

I1 Land Use and Transport

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1.0 INTRODUCTION

This Part applies to all land within the Waverley local government area (LGA). This Part should be read in conjunction with parking provisions throughout Waverley Development Control Plan 2010 (WDCP 2010).

1.1 Strategic Framework

This Part has been prepared in the context of the Waverley Transportation Policy adopted by Council in August 2002.

The Vision of the Waverley Transportation Policy holds that:

Transport in Waverley will become more sustainable, reducing negative effects while enhancing residents' quality of life and local amenity.

This Part has been prepared in accordance with one of the strategies held within the Waverley Transportation Policy, which is to:

Integrate land use and transportation in such a way that provides accessibility without relying on excessive mobility, especially by private vehicles. And in turn, provides for users without access to cars.

This Part contains provisions to be considered in the preparation and assessment of development applications (DA). It addresses land use, urban design, streetscape and transport issues, and provides for pedestrians, bicycle parking, vehicular access, car parking spaces and loading facilities.

1.2 Objectives of this Part

- (a) Establish controls for parking that reflect the characteristics of the LGA i.e. urban form, land use and proximity to public transport.
- (b) Ensure the provision of off-street parking is subject to considerations of urban design, streetscape and heritage conservation.
- (c) Establish parking policies that encourage walking, cycling, and public transport usage thereby reducing car dependency.
- (d) Minimise conflict between pedestrians, cyclists and vehicular movements.
- (e) Ensure transport aspects of development are met by providing:
 - (i) areas for the loading and unloading of service vehicles;
 - (ii) bicycle storage and amenities in residential and non-residential developments; and
 - (iii) parking and loading facilities with manoeuvring areas of adequate dimensions to allow their easy use.

1.3 Consultation

Council's Department of Planning and Environmental Services can be consulted on the interpretation of this Part. Dependent upon the scale, location and nature of a given development, Council may be required to consult with relevant traffic authorities. For some proposals, Council may require a traffic study to be submitted with a DA.

2.0 PARKING PROVISION - CONTEXT

Community views on transport planning are changing and contemporary planning theory is looking to a more sustainable and integrated transport and land use planning approach. Council seeks to address issues regarding on-site parking demand, the principle of car use reduction encouraging walking, cycling and the use of public transport.

As part of the strategy to reduce private vehicle trips, Council is undertaking, in consultation with relevant State bodies to encourage the provision of additional buses and examine the provision of different modes of public transport such as light rail and commuter buses.

Encouraging bicycle use as a form of transport for improving health benefits, easing road congestion, reducing atmospheric pollutants (including greenhouse gases) and traffic noise. An important factor in encouraging the use of the bicycle as an alternative transport mode is providing appropriate facilities such as secure bicycle parking and amenities such as showers and lockers at appropriate destinations.

3.0 PARKING CONTROLS

3.1 Residential Parking Provision Zones

The controls for car parking vary across the LGA but are generally based on proximity to existing public transport services. Based on this and other characteristics, the LGA is divided into three Parking Provision Zones. These zones are summarised in Table 1. Figure 1 illustrates the location of the parking provision zones. Figure 2 illustrates the major bus routes within the Waverley LGA.

Parking Provision Zone (see Figure 1)	Description	Location	Rate of Provision
A	High accessibility to public transport and services, high density, prone to traffic congestion.	<ul style="list-style-type: none"> Properties within the Bondi Junction Commercial Centre (shown on Figure 1). Properties within commercial centre identified by Business zone under WLEP 1996. Properties fronting major bus routes (shown on Figure 2) 	Lowest
B	Good accessibility to public transport and services, moderately high density, significant on-street parking subject pressures from traffic.	<ul style="list-style-type: none"> Properties not included in Zone A or Zone C. 	Moderate
C	Fair accessibility to transit and some services, relatively low density, significant off-street parking, relatively low levels of vehicular traffic.	<ul style="list-style-type: none"> Properties north of Murrivier Road (excluding properties zoned 2(c1) Residential – Medium and High Density under WLEP 1996). 	Highest

Table 1. Parking Provision Zones.

