Traffic Engineer Referral Response

Application Number:	DA2021/1039

Date:	15/03/2022
Responsible Officer	
Land to be developed (Address):	Lot 2566 DP 752038 , 16 Wyatt Avenue BELROSE NSW 2085 Lot 2597 DP 752038 , 16 Wyatt Avenue BELROSE NSW 2085

Officer comments

Revised referral comments - 15/3/2022

Parking
The amended plans have reduced the number of boarding rooms to 55 but have maintained the same level of offstreet parking provision i.e 31 parking spaces. The level of bicycle parking has been substantially increased to 55 spaces and the number of motorcycle spaces increased to 13. 4 visitor parking spaces adjacent to the access driveway have also been provided. This level of parking provision is acceptable

Access

The parking levels have now been dimensioned and all parking spaces and parking aisles are sized in compliance with the requirements of AS2890.1. It is noted that the new section of driveway has been widened to 4.5m in width consistent with Fire and Rescue NSW requirements. It is noted from the Bushfire hazard Assessment that widths under 4.5m are acceptable under provided they do not extend more than 30m in length and are no less than 3.5m in width.

It is also noted that traffic signal control and waiting bays have been added to the revised plans as requested in the initial referral comments.

There are no traffic engineering concerns with regard to the access provisions

Access to Public Transport

A condition of consent will be applied requiring that a footpath connection be established along the sites Wyatt Ave frontage linking with the footpath proposed along the frontages of No.s 12 & 14 Wyatt Ave.

Pedestrian Access

It is noted that the footpath connections between the front and rear buildings and the street have been redesigned and are now more appropriately graded to facilitate access to and from the site by active travel.

There are now no traffic engineering concerns with approval of the development application subject to conditions

Original Referral comments - 19/10/2021

The proposed development is for demolition of an existing dwelling and construction of a 61 room boarding house plus a managers room.

Parking:

As the proposed boarding house is sited on land zoned “deferred matter” under the Warringah LEP 2011 it is not covered by the LEP. The Warringah LEP 2000 applies to such land however does not nominate a parking rate for boarding house development. The most similar types of development include backpackers accommodation for which the LEP advises that a parking rate should be determined by comparison with developments for a similar purpose or hostel development where a rate of 0.5 spaces per bedroom is nominated for a development by a person other than a community housing provider. Given the above, it is noted that the development approved by the Land and Environment Court on the adjacent block at 14 Wyatt Ave which provides 25 rooms (including a managers room), 13 car parking spaces, 8 motorcycle spaces and bicycle storage. i.e a rate of approximately 0.5 car parking spaces per room had been applied, with motorcycle parking at a rate of approximately 0.3 spaces per room

If these same rates are applied to the proposed 62 bed boarding house 31 carparking spaces would be required together with 18 motorcycle spaces plus bicycle storage.

The development provides 31 carparking spaces and is acceptable.

In terms of motorcycle parking the development proposes only 10 motorcycle spaces which is considered inadequate. Most boarding house development would provide motorcycle parking at a rate of 0.2 spaces per bedroom which would equate to 13 spaces and it is considered that the number of motorcycle spaces should be increased to at least this level.

Finally, the proposed boarding house provides 14 bicycle spaces which is considered acceptable and comparable to rates approved for most other boarding house developments.

Access

Parking spaces and aisle widths have not been dimensioned and the traffic report submitted with the DA has not provided any swept path plots to confirm that ingress and egress from all parking spaces is possible in a forwards direction. Swept path plots to confirm that ingress and egress to and from the carpark in a forwards direction from parking spaces 01, 02,11, 12 & 13 is possible by a B85 vehicle via no more than 3 point shall be provided.

It is noted that the access road to the development needs to cater for access by a fire truck. The Fire & Rescue NSW – Fire Safety Guideline specify that a minimum width of carriageway of 4.5m is required for access by General Fire appliance vehicles. The proposed access road, although not dimensioned, is understood from reference to the Carpark, Ramp and Driveway Certification document to be 4.4m in width, this is less than the Fire & Rescue requirements. The driveway should be widened to a minimum of 4.5m to ensure safe access for fire vehicles. It is also noted that a fire truck turning bay has been provided at the northern end of the driveway to ensure that a fire truck can enter and exit the development in a forwards direction. A swept path plot for a medium rigid vehicle shall be provided to confirm that satisfactory turning for fire appliance vehicles is possible.

The driveway ramps to both the upper and lower carparks are curved and less than 5.5m in width and

therefore of insufficient width to allow for two vehicles to pass. As vehicles exiting the carpark will not be able to see vehicles entering the carpark traffic light control requiring exiting vehicles to wait for an entering to vehicle to pass must be provided for both carparks. Details to be included on the DA plans including markings to denote the location of the waiting bay.

Access to Public transport:

As the development provides a reduced level of carparking when compared to other types of residential development residents at the development will rely upon access to public transport. It is noted that Bus Stops are sited on Wyatt Ave and Cotentin Rd within 200m of the development and these are served by a number of buses which operate on a frequent basis to a range of destinations. To ensure that residents with mobility issues are able to access these buses it is considered that a footpath connection should be established along the sites Wyatt Ave frontage linking with the footpath proposed along the frontages of No.s 12 & 14 Wyatt Ave .

