

Bankstown
Development
Control
Plan 2015



PARKING

Exhibition version - March 2019

Note:

Changes to the DCP are show as:

- Double strike through is deleted text.
- <u>Italics & underlined</u> is added text

CONTENTS

Section 1	Introduction	3
Section 2	Off–Street Parking	4
Section 3	Off-Street Parking Design and Layouts	13
Section 4	Off-Street Parking Access and Circulation	19
Section 5	Other Considerations	21
Section 6	Landscaping	24

SECTION 1-INTRODUCTION

Bankstown Local Environmental Plan 2015 is Council's principal planning document to regulate effective and orderly development in the City of Bankstown. The LEP provides objectives, zones and development standards such as lot sizes and floor space ratios.

Part B5 of Bankstown Development Control Plan 2015 supplements the LEP by providing additional objectives and development controls to enhance the function and appearance of off-street parking in the City of Bankstown. The development controls include off-street parking requirements, layout dimensions, access and landscaping.

Part B5 applies to all land in the City of Bankstown. Applicants must note:

- Development must also comply with the precinct controls of this DCP.
 However if applicable to a development application, the precinct controls will prevail if there is an inconsistency with any development controls in Part B5.
- Development on land at risk of flooding must also comply with Part B12–Flood Risk Management.

Objectives

The objectives of Part B5 of this DCP are:

- (a) To have car parking meet the demands of new development.
- (b) To have the layout and design of car parks function efficiently and safely.
- (c) To have development achieve the parking requirements.
- (d) To have the design of open-air car parks incorporate landscaping areas to minimise the visual impact.
- (e) To have a balance between parking requirements, visual aesthetics and pedestrian safety, which includes access for people with disabilities and convenience for drivers.

SECTION 2-OFF STREET PARKING

Objectives

The objectives of off–street parking are:

- (a) To have car parking meet the demands generated by various land uses.
- (b) To have traffic flows that do not adversely affect the surrounding area due to vehicles parked on the streets.
- (c) To have minimal on-street car parking in order to ensure road safety and visual aesthetics.

Development controls

The development controls to achieve the objectives are:

Off-street parking spaces

- **2.1** Development must calculate the amount of parking required using the schedule of off–street parking requirements.
- **2.2** Development not included in the schedule of car parking standards must submit a parking study for Council's consideration. A qualified traffic consultant must prepare the parking study.
- **2.3** Car parking and driveway access in flood liable land in the City of Bankstown must be in accordance with Part B12–Flood Risk Management of this DCP.

Schedule: Off-street parking requirements

Land use	Off-street parking requirements	
A		
Attached dwellings	1 car space per 1 bedroom dwelling; or	
	1.5 car spaces per 2 bedroom dwelling; or	
	2 car spaces per 3 or more bedroom dwelling.	
Bed and breakfast	1 car space for resident; and	
accommodation	1 car space per 2 bedrooms.	
Boarding houses	1 car space per 3 bedrooms.	
	0.5 car spaces per boarding room and 1 car space for each	
	person employed in connection with the development and	
	who is resident on site.	
Bulky goods	1 car space per 60m ² gross floor area.	
premises		

Business premises/ Office premises	Bankstown CBD, Chester Hill Village Centre and Sefton Small Village Centre		
	1 car space per 40m ² of half the gross floor area of the premises; and a planning agreement is considered on the remaining 50% of parking requirements for the purpose of public parking.		
	2 Other centres		
	1 car space per 40m ² gross floor area of the premises.		
	Note: Council may vary the car parking requirement for minor alterations and additions to a business development solely where the total gross floor area of the building does not exceed 500m ² .		
Caravan parks	1 car space per caravan site.		
Car tyre retail outlets	3 car spaces per 100m ² gross floor area; or 3 car spaces for each work bay whichever is greater.		
Child care centres	1 car space per employee (stack parking is permitted); and 2 additional car spaces for the exclusive use of any associated dwelling.		
	1 car space per 4 children; and 2 additional car spaces for the exclusive use of any associated dwelling.		
Correctional centres	1 car space per 2 employees.		
Depots/transport depots	Sufficient off–street employee and visitor parking to satisfy peak demand; and 1 truck space for each vehicle present at the time of peak vehicle accumulation on the site for both fleet and contract–operator vehicles.		
	Note 1: On–site overnight truck parking should be provided as required.		
	Note 2: An area of 50m ² (including 20m length) per vehicle is to be provided for vehicles held or queued on the site.		
	Note 3: Provision of parking is to be supported by a parking survey.		

	T		
Dual occupancies	1 car space per 2 or less bedrooms; or 2 car spaces per 3 or more bedrooms.		
Dwelling houses	2 car spaces per dwelling behind the front building line.		
Educational establishments	1 car space per employee or classroom, whichever is the greater; and 1 car space per 8 students in year 12.		
Family day care centres	2 car spaces per dwelling behind the front building line.		
Freight transport terminals	Sufficient off–street employee and visitor parking to satisfy peak demand; and 1 truck space for each vehicle present at the time of peak vehicle accumulation on the site for both fleet and contract-operator vehicles.		
	Note 1: On-site overnight truck parking should be provided.		
	Note 2: Provision of parking is to be supported by a parking survey.		
Group homes	2 car spaces behind the front building line.		
Health consulting rooms	3 car spaces for the consulting rooms; and 2 car spaces for the associated dwelling.		
Home based child care centres	2 car spaces per dwelling behind the front building line.		
Home businesses/ home occupations	2 car spaces per dwelling behind the front building line.		
	Note 1: Additional car parking may be required for the proposed home business and must be made available onsite.		
	Note 2: All loading and unloading is to be conducted on-site and an area is to be made available for this activity behind the front building line.		
Hotel or motel accommodation	1 car space per unit; and 1 car space per 2 employees.		
Industries and light industries including	1 car space per 100m ² of gross floor area.		
vehicle body repair workshops and vehicle repair stations	Note 1: Where a retailing component is involved, provided this does not exceed 15% of the gross floor area (covering the retail component only) 1 car space per 100m ² of gross floor area is to be provided.		
	Note 2: Where an office component is involved, provided this does not exceed 20% of the total gross floor area, 1 car space per 100m² of gross floor area is to be provided. Any additional office space will be assessed at a rate of 1 car space per 40m² of gross floor area.		
	Note 3: When calculating the parking requirements for		