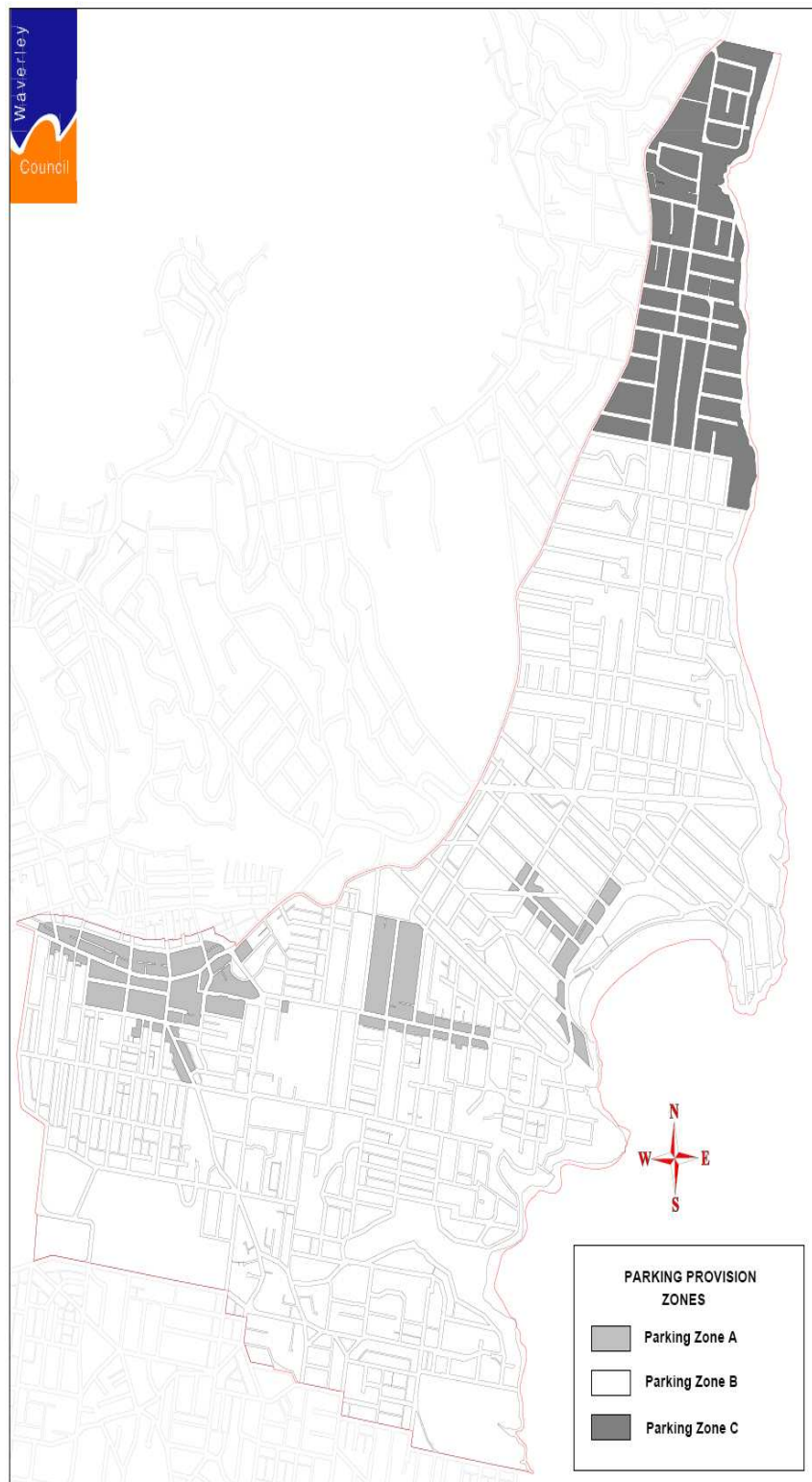


Figure 1. Parking Provision Zones.

