



CARPARK, RAMP AND DRIVEWAY CERTIFICATION OF PROPOSED RESIDENTIAL DEVELOPMENT

15-17 Dent Street in Jamisontown

Prepared for: Bishi Constructions

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1. INTRODUCTION

ML Traffic Engineers was commissioned by Bishi Constructions to prepare a car parking certification report of the proposed residential development at 15-17 Dent Street in Jamisontown.

The car park is on two basement levels with vehicle access and egress via Dent Street.

Reference is made to AS2890.1, AS2890.6 and Council's Development Control Plan for compliance.

2. DRIVEWAY AND RAMPS

The details of the ramp from the ground level to basement level 1 are as follows:

- The driveway/ramp is 3.6 metres wide between walls
- The minimum clearance above the ramp is 2.5 metres
- The gradients are as follows along the centreline from the inbound perspective for descriptive purposes:
 - Less than five percent for 8 metres
 - 12.5 percent for 2 metres
 - 25 percent for 10.9 metres
 - 12.5 percent for 2 metres

Convex safety mirror is provided at the bottom of this ramp

The details of the ramps within basement level 1 are as follows:

- The gradients are as follows along the centreline from the inbound perspective for descriptive purposes
 - 5 percent for 9.7 metres
 - 12.5 percent for 4.5 metres

The details of the ramp from basement level 1 to basement level 2 are as follows:

- The ramp is 6 metres wide between walls
- The gradients are as follows along the centreline from the inbound perspective for descriptive purposes:
 - 12.5 percent for 2 metres
 - 25 percent for 5.3 metres
 - 12.5 percent for 2 metres

Convex safety mirror is provided at the bottom of this ramp

The details of the ramps within basement level 2 are as follows:

- The gradients are as follows along the centreline from the inbound perspective for descriptive purposes
 - 5 percent for 9.7 metres

3. CAR SPACES

The details of the car parking areas are as follows:

Basement Level 1

- The parking aisle is 5.8 metres wide minimum
- The general 90-degree car spaces are 2.4 or 2.5 metres wide and 5.4 metres long
 - An additional 200 - 300mm clearance has been provided for car spaces adjacent to walls
- The disabled car space is 2.4 metres wide and 5.4 metres long
 - A shared zone of the same dimensions has been provided
 - A bollard setback of 850mm (+ or – 50 mm) has been provided
- The car wash bay is 2.8 metres wide and 5.4 metres long
- A section of the parking aisle has a 5 percent gradient
- One of the car spaces has a gradient of 5 percent (car space 7)
- Column setbacks are compliant

Basement Level 2

- The parking aisle is 5.8 metres wide minimum
- A section of the parking aisle has a 5 percent gradient
- The general 90-degree car spaces are 2.4 or 2.5 metres wide and 5.4 metres long at minimum
 - An additional 200 - 300mm clearance has been provided for car spaces adjacent to walls
- The disabled car spaces are 2.4 metres wide and 5.4 metres long
 - A shared zone of the same dimensions has been provided
 - A bollard setback of 850mm (+ or – 50 mm) has been provided
- One of the car spaces has a gradient of 5 percent (car space 19)
- Column setbacks are compliant
- 4 bicycle spaces have been provided

4. SWEPT PATHS

The following swept paths have been performed using VAN, B85 & B99 vehicles to determine whether the turning movements show adequate manoeuvrability:

- B85 forward inbound and reverse outbound parking movements for car space 6
- B85 forward inbound and reverse outbound parking movements for car space 19

- B99 ramp and basement movement passing a standby B85
- VAN reverse inbound and forward outbound for service bay

All movements show adequate manoeuvrability.

Swept paths are presented in Appendix A.

5. SIGHT DISTANCE

The car driver's sight distance requirement to enter the external road is stated in Figure 3.2 of AS2890.1.

The sight distance varies according to the speed of the external road. Dent Street has a speed limit of 50km/hr.

The minimum sight distance required is 45 metres. Site measurements showed that the minimum sight distance is met without permanent obstructions.

The pedestrian sight triangle (as set out in Figure 3.3) is met as well.

6. CONCLUSIONS AND RECOMMENDATIONS

The car parking area and driveway is compliant with Australian Standards and Council's DCP.

APPENDIX A – SWEPT PATHS