

## PART G – VEHICLE CIRCULATION AND PARKING

<b>G1. INTRODUCTION .....</b>	<b>2</b>
<i>What is the purpose of this Part? .....</i>	<i>2</i>
<i>What are the Objectives of this Part? .....</i>	<i>2</i>
<i>What will Council take into account? .....</i>	<i>2</i>
<b>G2. DEVELOPMENT STANDARDS .....</b>	<b>4</b>
G2.1 <i>Element – Parking Schedules.....</i>	<i>4</i>
Residential - Table G2.1 .....	5
Tourist accommodation - Table G2.2 .....	7
Commercial - Table G2.3 .....	8
Other development - Table G2.4 .....	8
Parking Spaces for People with Access Disabilities - Table G2.5 .....	9
Delivery/ Service Vehicles - Table G2.6 .....	9
G2.2. <i>Element - Parking Layout .....</i>	<i>10</i>
G2.3 <i>Element - Design, Access and Construction .....</i>	<i>11</i>
G2.4 <i>Element - Service and Garbage Areas .....</i>	<i>16</i>
G2.5 <i>Element - Monetary Provision.....</i>	<i>18</i>

Note: <sup>(D)</sup> = definition included in Part A8 of this DCP

## **G1. INTRODUCTION**

### **What is the purpose of this Part?**

The primary purpose of this Part of the DCP is to provide guidelines, controls and standards for vehicle access, circulation and parking for developments.

### **What are the Objectives of this Part?**

The Objectives of this Part of the DCP are:

- To ensure that adequate provision is made for off-street parking and vehicle access in accordance with the volume and turnover of traffic likely to be generated by the development.
- To outline the parking requirements relating to all forms of development.
- To encourage the creation of car parking and service vehicle areas that enhance the function and appearance of the development.
- To assist those involved in the design of service and parking areas to provide efficient, usable space for those activities.
- To preserve the safety and efficiency of the arterial road system as a carrier of through traffic.

### **What will Council take into account?**

In determining the provision of car parking, vehicle access and associated works, Council will take the following matters into account:

(a) The location, type and scale of the proposed development

While this Plan provides detailed standards relating to the provision of car parking and vehicle access, each proposal must recognise the inherent characteristics of the site and/or the development that may necessitate some variation of standard requirements.

(b) The availability and accessibility of existing public car parking areas

Under certain circumstances, it may be of greater benefit to utilise, enhance or expand existing public parking areas, than to provide on-site parking. In such cases, Council may require a monetary contribution in lieu of on-site provision of parking.

(c) The compatibility of the car parking location and design with adjoining properties

Small, fragmented parking areas are not as efficient as larger, consolidated layouts. Accordingly, the developer must attempt, where possible, to integrate parking areas in order to minimise traffic interference, maximise parking yields and ensure good car park design.

(d) The existing level of on-site car parking, when the proposal is for redevelopment.

Council will consider the amount of car parking provided for any existing development and may require additional car parking spaces or a monetary contribution for additional floorspace or a change in use.

(e) The nature and volume of traffic on the adjoining street network.

Council will consider the location of entrance and exit driveways and the potential impact of traffic on adjoining streets when assessing options regarding the extent of on-site parking versus contributions.

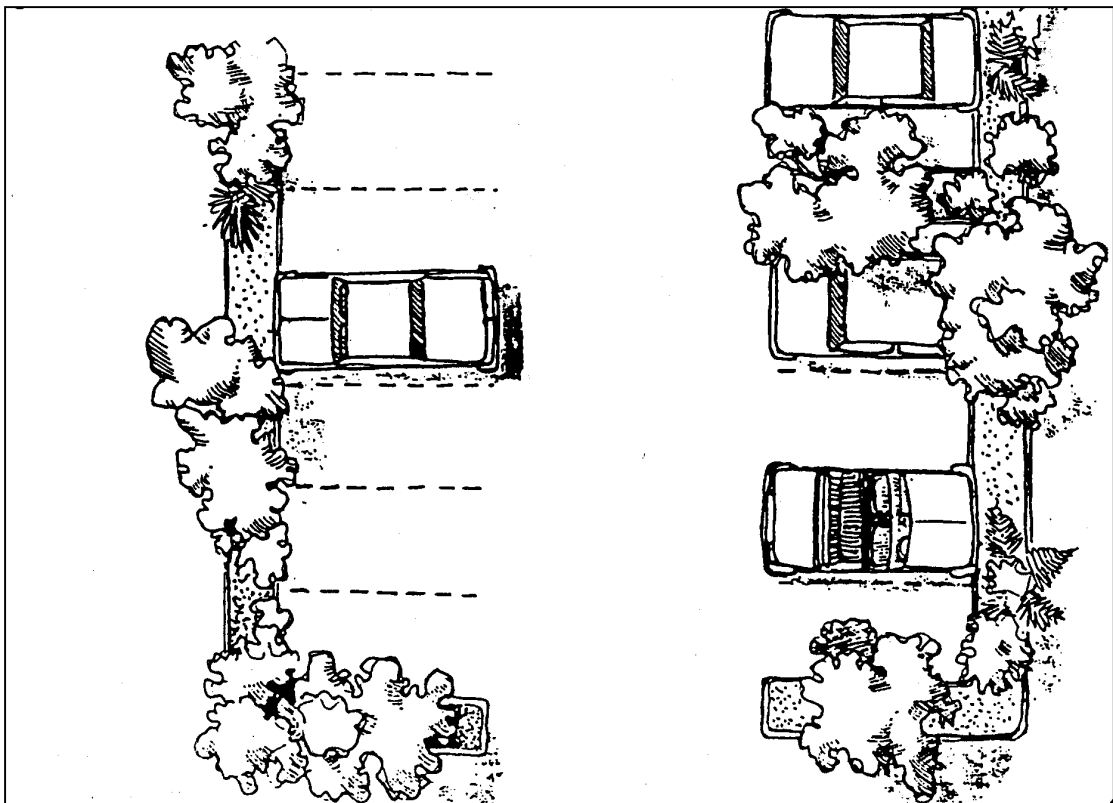
- (f) The guidelines of the NSW Roads and Traffic Authority or the relevant Australian Standard.

