

Traffic Engineer Referral Response

Application Number:	DA2023/1763
Proposed Development:	Construction of a warehouse and distribution centre with associated office, including tree removal
Date:	23/05/2024
Responsible Officer	
Land to be developed (Address):	Lot 502 DP 875858 , 4 Minna Close BELROSE NSW 2085

Officer comments

Referral comments 22/5/24

The Applicant has provided updated plans and additional information in response to the concerns raised regarding the shared heavy vehicle access conflicting with access to the car park for No.3 Minna Close. The amended TPIA documents that a number of changes have been made to the original proposal. The proposed brewery operation will be replaced by a generic industrial warehouse with the specific operational function unknown at this stage. The main change from a traffic perspective is the reversal of the heavy vehicle circulation for the site, from an anti-clockwise to a clockwise arrangement. Minor modification have also been made to the basement car parking layout, resulting in a reduction in the number of car parking spaces from 26 to 25 spaces (removing 1 of the 2 accessible parking spaces), which still complies with the minimum WDCP requirements.

The TPIA has been updated to indicate 25 staff are to be accommodated on-site at any given time, with hours of operation expected to be 8:00am-5pm, Monday to Saturday. The development will be serviced by five heavy vehicles (10 movements) per day between 9am to 5pm. Concerns regarding the safety of a shared use driveway by cars and heavy vehicles were originally raised at the pre-lodgement meeting. The RMS Guide to Traffic Generating Developments Clause 6.4.2 also specifies that separation of service vehicle and car movements should be a design objective. For safety reasons, Council would not support a shared access driveway for HRVs and passenger vehicle usage in new developments where there is opportunity to provide separate vehicle access. The Applicant's proposed heavy vehicle egress is also reliant on a right of way over the adjacent development roadway, along with the provision of "Stop" signage and convex mirror. Furthermore, the swept path analysis provided for the HRV exiting the shared driveway indicates that parking would need to be removed on the opposite side of the road due to the turning manoeuvres, resulting in the loss of at least 4 on-street parking spaces. The proposal for heavy vehicle egress using the shared driveway is therefore unacceptable for the above reasons.

The access driveway provided at the southern end of the site (5.8m wide driveway with a total width of 11m at the property boundary), allows sufficient width for HRVs to enter and exit based on the current and previous swept path assessments (Drawing No.22-003-04-V5 Sheet 4 and Drawing No.22-003-04-V3 Sheet 4). Two-way access would be supported for this development based on the proposed heavy vehicle usage and site location, subject to the installation of a traffic light system to control HRVs entering and exiting the driveway to access the loading dock area. Details of the system, including the system operation, components and placement within the development, must be specified by a practising Traffic Engineer, along with the submission of a Loading Dock Management Plan for approval prior to the issue of any Occupation Certificate.

The recommended provision of a two-way access driveway for heavy vehicle to enter and exit at the southern end of the site would also mean that modifications to the shared access driveway along the northern property boundary would no longer be necessary from at least a traffic perspective (changes may still be required by the Engineering team). The above requirements can be conditioned as part of the Consent with the amended plans to be submitted to Council for approval prior to the issue of a Construction Certificate.

The proposal can only be supported subject to the recommended Conditions.

Referral comments 19/1/24

The proposed development involves the construction of an industrial development to accommodate a brewery; for the production, bottling, storing and distribution of beer. The proposed building has two floors and a basement parking area. The ground floor provides a reception/lobby area, a staff room, a warehouse storage area, a food packaging/bottling area and ancillary amenities. The second floor provides an office space. There appears to be some discrepancies between the information provided in the Traffic and Parking Impact Assessment (TPIA) dated May 2023 and the Statement of Environmental Effects (SoEE) dated 30th October 2023. The TPIA specifies that the site will accommodate 10 staff at any given time, with operation hours 7am to 6pm, seven days, with the majority of staff working 9am to 5pm weekdays. The SoEE specifies that the site will accommodate a total of 26 staff, with operation hours 8am to 5pm, Monday to Saturday. The Transport Network section has reviewed the submitted TPIA with respect to traffic generation impacts, access and parking.

Traffic Generation and Impact to Road Network

The projected traffic generation for the development is 12 peak hour vehicle trips; based on TfNSW's Guide to Traffic Generating Developments for warehouse and office land use. The TPIA projects that the development would generate 10 inbound movements during the morning peak hour associated with staff arriving and 10 outbound movements during the afternoon peak hour with staff leaving. The development will also be serviced by five heavy vehicles (10 movements) per day between 9am to 5pm. The intersection of Minna Close and Narabang Way was modelled using SIDRA to assess the existing conditions and operation of the nearby public road network. The analysis showed that all movements for the intersection provided a level of service 'A' during peak periods, representing good operation with spare capacity. The adjoining road network is considered capable of accommodating the additional projected traffic generated by the proposed development.

