Traffic Engineer Referral Response

Application Number:	DA2022/0596

Date:	19/09/2022
Responsible Officer	
Land to be developed (Address):	Lot CP SP 35989 , 29 - 37 Dobroyd Road BALGOWLAH HEIGHTS NSW 2093

Officer comments

comments on amended plans - 19/9/22

There do not appear to have been any changes made to the original plans which impact upon the previous traffic referral comments and the amended plans remain supported subject to conditions

Original comments 23/6/22 - Supported with conditions.

The plans designed by Woodhouse and Danks Architects, dated March 2022 and Traffic Impact Assessment prepared by Apex Engineers dated February 2022 have been reviewed by the Traffic team.

This proposal in a B1 zone in Balgowlah Heights seeks approval for a mixed use development comprised of 12 boarding house units and a shop of 30.5 m2 GFA, 7 basement car parking spaces are proposed including 1 disabled space and 6 spaces in 3 pairs of mechanical car stackers. In addition there are 3 motorcycle spaces and 12 bicycle parking spaces. The Manly DCP applies to the subject site.

Traffic Generation

The development has been estimated to generate 62 daily trips and 7 peak hour trips using rates from the RMS Guide to Traffic Generating Development for medium density residential development. This is acceptable and the generated traffic will not make a significant impact on traffic conditions on the surrounding local road network.

Car Parking

- In terms of the parking requirements in SEPP (Housing) 2021 and the Manly DCP 2013, the development requires 3 parking spaces to support the boarding use and a parking space for the shop i.e a total of 4 spaces. The applicant proposes to provide 7 parking spaces including one disabled parking space. These provisions are in excess of the relevant parking requirements however given the isolated nature of the development which will tend to result in a higher reliance upon private motor vehicle travel than might normally be the case for boarding house development, it is considered appropriate.
- As the development is primarily a boarding house the use of car stackers would generally be considered inappropriate however as the stackers are of a “pit” style the use of car stackers is not opposed. This is because each space will be independently accessible not requiring the other space in the stacked pair to be vacated to facilitate access. In this way, subject to training in the use of the car stacker, boarding house tenants will be able to have access to any space

within the car stackers at any time.

- As there are twelve boarding house units and only 7 offstreet spaces there is potential for boarding house tenants to have more vehicles than there are spaces available off-street. As the carpark area is quite constrained a vehicle entering the carpark and finding all spaces occupied will find it difficult to turn around and exit the carpark in a forwards direction. Similarly, reversing up a single width curved ramp will be difficult and potentially unsafe. To minimise the chances of this happening parking space sensors will be required on all parking spaces and an electronic "carpark full" sign displayed at the entry point to the carpark.

Motorcycle and Bicycle parking

SEPP(housing) 2021 requires 1 motorcycle parking space for each 5 boarding rooms and 1 bicycle parking space for each boarding room. The plans indicate that there are 3 motorcycle parking spaces each of 2.5m in length and 1.2m width and 12 bicycle parking racks each allowing for a bay of 1200m length and 0.6m in width. The above satisfies the requirements of the SEPP and AS2890.1

Carpark Access

- It is noted that the width of the driveway has a limited width of 3.9 meters, which is insufficient for two way traffic but adequate for one way traffic. The driveway is also curved and graded at 16.5% over much of its length. Given the above, sight lines from one end of the driveway to the other will be poor and reversing along the driveway to allow an opposing vehicle to enter or exit will be difficult. Traffic signal control of the driveway is therefore required giving priority to vehicles entering the carpark.
- Swept path plots have been provided to demonstrate access to and from the carpark and to/from Commerce Lane. The plots demonstrate that the full width of Commerce Lane between Dobroyd Road and the driveway is required in order to enter and exit the carpark and parking will not therefore be able to be accommodated on either side of Commerce Lane north of the driveway. In addition, to ensure clear sightlines for traffic exiting the carpark parking will also not be permissible anywhere along the full frontage of The Commerce Lane frontage of the property. A plan for No Stopping restrictions shall be prepared and implemented subject to Traffic Committee approval
- It is noted that the requirement of AS2890.1 clause 3.3 (a) for a maximum grade of 5% in the first 6 metres of the carpark access ramp cannot be fully satisfied with grades on the southern edge of the driveway being 12.5% and at the centre of the driveway the gradient steepens to 16.5% within 6m of the boundary. Given sight constraints the minor departures from the standards requirements are acceptable however will result in poor sightlines to and from pedestrians when vehicles exit the carpark onto Commerce Lane. Given the above it is essential that pedestrian sight line triangles complaint with AS2890.1 section 3.2.4(b) and fig 3.3 are available on both sides of the driveway at the point where the carpark access ramp meets the property boundary. The sight line triangles on the architectural plans have not been correctly plotted to the south of the driveway and the plans do not allow for sufficient sight lines to pedestrians. The sight line triangle should be plotted along the driveway edge not from the drivers position.