Where this Plan provides no specific guidelines as to parking, loading or access requirements, Council will apply the Guidelines to Traffic Generating Developments published by the NSW Roads and Traffic Authority or the Australian Standard for Parking Facilities - AS 2890.

- (g) Referral to the local Traffic Committee or the NSW Roads and Traffic Authority

Referral will be made as required by:

- (i) State Environmental Planning Policy No.11 - Traffic Generating Developments
- (ii) NSW Roads and Traffic Authority- Procedures for Consultation on Traffic Generating Developments
- (iii) Delegation of Traffic Authority Powers



## **G2. DEVELOPMENT STANDARDS**

### **G2.1 Element – Parking Schedules**

#### **Element Objective**

*To provide sufficient and convenient parking to meet user needs.*

#### **Performance Criteria**

Parking and service vehicle areas must be provided according to projected needs.

Parking surveys and studies must provide relevant projections of parking likely to be generated by a development.

#### **Prescriptive Measures**

The total parking requirement of a development will be assessed on the cumulative basis of all activities to be carried out on the site. The schedules in this Part show the minimum requirement for parking spaces for different types of activity. Applicants must refer also to other parts of this Plan which give parking requirements specific to particular activities.

The requirements for any use or activity not specifically listed in these schedules will be determined according to the merits of the proposal, with reference, where appropriate, to the guidelines provided by the NSW Roads and Traffic Authority.

The total parking provision for developments may be reduced if it can be demonstrated that the peak parking demand of each facility on the development site will not coincide. Factors such as time of usage, and possible future usage, must be taken into consideration when meeting parking requirements.

In the following schedules, where reference is made to car parking spaces per rooms, units, beds etc., the reference should be taken to mean that number or a part thereof, eg. "1 per 2 bedrooms" means "1 car parking space for every two bedrooms or part thereof".

Where the number of spaces is expressed as a decimal, eg. "1.25 per unit", the total number of spaces so determined will be rounded up to the next whole number unless stated otherwise.

For example, if 1.25 spaces are required per unit, then for 5 units the requirement will be 6.25 spaces, ie. when rounded up, 7 spaces. Similarly, 7 units at 1.25 per unit will require 9 car parking spaces.

For the purpose of calculating Section 94 contributions in lieu of providing car spaces, fractions will be used rather than rounding to the nearest whole number.

## Residential - Table G2.1

The areas referred to are the floor plan areas<sup>(D)</sup> excluding balconies<sup>(D)</sup>.

Type of development	Minimum car parking spaces	Special Requirements
<b>Dwelling-house<sup>(D)</sup></b> (including expanded house <sup>(D)</sup> ) $\leq 100\text{m}^2$ $> 100\text{m}^2$	1  2 plus 1 per 2 bedrooms over 4 bedrooms (rounded down)	One space must be capable of being covered. Stacked parking may be permitted.
<b>Dual occupancy<sup>(D)</sup></b> Dwellings <sup>(D)</sup> $\leq 75\text{m}^2$ Dwellings <sup>(D)</sup> $> 75\text{m}^2$	1 per dwelling 2 per dwelling	One (1) space must be capable of being covered.
<b>Home office</b> (as defined under Byron LEP)  <b>Doctor, Dentist, Health Care Professional</b>  Other professionally qualified practitioners (e.g. Architect, Accountant, Engineer, Solicitor )	2 per surgery or consulting room plus 1 per practitioner plus 1 for the employee (if applicable) plus parking requirements for the dwelling <sup>(D)</sup> .  1 per practitioner, plus 1 for the employee(if applicable) plus parking requirements for the dwelling <sup>(D)</sup> .	
<b>Multiple occupancy<sup>(D)</sup></b> Dwellings <sup>(D)</sup> $\leq 100\text{m}^2$ Dwellings <sup>(D)</sup> $> 100\text{m}^2$	1 per dwelling <sup>(D)</sup>  2 per dwelling <sup>(D)</sup> plus 1 per 2 bedrooms over 4 bedrooms (rounded down)	One (1) space must be capable of being covered. Stacked parking may be permitted.
<b>Rural worker's dwelling</b>	1 per dwelling	
<b>Residential flat building or group dwelling<sup>(D)</sup> development:</b> Small units $< 55\text{m}^2$ Medium units $55-85\text{m}^2$ Large units $> 85\text{m}^2$	1 per unit 1.5 per unit 2 per unit  Plus 1 visitor space per 4 units.	One (1) space per unit must be covered.
<b>Residential Flat Development or Group Dwellings<sup>(D)</sup></b> in a mixed commercial/residential development in the commercial Zone No. 3(a)(Business Zone) and Zone No. 7(f2)(Urban Coastal Land Zone)	1 per unit $< 85\text{m}^2$ and 2 per unit $> 85\text{m}^2$ plus 1 visitor unit per 4 units	

