ATTACHMENT TO SUBMISSION FROM WILLOUGHBY CITY COUNCIL

DETAILED COMMENTS ON MODIFICATION 6 APPLICATION TO MP09_0066 THOMAS STREET CAR PARK SITE

This list of the traffic and car parking issues of Modification 6 have been prepared by Willoughby Council's Traffic Group. The list is in NOT in order of priority.

TRAFFIC ISSUES

- 1. On Plan A-0100(d) Street Level/Ground Floor Plan the following issues apply:
- a) The entries and exits from the car park on Thomas St show at least two entries and two exits from the car park spread over 18m length. There are concerns to pedestrian safety as motorists may not be looking out for them when exiting the site. Vehicular conflict points exist when vehicles are simultaneously trying to enter and or leave the site, particularly when exiting if one vehicle wants to turn right while the other wants to turn left. The same concerns apply for the entries and exits from Albert Ave. The array of access points is confusing and there are no refuge points within the driveway to allow pedestrians to stage their crossing. The number of entries and exits could be minimised by relocating the above ground parking levels to below ground.
- b) Advice is required as to how the entries and exits on both Thomas St and Albert Avenue are to differentiate between resident, public parking, service apartment parking, loading dock users entering the site. There is a high risk that motorists may enter the site via the wrong lanes or use exit lanes to enter.
- c) The location of where the guidance parking signs on the drawing indicating where the parking sign with number of bays available will be installed for the Council car park.
- 2. Vertical clearance for the public road from Thomas Street to Fleet lane is to meet Australian Standard 2890.2 table 4.1, which 4.5m as a minimum clearance. However, it is noted that the road is also proposed to provide a link to the loading dock such that 4.7 shall be achieved in accordance with Modification 3.
- 3. The structure below the public road, similar to the Fleet Lane encroachment, must be designed to general public road loadings especially in view of the proposed increased usage by trucks. It shall comply with the maximum loading of AS 5100.
- 4. The design of the loading dock must demonstrate in manoeuvring and height clearance that large rigid trucks can enter, manoeuvre and exit the site into the left lane only in Albert Avenue. The increased scale of the development demands access by large rigid trucks (furniture removalists, serviced apartment and retail deliveries). It must also be demonstrated that manoeuvring into and out of the loading dock can still occur when some of the bays are occupied and how the different heights within the loading dock will be managed. When the dock is full what warning is proposed to ensure that a truck does not enter the link road and block it? Where will a truck wait?
- 5. The loading dock is accessed from Thomas Street how with signposting be managed and how will trucks come to the site. Thomas Street does not provide for signalised right turns or from the Pacific Highway. Trucks will access Thomas Street from the south via Victoria Avenue and Katherine Street and will be required to exit to the north by circulating through Chatswood streets as left turn only has to apply in Albert Avenue. This has been an ongoing concern previously expressed in Modification 3.