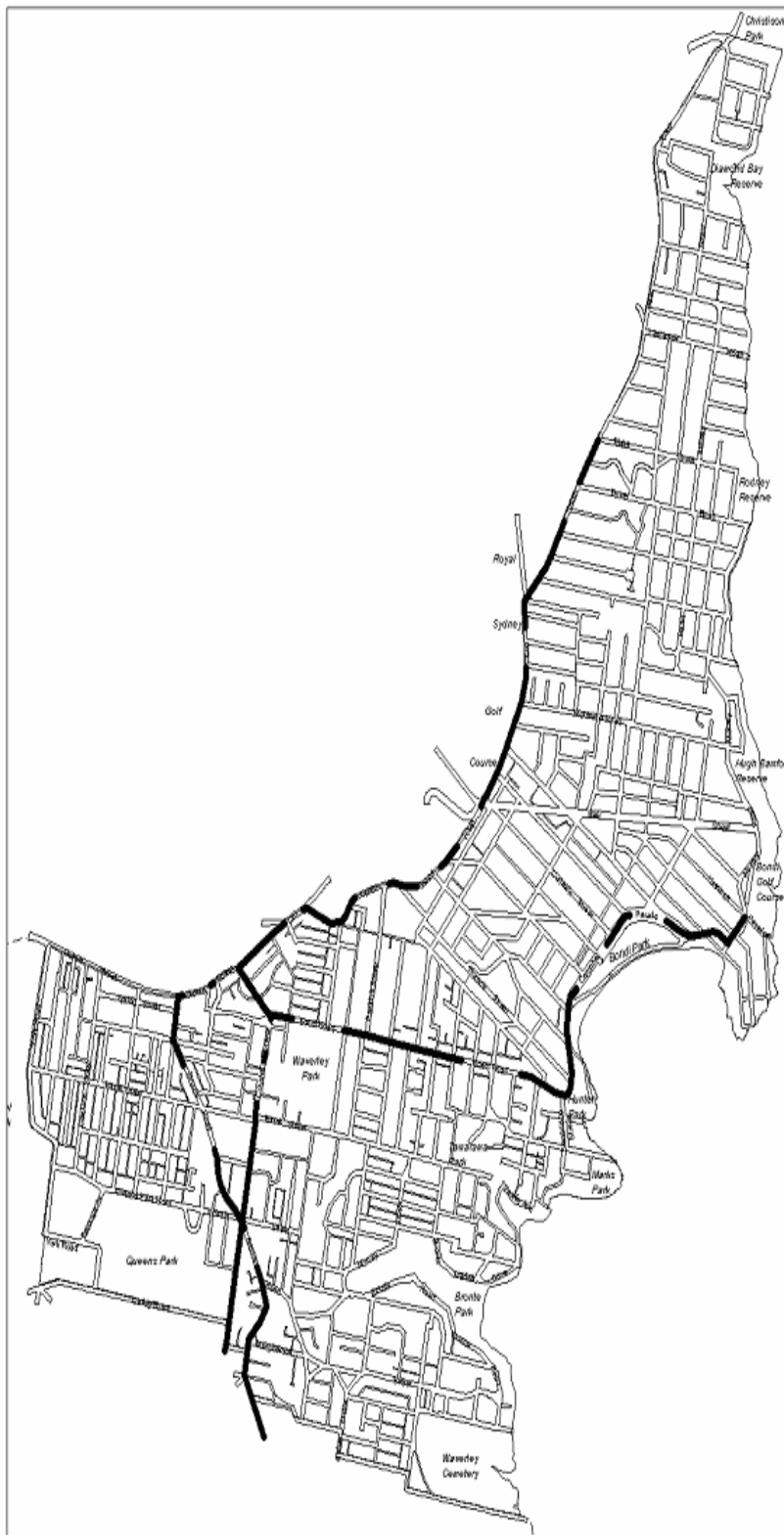


Figure 2. Major bus routes (shown by black line).

3.2 Parking Provision Rates

3.2.1 Car Parking for Residential Land Uses

Car parking spaces for residential development are determined at minimum and maximum rates. The number of spaces should fall within this minimum and maximum “envelope”.

Car parking spaces are to be provided for residential land uses at the following rates (except as otherwise indicated under Section 3.3 – 3.7):

Residential Type	Proposed Provision Rate (spaces per dwelling)					
	Parking Zone A		Parking Zone B		Parking Zone C	
	Min	Max	Min	Max	Min	Max
Medium / High Density						
1 Bedroom	0.3	0.6	0.4	0.8	0.5	1.0
2 Bedroom	0.4	0.8	0.8	1.0	0.8	1.2
3 Bedroom	0.8	1.2	1.0	1.5	1.0	1.8
Single Dwelling						
2 to 3 Bedroom	0	1	0	1	0	1
4+ Bedroom	0	2	0	2	0	2
Visitor Parking	No visitor parking spaces are required for the first 14 units. Thereafter, 1 visitor parking space is required for every 7 additional units. The required number of visitor parking spaces is reducible by 1 space for every 6m of on-street parking space located in front of the subject site.					
Accessible Parking	Accessible parking provisions are included within the calculations indicated in this Table.					

Table 2. Residential Car Parking Rates

3.2.2 Bicycle Parking Rates

- Bicycle parking is to be provided in all new residential developments (except new development comprising aged housing, housing for people with disabilities and dwelling houses); all new commercial, retail and industrial developments; and all community, educational, health and recreational facilities (refer to the rates shown in Table 3).
- Where bicycle parking is to be provided within a car parking area, care is to be taken to ensure that adequate sight lines are provided to maximise safety.
- Areas for bicycle parking will not be included as part of gross floor area or gross leasable area (GLA) for the purpose of calculating car parking provision.

3.2.3 Car Parking - Other Land Uses

Carparking spaces are to be provided for other land uses at the rates shown in Table 4 (overleaf).

Use	Rate	Conditions
Ground floor dwellings	Resident 0.25 per dwelling Visitor 0.25 per dwelling	<u>Resident bicycle parking</u> : is to be provided by way of a secure, lockable area or bike locker, at ground or car park level.
Other dwellings	Resident 1.00 per dwelling Visitor 0.25 per dwelling	<u>Visitor bicycle parking</u> : is to be provided by way of bicycle racks and located in convenient locations, be clearly visible and accessible to pedestrian entries so as to encourage their use.
Commercial, retail & industrial Community, educational & recreational facilities	1 per 10 car parking spaces 1 per 10 car parking spaces	<u>Bicycle parking</u> : is to be provided by way of either secure lockable area(s), bike lockers or bicycle racks, located within the ground floor foyer or adjacent to any forecourt, or within the car parking area. One-wheel racks are not acceptable.

Table 3. Bicycle parking rates.