<b>Housing for older people or people with a disability</b>	Refer to State Environmental Planning Policy No. 5	
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**Tourist accommodation - Table G2.2**

Type of development	Minimum car parking spaces	Special Requirements
<b>Bed and Breakfast<sup>(D)</sup></b>	1 per guest room plus parking requirements for the dwelling-house <sup>(D)</sup> .	One (1) space must be covered. Stacked parking may be permitted. In urban areas, no car parking spaces are to be provided forward of the building line (between the dwelling-house <sup>(D)</sup> and the street) unless suitable screening has been provided.
<b>Caravan park<sup>(D)</sup></b>	1 per caravan or camping site Plus 1 visitor space per 10 sites Plus 1 for manager	
<b>Hotel</b>	see table G2.4 – Other	
<b>Motel<sup>(D)</sup> or cabins</b> <20 m <sup>2</sup> 20-30 m <sup>2</sup> > 30 m <sup>2</sup>	1 per unit 1.25 per unit 1.5 per unit  Plus 1 per 2 employees  Plus for restaurant and / or function room: 1.5 per 10 m <sup>2</sup> gross floor area <sup>(D)</sup> or 1 per 3 seats, whichever is the greater.	If a restaurant and /or function room serves motel <sup>(D)</sup> customers only then additional parking may not be required.
<b>Hostel<sup>(D)</sup></b>	1 per 4 beds, plus 1 bus bay per 30 beds, plus 3 spaces (for staff)	
<b>Recreation establishment</b>	Survey of other similar developments and merit assessment to be submitted for consideration.	
<b>Rural tourist facility<sup>(D)</sup></b>	Survey of other similar developments and merit assessment to be submitted for consideration.	

**Industrial**

*Refer to DCP 15 Industrial Development.*

**Commercial - Table G2.3**

Type of development	Minimum car parking spaces	Special Requirements
<b>Commercial / retail premises / office</b>	1 per 20m <sup>2</sup> gross floor area <sup>(D)</sup>	
<b>Motor Showroom</b>	1 per 100 m <sup>2</sup> of total useable site area <sup>(D)</sup> plus 5 per work bay for vehicle servicing facilities.	
<b>Restaurant/Refreshment room</b> (including open outdoor eating areas) / Conference Centre.	1 per 7.5 m <sup>2</sup> gross floor area <sup>(D)</sup> or 1 per 3 seats, whichever is the greater.	If operating outside business hours 9am to 5pm, 1 per 15 m <sup>2</sup> gross floor area <sup>(D)</sup> or 1 per 6 seats, whichever is greater.
<b>Drive-in/takeaway outlet</b>	1 per 8 m <sup>2</sup> gross floor area <sup>(D)</sup> plus 1 per 5 seats.	
<b>Service station/convenience Store</b>	5 per work bay plus 1 per 20 m <sup>2</sup> gross floor area <sup>(D)</sup> of convenience store.	

**Other development - Table G2.4**

Type of development	Minimum car parking spaces	Special Requirements
<b>Club</b>	1 per 6 m <sup>2</sup> public area in bars and lounges plus 1 per 10 m <sup>2</sup> public area in dining rooms plus 1 per 3 seats in auditorium plus 1 per 2 employees	
<b>Educational establishment</b>	1 per staff member plus 1 per 10 students aged 17 and over.	Additional requirements at Council's discretion.
<b>Hospital</b>	1 per 10 beds for visitors plus 1 per 2 employees plus 1 ambulance space	
<b>Hotel</b>	1 per 5 m <sup>2</sup> public area in bars and lounges plus parking requirements for accommodation in accordance with requirements of motel <sup>(D)</sup> .	
<b>Theatre/cinema</b>	1 per 10 seats	
<b>Hall</b>	1 per 10 seats	
<b>Place of worship</b>	1 per 10 seats	
<b>Bowling club</b>	30 per bowling green	
<b>Squash/ tennis courts</b>	3 per squash or tennis court	
<b>Indoor bowling alley</b>	3 per bowling lane	
<b>Gymnasium</b>	1 per 20 m <sup>2</sup>	
<b>Recreation facility</b>	Survey of other similar developments and merit assessment to be submitted for consideration.	

