

# Grant Robinson PROPERTY SERVICES

## Parking Assessment

75 Castlereagh Street  
Penrith

Demolition of existing residence and the Construction of a 12 Bedroom New Generation Boarding house.

By Grant Robinson  
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## Introduction

The Development Application seeks consent for the demolition of an existing dwelling and the construction of a two storey New Generation Boarding House. The development is proposed to comprise 12 one bedroom studio style rooms.

## Site Access and Internal Circulation

### Access Arrangements

#### Access Design

Vehicular access between the onsite parking area and Stafford Street is proposed to be provided via a 5.8m wide combined ingress/egress driveway located within the South-Western boundary of the site, being off-set from Castlereagh Street pavement by some 22m. The above driveway arrangement is proposed to provide direct connectivity to an internal driveway servicing the internal passenger vehicle manoeuvring and parking area.

AS2890.1:2004 provides driveway design specifications based on the proposed primary land use, functional order of the access road and the number of spaces the driveway is to serve. Table 3.1 and 3.2 of AS2890.1:2004 specify that, at minimum, a category 1 type driveway is required, providing a combined ingress/egress driveway width of between 3m and 5.5m based on the local (non-arterial) functional order of Stafford Road, the residential land use and the passenger vehicle parking provision of six spaces. The proposed combined ingress/egress driveway width of 5.8m therefore exceeds the minimum AS2890.1-2004 specifications.

*In consideration of this and the above assessment, the proposed design is considered to be satisfactory.*

#### Vehicular Crossing Grades.

The vehicular crossing has been designed in accordance with Penrith City Councils Typical Vehicle Crossover drawing number SD1004 found here -

[https://www.penrithcity.nsw.gov.au/images/documents/services/other-services/Vehicle\\_Crossover\\_Specifications\\_Guidelines.pdf](https://www.penrithcity.nsw.gov.au/images/documents/services/other-services/Vehicle_Crossover_Specifications_Guidelines.pdf)

A section view of the driveway is provided in the Development Application Plans. SD1004 specifies that the maximum gradient of the driveway be below 12.5%. It is noted that the designed driveway has a maximum gradient of less than 12.5%.

*In consideration of this and the above assessment, the proposed design is considered to be satisfactory.*

#### Sight Lines

The safety and efficiency of access/egress movements are also proposed to be assisted by the provision of a relatively level (maximum 12.5%) grade. It is further noted that sight lines between exiting vehicles and Stafford Street are not impeded by any obstructions along the site frontage in accordance with the requirements of Figure 3.3 of AS2890.1:2004.

*In consideration of this and the above assessment, the proposed design is considered to be satisfactory.*

## Parking Provisions

The development is proposed to be serviced by 6 parking space.

#### Number of car parking spaces required.

The number of parking spaces required is set out in the State Environmental Planning Policy (SEPP). In June 2018 an amendment to the policy was passed increasing the number of parking space required for boarding houses. The proposed development complies with these increases.

The SEPP requires that at least 0.5 parking spaces are provided for each boarding room.  
12 Rooms x 0.5 = 6 Parking space.

In consideration of this and the above assessment, the proposed design is considered to be satisfactory.

#### **Number of accessible parking space required.**

The Building Code of Australia (BCA) in table D3.5 sets out the required number of parking spaces required for people with a disability. For a class 3 boarding house the required number of accessible car parking spaces is to be calculated by multiplying the total number of car parking space by the percentage of-

(i) accessible sole-occupancy units to the total number of sole-occupancy units or

(ii) Accessible bedrooms to the total number of bedrooms; and

the calculated number is to be taken to the next whole figure.

The percentage of accessible rooms is  $2/12 = 16.6\%$

The total number of spaces is  $6 \times 16.6\% = 1.0$  accessible parking spaces.

A total of 1 accessible parking spaces has been provided.

In consideration of this and the above assessment, the proposed design is considered to be satisfactory.

### **Internal Circulation and Manoeuvrability**

The access driveway is proposed to provide connectivity to an internal driveway. This driveway is proposed to provide direct connectivity to a total of 6 car parking spaces provided in a 90 degree arrangement.

The internal manoeuvring and parking areas have been designed to accord with the requirements of AS2890.1:2004, providing the following minimum characteristics:

Table 1.1 - User Class 1A and User Class 4

Figure 2.2

5.8m - Minimum aisle width

2.4m - Minimum parking space width\*

5.4m - Minimum parking space length

In consideration of this and the above assessment, the proposed design is considered to be satisfactory.

#### **Side Boundary**

2.4.1 (b) (ii) *adjacent obstruction* If the side boundary of a space is a wall or fence, or if there are obstructions such as a column placed so as to restrict door opening, 300mm shall be added to the width of the space.

It is noted that the walls adjacent to all parking spaces have an allowance of 300mm adjacent to them.

In consideration of this and the above assessment, the proposed design is considered to be satisfactory.

#### **Blind Aisle**

2.4.2 (c) the aisle shall be extended a minimum of 1m beyond the last parking space, as shown in figure 2.3 of AS2890, and the last parking space widened by at least 300mm if it is bounded by a wall or a fence.

It is noted that the parking configuration allows for the 1m beyond the last parking space.

