

## Traffic Engineer Referral Response

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| <b>Application Number:</b>             | DA2023/0617  |
| <b>Proposed Development:</b>           | Demolition and the construction of a Residential Flat Building   |
| <b>Date:</b>                           | 26/09/2023   |
| <b>Responsible Officer</b>             |  |
| <b>Land to be developed (Address):</b> | Lot 6 DP 9585 , 24 Angle Street BALGOWLAH NSW 2093<br>Lot 7 DP 9585 , 22 Angle Street BALGOWLAH NSW 2093 |

### Officer comments

#### **Proposal description:** Demolition and the construction of a Residential Flat Building

The proposed development is for the demolition of the existing structures and construction of a 2-storey residential apartment building comprising 8 residential apartments (1 x two-bedroom, 7 x three-bedroom apartments) and a single-level basement carpark for 15 vehicles (14 residential and 2 visitor spaces). Vehicle access is provided at Angle Street.

The traffic team has reviewed the following documents:

- Plans (Master Set), Project No. 22214 – designed by WOLSKI.COPPIN ARCHITECTURE, dated 05/05/2023,
- Transport and Parking Impact Assessment report – Version Final A, (Ref 22134), prepared by Transport Strategies, and
- The *Statement of Environment Effects* prepared by BBF Town Planners dated May 2023.

#### **Parking requirement and design:**

- *Manly DCP* applies to the subject site. According to the DCP, in LEP Residential Zones, the parking rate is as follows:
  - o 1 resident parking space for each dwelling (irrespective of the number of bedrooms), plus
  - o 0.2 resident parking spaces for each 2-bedroom dwelling, plus
  - o 0.5 resident parking space for each 3 (or more) bedroom dwelling, plus
  - o 0.25 visitor parking space for each dwelling (irrespective of the number of bedrooms).
- o The calculation of resident parking and visitor parking is to be individually rounded up to the next whole number.
- Application of the Manly DCP car parking rates to the proposed development would result in 12 residential parking spaces and 2 visitor parking spaces. Parking in excess of DCP is proposed (by 1 space), to which there is no objection in this location.
- Accessible parking spaces (2 spaces) are proposed in excess of the requirements of the DCP (Section 3.6.3.2) and will improve the equitability of access to the premises for

persons with a disability.

- The Manly DCP 2013 requires the provision of one (1) bicycle stand for every three (3) car parking spaces. The proposed plans detail the provision of seven (7) bicycle parking spaces, satisfying Council's DCP requirements and catering for alternate travel mode options.
- The basement carpark layout and car spaces appear to be compliant with Australian Standards AS2890.1:2004 Off-Street Parking requirements. However, parking aisle width and bicycle parking spaces have not been dimensioned and although scaled dimensions suggest they are adequate, this needs to be confirmed on dimensioned plans.
- The design of the accessible parking spaces appears to be compliant with the Australian Standard AS2890.6:2009 Parking Facilities-Off Street Parking for People with Disability. A bollard shall be provided on the plans for the disabled shared area as shown in Figure 2.2 of the Australian Standard AS2890.6:2009.
- The driveway at the property line is measured to be approximately 3.8 metres wide, reducing to about 3.6 meters wide inside the property (on the ramp) and reducing further to 3 meters at the roller shutter door location. It will be conditioned that dimensioned plans be submitted for the parking area including the bicycle parking spaces dimensions, parking aisle width and access driveway width to confirm that parking bays and the driveway are appropriately sized.
- The ramp and the carpark circulation roadway are single-width and there will be no capacity for the opposing vehicles to pass. To overcome this and to manage the carpark circulation roadway, it is noted that signal systems and convex mirrors are included in the plans.
- It is noted that the proposed development will delete the existing 24 Angle Street driveway on Sydney Road. The redundant driveway will need to be removed and reinstated as turf and kerb and gutter.
- In Appendix B of the traffic report, swept path plots for access to and from the development have been satisfactorily shown by B99 vehicles entering/exiting the site from Angle Street and then entering/exiting the carpark ramp.
- The B85 vehicle turning plots accessing each car parking space have also shown in Appendix B of the traffic report. Some of these movements seem to require the driver to stop and turn on spot and some movements require the driver to undertake 4 and 5-point turns and while this is acceptable under Appendix B4.8 of AS/NZS 2890.1, it demonstrates that access is constrained and a degree of inconvenience for drivers will exist.
- As reported in the Traffic report, Garbage collection for the proposed development is expected to be undertaken by Council's waste contractor with bins to be stored on-site and brought out to the kerbside on collection days.
- The driveway and ramp gradients appear satisfactory however a vertical clearance assessment on the driveway ramp should be undertaken, using traffic engineering software such as Autotrack/Autoturn, for a B99 car entering and accessing the carpark to demonstrate that there is adequate overhead clearance and that show any scraping and bottoming does not occur. This will be conditioned.
- It is noted that a pedestrian sightline triangle of 2.0 metres by 2.5 metres, in accordance with AS2890.1:2004 are provided at the vehicular access for pedestrian visibility for exiting vehicles.
- A queueing assessment was included in the traffic report based on the anticipated peak traffic volumes for the development. The analysis confirmed that the 98th percentile