**Parking Spaces for People with Access Disabilities - Table G2.5**

Type of development	Minimum proportion of car parking spaces to be provided for people with access disabilities.
<b>Retail/Commercial</b> Shopping complexes, banks, restaurants, post office, offices, etc.	1 – 2 percent
<b>Tourist Facilities</b> Motels <sup>(D)</sup> , holiday cabins <sup>(D)</sup> , etc.	1 – 2 percent
<b>Transport</b> Railway stations, bus/rail interchanges, etc.	1 – 3 percent
<b>Community</b> Civic centres, town halls, community centres, health care, places of worship, etc.	2 – 3 percent
<b>Recreation</b> Leisure centres, gymnasiums, swimming pools, etc.	2 – 3 percent
<b>Education</b> Schools, Tertiary institutions, etc.	2 – 3 percent
<b>Entertainment</b> Theatres, libraries, sports centres, etc.	3 – 4 percent
<b>Medical</b> Hospitals, medical centres, clinics, rehabilitation units, etc.	3 – 4 percent

**Delivery/ Service Vehicles - Table G2.6**

Type of development	Minimum parking spaces	Special Requirements
<b>Residential flat building or group dwelling<sup>(D)</sup> development</b>	1 per 50 units/dwellings <sup>(D)</sup> up to 200 plus 1 per 100 thereafter.	No spaces will be required for developments with less than 6 units/dwellings <sup>(D)</sup> . Visitor spaces may be used if designed for dual use.
<b>Hotels and Motels<sup>(D)</sup></b>	1 per 50 units up to 200 plus 1 per 100 thereafter plus 1 per 1000m <sup>2</sup> of public area (bar, tavern, lounge or restaurant)	
<b>Commercial premises</b>	1 per 4000m <sup>2</sup> of gross floor area <sup>(D)</sup> up to 20,000m <sup>2</sup> plus 1 per 8000m <sup>2</sup> thereafter.	
<b>Shops and Restaurants</b>	1 per 400m <sup>2</sup> of gross floor area up to 2000m <sup>2</sup> plus 1 per 1000m <sup>2</sup> thereafter.	
<b>Wholesale and Industrial</b>	1 per 800m <sup>2</sup> of gross floor area <sup>(D)</sup> up to 8,000m <sup>2</sup> plus 1 per 1000m <sup>2</sup> thereafter.	

## G2.2. Element - Parking Layout

### Element Objective

To provide functional, convenient and accessible car parking areas.

### Performance Criteria

Parking areas must be designed to reflect the specific requirements of the particular development proposed, the nature of existing and anticipated surrounding development and the environmental conditions of the land.

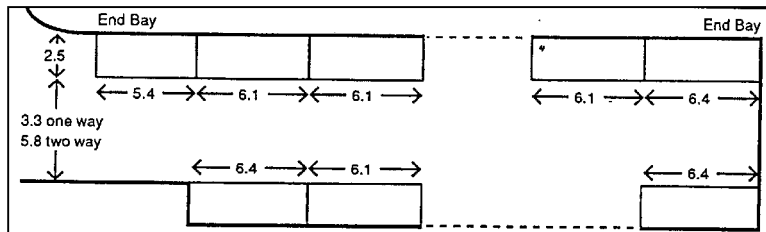
Parking must be safe, easily accessible and not obstruct the passage of vehicles or create traffic conflicts.

### Prescriptive Measures

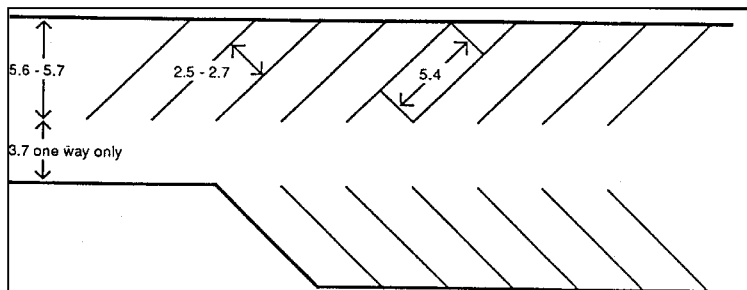
Many factors will influence the design and layout of parking areas. The following diagrams represent the minimum standards that will be acceptable to Council.

Where a dimension range is shown, the greater dimension must be adopted for areas of high turnover (ie. parking for less than three hours).