- 6. The use of Albert Lane/Fleet Lane as an entry and exit point to the Porte-Cochere is considered inappropriate. Albert Lane is narrow and constrained and is not considered suitable for such use. Site distance to/from the Porte-Cochere will be limited and vehicles queuing to drop off/pick up will tend to block Fleet Lane and/or Albert Lane for other traffic. This was a concern with Modification 3 that is exacerbated by Modification 6 with the increased scale of the development
- 7. Where will public bicycle parking occur and how will it be signposted?
- 8. In Thomas Street vehicles exiting left and wishing to proceed north on the Pacific Highway will need to turn right from Victoria Avenue with the assistance of traffic signals. This will require them to use Katherine Street. There is insufficient separation between the westernmost exit driveway and Katherine Street to allow this to happen safely and would require drivers to prop on the proposed pedestrian crossing.
- 9. Vehicles entering the site or wanting to use the link road to access Fleet Lane (east) will be confused as to which driveway they should enter and mistakes will be made resulting in drivers reversing back out the driveway onto Thomas Street. This is undesirable from both a vehicular and pedestrian safety viewpoint. The situation could be improved but not eliminated by signage.
- 10. As part of the development works the pedestrian crossing on Thomas Street has been temporarily relocated further to the east. The crossing will need to be reinstated at the completion of the project at the developers cost and it had been intended that it would be reinstated immediately to the east of Katherine Street, in front of the development site to cater for the pedestrian desire through the site and to bus stops on Victoria Avenue. If the Thomas Street driveway is widened as proposed, space to install the crossing will be constrained and vehicles propping to enter the site would stop on the crossing. This would mean that the crossing will need to be sited west of Katherine Street which is unacceptable.
- 11. Traffic Assessments undertaken by the applicant's traffic consultant have only been with SIDRA and have only considered each intersection in isolation. In peak periods congestion levels on the Pacific Highway are considerable and in practice the existing level of service of the Albert Avenue/Pacific Highway intersection is considerably worse that A(morning peak) and B(evening peak). This is due to tailback from the Pacific Highway/Fullers Road intersection and the close proximity of the adjacent signalised intersection at Centennial Ave. The SIDRA analysis conducted by the applicant's consultant for the PM peak also conflicts with SIDRA analysis undertaken by Council's consultants in 2011 which found that the Albert/Pacific intersection had a LOS of B in the AM peak and a LOS F in the PM peak. Notwithstanding this the applicant's traffic study still shows a significant decline in LOS at the Pacific Highway/Albert Ave intersection in the PM peak from LOS B to LOS D.
- 12. SIDRA Analysis of the Pacific Highway/Victoria Avenue and Albert Ave/Orchard Rd is also considered overly optimistic in view of the congestion issues outlined above.
- 13. The Traffic Study reveals a significant deterioration in average delay at the Albert Ave/Orchard Rd intersection where average delay in the PM peak increases from 15.9 seconds to 24.4 seconds. Given the above comments about the overly optimistic outcomes from the SIDRA analysis this is cause for concern and indicates that Albert Ave will be placed under increasing pressure.

- 14. There has been no weekend traffic analysis undertaken. Given that the Saturday midday period is typically the most congested time period in the Chatswood CBD and particularly on Albert Avenue this is considered to be a significant omission.
- 15. A Left In/left out arrangement to Albert Ave as proposed under the original proposal shall be retained under the amended scheme. A median island to physically prevent right turns in and out will be required.
- 16. The dual exit lanes from the car park and loading dock to Albert Ave will create problems in terms of conflict between two vehicles seeking to exit left at the same time.
- 17. Storage bays within the serviced apartment and residential car park are sized identically to adjacent parking spaces and could readily be used as parking resulting in a significant increase in the amount of parking on the site.
- 18. On page 14 of the traffic study reference is made to "resolved proposals" arising from the 2009 GHD traffic study for Chatswood. Council has NOT resolved to implement widening of the Pacific Highway on approach to Albert Avenue. This remains a proposal still under consideration for future implementation and more recent work conducted by Lambert & Rehbein for Council in 2011 suggests that the work may not result in any improvement to intersection efficiency at the intersection.
- 19. In assessing the traffic generation from the site the traffic consultant advises that the development will exhibit a peak traffic generation of 0.16 vtph per apartment. This is less than the rate for similar apartments in Railway Street. The reason for the lower rate has not been adequately explained or justified. The Railway Street developments are comparable to the residential development proposed on this site.
- 20. The Traffic Study advises that serviced apartments will generate "some higher taxi and set down/pick up rates" and yet the site has not provided any on-site parking facilities for such use. It is also likely that the development will require tour bus parking facilities as such demands are evident at other serviced apartment facilities within Chatswood. Parking/drop off/pick up facilities to cater for each of the above uses must be provided on site. Council will not set aside kerb side space for the site.

