

# **CARPARK CERTIFICATION OF A PROPOSED BOARDING HOUSE DEVELOPMENT**

***76 Hobart Street, St. Marys***

Prepared for: GPG CONSTRUCTIONS PTY LTD

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## 1. INTRODUCTION

Motion Traffic Engineers was commissioned by GPG CONSTRUCTIONS PTY LTD to prepare a car parking certification report of a proposed boarding house development at 76 Hobart Street in St. Marys.

The site has frontage to Hobart Street.

Vehicle access and egress to the car parking areas are via Hobart Street. Car parking is provided on the ground level.

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

## 2. DRIVEWAYS

The details of the driveway from Hobart Street into the ground level parking area are as follows from the perspective of the inbound movement for descriptive purposes only:

- The driveway is 5.7 metres wide
- The gradient is less than 5 percent

## 3. CAR SPACES

The details of the car parking areas are as follows:

- The car parking aisle is 5.8 metres
- The 90-degree car spaces are 2.4 metres wide and 5.4 metres long
  - Car spaces adjacent to walls have a minimum 300mm clearance
  - Columns with appropriate setbacks are provided
- The 90-degree disabled car spaces are 2.4 metres wide and 5.4 metres long
  - A shared zone of same dimension has been provided.
  - A bollard with appropriate setback has been provided in the shared zone
- The internal dimension of motorcycle parking are 1.2 metres wide and 25. metres long
- Blind aisle extension of 700mm is provided.
  - Should be 1m
- Bicycle parking spaces are provided
- Two motorcycle spaces are provided. Motorcycle space arrangement is shown as a tandem space in the plan which interferes with compliance. Access to the motorcycle space adjacent to the wall should not be obstructed by the other space.

#### **4. SWEEP PATHS**

A swept turning path analysis is performed using 4.9 metres long B85 car as stated in Australian Standards to confirm that vehicle movements are adequate.

The following Swept Paths have been performed:

- B85 car forward inbound and reverse outbound for two car spaces

The turning movement is limited for car spaces attached to southbound wall. The blind aisle extension should be 1 metre.

The three-point turn is required for outward movement for car spaces.

The swept paths are provided in the Appendix A of this report.

#### **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. Hobart Street has default speed limit of 50km/hr.

The minimum sight distance required is 45 metres. The minimum vehicle sight distance is met.

The pedestrian sight distance triangle as set out in Figure 3.3 of AS2890.1. is met as well.

#### **6. CONCLUSIONS AND RECOMMENDATIONS**

The car parking area and driveway is **NOT** compliant with Australian Standards and Council's DCP.

The blind aisle extension should be 1 metre for adequate manoeuvrability for car spaces attached to the wall at the southern boundary.

Motorcycle space arrangement is shown as a tandem space in the plan which interferes with compliance. Access to the motorcycle space adjacent to the western wall in the parking should not be obstructed by the other space.

# APPENDIX A – SWEEP PATHS