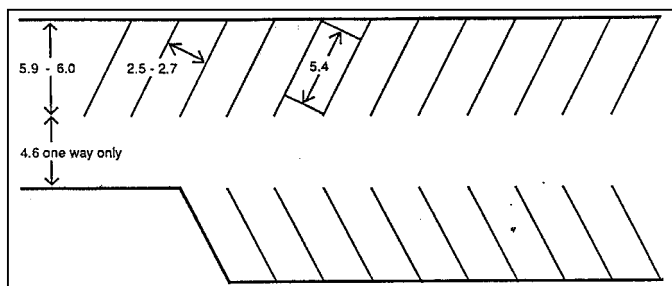
### Parallel parking



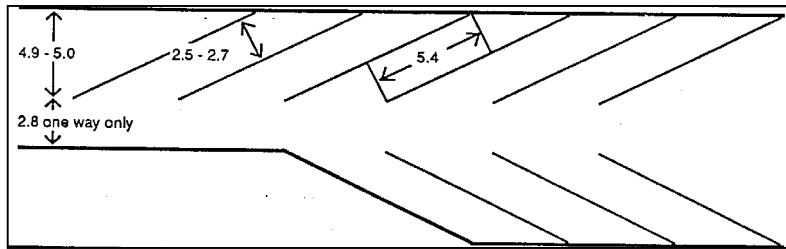
### 30° parking



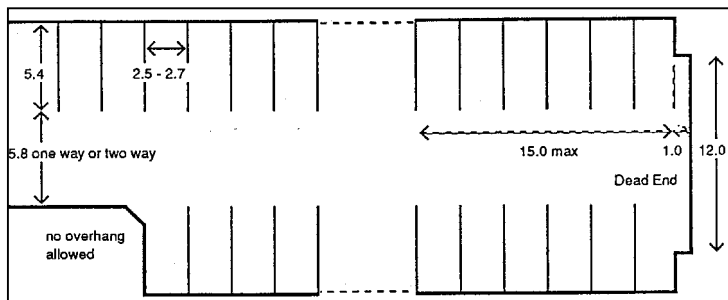
### 45° parking



### 60° parking



### 90° parking



## G2.3 Element - Design, Access and Construction

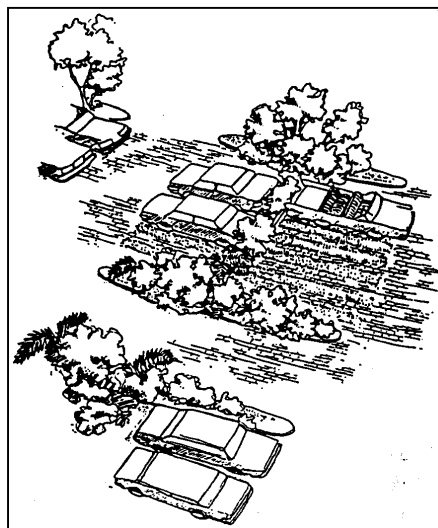
### Element Objective

*To provide safe, pleasant and functional car parking areas.*

### Performance Criteria

Parking and service vehicle areas must provide pleasant areas in which to park.

Public safety must be the main consideration when planning the location of access to a development. Parking areas must be designed to consider all users.



Underground car parks are to be designed so that they meet ESD principles and prevent the entry and/or collection of stormwater and/or groundwater below the natural ground surface.

### Prescriptive Measures

### Materials

All internal roads and car parking access aisles must be constructed of hardstanding all-weather material and are to be drained and marked to Council's satisfaction. Design details are to be submitted to Council for approval.

Brick or block pavers must be used in preference to bituminous surfacing wherever possible, particularly in visually prominent areas.

Wheel stops in accordance with the requirements of AS2890.1 – Off-Street Car Parking must be provided to protect walls, landscaping, shade trees and pedestrian areas from vehicle encroachment.

### **Design for people with access disabilities**

Design of parking areas must provide for safe, practical and convenient access to the development for people with access disabilities. Parking spaces for disabled drivers must have minimum dimensions of 5.4 metres by 3.2 metres.

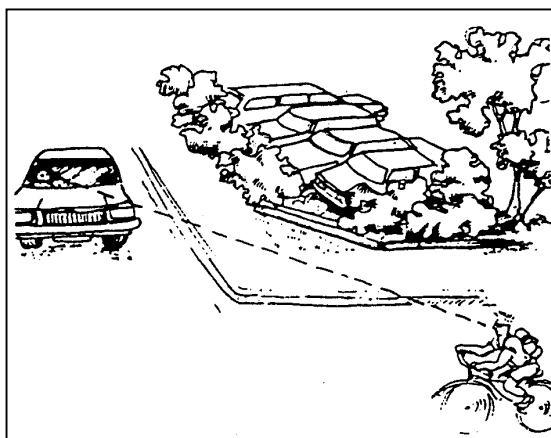
The location of spaces designated for persons with disability must be close to an entrance to a building or facility with access from the car space by ramps and or lifts in accordance with AS 2890.1 and Part D of the Building Code of Australia.

### **Landscaping**

As an integral and important component of parking area design, suitable landscaping must be provided in accordance with the requirements of Part H - Landscape, and other parts of this Development Control Plan.

### **Visibility**

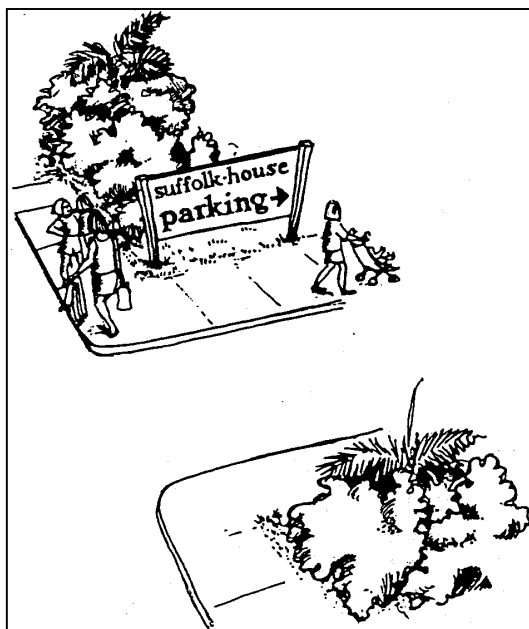
Design of car parking areas and vehicle access must ensure that no loss or restriction of visibility is suffered by motorists on the adjacent streets. Council may require the provision of a corner splay at the access point.