CAR PARKING DESIGN

The extent of proposed change to the car parking arrangements on the site including the public car parking requires review of previously discussed and agreed to outcomes:

- Page 2, 8, "250 public car spaces that are independent from private use." Making the public car park independent of the other parking on site is required for management of the public car park. This is essential to Council. Electrical metering, mechanical ventilation systems and other services shall all be kept independent to allow for accurate costing of system use and maintenance agreements detailing which party is responsible for what maintenance costs. Council must be clear which party is responsible for maintenance or repair of the base structure and/or renewal costs.
- 2) On plans A-0115 E, A-0116 E, A-0117 E, A-0118 E, A-0119 E explanation of whether the lift foyers are level with the surrounding car park on the northern side of the Council car park is the case or if there is a kerb with a step up to the lift foyers. If there is a kerb disabled access will need to be provided from the accessible parking bays to the lift.

- 3) On plans A-0115 E, A-0116 E, A-0117 E, A-0118 E, A-0119 E explanation is required on how pedestrians get from the southern side of the car park to the lift foyers as there is a height difference between the northern side and southern side of the car parks. A safe accessible path needs to be provided centrally in the car park or two paths provided, one at northern and southern end of the car park. It is not acceptable to have pedestrians use the vehicular circulation ramps. The pedestrian route needs to be clearly marked on the pavement and with signage through the car park.
- 4) On plans A-0115 E, A-0116 E, A-0117 E, A-0118 E, A-0119 E it appears that pedestrians will be able to exit the lift foyers to the southern end of the car park. It is difficult to tell from the plans. This appears to be dangerous in the position shown due to the heavily restricted sight lines for pedestrians due to the lift shaft wall on one side and a wall and column on the other side. Pedestrians will be stepping out into the circulating traffic path and the vehicles will not see them on approach.
- 5) On plan A-0115 E pedestrians leaving the lifts and walking to the northern side of the car park currently have the option of going on either side of the lift to get to the northern side of the car park. It is suggested that a door be installed on the eastern side of the lifts to stop pedestrians from entering out straight into the entering traffic for the car park. This is a particularly dangerous location to let pedestrians to step out into traffic. There are no sight lines for vehicles entering or for pedestrians to see the vehicles approaching.
- 6) The floor of the lift foyer area of each of the levels of the car park should be clearly delineated by colouring the surface with a durable product that meets Australian Standards for slip resistance different to the colour to the surrounding concrete of the car park to assist with safety. Additionally the lift foyer areas require bollards to be installed in suitable positions to prevent vehicles from encroaching on these areas.
- 7) The number of accessible bays to be provided in the Council "Public Car Park" should be 3% of the total number of bays according to Australian Standards for public car parks 3% of 250 bays is 7.5 bays, rounded up to 8. Only 3 accessible parking bays appear to have been provided on Basement 1. Increase in the number of accessible bays to meet Australian Standard AS2890.6 is required. On the shared accessible parking spaces a bollard is required in accordance with Australian Standards and must be shown on the drawings.
- 8) An automatic roller shutter viewed by CCTV camera that can be opened and closed on an automatic schedule and be lifted and closed remotely is to be installed just before the entry to the Council Car Park to enable Council to close the public car park when required.
- 9) Advice is required as to whether a climate controlled server room has been provided for the Council parking and CCTV equipment or whether the Council Security office is to be where the servers are to be installed. A central data riser is to be provided from each level of the car park to this office. Lockable cupboards with power outlets to be provided on each level of the car park attached to this central data riser to allow for items such as rack mounted network switches to be installed. Adequate power, telephone and data points are to be provided to the Council security office.
- 10) Line marking arrows to be thermoplastic to ensure longevity. Within the Council car park they are to be provided at top and bottom of ramps, and as a minimum at two positions along aisles. Thermoplastic centre lines to be marked at ramps to guide motorists.