The matters requiring amendment as detailed above can be addressed by conditions of consent

The proposal is therefore supported.

Note: Should you have any concerns with the referral comments above, please discuss these with the

Responsible Officer.

Recommended Traffic Engineer Conditions:

CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF THE CONSTRUCTION CERTIFICATE

Construction Traffic Management Plan
As a result of the site constraints, limited vehicle access and parking, a Construction Traffic Management Plan (CTMP) and report shall be prepared by an RMS accredited person and submitted to and approved by the Northern Beaches Council Traffic Team prior to issue of any Construction Certificate.

Truck movements must be agreed with Council's Traffic Engineer prior to submission of the CTMP.

The CTMP must address following:

- The proposed phases of construction works on the site, and the expected duration of each construction phase
- The proposed order in which works on the site will be undertaken, and the method statements on how various stages of construction will be undertaken
- Make provision for all construction materials to be stored on site, at all times
- The proposed areas within the site to be used for the storage of excavated materials, construction materials and waste containers during the construction period
- The proposed method of access to and egress from the site for construction vehicles, including access routes and truck rates through the Council area and the location and type of temporary vehicular crossing for the purpose of minimising traffic congestion and noise in the area, with no access across public parks or reserves being allowed
- The proposed method of loading and unloading excavation and construction machinery, excavation and building materials, formwork and the erection of any part of the structure within the site. Wherever possible mobile cranes should be located wholly within the site
- Make provision for parking onsite. All Staff and Contractors are to use the basement parking once available
- Temporary truck standing/ queuing locations in a public roadway/ domain in the vicinity of the site are not permitted unless approved by Council prior
- Include a Traffic Control Plan prepared by a person with suitable RMS accreditation for any activities involving the management of vehicle and pedestrian safety
- The proposed manner in which adjoining property owners will be kept advised of the timeframes for completion of each phase of development/construction process. It must also specify that a minimum Fourteen (14) days notification must be provided to adjoining property owners prior to the implementation of any temporary traffic control measure
- Include a site plan showing the location of any site sheds, location of requested Work Zones, anticipated use of cranes and concrete pumps, structures proposed on the footpath areas (hoardings, scaffolding or shoring) and any tree protection zones around Council street trees
- Take into consideration the combined construction activities of other development in the surrounding area. To this end, the consultant preparing the CTMP must engage and consult with developers undertaking major development works within a 250m radius of the subject site to ensure that appropriate measures are in place to prevent the combined impact of construction activities, such as (but not limited to) concrete pours, crane lifts and dump truck routes. These communications must be documented and submitted to Council prior to work commencing on site
- The proposed method/device to remove loose material from all vehicles and/or machinery before entering the road reserve, any run-off from the washing down of vehicles shall be

directed to the sediment control system within the site
- Specify that the roadway (including footpath) must be kept in a serviceable condition for the duration of construction. At the direction of Council, undertake remedial treatments such as patching at no cost to Council
- The proposed method of support to any excavation adjacent to adjoining properties, or the road reserve. The proposed method of support is to be designed and certified by an appropriately qualified and practising Structural Engineer, or equivalent
- Proposed protection for Council and adjoining properties
- The location and operation of any on site crane

The CTMP shall be prepared in accordance with relevant sections of Australian Standard 1742 – "Manual of Uniform Traffic Control Devices", RMS' Manual – "Traffic Control at Work Sites".

All fees and charges associated with the review of this plan is to be in accordance with Council's Schedule of Fees and Charges and are to be paid at the time that the Construction Traffic Management Plan is submitted.

Reason: To ensure public safety and minimise any impacts to the adjoining pedestrian and vehicular traffic systems.

Pedestrian sight distance at property boundary
A pedestrian sight triangle of 2.0 metres by 2.5m metres, in accordance with AS2890.1:2004 is to be provided on both sides of the vehicular access to the property. In this respect the plans must be amended with the sight line triangle on the southern side of the driveway replotted from a point 2.5m inside the property boundary where it meets the southern edge of the driveway ramp. Details demonstrating compliance are to be submitted to Council for approval and confirmation provided to the Certifying Authority prior to the issue of the Construction Certificate.

Reason: To maintain pedestrian safety.

