

Reference: #13S1213000

18 April 2016

JBA Urban
Level 7 / 77 Berry Street
NORTH SYDNEY NSW 2059

Attention: Mr. Michael Rowe

Dear Michael,

**RE: 1 CARRINGTON STREET, SYDNEY
CARPARK ASSESSMENT FOR CC DOCUMENTATION**

I refer to the email correspondence dated 21 March 2016 from Matthew Rosel from NSW Department of Planning and Environment. The email correspondence responds to JBA's request for a change in the wordings relating to Consent Condition No 44 which states:

"The layout of the proposed car parking areas associated with the subject development (including driveways, ramps, grades, turn paths, sight distance requirements, aisle widths, aisle lengths, and parking bay dimensions) shall be in accordance with AS2890.1-2004, AS 2890.6 for accessible spaces and AS2890.2-2002 for heavy vehicles where applicable."

Due to existing physical constraints associated with the site which preclude the carpark from strictly complying with the specific AS2890 criteria, alternative wording was sought by JBA as follows:

*"The layout of the proposed car parking areas associated with the subject development (including driveways, ramps, grades, turn paths, sight distance requirements, aisle widths, aisle lengths, and parking bay dimensions) shall **generally** be accordance with AS2890.1-2004, AS 2890.6 for accessible spaces and AS2890.2-2002 for heavy vehicles where applicable. **The design shall be certified by a suitably qualified traffic engineer.**"*

This letter provides additional information regarding the specific criteria within AS2890 which the approved, but yet to be constructed, car park cannot comply, and provides a succinct overview with respect to the sufficiency of the non-compliance. In summary, it is our view that:

- the non-compliance is minor and quite common in inner CBD developments
- the non-compliance is not expected to compromise the safety or function of the internal car park (and nor is it likely to be a concern to RMS or TfNSW)
- The proposed alternate wording is considered to be acceptable

The non-compliance

The non-compliance relates to the ability of the car park, within the Shell House Building only, to accommodate simultaneous movements by 85th and 99th percentile cars travelling within the car park in opposite directions at corners of aisles and ramps.

Specifically, the relevant section of AS2890.1 is reproduced as follows:

melbourne
sydney
brisbane
canberra
adelaide
gold coast
townsville
perth

Level 6, 15 Help Street
CHATSWOOD NSW 2067
PO Box 5254
WEST CHATSWOOD NSW 1515
t// +612 8448 1800

“Intersections between circulation roadways and ramps, and with parking aisles, shall be designed so that both the approach roadways and the intersection areas are wide enough to accommodate turning vehicles and there is adequate intersection sight distance.

Intersection areas designed for use by one vehicle at a time shall be designed for use by the B99 vehicle. Areas in which it is necessary for two vehicles to pass one another shall be designed for a B85 vehicle to pass a B99 vehicle...”

With respect to the car park within the Shell House Building, it is noted that the intersections between ramps and aisles do not accommodate the passing of a B99 and a B85, but rather simply a B99 to travel through the intersection and pass another nearby vehicle which would need to wait for the other vehicle to pass.

Impact of the non-compliance

Albeit a technical non-compliance, the impact of two cars not being able to simultaneously pass each other is, in our view, minor, noting:

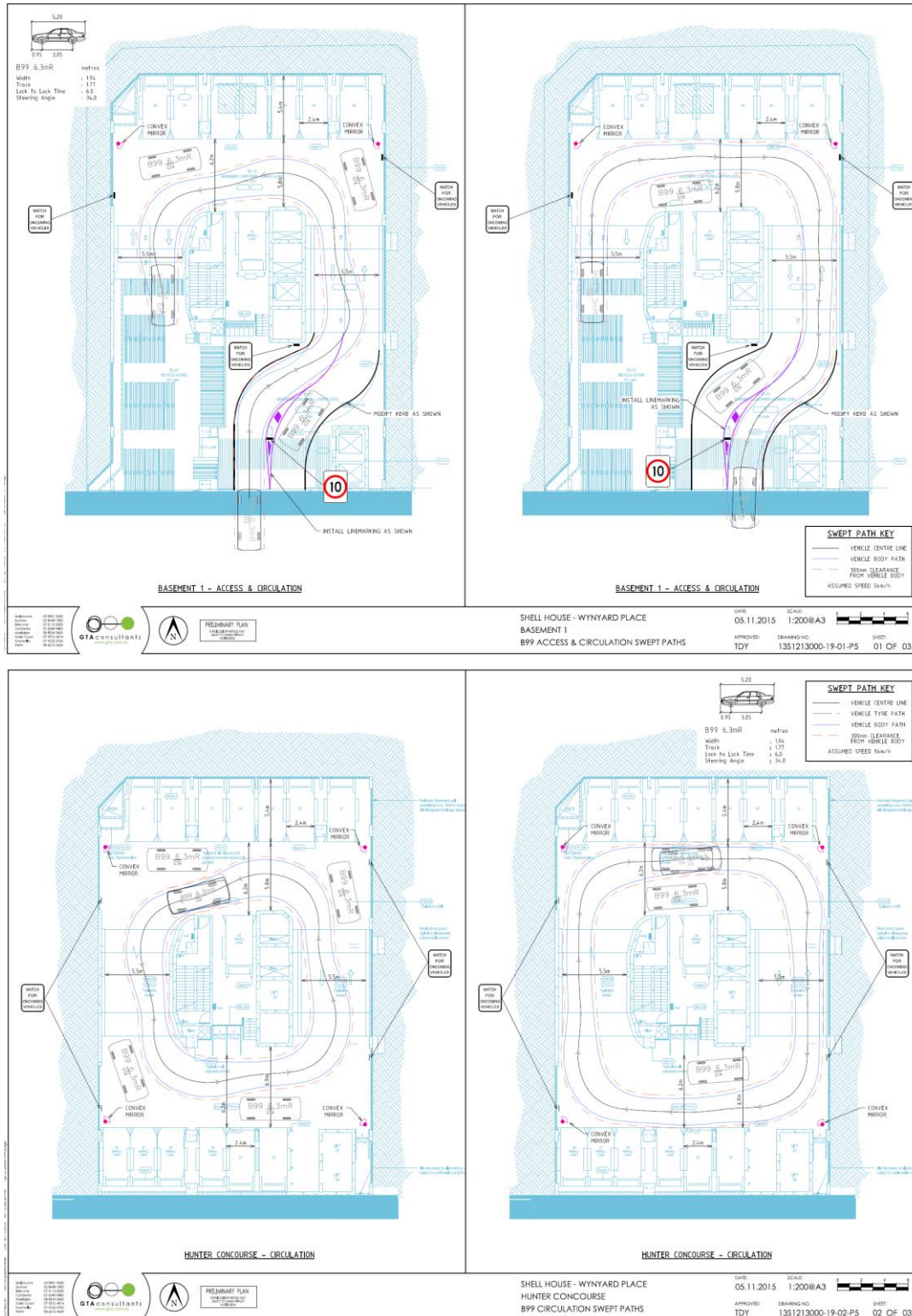
- The traffic volumes within the site are likely to be very low (for 89 car spaces within the basement, it is approximated that the car park would generate approximately 50 car movements in any peak hour).
- The probability of two vehicles needing to pass at any point within the car park, let alone one of the corners, is expected to be low given that the majority of cars will be entering and exiting the site during the AM and PM peak hour.
- The physical constraints of the site itself are such that it would be impractical to design for such an infrequent worst case scenario (noting that many building in such locations would feature this non-compliance)

In practice, the non-compliance is also unlikely to detrimentally impact the circulation of cars within the car park, or the safety of such movements, given that adequate space has been provided to allow cars to pass each other at suitable locations.

Moreover, it is also noted that this non-compliance was discussed at length within the GTA letter report (dated 9/11/15) submitted for the Section 96 Application, with swept paths from that letter presented below for reference. These swept paths show that vehicles will be able to pass each other at suitable locations near the internal intersections. GTA is not aware of any concerns with respect to this layout as submitted and approved but nevertheless note that the currently worded Consent Condition require a far more onerous design outcome.

Having regard to the above, and noting that the circulation is well within the site, we do not expect that RMS or TfNSW would have concern with the non-compliance, particularly TfNSW given that they have not raised it previously in their comments on the Section 96 Application.

Figure 1: Swept path assessment from 9/11/15 GTA Letter Report



Additional measures to treat non-compliance

In light of the identified issue, it is proposed that any conflicting vehicle movements, albeit minimum due to the unidirectional nature of their use, be managed via:

- i At the entry point to the Shell House Building carpark, entering vehicles are informed by signage to:
 - I. turn on head lights
 - II. give way to exiting vehicles
 - III. proceed down the ramp slowly
- ii Once circulating within the carpark ramps, entering vehicles have right of way over exiting vehicles. In the unlikely event that a conflicting (entering) vehicle approaches the ramp, an exiting vehicle is to manoeuvre into a position to enable the other vehicle to pass. These locations are shown in Figure 1,
- iii The provision of other signage and convex mirrors as shown in Figure 1.

Summary

Subject to satisfactory implementation and management of the above, it is GTA's professional opinion that the carpark will operate in a satisfactory manner and would not have unacceptable implications on its users. For this reason, the proposed wording change to Consent Condition 44 as outlined is considered to be appropriate.

I trust the above is sufficient for your requirements. Naturally, should you have any questions or require any further information, please do not hesitate to contact me in our Sydney office on (02) 8448 1800.

Yours sincerely,

GTA CONSULTANTS



Tim De Young
Director