inbound queue expected at the access was less than 1 vehicle based on an average service time of 60 seconds per vehicle. The calculated chance of a conflict/queue of the development was 0.14%. Therefore, the likelihood of vehicular conflict in the driveway is considered negligible.

### **Traffic generation**

- The proposal will generate minimal traffic during peak periods; therefore, it will not have any unacceptable implications in terms of road network capacity performance.

### **Conclusion**

Subject to conditions, the application can be supported from a traffic perspective.

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**

### **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.

- A vertical clearance assessment on the driveway ramp should be undertaken, using traffic engineering software such as Autotrack/Autoturn, for a B99 car entering and accessing the carpark to show overhead clearance and demonstrate that scraping/bottoming does not occur.

Details demonstrating compliance with this condition must be submitted to the Principal Certifier 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 a TfNSW accredited person and submitted to and approved by the Northern Beaches Council Traffic Team prior to issue of any Construction

Certificate.

Due to heavy traffic congestion throughout the town centre, truck movements will be restricted during the major commuter peak times being 8.00-9.30am and 4.30-6.00pm. Truck movements must be agreed with Council's Traffic and Development 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 routes 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.

### **Removal of Redundant Driveways**

All redundant driveways shall be removed and reinstated to Council standard kerb and gutter. Suitably prepared plans shall be submitted to Council for an approval prior to the issue of the Construction Certificate. All costs associated with the works shall be borne by the applicant.

A plan checking fee (amount to be advised) and lodgement of a performance bond may be required from the applicant prior to the release of the approval.

Reason: To maximise on street car parking by removing driveways that are no longer needed in accordance with Council policy.

### **Vehicle Access & Parking**

All internal driveways, vehicle parking spaces and bicycle parking spaces must be designed and constructed to comply with the relevant section of AS 2890 (Off-street Parking standards).

With respect to this, the following revision(s) must be undertaken;

- Dimensioned plans for the parking area including the aisle width, driveway width and bicycle parking spaces are to be submitted to Council’s traffic engineer for review to confirm that parking bays and the driveway widths are appropriately sized

Plans prepared by a suitably qualified Engineer shall be submitted and the outcome of Council’s traffic engineer’s review provided to the Principal Certifier prior to the issue of a Construction Certificate.

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

## **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. The Transport for NSW (TfNSW) Transport Management Centre (TMC) must provide a Road Occupancy License and give their consent for any works or Works Zone on Sydney Road

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

**Road Occupancy Licence**

Prior to commencement of the associated works, the applicant shall obtain a Road Occupancy License from Transport Management Centre for any works that may impact on traffic flows.

Reason: Requirement of TMC for any works that impact on traffic flow.

**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.

Due to heavy traffic congestion throughout the area, truck movements will be restricted during the major commuter peak times being 8.00-9.30am and 4.30-6.00pm.

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 TfNSW 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 TfNSW 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 TfNSW 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**

### **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 Certifier prior to the issue of any Occupation Certificate.

Reason: To ensure compliance with Australian Standards.

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

### **Landscaping adjoining vehicular access**

The applicant must ensure that the planting chosen for any land immediately adjacent to the driveway and adjacent to any driveway intersections must not exceed a height of 1,140mm

Reason: To maintain unobstructed sight distance for motorists.