	factories and factory units, Council may exclude a			
	mezzanine level used solely for storage purposes provided:			
	The floor of the mezzanine level is a light–weight floor;			
	The mezzanine level is enclosed on one or more sides			
	with a hand rail as opposed to walls; and			
	The floor-to-ceiling height of the mezzanine level does			
	not exceed 3 metres.			
Live-work enterprises	2 car spaces in addition to the off–street parking			
Zivo work orkorphoco	requirements for the residential component of the dwelling.			
Marinas	0.5 car space per employee; and			
	0.2 car space per swing mooring; and			
	0.2 car space per dry storage berth; and			
	0.6 car space per wet berth.			
Medical centres	1 car space per 25m² of gross floor area.			
Medical certifes	l cal space pel 25111 of gloss floor area.			
	Note: Ambulance/disability spaces must be provided			
	according to the recent Australian Standard.			
Multi dwelling				
Multi dwelling	1 car space per 1 bedroom dwelling; or			
housing	1.5 car spaces per 2 bedroom dwelling; or			
	2 car spaces per 3 or more bedroom dwelling; and			
Diameter () I P	1 visitor car space per 5 dwellings.			
Places of public	Car parking must be provided on–site at a minimum rate of			
worship	1 car space per 5m ² of the assembly area.			
	Car parking for ancillary uses and social / special events			
	must be provided on-site on the basis of a Parking Study, to			
	be submitted with the development application.			
Residential flat	In Zone R4, Zone B1, Zone B2 and Zone B6			
buildings	1 car space per 1 bedroom dwelling; or			
	1.2 car spaces per 2 bedroom dwelling; or			
	1.5 car spaces per 3 or more bedroom dwelling; and			
	1 visitor car space per 5 dwellings.			
	In Zone B4			
	A minimum of 1 car space and a maximum of 3 car spaces			
	per dwelling; and 1 visitor car space per 5 dwellings.			
	Note 1: Residential flat buildings on state and regional			
	roads with over 10,000 vehicles per day should provide an			
	additional space on site for a furniture truck.			
	Note 2: All car spaces must be located behind the front			
	building line. Residential flat buildings are required to			
	provide car spaces for people with disabilities depending on			
	the size of the development.			
	·			
	Note 3: Service and delivery vehicles can use visitor space.			
Restaurants	Bankstown CBD			
	 Less than or equal to 100m² of total dining, bar area: 			
	No requirement.			
L				

 More than 100m² of total dining bar area: Parking study required.

Other Centres

- Less than or equal to 100m² of total dining, bar area:
 No requirement.
- More than 100m² of total dining bar area: 0.15 car space per square metre in excess of 100m².

Outside above areas

0.15 car space per square metre of total dining or bar area.

Note 1: Part B5 aims to encourage small restaurants within existing commercial centres. For restaurants on busy roads obviously oriented to passing traffic, the higher assessment rate applies. The change of use to a shop or office, sometime in the future, would be dependent on the provision of additional parking. This advice will be contained within the determination notice for the development.

Note 2: Drive-in take away food outlets

- Development where customers park their vehicles on site and walk to the food outlet for service: 0.12 car space per square metre of gross floor area; and 1 car space per 5 seats.
- Development where customers stay in their vehicles to give their orders and wait for delivery: Off-street car spaces for "browse-room" customers; and 1 car space for each employee.
- Where a drive-in take away food outlet has a frontage to a state or regional road, a minimum of 30 car spaces are to be provided.

Note 3: Drive-in liquor stores

- Off-street car spaces for "browse-room" customers;
 and 1 car space for each employee.
- Where customers park and leave their vehicles to purchase liquor, a drive—in liquor store may be considered as a shop. Under these circumstances, 1 car space per 40m² of gross floor area will be required.

Note 4: Total dining bar area means all of those parts of a restaurant, catering or reception centre where customers order or are served food or drink, and includes waiting areas.

Roadside stalls

4 car spaces per stall.

Secondary dwellings

1 car space if the gross floor area of the secondary dwelling is over 50m².

Semi-detached 1 car space per 2 or less bedrooms; or

dwellings 2 car spaces per 3 or more bedrooms.				
Seniors housing	Residential care facilities			
Cernors riousing	1 parking space for each 10 beds in the residential car facility (or 1 parking space for each 15 beds if the facility provides care only for persons with dementia), and			
	 1 parking space for each 2 persons to be employed in connection with the development and on duty at any one time, and 			
	1 parking space suitable for an ambulance.			
	Hostels			
	 1 parking space for each 5 dwellings on the hostel, and 1 parking space for each 2 persons to be employed in connection with the development and on duty at any one time, and 1 parking space suitable for an ambulance. 			
	Self-contained dwellings			
	 0.5 car spaces for each bedroom where the development application is made by a person other than a social housing provide, or 1 car space for each 5 dwellings where the 			
	development application is made by, or is made by a person jointly with a social housing provider.			
Serviced apartments	In Zone R4, Zone B1, Zone B2, Zone B5 and Zone B6 1 car space per 1 bedroom dwelling; or 1.2 car spaces per 2 bedroom dwelling; or 1.5 car spaces per 3 or more bedroom dwelling; and 1 visitor car space per 5 dwellings.			
	In Zone B4 A minimum of 1 car space and a maximum of 3 car spaces per dwelling; and 1 visitor car space per 5 dwellings.			