Use	Rate
Auditoria, cinemas, places of assembly, theatres	1 per 5 seats
Backpackers hostel	1 per 10 guests or 1 per 4 bedrooms (maximum)
Café, restaurant, take-Away	1 per 50m ² GLA
Car repair & service stations	6 per work bay plus 1 per 20m ² GFA of convenience store
Car tyre retailers	3 per 100m ² GFA OR 3 per work bay (whichever is greater)
Catering & reception facilities (not elsewhere described)	1 per 10m ² GFA
Child care centres, kindergartens, pre-school centres	1 per 4 employees plus 1 per 8 children for drop-off/pick-up facility
Convalescent hospitals, nursing homes	1 per 10 beds plus 1 per 2 employees or 1 per 8 beds whichever is the greater
Discos, nightclubs, licensed bars, reception centres, club, hotel & tavern bar areas	1 per 10 persons as endorsed as the maximum number on the subject liquor license
Drive-in liquor stores	1 per 8m ² GFA including queuing lane spaces
Drive-in restaurants & take-away food stores	1 per 8m ² GFA plus 1 per 6 seats
Educational facility	1 car space per 50 students in year 12, 1 space per 4 employees and 1 space per 20 Tertiary students
Hospitals	1 per 4 beds
Industrial uses	1 per 100m ² GFA
Local places of public worship	1 per 20 seats
Regional places of public worship	1 per 10 seats or 1 per 10m ² GFA if no permanent seating provided
Motor showrooms	1.5 per 200m ² GFA plus 6.0 per work bay
Offices, commercial premises & professional consulting rooms	1 per 60m ² GFA
Residential hotels, guesthouses, serviced apartments & motels	1 per 4 guest rooms
Shops / Retail	1 per 30m ² GLA
Veterinary hospitals	1 per 22.5m ² GFA
Warehouses	1 per 300m ² GFA

Table 4. Car Parking Rates – Other uses.

3.3 Development within Bondi Junction Centre

The Bondi Junction Centre (situated within Zone A Parking Provision) has high accessibility to public transport and services. It also comprises high density development and is prone to traffic congestion. Therefore, reduced car parking provision rates apply to certain development. Notwithstanding Table 4, car parking spaces in the Bondi Junction Centre are to be provided at the rate shown in Table 5.

Land Use Type	Car Parking Spaces
Auditoria, Cinemas, Places of Assembly, Theatres	1 per 20 seats
Offices, commercial premises & professional consulting rooms	1 per 100m ² GFA
Restaurants	1 per 50m ² GLA or (if hours of operation are outside usual business hours – 0 for an initial 100m ² GLA plus 1 per 50m ² GLA)
Shops/Retail	1 per 60m ² GLA

Table 5. Car Parking Rates - Bondi Junction Centre.

3.4 Pedestrian dominated streets in Bondi Junction Centre

Council may also require on-site parking provision be reduced for development fronting "pedestrian-dominated" streets in the Bondi Junction Centre, as shown in the area marked in Figure 3. The exact reduction in on-site parking provision will be determined by Council on a case-by-case basis.

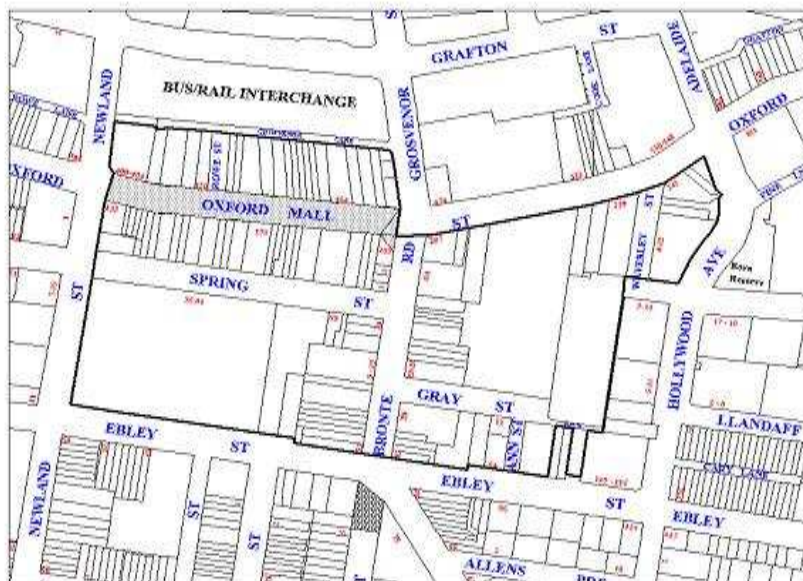


Figure 3. Land subject to Clause 3.4.

3.5 Development within Charing Cross

This Section refers to all land to which Part H2 Charing Cross Conservation Area applies. Council will consider the provision of reduced rates of car parking, to meet the objective of encouraging walking, cycling and use of public transport. The exact reduction will be determined on a case by case basis.