### **Signs and marking**

- Parking areas must be well signposted to indicate the availability of off-street parking. The location and signposting of entry and exit point/s must be clearly visible from both the street and within the site<sup>(D)</sup>.
- Vehicle circulation must be clearly indicated by pavement arrows. Parking spaces for specific uses, eg. disabled, employees, visitors, must be clearly sign posted. Pedestrian and other hazard areas, eg. speed humps, must also be clearly indicated.
- Where car parking areas are used frequently at night, signposting and line marking must utilise reflective background materials or paint. Adequate lighting will be required during normal hours of operation.

- The design of signs must be simple and in character with the development and its surroundings. Refer to Byron DCP 16 - Exempt and Complying Development and Part L of this Plan for Council's guidelines relating to signs and signposting in the Shire.
- Details of proposed signs must be submitted to Council with the development application.



### Stacked parking

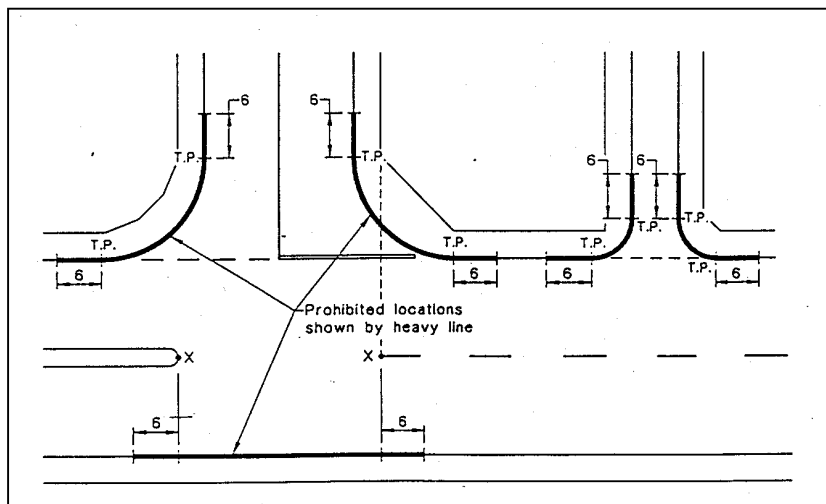
Stacked parking is not acceptable for dual occupancy<sup>(D)</sup>, medium density, commercial or industrial development.

### Vehicle access

The width and location of access driveways must be in accordance with the requirements of AS2890.1 – Off-Street Car Parking.

Access driveways may require splays to allow turning movements to and from the development without adversely affecting traffic flows in the frontage roadway.

Location of new entry/exit points must achieve a minimum of potential conflict with existing access points. Access driveways must not be located in the section of kerb shown by heavy lines in the following diagram.



### Vehicle movements

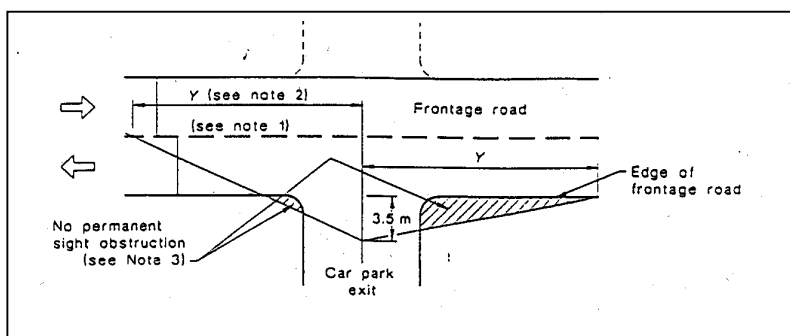
Other than for allotments containing only one dwelling-house<sup>(D)</sup>, all vehicles must move in a forward direction when entering and leaving the site<sup>(D)</sup>.

Entry and exit points must be separated for major developments, in accordance with the NSW Roads and Traffic Authority guidelines and AS2890.1 – Off-Street Car Parking

### Sight distance

Design of car parking areas and vehicle access must ensure that there is adequate sight distance to traffic on the frontage road and to pedestrians on the frontage road footpath. The minimum sight distance must be in accordance with AS2890.1 – Off-Street Car Parking as shown in the following diagrams.

The sight for urban areas with a speed limit of greater than 60km/h and in rural areas requires the provision of greater sight distances. Austroads, Part 5 tables the recommended sight distances in these circumstances.



### Intersections

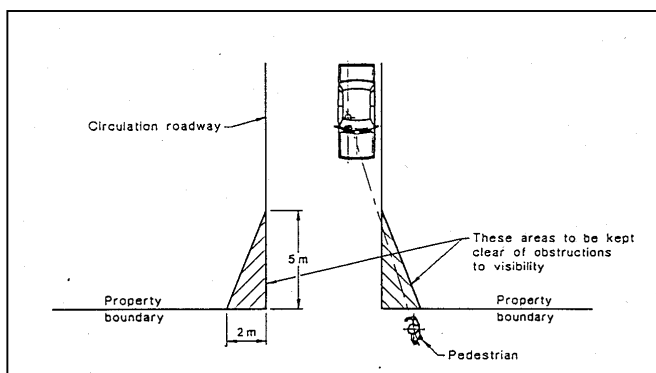
Avoid conflict with traffic movements at nearby intersections. Site<sup>(D)</sup> entry/ exit must not be closer than 6 metres to an intersection measured from the property boundary.

### On-street queuing

Design and location of access must ensure the minimum potential for on-street vehicle queuing.