Service stations including convenience store	6 car spaces for each work bay; or if no work bay is provided, 1 car space for each employee; and	
	Where a convenience store is provided, 1 car space per 20m² of gross floor area; and	
	Where restaurant with greater than 100m² of total dining/bar area is provided, 0.15 car space per square metre in excess of 100m².	
	Note: For combinations of the above uses, the total requirement may be reduced if it can be proven that the	

	times of peak demand for the various uses do not coincide.
Sex services premises	1.5 car space per service room.
Shops	Development of less than 4,000m² gross floor area 1 car space per 40m² of gross floor area.
	Developments of greater than or equal to 4,000m ² gross floor area
	A parking survey should be carried out by the applicant, to assess the appropriate level of parking for developments greater than 4,000m² in gross floor area.
	Note 1: Council may vary the car parking requirement for minor alterations and additions to shops solely where the total gross floor area of the building does not exceed 500m ²
	Note 2: In the Bankstown CBD, Council may consider a planning agreement for 50% of the parking requirement for the purpose of public parking provided the development is less than 4,000m ² gross floor area.
Shop top housing in Zone R4	1 car space per retail / business premises in addition to the off–street parking requirements for residential flat buildings.
Shop top housing in business zones	1 car space per dwelling; and a retail premises must comply with the off–street parking requirements for shops; and a business premises must comply with the off–street parking requirements for business premises.
	Note: Council may vary the car parking requirement for minor alterations and additions to shop top housing solely where the total gross floor area of the building does not exceed 500m ² .

Vehicle sales or hire	1.5 car spaces per 200m ² of site area; and,
premises	6 car spaces per work bay if servicing facilities are provided.
Warehouse or	1 car space per 300m ² gross floor area.
distribution centres	

Additional developer contributions

2.4 Council may consider accepting additional developer contributions (i.e. to be paid on top of the normal amount of Section 94A contribution that is payable) in lieu of providing on–site parking spaces for non–residential development on land within:

- (a) Zone B4 Mixed Use. These funds will be used by Council to build car parking spaces at sites identified in Council's City Centre Car Parking Strategy.
- (b) Zone B2 Local Centre within the Chester Hill Village Centre and the Sefton Small Village Centre. These funds will be used by Council to build car parking spaces at sites identified in the North West Local Area Plan.

The amount of parking that can be offset is up to 100% of a development's parking requirement under the DCP. This clause does not apply to dwellings.

- 2.5 Council will only consider accepting these additional developer contributions in lieu of the provision of on–site parking at its discretion, and only in the following circumstances:
 - (a) Where Council is satisfied that there will not be a significant impact associated with the parking not being provided on site. Note: if Council is not satisfied in this regard it may require that some or all of the parking must be provided on site in accordance with the requirements of this DCP.
 - (b) That the parking spaces to be provided off site will be available for use at all times by the general public and that there is no expectation that they will be used solely by clients of the development that is providing the parking spaces.
 - (c) That the timing of building the parking spaces shall be at the sole discretion of Council and there shall be no expectation by the applicant that the building of the car parking spaces shall be built to coincide with the development for which the additional contributions have been paid.
 - (d) That the amount of developer contributions to be charged is \$28,000 per car parking space as at the date that this DCP comes into effect and indexed quarterly to the CPI.
 - This amount represents the cost of building a parking space and is not negotiable. The amount will also be reviewed annually by Council.
- 2.6 The process for the payment of additional developer contributions in lieu of providing on site car parking will be through a Voluntary Planning Agreement, made in accordance with Council's Planning Agreements Policy, dated July 2007 and amended at various times.

Parking requirements for people with disabilities

2.7 Development should provide special parking spaces for people with disabilities at the rate of at least one car space per 100 car spaces provided. Council may require a higher proportion of car spaces for land uses which generate high volumes of sick and infirm visitors such as in medical centres and hospitals.

Calculation of parking spaces

- **2.8** In calculating the total number of car parking spaces required for a development, these must be:
 - (a) rounded down if the fraction of the total calculation is less than half (0.5) a space; or
 - (b) rounded up if the fraction of the total calculation is equal or more than half (0.5) a space; and
 - (c) must include a room that is capable of being converted to a bedroom.

SECTION 3-OFF STREET PARKING DESIGN AND LAYOUTS

Objectives

The objectives of off-street parking design are:

- (a) To have the location and layout of parking areas function efficiently and safely.
- (b) To have quality and safety of parking services within the car park.

- (c) To have efficiency in vehicular circulation and connection with the external traffic network.
- (d) To have a balance between parking requirements, visual aesthetics and pedestrian safety.
- (e) To have the design of car parking areas incorporate landscaping areas to minimise the visual impact.

Development controls

The development controls to achieve the objectives are:

Parking location

- **3.1** Refer to Part B1 of this DCP for information on the location of garages and carports in the residential areas.
- **3.2** Parking areas for people with disabilities should be close to an entrance to development. Access from the parking area to the development should be by ramps or lifts where there are separate levels.

Minimum parking bay dimensions

3.3 The following minimum dimensions are generally required for each parking space.

Parking	L (m)	W (m)	Aisle width			
type			90°	60 ⁰	45 ⁰	30 ⁰
Open parking	5.4	2.5	6.2*	4.6	3.7	3

Note 1: Width of the end parking bays with obstruction on one side is 2.8 metres.

Note 2: All dimensions in this DCP are minimum dimensions, unless specified otherwise.

Note 3: All dimensions are in metres (m), unless specified otherwise.

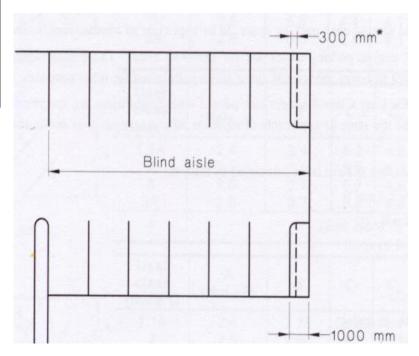
Note 4: *Council may consider a 6 metre absolute minimum aisle width depending upon the site constraint on a condition that 5.5 metre bay length should be maintained to produce a 17 metres wide parking module. However, Council considers 6.2 metres to be a desirable aisle width.

Parking bay dimensions for people with disabilities and residential garages

3.4 Parking bay dimensions for people with disabilities and residential garages are as follows:

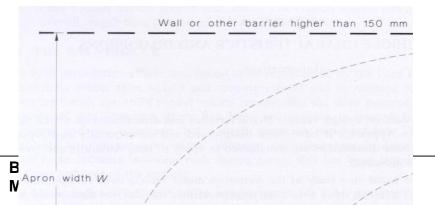
Parking type	L (m)	W (m)	Comments
Disabled (90°)	6.0	3.2	
Basement parking and single garage	5.5	3	Clear door opening of 2.4m between door jambs.
Double garage in residential development	5.5	5.4	Clear door opening of 4.8m between door jambs.