3.6 Affordable Housing Parking

Council seeks to encourage the provision of affordable rental housing in Waverley LGA. Where Affordable Housing is proposed within a given development it is to be facilitated by parking on a rate equivalent to the units throughout the property (refer to Part D2).

3.7 Mixed Use Development

3.7.1 Justification for Reduction of Car Parking Requirements

A reduction in the number of car parking spaces provided for a mixed use development may be permitted by Council where an applicant is able to provide evidence where a development has varying parking demand for each use.

3.7.2 Information required by Council

In order to assess whether a reduction in car parking provision under Clause 3.7.1 is justified, Council requires the following survey data of existing, comparable developments for each use within the development:

- (a) maximum utilisation of available parking;
- (b) time of peak demand;
- (c) proportion of people using other facilities on-site;
- (d) proportion of people arriving by car and public transport;
- (e) average car occupancy for vehicles accessing the site/use; and
- (f) the hours of operation for each use.

3.8 Accessible Parking

- (a) Accessible Parking spaces are to be provided at the following:
 - (i) Multi Unit development – 1 per 10 dwellings with at least 1 accessible visitor space for all developments comprising 8 or more dwellings.
 - (ii) Commercial/ retail development – 10% of total car spaces.
- (b) Parking for people with disabilities is to be provided in accordance with the current Australian Standard (AS).
- (c) Parking spaces for people with disabilities are to be located as close as possible to the subject premises and be signposted using standard signage. A continuous accessible path of travel must be provided from each accessible parking space to the closest accessible public entrance or wheelchair accessible lift. The design for drainage should identify any accessible path of travel and if unavoidable, pits should be grated for smooth passage of wheels, walking frames, walking sticks and the like. AS provides technical details to ensure a continuous accessible path of travel.
- (d) The location of accessible parking is to be indicated on DA plans.

3.9 Assessment of Parking Provisions

3.9.1 Calculation of Number of Spaces

- (a) When calculating the provision of car parking spaces, bicycle parking spaces or loading facilities, the following method is to be applied:
- (i) the number of spaces for each use on the site is to be calculated separately and to two decimal places;
 - (ii) the number of spaces for each use is to be totalled; and
 - (iii) the total number of facilities or spaces to be provided is to be rounded to the nearest whole number, i.e. 2.15 spaces equals a requirement for 2 spaces and 2.50 spaces equals a requirement for 3 spaces.

3.9.2 Change of Use

Where a DA involves a change of use, the parking rate for the new use is to be calculated as the difference between the parking rates required for both the present and proposed uses (under this Part).

3.9.3 Alterations and Additions

- (a) Where a DA involves alterations and additions to an existing building without a change of use, the increase in car parking provision is to be calculated on the basis of the net increase in gross floor area, number of bedrooms or dwellings, or other appropriate requirements under this Part for that use.
- (b) Council reserves the right to require the parking provision rate based on the total requirement for the use if, in its opinion, the DA involves a re-construction of the building.
- (c) Where a DA involves alterations and additions to an existing building without a change of use, Table 3 shall be used to determine the new bicycle parking provision, to be calculated at the rate for the entire premises.

3.10 Excess Parking

- (a) Carparking, provided in excess of that required under this Part, is to be considered part of the gross floor area of a development (for the purposes of calculating the floor space ratio of that development).

3.11 Variations of Standards

- (a) Council may waive or reduce any car parking standard within this section if Council considers that such a variation will permit a better planning solution to development of the subject site.
- (b) Council reserves the right to require a greater provision of bicycle parking than indicated in Table 3, where in Council's opinion, the particular nature of the development will generate an increased demand for bicycle parking.

3.12 Residential Parking Schemes

- (a) Residential Parking Schemes operate in a number of areas within the Waverley LGA. No parking permits will be issued to residents of developments that have been designed and approved by Council in accordance with this Part.

3.13 Traffic Generating Development

- (a) Certain DA's are required to be referred to the Traffic Authority of NSW under State Environmental Planning Policy (Infrastructure) 2007. Reference should be made to the SEPP to establish whether referral to a Regional or Local Traffic Committee is required. Additional uses that may be referred to either the Regional or Local Traffic Committees are as follows:

- Motels
- Shopping centre
- Convenience store
- Car tyre retail outlets
- Restaurants
- Truck stops
- Factories
- Warehouses
- Video stores
- Bulky goods stores
- Child care centres
- Gymnasiums
- Markets
- Professional consulting rooms
- TAB
- Extended hours medical centres

- (b) Where a DA involves the addition or alteration of a use and the increase in traffic generation is greater than 10%, the car parking component together with the traffic impacts are to be examined as a whole (incorporating the original development) and referred to either the Regional or Local Traffic Committees.

4.0 PROVISION OF LOADING FACILITIES

Loading facilities are to be provided for the uses shown in Table 6.