### Pedestrian movements

Parking areas must be so designed as to minimise the potential for vehicular/pedestrian conflict. A pedestrian pathway connection between the car parking areas and building access points is desirable.



### Gradients

The internal access driveway must be designed so that it is relatively level within 6 metres of the site<sup>(D)</sup> boundary or any pedestrian way. The recommended maximum grade is 5%.

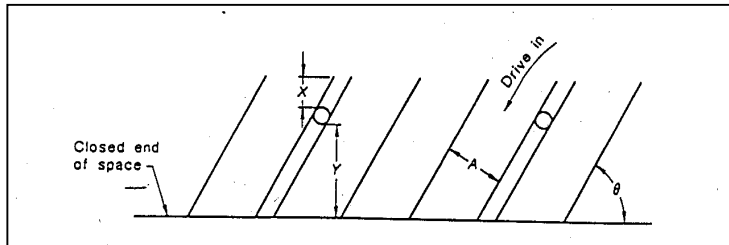
All gradients of car parking surfaces, ramps and access driveways must be in accordance with Council standards and/ or AS2890.1 – Off-Street Car Parking.

### Headroom

To permit access for both cars and light vans, the height between the floor and an overhead obstruction must be a minimum of 2.3 metres. Clearances must be measured to the lowest projection from the roof.

### Column Locations

Columns must not be located at the edge of a parking aisle. The dimensions for locating columns must be in accordance with the following diagram.



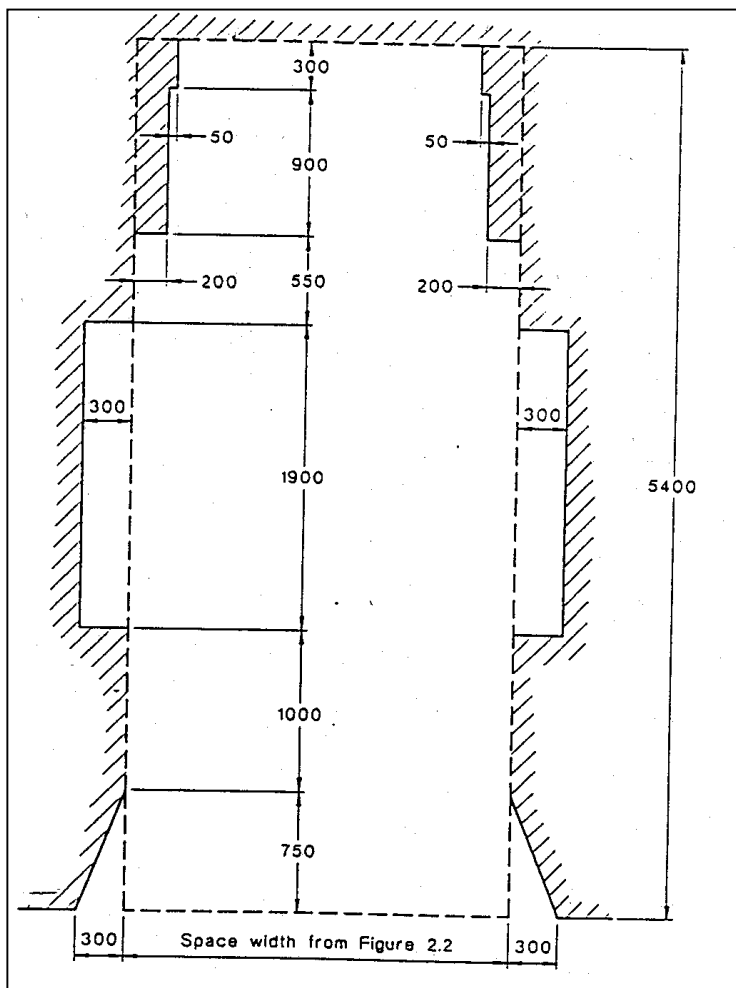
A = parking space width (see Figure 2.2)

Parking angle, $\theta$ degrees	Dimensions, mm	
	X, min.	Y, min.
30	375	1825
45	530	2581
60	650	3161
75	724	3526
90	750	3650

FIGURE 5.1 COLUMN LOCATION

### Design Parking Envelope

The design envelope around a parked vehicle which must be kept clear of walls, columns or other obstructions is as shown in the following diagram.



### **Bicycle, motor cycle and Coach parking**

Proposals for commercial, recreational or entertainment buildings larger than 120 m<sup>2</sup> gross floor area<sup>(D)</sup> must make provision for bicycle parking.

Adequate provision is to be made for access, safe manoeuvring and parking of coaches in proposals for tourist, commercial and recreational developments.

Provision must also be made for the parking of motor cycles as appropriate.

### **Underground car parks**

Underground car parks must be designed so as to completely exclude the entry of stormwater and/or groundwater to the underground carparking (other than up to a maximum of 60m<sup>2</sup> of the driveway ramp only). The floor level of any underground carpark must be located above the maximum level of the ground water table.

## **G2.4 Element - Service and Garbage Areas**

### **Element Objective**

*To ensure that developments incorporate proper provision for servicing and waste collection consistent with contemporary policies and practices.*

### **Performance Criteria**

Service vehicle areas must be provided in accordance with the projected needs.

