

## 6 March 2015

Our Ref: 13SYT0038

Your Ref:

Attention: Merv Ismay

Holroyd City Council 16 Memorial Avenue, Merrylands, NSW 2160

Dear Merv Ismay,

## RE: 148-150 Great Western Highway, Westmead - Council Response

This letter is prepared for St George Community Housing (SGCH) in response to a letter from Merv Ismay (Holroyd City Council) dated 30<sup>th</sup> January 2015, outlining Councils concerns relating to the traffic assessment for the proposed residential development at 148-150 Great Western Highway, Westmead. Council's reference for the proposed development is 2014/427.

The specific traffic engineering items that TTM is responding to are as follows:

i. "Road widening along the site frontage shall be provided in accordance with Part N, Section 1.6 of the Holroyd DCP 2013."

#### **TTM Response**

To comply with Councils DCP (Part N: Section 1.6), 5.5m (minimum) of road widening reserved for pedestrian facilities is required from the kerb to the property boundary. Part of the land will be handed over to Council to accommodate this 5.5m requirement of road widening.

ii. "A 4.0 m x 4.0 m splay corner shall be provided on the road reserves at intersections in accordance with Council's DCP 2013 Part A Section 2.4."

## **TTM Response**

A 4.0m x 4.0m splay corner has been provided in the road reserve at the intersection of Broxbourne Street and Great Western Highway, which complies with Councils DCP 2013 Part A Section 2.4.



iii. "Adequate loading facilities shall be provided on-site to service the proposed retail stores, and if required garbage collection."

## **TTM Response**

The delivery vans will use the non-residential parking spaces when available. Generally, the deliveries are infrequent and will only be used for a short period of time when in use. Therefore, it is considered acceptable for the proposed development.

Garbage collection will take place from the kerb side on Broxbourne Street and Great Western Highway, the same way that the collection occurs for the adjacent properties.

iv. "Swept path analysis shall be provided for the largest vehicles entering/exiting the site and the loading space."

## **TTM Response**

TTM has undertaken swept path analysis using a B99 vehicle to demonstrate the vehicles manoeuvring within the carpark.

v. "The commercial, visitors and residential parking spaces shall be separated and marked on the plan".

## **TTM Response**

The parking spaces have been separated for both residential and non-residential (NR), with the NR parking spaces located in the east end of the basement and the residential parking spaces located in the north, south and west ends of the basement. Parking spaces have been identified and labelled as shown in the plans.

vi. "Waiting bays shall be provided and line marked within the basement."

## **TTM Response**

It is assumed that the reason for this request is to provide a marked area for cars to wait while giving way to other cars at the bottom of the ramp due to the overlap in swept paths at this location. However, due to cars approaching from different directions from the three parking aisles, there is no common area that these cars would wait. For example, cars approaching the ramp from the east would wait further back before approaching the ramp to see which direction incoming cars are turning. Cars will need to give way to each other; it is just as likely that an exiting car will reach the ramp before an incoming car, so the incoming car will need to wait on the ramp to give way to the exiting car. In this case, the visibility on the ramp is adequate for the incoming driver to realise that they need to give way. Due to the low volume of traffic, the need to give way is unlikely in any case.



vii. "The driveway/vehicular crossing shall be perpendicular to the road, setback 1.5m from the side property boundary to the driveway in accordance with Council's DCP Part A Section 3.5 and 1.6m from any neighbouring driveway/vehicular crossing."

## **TTM Response**

The plans have been modified to accommodate the setback of 1.5m from the side property boundary to the driveway in accordance with Councils DCP, and 1.6m from the neighbouring driveway/vehicular crossing has been included in the design.

viii. "A maximum of 5% (1:20) shall be provided for the first 6.0 m from the property boundary and into the site in accordance with AS 2890.1 - 2004."

# **TTM Response**

The proposed access driveway to the carpark has been altered to comply with the maximum gradient of 5% for the first 6.0m from the property boundary and into the site in accordance with AS2890.1.

ix. "A long section of the proposed ramps (i.e. both straight and curved) at scale 1:50 or 1:25 shall be provided with dimensions (i.e. levels, length of the slope, height clearance) ensuring that the grades are in accordance with AS 2890.1-2004. In addition, the long section shall be checked for scraping and to be demonstrated on the plan."