Amendments to plan of management
The Boarding House Management Plan shall be amended to require that the resident manager provide training and advice to all new boarding house tenants with regard to:

- the operation or the mechanical car stackers
- the presence of the "carpark full" sign and that when it is displayed vehicles are not to be driven into the carpark
- the meaning and operation of the traffic light control of the carpark

Reason: education of tenants regarding safety within the carpark (DACTRCPCC1)

Parking sensors and carpark full sign
That amended plans be provided for Council's approval to demonstrate that carpark sensors will be introduced in every parking parking space linked to an electronic "carpark full" sign that will display when all spaces are occupied.

Reason: ramp safety and minimise congestion within carpark (DACTRCPCC2)

CONDITIONS THAT MUST BE ADDRESSED PRIOR TO ANY COMMENCEMENT

Work Zones and Permits
Prior to commencement of the associated works, the applicant shall obtain a Work Zone Permit where it

is proposed to reserve an area of road pavement for the parking of vehicles associated with a construction site.

A separate application is required with a Traffic Management Plan for standing of construction vehicles in a trafficable lane

Reason: To ensure Work zones are monitored and installed correctly.

Demolition Traffic Management Plan
As a result of the site constraints, limited vehicle access and parking, a Demolition Traffic Management Plan (DTMP) shall be prepared by an suitably accredited person and submitted to and approved by the Northern Beaches Council Traffic Team prior to commencing any demolition work.

The DTMP must:-

- Make provision for all construction materials to be stored on site, at all times.
- The DTMP is to be adhered to at all times during the project.
- Specify construction truck routes and truck rates. Nominated truck routes are to be distributed over the surrounding road network where possible.
- Provide for the movement of trucks to and from the site, and deliveries to the site. Temporary truck standing/ queuing locations in a public roadway/ domain in the vicinity of the site is not permitted unless prior approval is granted by Council's Traffic Engineers.
- Include a Traffic Control Plan prepared by an RMS accredited traffic controller for any activities involving the management of vehicle and pedestrian traffic.
- Specify that a minimum fourteen (14) days notification must be provided to adjoining property owners prior to the implementation of any temporary traffic control measures.
- Include a site plan showing the location of any site sheds, location of requested Work Zones, anticipated use of cranes, structures proposed on the footpath areas (hoardings, scaffolding or temporary shoring) and extent of tree protection zones around Council street trees.
- Take into consideration the combined construction activities of other development in the surrounding area. To this end, the consultant preparing the DTMP must engage and consult with developers undertaking major development works within a 250m radius of the subject site to ensure that appropriate measures are in place to prevent the combined impact of construction activities. These communications must be documented and submitted to Council prior to work commencing on site.
- Specify spoil management process and facilities to be used on site.
- Specify that the roadway (including footpath) must be kept in a serviceable condition for the duration of demolition. At the direction of Council, the applicant is to undertake remedial treatments such as patching at no cost to Council.

The DTMP shall be prepared in accordance with relevant sections of Australian Standard 1742 – "Manual of Uniform Traffic Control Devices", RMS' Manual – "Traffic Control at Work Sites".

All fees and charges associated with the review of this plan is to be in accordance with Council's Schedule of Fees and Charges and are to be paid at the time that the Demolition Traffic Management Plan is submitted.

Reason: This condition is to ensure public safety and minimise any impacts to the adjoining pedestrian and vehicular traffic systems. The DTMP is intended to minimise impact of construction activities on the surrounding community, in terms of vehicle traffic (including traffic flow and parking) and pedestrian amenity adjacent to the site.

CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK

Implementation of Demolition Traffic Management Plan
All works and demolition activities are to be undertaken in accordance with the approved Demolition Traffic Management Plan (DTMP). All controls in the DTMP must be maintained at all times and all traffic management control must be undertaken by personnel having appropriate RMS accreditation. Should the implementation or effectiveness of the DTMP be impacted by surrounding major development not encompassed in the approved DTMP, the DTMP measures and controls are to be revised accordingly and submitted to Council for approval. A copy of the approved DTMP is to be kept onsite at all times and made available to the accredited certifier or Council on request.

Reason: To ensure compliance and Council's ability to modify the approved Construction Traffic Management Plan where it is deemed unsuitable during the course of the project.

Implementation of Construction Traffic Management Plan
All works and construction activities are to be undertaken in accordance with the approved Construction Traffic Management Plan (CTMP). All controls in the CTMP must be maintained at all times and all traffic management control must be undertaken by personnel having appropriate RMS accreditation. Should the implementation or effectiveness of the CTMP be impacted by surrounding major development not encompassed in the approved CTMP, the CTMP measures and controls are to be revised accordingly and submitted to Council for approval. A copy of the approved CTMP is to be kept onsite at all times and made available to Council on request.

Reason: To ensure compliance of the developer/builder in adhering to the Construction Traffic Management procedures agreed and are held liable to the conditions of consent.