Diagram: Blind Aisle Extension



* Additional widening required if there is a wall or fence at the side of the last space. See clause 2.4 (b)(ii) of AS/NZS 2890.1:2004

Diagram: Apron widths for right angle access to single vehicle garages



Note: Vehicles larger than the B85 need to make a 3-point turn at the apron widths shown. The apron width may be reduced by 0.3m when the edge opposite the doorway is a kerb 150mm or less in height with clearance of at least 0.3 m behind the kerb

Doorway width (D)	Apron width (W) (See Note)
2.4	7.0
2.7	6.3
30.	5.6

Service restriction and small car bay dimensions

- **3.5** Service provisions such as air conditioning vents or lift shafts may reduce the length of parking bays. However, this provision must not cause adverse impact on the traffic.
- **3.6** Service restriction spaces (not less than 4.2 metres in length) should be considered where the number of parking spaces exceeds twenty five.
- **3.7** Service restriction spaces must be considered as spaces for small cars as specified in clause 3.10.
- 3.8 Development may include parking spaces for small cars measuring 4.2m x 1.7m. The minimum dimensions required for parking small car are 4.5m X 2.3m. The number of small car spaces shall be a maximum of 10% of the total car parking provision.

Service bay dimensions

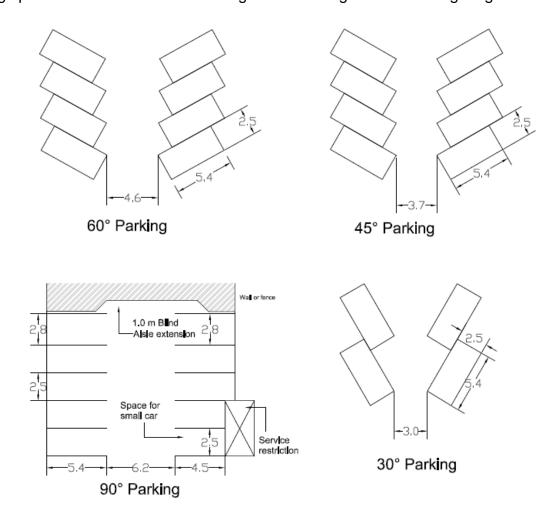
3.9 Service bay dimensions for different vehicles are to be as follows:

Vehicles	L (m)	W (m)	Comments
Small Truck	7.0	2.7	Refer to AS/ANZ
Large Truck	11.5	3.2	2890.1 for

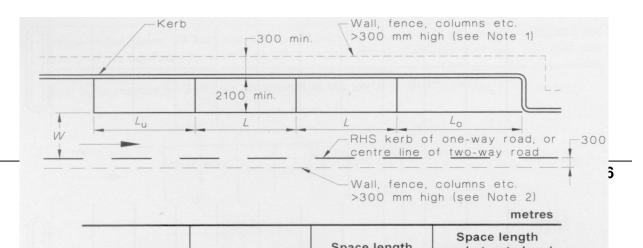
Articulated vehicle	19.0	3.5	manoeuvring
City transit bus	13.0	3.2	dimension.

3.10 Parking layouts

Parking spaces and areas are to be designed according to the following diagram.



Parallel Parking



Вапк	Stow	n City Council
3.11	with park mus	ncil prefers 90° parking which provides the most efficient use of space two—way vehicle movement. Where space is limited, 60°, 45° or 30° sing may be used instead. With these arrangements, appropriate signs to be used for drivers not to enter aisles the wrong way and reversing into sing spaces.
	acce	e: A parking aisle is a roadway or an area used by vehicles to gain ess to, and to manoeuvre into and out of parking spaces. Two–way aisles prohibited for parking angles other than 90°.
Stack	park	king
3.12	Cou	ncil may consider stack parking in the following situations:
	(a)	In industrial development where the users of the car parking will almost all be employees.
	(b)	Council may consider stacked parking, turn tables and lift stacks subject to further assessment in mixed use development and high density residential flat development.
	(c)	Horizontal stacked parking for a maximum of two vehicles is permissible in dwelling houses, attached dwellings, secondary dwellings and multi dwelling housing if the residents reside in the same dwelling.

Ban	kstow	n City Council
	(d)	Stacked parking is not permitted where a high proportion of the users of the car park are visitors or customers.
SEC	TION	4-OFF STREET PARKING ACCESS AND CIRCULATION
Acc	ess dr	iveway width and design
4.1		ocation of driveways to properties should allow the shortest, most direct so over the nature strip from the road.

- **4.2** The appropriate driveway width is dependent on the type of parking facility, whether entry and exit points are combined or separate, the frontage road type and the number of parking spaces served by the access facility.
- **4.3** Driveway widths for existing dwellings and extensions to the existing properties are assessed on their merits.
- **4.4** For new residential development, necessary clear driveway widths are provided in the following table:

Driveway width	Minimum Clear Width
One-way	3.0 m
Two-way	5.5m

Note: Refer to AS 2890.1 for access driveway width for other development.

4.5 Driveway widths will need to be increased adjacent to parking bays according to AS 2890.1 to provide adequate turning circles.

Queuing distance

4.6 Parking studies are necessary to determine minimum queuing length for developments fronting state roads.

Use	Queuing Distance
Residential and mixed use	Absolute minimum 6m;
	Desirable minimum 7.5m
Drive-in take away	8 spaces (each approx. 8 m long) in a marked lane for the exclusive use of drivers; plus 7 additional queue spaces at the end of the marked queue lane to be within the site.

Note: Refer to AS 2890.1 for queuing distance for other land uses.

4.7 The queuing area between the vehicular control point and the property boundary should be sufficient to allow a free influx of traffic which will not adversely affect traffic or pedestrian flow in the frontage road.