USE	RATE
Car tyre retailers	1 per 800m ² GFA
Catering & reception facilities	1 per 400m ² GFA
Department stores	1 per 1500m ² up to 6000m ² plus 1 per 3000m ² thereafter
Drive-in liquor stores	1 per 400m ² GFA
Drive-in take-away food stores	1 per 400m ² GFA
Industrial uses	1 per 800m ² GFA
Licensed bars, clubs, hotels & taverns (with a GFA greater than 100m ²)	1 per 1000m ² GFA
Mortuary chapels	1 per site
Motor showrooms	1 per 800m ² GFA
Offices, commercial premises & professional consulting rooms (with a GFA greater than 400m ²)	1 per 4000m ² up to 20,000m ² plus 1 per 8000m ² thereafter
Residential flat buildings (with more than 25 dwellings)	1 per 50 dwellings
Restaurants (with a GFA greater than 100m ²)	1 per 400m ² GFA
Shops (including supermarkets) (with a GFA greater than 100m ²)	1 per 400m ² GFA up to 2000m ² plus 1 per 1000m ² thereafter
Warehouses	1 per 800m ² GFA
Other uses	As may be required by Council

Table 6. Loading Facilities.

5.0 URBAN DESIGN, STREETScape AND HERITAGE CONSERVATION

The LGA has older established areas, which were designed and built before the widespread use of cars. The retrospective provision of off-street car parking has caused significant impacts on streetscapes and has impacted upon the amenity of pedestrians and cyclists.

5.1 Design

- (a) Pedestrian and cyclist amenity on streets is maintained or improved.
- (b) Existing on-street parking supply is protected by minimising impacts of additional vehicular kerb crossings.
- (c) The continuity of streetscapes, streetscape elements and landscaping is maintained.
- (d) Car parking bays, garages, etc and vehicular access do not dominate the streetscape.
- (e) Heritage conservation areas are protected.
- (f) Site layout, landscape design, deep soil zone provision and drainage are not detrimentally affected through the provision of on-site car parking.

5.2 Parking and Access

- (a) All car accommodation is to be located behind the front building line.
- (b) No part of a building is to be altered or demolished to primarily provide car parking except where topography or appropriate building design allows.
- (c) Parking facilities in commercial areas should be sited and designed to minimise their visual impact on the continuity and amenity of a street frontage.
- (d) The external appearance of any parking or loading structure or area is to be of a high standard and finish when viewed from the street. Landscaping is to be used to soften the impact of such structures/areas.
- (e) Open driveways and parking spaces in residential flat developments are to be of exposed aggregate, grasscrete or other quality finish.
- (f) Parking and driveways areas in a dwelling house development are to be paved using only pervious material to reduce the run-off of stormwater.
- (g) Entry gates and structures for car accommodation are to be of an open design to allow for improved security by way of street surveillance. An open design will also reduce any impact on the streetscape.

5.3 New Vehicle Crossings

- (a) Vehicular crossings for dwelling houses are to be of single vehicle width only.
- (b) Where there is no car parking on an original lot and off-street parking is not characteristic, vehicular access from the street is not permitted.

- (c) Vehicular crossings should be provided from rear lanes where possible.
- (d) No vehicular crossings or off-street parking (other than from rear lanes) are permitted in heritage conservation areas where there will be an adverse impact on streetscape continuity, the character of the built form or landscape setting.
- (e) Properties which have two street frontages, are only permitted to have one vehicular crossing.
- (f) Where possible, vehicular crossings should be shared with neighbouring properties.
- (g) New vehicular crossings must be constructed from permeable material or wheel strips.

5.4 Landscaping

- (a) Open car parking areas are to be landscaped to:
 - (i) ensure that 50% of their area will be shaded; and
 - (ii) to improve their appearance.
- (b) Open car parking or loading areas are to be adequately landscaped to screen them from view of the street and other public areas where possible.
- (c) A landscape strip of between 1.5 metres and 3.0 metres is to be provided for open car parking areas along the street frontage. A greater landscaped strip may be required to screen multi-level car parks.
- (d) Landscaping strips are to be established and maintained with appropriate planting. The location of landscape strip, as well as a detailed landscaping plan will be required to be submitted when lodging a DA.

6.0 DESIGN GUIDELINES FOR PARKING AND LOADING FACILITIES

The design of parking and loading facilities is to be in accordance with all the relevant AS pursuant to the Building Code of Australia (BCA).

6.1 Accessible Parking

Council seeks to ensure that all new and refurbished buildings provide access for people with disabilities as required by the Federal Government's *Disability Discrimination Act (DDA 1992)* 1992. Council also seeks to promote recognition and acceptance within the community of the principle that persons with disability have the same rights of access as the rest of the community.

The design of car parking for people with disabilities is to be in accordance with the most current Australian Standard (AS) relating to off-street parking for people with disabilities.

6.2 Parking Spaces for Small Cars and Motorcycles

- (a) For developments requiring more than 50 car parking spaces, a maximum of 2% of the required parking spaces may be specified as "small car spaces", with a minimum length of 5

metres. Such spaces are to be indicated on the plans submitted and clearly indicated when completed.