In consideration of this and the above assessment, the proposed design is considered to be satisfactory.

#### **Gradients**

2.4.6 *Gradients within parking modules*

2.4.6.1 *Maximum Grades*

*Measured parallel to the angle of parking 1 in 20 (5%)*

*Measured in any other direction - 1 in 16 (6.25%)*



*Gradient for accessible parking space to be in accordance with AS2890.6 which specifies a maximum of 1 in 40 (2.5%)*

#### 2.4.6.2 Minimum gradients

*So that parking floors will drain adequately, the minimum gradient shall be 1 in 100 (1%) for outdoor areas and 1 in 200 (0.5%) for covered areas.*

It is noted that RL levels given on the Carparking and Hardscaping plan provide evidence that the gradients of the proposed car parking areas fall within the tolerances allowed.

For easy reference the follow calculations of maximum rise/fall over certain distances is provided

5.4m x 5% = 270mm      5.4m x 2.5% = 135mm

2.4m x 5% = 120mm      2.4m x 2.5% = 60mm

In consideration of this and the above assessment, the proposed design is considered to be satisfactory.

#### **Accessible Parking space.**

AS2890.6:2009 gives the minimum requirement for the accessible parking space.

Figure 2.1 give minimum dimensions for the space as 5.4m x 2.4m with two adjacent shared unloading areas.

There is also a requirement for a bollard to be placed to prevent the shared unloading area from being used as a parking spot. Access to this spot is prevented by the wall protecting the motorbike parking from the bins.

Gradient of the accessible parking space should not exceed 1 in 40 (2.5%). The car parking plan shows the finished levels of the concrete and the gradient in this area does not exceed 1 in 40. To confirm this simple calculations can be carried out using the following rise/fall calculations

2.4m x 2.5% = 60mm

5.4m x 2.5% = 135mm

In consideration of this and the above assessment, the proposed design is considered to be satisfactory.

#### **Accessible Parking Space Headroom**

AS2890.6:2009 2.4 Headroom requires the path of vehicular travel from the car park entrance to all parking space for people with disabilities and from those space to the car park exit shall have a minimum headroom of 2.2m

The maximum height of the car parking floor is FL29.675 The underside of the slab above is FL32.200. This results in a floor to ceiling height of 2.525

In addition 2.4 requires the space above the accessible parking space to meet the requirements in Figure 2.7 Headroom required above car spaces for people with disabilities shows the minimum ceiling height of 2.5m.

The highest finished level of the accessible car parking space is FL29.495. The underside of the slab above is RL32.200 which gives the following calculation.

32.200 - 29.495 = 2.705.

In consideration of this and the above assessment, the proposed design is considered to be satisfactory.

## **Motorbike Parking**

The SEPP requires that at least 0.2 motorbike parking spaces are provided for each boarding room.

12 Rooms x 0.2 = 2.4 Parking space rounded up to 3 parking space.

Three motorbike parking spaces have been provided. They are sized in accordance with AS2890.1:2004 clause 2.4.7. that size being 2.5m x 1.2m. These parking spaces are protected from being hit from manoeuvring cars with steel bollards.

In consideration of this and the above assessment, the proposed design is considered to be satisfactory.

## Bicycle Parking

The SEPP requires that at least 0.2 bicycle parking spaces are provided for each boarding room.  
 $12 \text{ Rooms} \times 0.2 = 2.4$  Parking space rounded up to 3 parking space.

Three Bicycle parking spaces have been provided. They are sized in accordance with AS2890.3:2015 Figure 1.1 which give a size of 1.8m x 0.6m. These parking spaces are protected from being hit from manoeuvring cars with steel bollards.

In consideration of this and the above assessment, the proposed design is considered to be satisfactory.

## Site Servicing

The proposed development will require regular waste bin collection. Bin collection points are nominated on the Carparking and Hardscaping plan. Contractors shall bring the bins to Stafford Street for collection in a similar manner to other properties in the subject vicinity.

In consideration of this and the above assessment, the proposed design is considered to be satisfactory.

## Conclusion

This report assesses the potential parking implications associated with a residential development of a 12 Room Boarding House at 75 Castlereagh Street, Penrith.

Based on this assessment, the following conclusions are now made:

- The proposed off-street parking provisions complies with the affordable housing SEPP;
- The internal vehicle circulation arrangements are capable of providing for safe and efficient internal manoeuvring;

**Having regard to the above conclusions, there are no parking related issues that should prevent approval of the subject application. This action is therefore recommended to Council.**

## Reference Documents

- State Environmental Planning Policy (Affordable Rental Housing) 2009
- State Environmental Planning Policy (Affordable Rental Housing) Amendment (Parking for Boarding Houses) 2018
- Australian Standard for Parking Facilities Part 1 Off-Street Car Parking (AS2890.1:2004)
- Australian Standard for Parking Facilities Part 3 Bicycle Parking facilities (AS2890.3:2015)
- Australian Standard for Parking Facilities Part 6 Off-Street Parking for people with disabilities (AS2890.6:2009)
- The Building Code of Australia - Volume One (BCA:2016)
- Penrith City Council's Development Control Plan (DCP 2014)
- Penrith City Council driveway standards and specifications. (Feb 2019)