Circulation roadway and ramp gradients

4.8 Limiting requirements for grades on circulation roadways and ramps shall be as follows:

Maximum Gradient	Straight ramps longer than 20m	Straight ramps up to 20m
Public car parks	1 in 6 (16.7%)	1 in 5 (20%)

Private or residential car parks	1 in 5 (20%)	1 in 4(25%)
Domestic driveways	1 in 4 (25%)	

Note: Gradient of access driveway, grade change and grade transition is to be in accordance with AS 2890.1.

Gradient within parking module

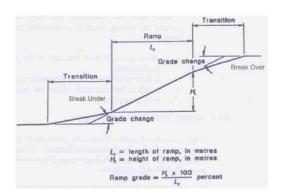
- **4.9** The maximum gradients within a parking module including a motorcycle parking area shall be as follows:
 - (a) Measured parallel to the angle of parking-1 in 20 (5%).
 - (b) Measured in any other direction–1 in 16(6.25%).
 - (c) Within parking spaces for people with disabilities-see AS/ANZ 2890.6.

Vehicular footway crossing

4.10 Design and construction of vehicular footway crossing is to be in accordance the Bankstown Development Engineering Standards.

Internal circulation

4.11 'Dead end' aisles longer than 15 metres should be avoided. Internal vehicular movements should be able to take place wholly within the site. Circulation patterns which involve the use of a public street are to be avoided.



SECTION 5-OTHER CONSIDERATIONS

Minimum headroom dimensions

5.1 Clear headroom dimension is necessary to make sure that vehicles are clear of mechanical or service obstructions such as fire sprinklers, lighting fixtures and

signs. Following minimum headroom dimension has to be maintained in all development.

Minimum headroom	Dimension
Car and light vans	2.4m
People with disabilities	2.3m
Small rigid vehicles	3.6m

Loading and unloading facilities

- **5.2** Mixed use development must provide appropriate loading/unloading or furniture pick—up spaces. If no provision is made for the facilities, development applications must provide justification why they are not necessary.
- **5.3** Where rear lane access is not available and the commercial/retail gross floor area of a building is greater than 500m², Council requires:
 - (a) at least one off-street parking space for delivery/service vehicles; and
 - (b) additional off-street parking spaces or a loading dock depending on the size, number, and frequency of delivery/service vehicles likely to visit the premises.
- **5.4** The design of loading docks must:
 - (a) be separate from parking circulation or exit lanes to ensure safe pedestrian movement and uninterrupted flow of other vehicles in the circulation roadways;
 - (b) allow vehicles to enter and leave an allotment in a safe manner; and
 - (c) have minimum dimensions of 4 metres by 7 metres per space.

Column location and spacing

5.5 Columns should not be located at the edge of a parking aisle as they increase the difficulty of manoeuvring into a parking space. It is also desirable to avoid locating a column directly opposite a car door. The dimensions for locating columns in a short span structure are illustrated in the adjoining diagram.

Note: Refer to Appendix 6 for the design envelope around parked vehicle to be clear of columns, walls and obstructions.

Safety and security

5.6 Car parking safety can be enhanced with good visibility, security, lighting and good pedestrian and car parking layouts.

5.7 Sloping ramps from car parks, garages and other communal areas are to have at least one full car length of level driveway before they intersect pavements and carriageways.

Sight distance requirement

5.8 For all development, adequate sight distance must be provided for vehicles exiting driveways. Clear sight lines are to be provided at the street boundary to ensure adequate visibility between vehicles on the driveway and pedestrians on the footway and vehicles on the roadway. Refer to Australian Standard 2890.1 for minimum sight distance requirements.

Pedestrian access

- **5.9** Parking areas should be designed so that through–traffic is excluded, and pedestrian entrances and exits are separate from vehicular entrances and exits.
- **5.10** Lifts and stair lobbies should be prominently marked to help users find them and to increase personal security.
- 5.11 In split–level/ multi–level car parks, a stairway should be located at the split–level, to provide pedestrian access between these levels and eliminate pedestrians having to use vehicular ramps.

Diagram: Column Location



A=parking space width (see figure 2.2 of AS/NZS 2890.1:2004

Parking	Minimum Dimension		
angle	Χ	Υ	
30	375	1825	
45	530	2581	
60	650	3161	
75	724	3526	
90	750	3650	

Sign posting and line marking

- **5.12** All car parking spaces should be clearly line marked consistently as illustrated in Australian Standard 2890.1.
- **5.13** Where customer or visitor parking is provided, signposting should be provided to indicate the location of these spaces.

- **5.14** Where a one–way circulation pattern is adopted, direction of flow should be indicated by signposting and arrow markings on the surface of aisles and driveways. Segregated entries and exits are to be signposted to that effect.
- **5.15** In large car parks, means of egress should be indicated by directional signs which need to be shown on application plans.
- **5.16** Parking for people with disabilities should be clearly marked with signs and stencilled disabled symbol on the surface. The space should be painted blue.

Car wash bay

- **5.17** Where residential development are required to provide a car wash bay as a condition of development consent, the following requirements apply:
 - the car wash bay pavement must be bunded and isolated from the stormwater drainage system so that car wash runoff does not discharge into the Sydney Water sewer system;
 - (b) the car wash bay must be covered or located in the basement and protected so that stormwater does not collect in the wash bay and discharge into the sewer system; and
 - (c) the car wash bay space may also be used as a visitor space.

Bicycle parking

5.18 Council may require development to provide appropriate bicycle parking facilities either on–site or close to the development as identified in Australian Standard 2890.3–Bicycle Parking Facilities.

SECTION 6-LANDSCAPING

Objectives

The objectives of landscaping in open—air parking are:

- (a) To have existing trees incorporated as far as possible in order to protect them and also to provide shade in parking areas.
- (b) To have car parks screened from public view by functioning as a buffer to reduce visual and noise pollution.
- (c) To have large areas soften the impact of paving and thereby providing relief from heat and glare.
- (d) To have Water Sensitive Urban Design Principles met in order to reduce stormwater runoff.
- (e) To have safety and security as part of planting.