- (b) For developments requiring more than 20 car parking spaces, separate car parking spaces for motorcycles must be provided. These spaces can be provided in excess of the stipulated requirements or in lieu of a maximum of 1% of required car parking spaces. These spaces are to be indicated on the plans submitted, and clearly signed for motorcycle use only when completed.

6.3 Design and Layout of Parking Facilities

6.3.1 Siting and Location

- (a) On-site parking for visitors/customers is to be located so that it is convenient and accessible to users: that is, within a reasonable distance of access to the premises it serves. This applies especially to bicycle parking.
- (b) Consideration may be given to the provision of parking facilities on another adjacent parcel of land if the applicant can provide a secure guarantee that such parking will be available at all times during the currency of the development.

6.3.2 General Layout

- (a) Parking areas are to be designed to expedite vehicle circulation by adopting a simple layout, thereby minimising congestion points and reducing any potential conflict in vehicular movements.
- (b) Car park design should ensure that all vehicles enter and leave the site in a forward direction.
- (c) Within larger, short-term parking areas, a one-way circulation pattern is to be adopted. Where bicycle parking is to be provided within a parking area, it should be located as near as possible to the pedestrian access areas. Adequate sight lines are to be provided to ensure bicycle safety.

6.3.3 Pedestrian/Bicycle Circulation and Safety

Location of parking spaces is not to obstruct pedestrian and bicycle access to the premises or major pedestrian and cycling routes. Within parking areas of larger than 10 carspaces, segregated routes for main pedestrian and bicycle movements must be created making use of line marking, pedestrian crossings, signage and where appropriate speed humps.

Exit points of parking areas of larger than 10 carspaces require the following safety devices installed within the boundary of the property:

- (a) Two stop signs.
- (b) A white, unbroken line at the exit point appropriate to accompany stop signs.
- (c) Two fish eye mirrors to improve sighting of pedestrians traversing the public footpath area.
- (d) Either a boom gate or a speed hump within 8 metres of the exit point.

- (e) Speed limit of 5 km per hour to be enforced within the carpark; which should be clearly sign posted.

All these devices will be installed within the boundary of the property and not on public land, footpath or road areas.

6.3.4 Speed Humps

- (a) Where it is considered necessary to provide speed humps to regulate vehicle speeds, these must be of the approved design. In this regard, the applicant is to confer with Council's Manager Technical Services. Speed humps are to be adequately signposted using standard signage.
- (b) Locations of speed humps are to be shown on application plans.

6.3.5 Line marking and Signposting

- (a) All parking spaces are to be clearly line-marked and signposted. This includes customer, visitor or bicycle parking.
- (b) Where a one-way circulation pattern is adopted, direction of flow is to be indicated by signposting and arrow markings on the surface of aisles and driveways. Segregated entries and exits are to be signposted.
- (c) In large parking areas, means of egress are to be indicated by directional signs.
- (d) The use and location of signs is to be shown on DA plans.
- (e) Loading areas are to be situated so that, when in use, they do not interfere with pedestrian, bicycle or vehicular circulation on the site or at the site interface with the streetscape. Separate access and circulation lanes for large vehicles should be provided if the site is to be serviced by such vehicles.
- (f) For other vehicle types, it will be necessary for the applicant to justify bay sizes in terms of the dimensions of the vehicles.
- (g) All necessary segregated routes for main pedestrian and bicycle movements will be clearly line-marked and sign posted and indicated on plans submitted.

6.4 Use of Templates

The templates provided in the AS indicate the paths swept by manoeuvring vehicles and may be used by applicants to design access to parking and loading facilities. A minimum clearance of 300mm between the swept path and any building and obstruction is to be maintained.

6.5 Gradients

Gradients of all manoeuvring areas, aisles, parking spaces and loading bays are to comply with the relevant AS.

6.6 Drainage, Light, Ventilation

- (a) All parking areas are to ensure adequate drainage of surface water into Council's stormwater system to prevent flooding of adjoining properties or public footpaths (refer to Part G4).

- (b) Where a parking area is excavated, provisions are to be made for drainage of runoff and seepage in accordance with Part G4.
- (c) Covered or enclosed parking areas are to have adequate provision for lighting and ventilation, preferably by natural means. Council may require the provision of artificial lighting and mechanical ventilation where necessary.

6.7 Access to Residential Allotments

Where an allotment is subdivided to create a "battleaxe" shaped allotment, the access "handle" is to have a minimum width of 3.5 metres.

6.8 Stacked Car Parking

6.8.1 General

Stacked parking spaces are to comply with the dimensions for individual spaces.

6.8.2 Horizontally Stacked

Horizontally stacked parking is only permitted for residential development and in addition to the parking requirements indicated in Sections 3.2, 3.4 and 3.6. Stacked pairs of car spaces are to be allocated to the same dwelling and are not acceptable for visitor parking.

6.8.3 Vertically Stacked

Vertically stacked parking is only permitted where site constraints (such as horizontal dimensions or vertical relief) prevent full provision of conventional parking.