Pedestrian access

Pedestrian access from the street to both buildings and to the rear building in particular is poor being steep and lengthy. Given that boarding house developments have a lower parking requirement than other residential accommodation most tenants rely upon use of public transport, walking and cycling for their travel and the absence of good pedestrian access to and from the street is not conducive to travel by these means. The layout of the development should be reconsidered to improve pedestrian access and reduce the potential for tenants to instead become reliant on private motor vehicle travel with resultant on-street overflow parking issues.

Sight lines at boundary

The pedestrian and vehicle sight lines at the development's Wyatt Ave boundary are adequate

Traffic Generation:

Traffic Generation has been calculated in the applicant’s traffic report and has estimated that the development will generate 25 trips in the am and pm peak hour. These volumes are unlikely to have significant impacts on the surround road network and SIDRA modelling has found no change to LOS for the intersection of Wyatt Ave and Forest Way. Traffic generation impacts are acceptable.

Summary:

The development provides insufficient motorcycle parking and has not provided sufficient information to determine the adequacy of the carparking levels. There are also concerns about access to the site by fire service vehicles and for pedestrians. Further information and amended plans are required for assessment

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:

DEVELOPMENT CONSENT OPERATIONAL CONDITIONS

Fencing Height / Vegetation
All fencing and/or vegetation along the frontage road(s) shall not impede pedestrian or driver visibility. This requires that vegetation does not exceed one (1) metre in height. Appropriate plants shall be selected within the 2.0 x 2.5m splay to ensure this condition is met.

Reason: To ensure maximum vehicular and pedestrian visibility.

Parking Enclosure
No parking spaces, or access thereto, shall be constrained or enclosed by any form of structure such as fencing, cages, walls, storage space, or the like, without prior consent from Council.

Reason: To ensure accessibility is maintained.

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

Car Parking Finishes
All driveways, car parking areas and pedestrian paths are to be surfaced and sealed. Details of treatment to these areas are to be submitted to the Certifying Authority prior to issue of the Construction Certificate.

Reason: To provide suitable stormwater disposal and to prevent soil erosion and runoff.

Vehicular Swept Paths
Vehicular manoeuvring paths must be provided to demonstrate all vehicles can enter or depart the site in a forward direction without encroaching on required car parking spaces. The drawings must be compliant with Australian/New Zealand Standard AS/NZS 2890.1:2004 - Parking facilities - Off-street car parking.

This includes details for a medium rigid vehicle turning in the fire truck turning bay at the northern extremity of the driveway

Details demonstrating compliance with this condition must be submitted to the Certifying Authority prior to the issue of the construction Certificate.

Reason: To ensure compliance with Australian Standards relating to manoeuvring, access and parking of vehicles.

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.

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
- Specify that, due to the proximity of the site adjacent to John Colet School, no heavy vehicle movements or construction activities effecting vehicle and pedestrian traffic are permitted in school zone hours (8:00am-9:30am and 2:30pm-4:00pm weekdays)
- Include a Traffic Control Plan prepared by a person with suitable RMS accreditation for any activities involving the management of vehicle and pedestrian traffic
- 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.

Submission of Engineering Plans (standard from development engineers).
The submission is to include four (4) copies of Civil Engineering plans for the design of:

A footpath connection along the Wyatt Avenue frontage of the site and linking to the existing footpath connecting to Forest Way.

These are to be generally in accordance with the civil design approved with the Development Application and Council's specification for engineering works - AUS-SPEC #1 and or Council's Minor Works Policy. Details demonstrating compliance are to be submitted to the Certifying Authority prior to the issue of the Construction Certificate.

Section 138 and/or 139 applications are to be submitted to Council for Local Traffic Committee approval.

Reason: To ensure compliance with Council's specification for engineering works.

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 at the vehicular access points to the property and where internal circulation roadways intersect with footpaths or other pedestrian access areas. Details demonstrating compliance are to be submitted to the Certifying Authority prior to the issue of the Construction Certificate.

Reason: To maintain pedestrian safety.

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.
- Specify that, due to the proximity of the site adjacent to John Colet School, no heavy vehicle movements or construction activities effecting vehicle and pedestrian traffic are permitted in school zone hours (8:00am-9:30am and 2:30pm-4:00pm weekdays).
- 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

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, designed to warn drivers about to enter the road 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,
- Incorporate linemarking to delineate traffic flow and nominate waiting bay locations to allow vehicles to overtake another.

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.

Signage and Linemarking - Internal
A plan demonstrating appropriate wayfinding signage for cyclists is to be submitted to the Principal Certifying Authority prior to the issue of any Occupation Certificate.

Reason: to maintain cyclist safety.

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.

Shared Zone Bollard
A bollard is to be provided at the shared zone between disabled spaces in accordance to Australian Standards 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.

Footpath Construction
The footpath, in accordance to Council's standard specifications, shall be constructed along the property frontage to Council's satisfaction. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of any Occupation Certificate.

Reason: To provide pedestrian access to and from the property.

Turning Bays - hatching
Turn bays within the basement parking areas are to hatched and marked as TURNING AREA. Details demonstrating compliance are to submitted to the Principal Certifying Authority prior to occupation

Reason: to ensure the turning bays are not used for parking