Servicing the development must be safe and not obstruct the passage of vehicles or create traffic conflicts.

### **Prescriptive measures**

Loading and unloading from the street is not permitted.

As the size of service vehicles varies considerably, it is not possible to specify parking and access dimensions which will be suitable for all situations. Accordingly, the design of service areas will have to be tailored to each particular site<sup>(D)</sup>, type of development and the anticipated types of service vehicles.

Applicants are referred for specific advice for service vehicle areas to the NSW Roads and Traffic Authority Guidelines for Traffic Generating Developments.

That document includes:

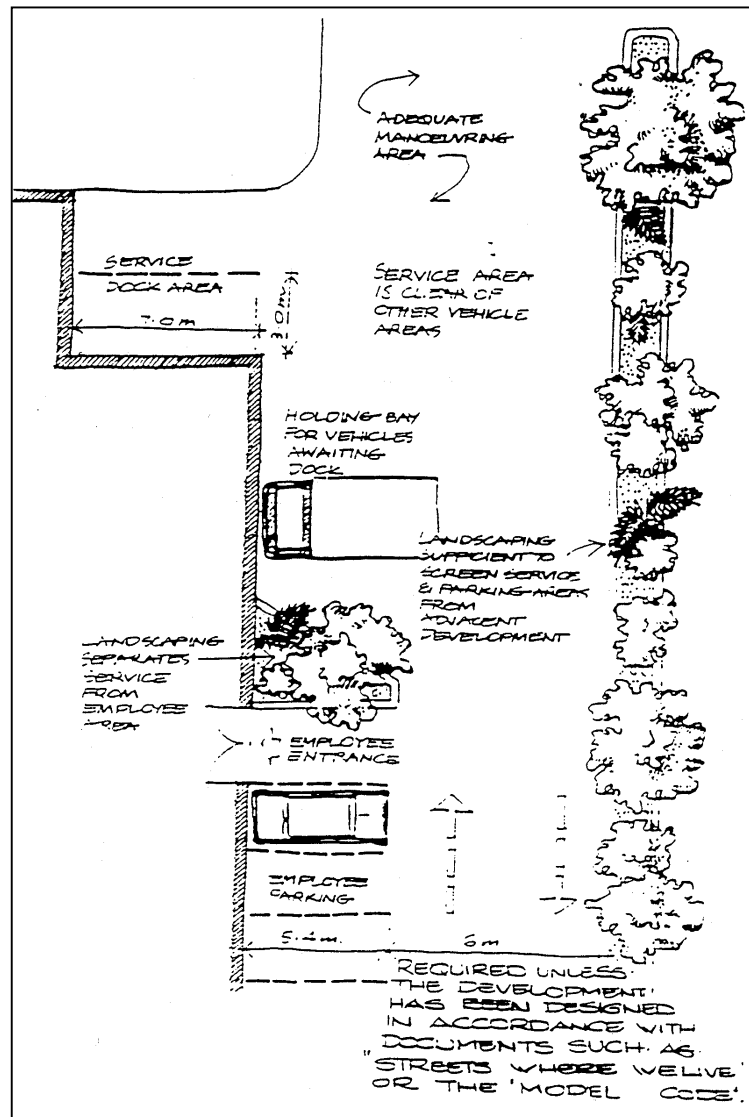
- Dimensions of service areas
- Loading bay platform and clearance heights
- Critical loading bay manoeuvring areas
- Typical service areas for particular forms of development
- Design turning paths for a range of vehicles
- Requirements for waste collection vehicles

### **Design principles**

Council will give consideration to the following principles in determining the appropriateness of service areas:

- The service area must be a physically defined location, screened from public view, and not used for purposes other than servicing, loading and unloading.
- Service area layout must facilitate its efficient use and must effectively discourage on-street loading and unloading.
- Requirements for storage and collection of waste must be taken into account in service area design.
- All service vehicles must be able to enter and leave the site in a forward direction, ie. adequate manoeuvring space is required on-site.
- Internal roadways must be of a size adequate for the largest vehicle anticipated to use the site.
- Where possible, service vehicle movements must be separated from car movements.

The following diagram illustrates the incorporation of some of these principles into the layout of a typical development.



## G2.5 Element - Monetary Provision

### Element Objective

To enable the provision of a monetary contribution in lieu of on site parking provision in Commercial Areas where this is in the public interest.

### Performance Criteria

Council may consider accepting a monetary contribution in lieu of on-site car parking in accordance with a Section 94 Contributions Plan and where there is a nexus between the development and the area in which the public parking is to be provided.

### Prescriptive Measures

In commercial areas, Council may accept a cash contribution in lieu of the provision of on-site car parking spaces. Such cases will be considered on merit, with reference to:

- (a) the size of the development;
- (b) the site's proximity to, and the accessibility of, existing or proposed public car parking areas;
- (c) the demand for car parking generally in the locality; and
- (d) the general traffic flow in the area.

In the main commercial areas, Council may favour the development and use of public car parks in preference to small parking areas associated with individual developments. Where Council considers it appropriate in such circumstances, a contribution will be required in accordance with the rates specified in Council's adopted Section 94 Plan, notwithstanding the availability of adequate areas on-site for parking.

In locations away from the main commercial areas, or where no public car parks are planned, on-site car parking is to be provided with the development.