Ongoing Management
The applicant shall be responsible in ensuring that the road reserve remains in a serviceable state during the course of the demolition and building works.

Reason: To ensure public safety.

CONDITIONS WHICH MUST BE COMPLIED WITH PRIOR TO THE ISSUE OF THE OCCUPATION CERTIFICATE

Signage and Linemarking – External
A plan demonstrating the proposed signage and/or line marking within Council's Public Domain shall be prepared by a suitably qualified person and submitted to and approved by the Local Traffic Committee prior to the issue of any Occupation Certificate. The plans shall incorporate:

a) No Stopping restrictions along the full Commerce Lane frontage of 29-31 Dobroyd Rd
b) No Stopping restrictions on the east side of Commerce Lane between Dobroyd Road and a point 2m south of the driveway to No. 27 Dobroyd Road

Note: The applicant is advised that the plan will require approval by the local Traffic Committee if the proposal requires change in existing parking conditions and hence, adequate time should be allowed for this process

Reason: To ensure property access and appropriate parking.

Signage and Linemarking – Implementation
The applicant is to install all signage and linemarking, as per any Roads Act or Traffic Committee approval. These works are to be completed at no cost to Council prior to the issue of any Occupation

Certificate.

Reason: To ensure compliance with the Road Act.

Basement Garage Traffic Signal System
To prevent conflicting vehicle flows on the internal basement garage ramp and avoid vehicles having to reverse up/ down the ramp, a traffic signal system must be installed at each ramp entry point and at the base of the ramp, designed to warn drivers about to enter the ramp from the carpaking level of any conflicting vehicle approaching.

The signal system must;

- be clearly visible from ramp entrances,
- is to clearly indicate to an approaching driver, by way of red light or wording, that an opposing vehicle has entered the ramp,

Details of the system, including the system operation, components and placement within the development, must be specified by a practising Traffic Engineer. This engineer is to submit a compliance certificate to the Principal Certifying Authority that the system has been installed and operating as designed, in accordance with the requirements of this condition, prior to the issue of any Occupation Certificate issued for the development.

Reason: To ensure no vehicle conflicts within the basement carpark.

Disabled Parking Spaces
Where disabled parking spaces are provided they must be in accordance with AS2890.6:2009.

Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of any Occupation Certificate.

Reason: To ensure compliance with Australian Standards.

Mechanical & Electronic Servicing of carpark devices
The applicant is to include a Section 88E instrument on the title permitting Council to provide direction as to the repair/maintenance of any mechanical and electronic devices within the carpark specifically:
- the mechanical car stackers,
- the car parking bay sensors,
- driveway ramp traffic light controls and
- carpark full signs

In the instance where the building manager does not comply with the direction of Council, or fails to address repair/maintenance requirements in a timely manner, Council reserves the right to undertake the repairs and all fees associated will be borne by the building manager.

Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of any Occupation Certificate.

Reason: To ensure the mechanical and electronic devices are maintained in a serviceable state at all times.

Parking sensors & carpark full sign
To prevent conflict with the carpark and avoid vehicles having to reverse up/ down the ramp, parking

sensors must be installed for each parking space and linked to an electronic "carpark full" sign which must be installed at the driveway ramp entry point designed to prevent drivers from entering the ramp when the carpaking level is full.

The sign must;
- be clearly visible to traffic entering the carpark,
- is to clearly indicate to an approaching driver, by way of an unambiguous display or wording, that traffic should not enter the ramp,

Details of the system, including the system operation, components and placement within the development, must be specified by a practising Traffic Engineer. This engineer is to submit a compliance certificate to the Principal Certifying Authority that the system has been installed and operating as designed, in accordance with the requirements of this condition, prior to the issue of any Occupation Certificate issued for the development.

Reason: To ensure no vehicle conflicts within the basement carpark.

ON-GOING CONDITIONS THAT MUST BE COMPLIED WITH AT ALL TIMES

Use of mechanical car stackers
The six parking spaces accessed via the mechanical car stackers shall be utilised only by persons who have been trained in their operation. Persons living in the boarding house must receive training in the operation of the car stacker if they own a vehicle. Visitors are not permitted to use the car stackers. These requirements shall be included in the occupancy agreement.

Reason: To ensure that parking is utilised effectively

Sight lines within carparks
The required sight lines to pedestrians and other vehicles in and around the carpark and entrance(s) are not to be obstructed by landscaping or signage.

Reason: To maintain unobstructed sight distance for motorists.

Site Occupancy
That the number of residents on the site at any one time be limited to 16 persons.

Reason: To ensure that all parking generated by the site is contained on the site.