Carpark and driveway Certification of a proposed residential development

32–34 Kent Street, Belmore

Prepared for: Multiform Design and Constructions Pty Ltd

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# Introduction

Motion Traffic Engineers was commissioned by Multiform Design and Constructions Pty Ltd to prepare a car park certification of a proposed residential (co-living) development at 32–34 Kent Street, Belmore.

Car parking is provided on one basement level with vehicle access and egress via a driveway/ramp from Kent Street. Seven car spaces are provided as well as bicycle and motorcycle spaces.

Reference is made to AS2890.1 (2004), AS2890.6 (2009) and Council’s Development Control Plan for compliance.

# Driveway/Ramp

The details of the proposed driveway/ramp from Kent Street into the basement level parking area from the perspective of the inbound movement for description purposes are as follows:

* The driveway is 3.2 metres wide between the kerbs at the property line
* 300mm wide kerbs are provided on both sides of the ramp
* Gradients along the centreline of the driveway/ramp are as follows:
  + 5 percent for 6 metres
  + 12.5 percent for 2 metres
  + 21 percent for 10.29 metres
  + 12.5 percent for 2 metres

# Car SpaCES

The details of the car parking area are as follows:

* The parking aisle is 7.1 metres
* The general 90-degree car spaces are 2.4 metres wide minimum with a length of 5.4 metres
* Car spaces adjacent to a wall have an additional 300mm clearance from the wall
* The disabled parking space is 2.4 metres wide and 5.4 metres long
* A shared zone with dimensions of 2.4 metres wide and 5.4 metres long is provided adjacent to the disabled parking space
* A bollard is provided in the shared zone with 750mm setback
* Two motorcycle space provided has dimensions of 1.3 metres wide and 2.6 metres long and 1.8 metres wide and 2.5 metres long.
* Column setback and length complies
* Bicycle racks are provided.
* Blind aisle extension is provided overall.

# Swept Paths

A swept turning path analysis is performed using a B85 car to confirm that vehicle movements are adequate.

The following Swept Paths have been performed:

* B85 car forward inbound and reverse outbound for space 1
* B85 car reverse inbound and forward outbound for space 7

The swept paths are provided in the Appendix A of this report and show adequate maneouvrability.

# sight distance

The car driver’s vehicle 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. Kent Street has a default speed limit of 50km/hr.

The minimum vehicle sight distance required is 45 metres. Site measurements showed that the minimum sight distance looking left and right is met

The pedestrian sight distance requirements as set out in Figure 3.3 of AS2890.1 is not met.

# Conclusions and recommendations

~~The car parking area and driveway is not compliant with Australian Standards and Council’s DCP.~~

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**APPENDIX A**

***Swept Paths***