## **TTM Response**

TTM have checked and reviewed the proposed ramp, with all gradients complying with AS2890. A long section plan was undertaken to demonstrate and check for scraping and height clearance for vehicles entering and exiting the site as shown on TTM drawing 13SYT0038-SK01.

x. "The height clearance within disabled spaces shall be shown on the plan and to be in accordance with AS 2890.6-2009. In addition, the over bonnet storage shall be shown on the plan."

## **TTM Response**

As noted in AS2890.6-2009, the headroom required above car spaces for people with disabilities is 2.5m. This has been provided within the carpark and shown on the plans.

The over bonnet storage has been identified on the plans and complies with the headroom required above car spaces for people with disabilities.

xi. "Clear sight distance shall be provided at the property line to ensure adequate visibility for vehicles entering the road as shown in Figure 3.2 of AS 2890.1-2004 and to pedestrians at the frontage road as shown in Figure 3.3 of AS 2890.1-2004."

## **TTM Response**

Clear sight distance/sight triangles in accordance with AS2890.1 have been provided at the property boundary of the site access to provide clear visibility of pedestrians and vehicles.



xii. "The sight distance between vehicles waiting on the passing bays/areas (i.e. top of the ramp and bottom of the ramp) and around bends shall not be restricted. Details of measures (such as mirrors, line marking, etc.) to maintain sight distance shall be shown on the plans and demonstrated to be effective."

## **TTM Response**

A convex visibility mirror will be installed at the bottom of the ramp to provide visibility up the ramp for vehicles in the western parking aisle. All other approaches within the carpark have sufficient sight distances where they can see oncoming vehicles entering the carpark.

xiii. "The design of the bicycle parking facility shall be in accordance with AS 2890.3.1993. In this regard, access to the bicycle parking spaces shall be provided and on the plan shall demonstrate that vehicles and obstructions will not encroach into the bicycle spaces."

# **TTM Response**

The bicycle parking facility has been provided within the carpark, with 43 bike racks available to facilitate the proposed development. Bicycle facilities are located close to the main pedestrian access via the proposed lift, to avoid conflict with vehicles.

xiv. "A minimum of 300 mm kerbs from walls shall be provided on the ramp as per Figure 2.8 of AS 2890.1-2004."

#### **TTM Response**

The 300mm clearance noted in AS2890 from kerb to walls has been documented on the plans.

xv. "Physical controls (e.g. wheel stops, kerbs, bollards, landing, etc.) shall be provided to protect pedestrian access facilities (e.g. lifts, stairways), path ways (e.g. pedestrian footpath) and any parking spaces from potential vehicles encroachments in accordance with AS 2890.1-2004".

# **TTM Response**

Physical control devices have been implemented within the carpark where necessary. Bollards have been located on shared spaces adjacent to the PWD (Persons with Disability) bays, with wheel stops provided near pedestrian / cyclist access.



xvi. "The door opening into the parking aisle from the main switch room shall swing into the main switch room"

## **TTM Response**

The door opening into the parking aisle has been amended so that the door will swing in the pedestrian area, to avoid conflict with vehicles.

xvii. "Details of any control device for the roller door shall be shown on the plans. The control device shall not reduce the width of the access driveway below the minimum in accordance with AS 2890.1-2004, not impact on the flow of traffic and road safety. In addition, the control point should be located at the top of the ramp to ensure vehicles will not be required to reverse up the ramp if they cannot open the gate".

# **TTM Response**

A control device (intercom, security lock system) to allow access into the site has been located at the top of the ramp, as shown on the plans. A 7m driveway width has been altered to accommodate the control device without reducing the 3m lane in both directions.

TTM have also undertaken a swept path analysis to demonstrate the space available for vehicles to pass each other at the site access.

xviii. "One (1) car wash bay shall be provided and to be a common, independent area and not serve as a visitor parking space in accordance to Holroyd DCP 2013."

## **TTM Response**

One (1) car wash bay has been provided on site shared with the community facility. Generally, the car wash bay is not regularly used and most of the time will be used after hours. Therefore, this would be considered suitable for the proposed development.

We trust that the above responses adequately address the issues that have been raised. Should there be any further questions please do not hesitate to contact Tom Wheatley.

Yours faithfully,

Tom Wheatley Principal Consultant

**TTM Consulting Pty Ltd**