Development controls

The development controls to achieve the objectives are:

Landscaping

6.1 Appendix 1 and 2 give an indication of landscaping expected.

Trees

- **6.2** Provision is to be made within the car park for planting of trees and shrubs to shade cars and soften the visual impact of the car park. All landscaping is to be adequately protected from potential damage caused by car movements.
- **6.3** Trees are to be planted at the ratio of 1 tree per 5 car park places allocated. Species shall be selected for their ability to thrive where compaction and deoxygenation are characteristic of the soils.
- **6.4** No changes in ground level, within variance of 300mm from existing ground level shall occur within 3 metres of the base of the trunk or within the drip line (whichever the greater) of existing trees determined to be retained, whether on the development site or adjacent property.

Perimeter planting

- 6.5 For proposed car parks of capacity 40 cars or more, raised landscape island beds of minimum dimensions 2 metres x 4 metres shall be provided to break up row of cars, spaced at every 10 car places for placement of a canopy tree.
- 6.6 Planting buffer shall incorporate three levels, being tree canopy, shrubs to 600mm high and ground cover understorey. However, if the parking is near noise sensitive areas such as dwellings, schools, child care centres, health consulting rooms or hospitals, height of planting buffer is to be 1.2 metres.
- **6.7** For industrial development, reference should also be made to the landscaping requirements of Part B3 of this DCP.

Plant selection

- **6.8** All planting schedules are required to be submitted for approval by Council. A list of tree species suitable for canopy planting is provided in Appendix 3 and 4.
- **6.9** Selection of planting must include consideration of safety and security. Preference is given to native plants indigenous to the City of Bankstown. However, introduced species may be acceptable to achieve a special effect.

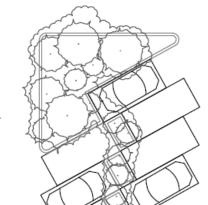
Plant protection

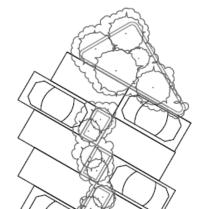
6.10 Concrete wheel stops are to be provided 450mm from the base of island planter beds or perimeter landscape beds to protect planting where car parking is angled at 90, 60 or 45 degrees.

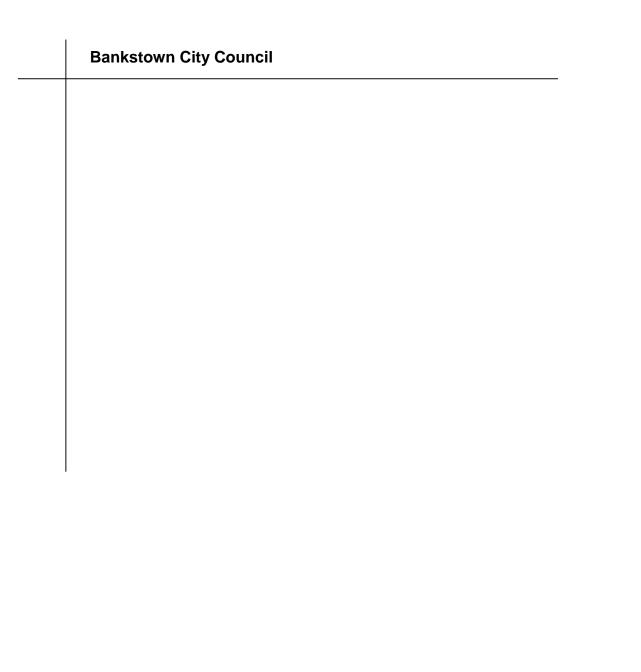
Material

6.11 Materials for car park surfaces should be considered at site planning stage. Pervious surfaces should be considered subject to hydraulic engineering requirements or constraints. Council encourages use of porous pavement (such as grass crete or ecoloc) and on–site sub surface drainage collection meeting WSUD principles.

Appendix 1–Parking with trees







Appendix 2-Details of plating bed





Bankstown City Council	
Appendix 3-List of non-native tree species suitable for canopy planting	

Non-Native Species	Common Name	Soil
Acer buergerianum	Trident Maple	Improved soil
Acer palmatum	Japanese Maple	conditions/
Acer saccharinum	Sugar Maple	composted
Acer negundo	Box Elder	garden soils
Acer sp various	Maples	
Arbutus unedo	Irish Strawberry Tree	
Calodendron capense	Cape Chestnut	

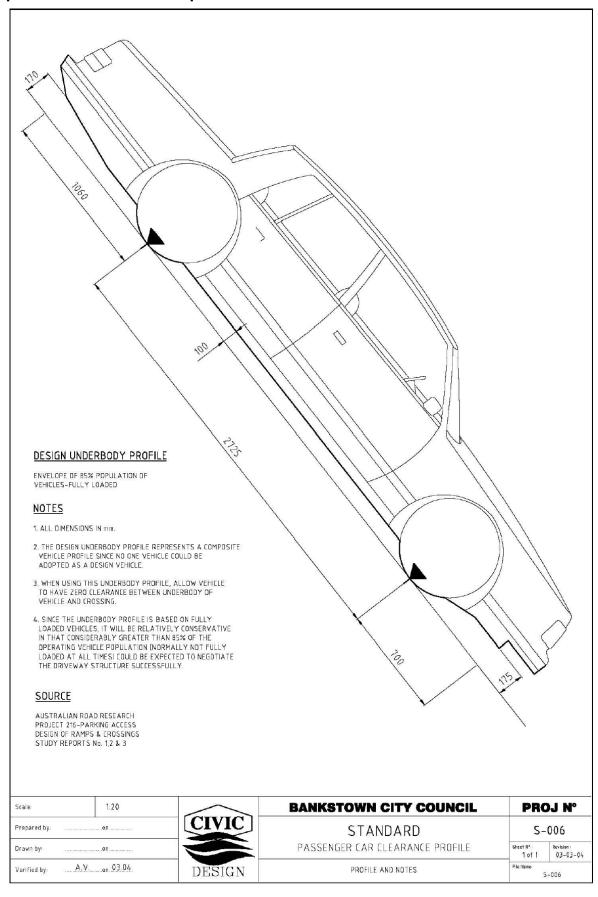
Appendix 4-List of native tree species suitable for canopy planting