6.9 Allocation of Car Parking Spaces

6.9.1 Residential Development

Under strata title, parking spaces are to be included either as a part lot associated with a particular dwelling or as common property. Lots that are comprised solely of parking spaces are not permitted.

6.9.2 Non-residential Strata-Titled Development

Under strata title, parking spaces are to be included as either common property or as a part lot. Lots that comprised solely of parking spaces are not permitted.

7.0 COMMUNITY CRIME PREVENTION

Carparks, in particular multi-storey and underground car parks, are places where many people feel especially vulnerable. Whether designing a carpark for a commercial centre or large housing development, attention needs to be given to perceived and active safety. This section provides performance criteria for ground level, multi-

storey or underground car parks and applies to car parking generally, both public and private.

7.1 General Controls

- (a) Parking areas should be well lit and visible to allow for casual surveillance from the development. Similarly, pedestrian entry and exit points should have a high level of illumination.
- (b) Areas that can potentially allow for the concealment of people within parking facilities (for instance blind or dark areas) should be avoided and resolved at the design phase.
- (c) Residential components of a parking facility within a mixed development should have a secure separation from parking allocated to other uses and from publicly accessible and common areas.

7.2 Underground/Multi Storey Car Parks

a) Car Park Layout

Performance criteria	Design Suggestions/ Requirements
The car park should be designed to allow people easy identification of their vehicles.	Non residential car parking should be divided into sections/groups of cars, each visually distinguishable from the other e.g. through different colours, visual themes or physical separation to help people relocate their cars quickly.
Car parks should be designed to allow quick and easy access to pedestrian entry/exit points.	Access to the liftwell, stairwell or directions to these points should be clearly visible from every car parking space. Location signs for pedestrians and drivers should be large and legible with strong colours, standard symbols and simple graphics. Unauthorised pedestrian access should be restricted (most theft from cars is undertaken by people who enter the car park on foot).
Car parks should be designed to minimise the number of entry/exit points.	Entry/exit points at ground level should be located to maximise opportunities for casual surveillance from a car park operator or "active" uses at ground level e.g. shops, cafes. Where possible, exit from the car park should be via controlled/supervised boom gates.
Car parks should be designed to maximise opportunities for casual surveillance.	Facilities such as telephones and bicycle storage should be in the most prominent and visible areas possible.
	Facilities such as telephones and bicycle storage should be in the most prominent and visible areas possible. Parking spaces for more vulnerable user groups such as disabled people should be located in highly visible locations. If seating is installed, ensure it does not encourage loitering, such as near toilets and that it is placed in highly visible locations e.g. near pedestrian entry/exit points. Consider the incorporation of uses within the car park which allow for casual surveillance such as car wash services.

b) Lighting

Performance criteria	Design Suggestions/ Requirements
The location and type of lighting promotes user safety.	Lighting throughout the car park must conform to Australian Standards. Avoid lighting which produces areas of glare and shadow. Lighting should have a wide beam of illumination which reaches to the next light or the perimeter of the site. Lighting intensity at the entrance to an underground or covered multi storey car park should be graded (from brightest at the entrance) to allow for gradual adjustment of driver/pedestrian vision as per Australian standard. All lighting should be vandal resistant.
Ensure lighting is of an adequate brightness.	Lighting should be sufficiently bright to enable a car park user to see.
Ensure adequate lighting of access ways/facilities.	Pedestrian access ways to, from and around the car park should be well lit as should toilets, telephones etc.
Ensure materials used enhance lighting of the car park.	The ceilings and walls of the car park and associated access routes should be painted in light colours.

c) Security

Performance criteria	Design Suggestions/ Requirements
Car parks should be designed and managed to reduce the opportunity and /or incentive for vandalism and illegal access and employ an appropriate range of security measures.	A help point or information of where to obtain help should be located on each car parking level as a minimum. Convex mirror should be used where there are blind corners to allow users to see ahead. Where appropriate security officers/CCTV should be used. Routine patrols of car parks by security staff are recommended in public car parks. Consideration should be given to the provision of an escort service to assist customers to their cars at night. Consider the installation of roller security grilles to individual parking spaces in car parks serving residential developments. Ensure the speedy repair or cleaning of damaged or vandalised property as a deterrent to further damage.

7.3 Ground Level Car Parks**a) Car Park Layout**

Performance criteria	Design Suggestions/ Requirements
Entrances and exits both for cars and pedestrians should be clearly signposted.	Signs should be clearly visible from all parking spaces by day and night. Identification signs should be provided in large car parks to enable drivers to easily.
The design of the car park should maximise opportunities for casual surveillance.	Where possible, car parks should be overlooked by windows from adjacent uses, e.g. dwellings, shop. Carparks should be located to permit maximum opportunities for surveillance by passersby. Facilities such as telephones, bicycle storage and spaces designated for specific user groups should be located in the most visible areas possible.