- 11) Minimum vertical clearance in the car park levels is to be 2.2m to comply with Standards, however, 2.3m is to be provided to all paths of travel to all accessible parking spaces as according to Australian Standard 2890.1 (B6).
- 12) Height clearance bars are to be installed in accordance with Australian Standard AS2890.1 (if any clearances are less than 2.3m).
- 13) Council has not determined the final pay parking solution to be installed in the car park at this time. This may be a gated system that uses pay stations for payment on each level of the car park, or a series of parking meters with Council enforcement. Regardless of Councils final decision the developer is to allow for power and data to these equipment locations and cast vehicle detection loops directly into the slabs at appropriate locations for a gated system. The developer is to get specialist advice on the data and power conduit requirements for parking equipment and ensure that conduits are provided to connect this equipment back to the computer servers in the Council security office. For a gated system a drawing that shows the location of pay stations at lift fovers is required as there is some concern that positioning of pay stations may affect accessible paths of travel in the lift foyer areas on each level. Additionally the positioning of exit and entry terminals and gates at the entry to the Council car park ensuring there is enough room on the island provided for this equipment and illuminated parking information rate boards. Also demonstrate to Council two locations, preferably central to the car park, on both northern and southern sides of each level of the car park where a parking meter could be installed to allow motorists to safely pay for their parking. Power is to be provided to these positions and data conduits from these locations are to be provided back to the Council security office/data room.
- 14) Accessible parking signs to Australian Standards must be supplied at each disabled parking bay to allow for compliance enforcement of the parking bays by Council officers.
- 15) Terms and Conditions of the public car park will be defined by Council.
- 16) A formal agreement will be required so that Meriton and future owners will pay any OSR levy for the respective spaces they control and own.
- 17) Separate electrical smart metering needs to be in place for the Council car park to ensure Council only pays for what electricity it uses similar with mechanical ventilation costs or a separate ventilation system installed for the council car park.
- 18) Where fluorescent light fittings are used in the car park, they should be a T5 fitting to minimise ongoing operational costs. Sensor to be installed to ensure that the lighting is not turned on when there is no movement in the car park after a set time. However, a series of emergency lighting must be left on at all times.
- 19) Council must not be limited to supplying a ticketing and gated parking system. For example, Council may determine that it may be more advantageous to install parking meters and have Council officers enforce compliance. Under 3.2.2 it appears to give Council the flexibility to determine what system it installs.
- 20) Where are the nearest toilets for staff working in the Security office? Is air conditioning provided to this room? If the security room is for Council, the security room will require an access control system in order to access to the room.

- 21) Who is responsible for the maintenance and operational expenses of the public lifts in the public car park? Does Council have control of these in order to be able to close down access to the public car park? What levels does the public lift access in the building?
- 22) Is there a set of stairs between the Ground floor and Basement 1 of the car park? Is council able to lock stairs on basement 1 to close access to the public car park or must the stairs remain open for fire or emergency egress purposes?
- 23) Detailed signage plan is required to be provided to Council, add the comment "For Council's approval at least 3 months prior to the opening of the car park".
- 24) Is a dimension plan available regarding the parking bay widths? A minimum bay width of 2.4m is stated, however under the Australian Standard 2890.1 Table 1.1 & Figure 2.2 the minimum width should be 2.6m to allow for parking stations and short term parking. See Table 1.1 User class 3 Parking stations.
- 25) Previous proposals included a public bicycle enclosure. This facility does not appear to have been provided in the current proposal and is required. The residential bicycle storage area needs to be clearly designated as such and should provide secure (gated, ID card access) storage for bikes.
- 26) Give way line marking should be installed wherever give way signs are installed.
- 27) Speed limit signs are required within the public car park. Speed humps to slow down vehicles when approaching the ramps between levels of the public car park may be necessary given the narrowness of the vehicle swept paths.
- 28) Wheel stops are to be installed wherever a wall or other obstruction is present at the end of a parking bay. Painted yellow bollards should also be installed to protect structures and pedestrian paths of travel.
- 29) All Parking equipment shall be compatible with council existing systems.
- 30) The manoeuvring to and through the internal circulating ramps requires checking to ensure that vehicles are not forced to encroach outside their lane to negotiate the ramps which will cause conflict between concurrent turning vehicles.

The above are a summary of some points that have previously been raised with Meriton as part of a response to Condition B15. The extent of change in Modification 6 requires that any past dialogue and agreement in response to Condition B15 is set aside and the satisfying of the Condition 15 has not occurred.