Australian Native Species	Common Name	Preferred Soil
Acacia binervia	Myall Wattle	Sand /clay*
Acmena smithii	Lilli Pilli	
Angophora costata	Smooth Barked Apple	
Backhousia citriodora	Lemon Scented Myrtle	
Backhousia floribunda	Flowering Myrtle	
Brachychiton acerifolius	Illawarra Flame Tree	
Brachychiton populneum	Kurrajong	
Callistemon citrinus	Crimson Bottlebrush	
Callistemon pinifolius	Green Bottlebrush	
Callistemon viminalis	Weeping Bottlebrush	
Cupaniopsis anarchoides	Tuckeroo	
Elaeocarpus reticulatus	Blueberry Ash	Sand*
Eucalyptus eugenioides	Thin Leaf Stringybark	Clay*
Eucalyptus fibrosa	Broad Leaf Ironbark	Clay*
Eucalyptus gummifera	Red bloodwood	Sand*
Eucalyptus haemastoma	Scribbly Gum	Sand*
Eucalyptus longifolia	Woollybutt	Clay*
Eucalyptus maculata	Spotted Gum	
Eucalyptus moluccana	Grey Box	Clay*
Eucalyptus resinifera	Red Mahogany	Sand /clay*
Eucalyptus sideroxylon	Mugga Ironbark	Clay*
Flindersia australis	Australian Teak/ Crows Ash	
Glochidion ferdinandii	Cheese Tree	
Harpullia pendula	Tulipwood	
Leptospermum petersonii	Lemon Scented Tea Tree	Sand /clay*
Lophostemon conferta	Brushbox	
Melaleuca decora	White Feather Honey Myrtle	Clay*
Melaleuca linariifolia	Narrow Leaf Paperbark	Clay*
Pittosporum revolutum	Yellow/ Rough Fruit Pittosporum	
Pittosporum rhombifolium	Diamond Leaf Pittosporum	
Podocarpus elatus	Illawarra Plum	
Stenocarpus sinuatus	Queensland Firewheel Tree	
Syncarpia glomulifera	Turpentine	Sand /clay*
Syzygium luehmannii	Small Leaf Lilli Pilli	
Syzygium paniculatum	Brush Cherry	
Syzygium oleosum	Blue Lilli Pilli	
Tristaniopsis laurina	Water Gum	
Waterhousia floribunda	Weeping Lilli Pilli	

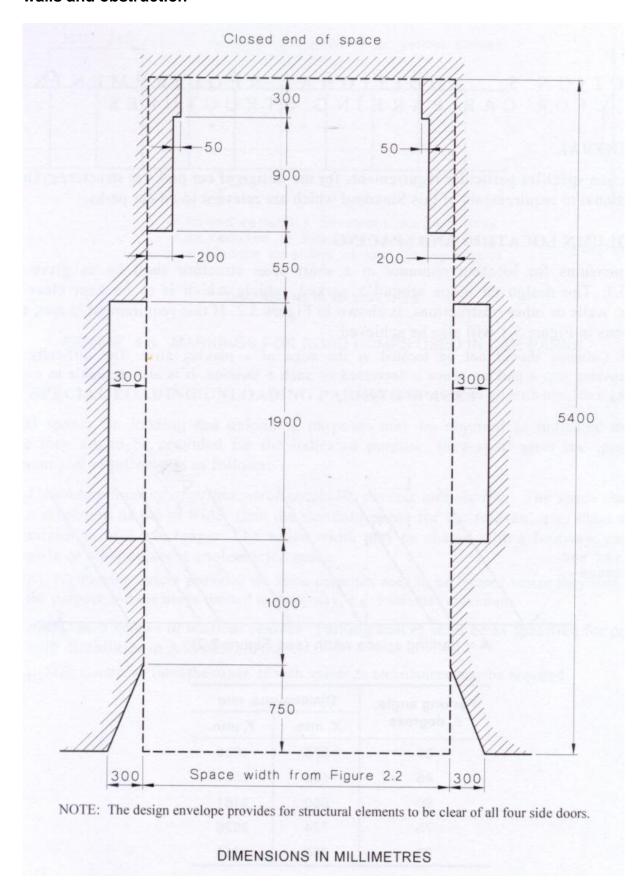
Note (1): * Asterix denotes plant species native to Bankstown area. Plants listed will benefit from improved garden soil conditions, irrigation and on-going maintenance.

Note (2): The above plant list is not exhaustive, additional species may be considered. Planting to be determined with concession to site conditions, aspect, exposure, drainage and surrounding vegetation, and available room for resulting canopy and root growth and spread.

