING

In support of the planning for the Castle Hill North Precinct a Section 94 Contributions Plan was prepared to levy development for the provision of local infrastructure. This infrastructure includes the public domain improvements throughout the Precinct.

The public domain improvements can be implemented by Council through its works program or by developers through a work in kind agreement. It is anticipated that the public domain improvements will occur as development occurs throughout the Precinct.

THE HILLS
Sydney's Garden Shire

MINUTES of the duly convened Ordinary Meeting of The Hills Shire Council held in the Council Chambers on 25 July 2017

10.34pm Councillor Tracey left the meeting and returned at 10.36pm during Item 5.

ITEM-5 DEVELOPMENT CONTROL PLAN, CONTRIBUTIONS PLAN & PUBLIC DOMAIN PLAN FOR CASTLE HILL NORTH (FP38 & 16/2016/PLP)

A MOTION WAS MOVED BY COUNCILLOR DR LOWE AND SECONDED BY COUNCILLOR HASELDEN THAT the Recommendation contained in the report be adopted.

THE MOTION WAS PUT AND CARRIED UNANIMOUSLY.

372 RESOLUTION

1. Draft Contributions Plan No.17 - Castle Hill North (Attachment 1), Draft The Hills DCP 2012 Part D – Section 20 – Castle Hill North (Attachment 2), Draft The Hills DCP 2012 Part C – Section 1 – Parking (Attachment 3) and Draft Public Domain Plan – Castle Hill North (Attachment 4), be exhibited in conjunction with the exhibition of the planning proposal for the Castle Hill North Precinct (16/2016/PLP).
2. A planning proposal applying to land at 7-13 Glenhaven Road, 1 Kyle Avenue and 3 Gilmour Close, Glenhaven (Lot 8 & 9 DP25902, Lot 1 DP844862, Lot 1 DP524622, Lot 1 DP207788 and Lot 1 DP261810) be forwarded to the Department of Planning and Environment for a Gateway Determination to amend Local Environmental Plan 2012 as follows:
 - a. Amend the Land Zoning Map to rezone the site from RU6 Transition to RE1 Public Recreation.
 - b. Amend the Land Reservation Map to identify 7, 9 and 13 Glenhaven Road, 1 Kyle Avenue and 3 Gilmour Close, Glenhaven (Lot 8 & 9 DP25902, Lot 1 DP524622, Lot 1 DP207788 and Lot 1 DP261810) as SP2 Infrastructure.
3. Council commence consultation with land owners of 7, 9 and 13 Glenhaven Road, 1 Kyle Avenue and 3 Gilmour Close, Glenhaven (Lot 8 & 9 DP25902, Lot 1 DP524622, Lot 1 DP207788 and Lot 1 DP261810) and the NSW Rural Fire Service with respect to the proposed district open space facility in Glenhaven.

Being a planning matter, the Mayor called for a division to record the votes on this matter

VOTING FOR THE MOTION

Clr Y D Keane
Clr R A Preston
Clr R K Harty OAM
Clr Dr J N Lowe
Clr R M Tracey
Clr Dr M R Byrne
Clr Dr P J Gangemi
Clr A N Haselden

VOTING AGAINST THE MOTION

None

MINUTES of the duly convened Ordinary Meeting of The Hills Shire Council held in the Council Chambers on 25 July 2017

ABSENT

Clr A J Hay OAM
Clr M G Thomas

ITEM-8

VOLUNTARY PLANNING AGREEMENT - SISTERS OF SAINT JOSEPH SITE MACKILLOP DRIVE, BAULKHAM HILLS (FP187)

A MOTION WAS MOVED BY COUNCILLOR HARTY OAM AND SECONDED BY COUNCILLOR DR LOWE THAT the Recommendation contained in the report be adopted.

THE MOTION WAS PUT AND CARRIED UNANIMOUSLY.

373 RESOLUTION

Council provide consent under Clauses 5.1 and 35.1(a) of the Voluntary Planning Agreement for the sale of Lot 1001 DP1190982 at Mackillop Drive, Baulkham Hills and for the transfer of any right or liability under the VPA to Aqualand Dee Why Development Pty Ltd, subject to:

- a) The inclusion of conditions within any contract of sale which:
1. Ensure, legally, that any purchaser of the land is bound by the terms of the VPA;
 2. Include, as a minimum, clauses obligating the purchaser to adhere to the terms of the VPA, including the carrying out of Works, dedication of land and payment of monetary contributions to Council in accordance with the VPA; and
 3. Require that upon the transfer of land being affected, the owner must register the VPA on title; and
- b) The preparation and execution of a Deed of Novation by the parties (Trustees of the Sisters of Saint Joseph and Aqualand), which transfers the rights, liabilities and obligations under the VPA to the purchaser, as if they themselves were party to the VPA.

Being a planning matter, the Mayor called for a division to record the votes on this matter

VOTING FOR THE MOTION

Clr Y D Keane
Clr R A Preston
Clr R K Harty OAM
Clr Dr J N Lowe
Clr R M Tracey
Clr Dr M R Byrne
Clr Dr P J Gangemi
Clr A N Haselden

VOTING AGAINST THE MOTION

None

ABSENT

Clr A J Hay OAM
Clr M G Thomas