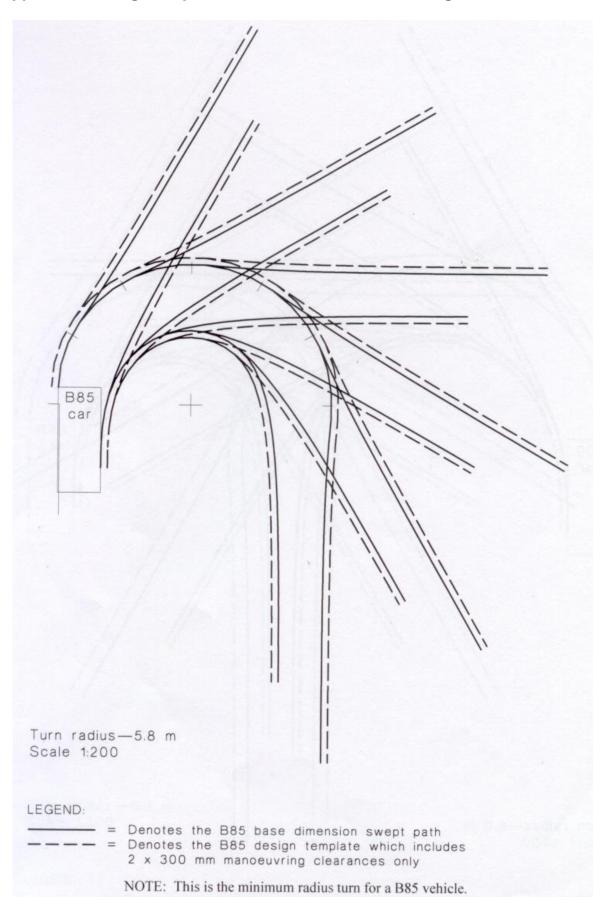
Appendix 5-Car clearance profile



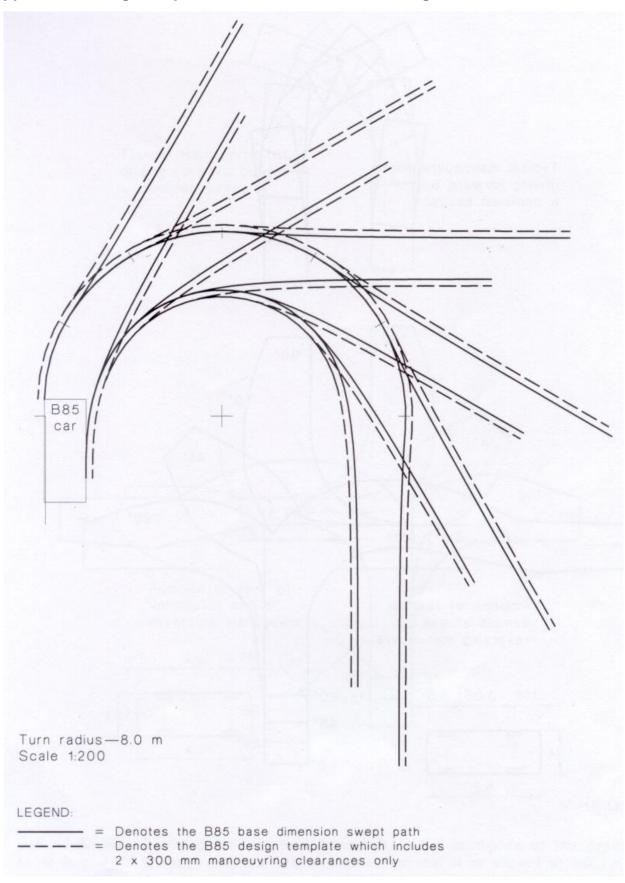
Appendix 6-Design envelope around parked vehicle to be clear of columns, walls and obstruction



Appendix 7-Design template for B 85 car with 5.8 m turning radius



Appendix 8-Design template for B 85 car with 8 m turning radius



Appendix 9-State and regional roads in the City of Bankstown

ROAD	FROM	ТО
Alfords Point Road	Davies Road	City Boundary
Boronia Road	Hume Highway	Waterloo Road
Brunker Road	Rookwood Road	Hume Highway
Canterbury Road	Milperra Road	Punchbowl Road
Davies Road	Fairford Road	Alfords Point Road
Fairford Road	Stacey Street	Davies Road
Henry Lawson Drive	Hume Highway	City Boundary
Hume Highway	City Boundary	City Boundary
Juno Parade	Waterloo Road	Punchbowl Road
Milperra Road	Newbridge Road	Canterbury Road
Newbridge Road	City Boundary	Milperra Road
Punchbowl Road	Canterbury Road	City Boundary
Roberts Road	Hume Highway	Wiley Avenue
Rookwood Road	Hume Highway	City Boundary
Stacey Street	Rookwood Road	Fairford Road
Stacey Street	Fairford Road	Canterbury Road
The River Road	Canterbury Road	M5 Motorway
M5 Motorway	City Boundary	City Boundary
Wiley Avenue	Roberts Road	Koala Road
Wiley Avenue	Roberts Road	Punchbowl Road
Woodville Road	Hume Highway	City Boundary
Alma Road	Davies Road	Faraday Road
Ashford Avenue	Bullecourt Avenue	Milperra Road
Auburn Road	Water Pipeline	Hume Highway
Beaconsfield Street	The River Road	Horsley Road
Birdwood Road	Owen Road	Georges Crescent
Brandon Avenue	Chapel Road	Greenwood Ave
Brunker Road	Rookwood Road	Allder Street
Bullecourt Avenue	Horsley Road	Ashford Avenue
Bullecourt Avenue	Horsley Road	Henry Lawson Drive
Carlingford Road	Water Pipeline	Waldron Road
Chapel Road	Canterbury Road	Brandon Avenue
Chapel Road	Rickard Road	Hume Highway
Christina Road	Waldron Road	River Avenue
Edgar Street	Milperra Road	Hume Highway
Faraday Road	Alma Road	Uranus Road
Ferrier Road	Railway Bridge	Auburn Road
Gibson Avenue	Watson Road	Canterbury Road
Greenwood Ave	Brandon Avenue	Marion Street
Haig Avenue	Georges Crescent	Henry Lawson Drive
Hector Street	Hume Highway	Water Pipeline
Horsley Road	Beaconsfield Street	Bullecourt Avenue
Koala Road	Wattle Street	Wiley Avenue
Macauley Avenue	Stacey Street	Chapel Road

ROAD	FROM	ТО
Marion Street	Greenwood Avenue	Meredith Street
Marion Street	Owen Road	MacLaurin Avenue
Meredith Street	Marion Street	Rickard Road
Miller Road	Hume Highway	Waldron Road
Owen Road	Marion Street	Birdwood Road
Park Road	Braesmere Road	Maclaurin Avenue
Queen Street	Beaconsfield Street	Milperra Road
Rickard Road	Stacey Street	Chapel Road
Rickard Road	Meredith Street	Chapel Road
Roberts Road	Wiley Avenue	Wattle Street
Sphinx Avenue	Gibson Avenue	The River Road
The River Road	Henry Lawson Drive	M5 Motorway
Tower Street	The River Road	Braesmere Road
Uranus Road	Faraday Road	The River Road
Waldron Road	Carlingford Road	Christina Road
Waterloo Road	Wattle Street	Hume Highway
Watson Road	Fairford Road	Gibson Avenue
Wattle Street	Koala Road	Stacey Street
Wellington Road	Auburn Road	Woods Road
Woods Road	Wellington Road	Carlingford Road