Access and Parking - Basement Car Park

A Traffic and Parking Impact Assessment (TPIA) has been prepared by Stanbury Traffic Planning for the development application at 4 Minna Close, Belrose. Access to the basement parking area is provided by a new 6m wide combined driveway off Minna Close. The number of parking spaces required for the industrial development under the Warringah Development Control Plan (WDGP) 2011 is calculated based on 1.3 spaces per 100m² GFA, (Including up to 20% of floor area as office premises space component. Office premises component above 20% determined at office premises rate). On the basis of 1,551.52m² of proposed GFA of warehouse and 175.47m² of proposed

mezzanine office space, a total of 23 spaces is required ($1.3 \times (1,727\text{m}^2 / 100\text{m}^2)$). The development provides 26 passenger vehicle parking spaces (2.4m x 5.4m, including 2 accessible parking spaces with adjoining 2.4m wide shared area) in accordance with WDCP 2011. The new basement access driveway and heavy access will result in the loss of two on-street parking spaces, however the additional off-street parking spaces provided will offset the loss of parking in Minna Close. The swept path plans provided demonstrate access to the car parking spaces and entry and exit from the basement in a forward direction.

Bicycle and Motorcycle Parking

The WDCP 2011 specifies bicycle parking for light and general industry at a rate of 1 per 200m² GFA (High-Medium Security Level) and 1 per 600m² GFA (High-Low Security Level) for visitors. The development requires 9 spaces ($1,727\text{m}^2 / 200\text{m}^2$) Class B and 3 visitor spaces ($1,727\text{m}^2 / 600\text{m}^2$) Class C. The proposal provides end of trip facilities and a total of 14 bicycle spaces, comprising 10 x Class B spaces within a bicycle storage room on the ground floor, and 4 x Class C spaces near the basement lobby door; which complies with the minimum WDCP 2011 requirements. The development also provided 2 motorcycle parking spaces (1.2m x 2.5m within the basement parking area).

Heavy Vehicle Access and Loading Facilities – Ground Floor

The proposed development provides two internal heavy vehicle loading bays on the ground floor, accommodating vehicles up to and including 12.5m long HRVs. The loading bays are to be accessed via an internal roadway that connects to the ingress and egress driveways situated in the eastern and southern corner of the site. Entry for heavy vehicles is via an existing 7m wide shared driveway with 3 Minna Close. The SoEE notes that right-of-way consent/agreement will be sought to use neighbouring driveway. The driveway is to be widened to 8.2m to facilitate heavy vehicle entry. The proposal provides a 5.8m wide egress driveway (total width of 11m measured at the property boundary. The egress for heavy vehicles is situated approximately 4.5m west of the access driveway for the basement car park.

The swept path plans for MRV and HRV access have been provided on Drawing No. 22-003-04-V3 Sheets 3 and 4. There are concerns with access using the shared driveway with the adjacent property. The vehicle swept paths for both the MRV and HRV encroach across the driveway for vehicles exiting No.3 Minna Close, with the HRV occupying approximately 10m of the driveway beyond the property boundary. For safety reasons, heavy vehicle access and parking should be separated from staff and customer parking. Although the proposal provides separate access and parking facilities between passenger and heavy vehicles for the site; the proposed shared heavy vehicle access conflicts with access to the car park for No.3 Minna Close. This issue is a potential traffic hazard both during construction and after completion of the development. The heavy vehicle use would also have additional driveway maintenance requirements.

Parking and traffic generation for this development is based on usage as a brewery. There is a growing trend for breweries to diversify from solely production purposes, to a venue which provides tastings, serving of food and drinks, and events. The proposed car park facilities are adequate for the current proposal only and do not support expansions to cater for additional functions. There is existing demand for on-street parking and any future changes to the development will not be able to rely on the on-street parking. All proposed and future parking needs for the development therefore need to be provided on-site. It should be noted that Transport Network would not support future applications for modifications which will create additional traffic generation and parking demands, The Applicant needs to review the design and modify and/or incorporate additional measures to

improve access and safety for heavy vehicles. It is noted that the proposed heavy vehicle access is also reliant on a right-of-way agreement from the adjacent property due to the shared access driveway. It is unlikely that owner consent would be granted if the safety concerns are not adequately addressed.

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

Traffic Management

Traffic management procedures and systems must be in place and practised during the course of the project to ensure safety and minimise the effect on adjoining pedestrian and vehicular traffic systems. These procedures and systems must be in accordance with AS 1742.3 2009 Manual of Uniform Traffic Control Devices and Council's Development Control Plans.

Note: A plan of traffic management is to be submitted to and approved by the Northern Beaches Council Traffic Team.

Reason: To ensure pedestrian safety and continued efficient network operation.

Staff and Contractor Parking

The applicant is to make provision for parking for all construction staff and contractors for the duration of the project. All Staff and Contractors are to use the basement parking once available. All necessary facilities are to be provided to accommodate this requirement including lighting in the basement, security cameras, etc.

Reason: To ensure minimum impact of construction activity on local parking amenity.

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

Car Parking Standards

The driveway/access ramp grades, access and car parking facilities must comply with the Australian/New Zealand Standard AS/NZS 2890.1:2004 - Parking facilities - Off-street car parking. The dimensions of car parking bays and aisle widths in the car park are to comply with Australian/New Zealand Standard for Off-Street Parking AS/NZS 2890.1-2004.

Details demonstrating compliance with this condition are to be submitted 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.

Construction Traffic Management Plan

A Construction Traffic Management Plan (CTMP) and report shall be prepared by a Transport for NSW 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 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.
- Where access is required across private property not in the direct ownership of the proponent, such as a private road/driveway, community title road or right of way, the CTMP is to include:
 - Evidence of the legal right and terms to use the access route or provide owners consent from the owners/strata/community association.
 - Demonstrate that direct access from a public space/road is not viable for each stage of works.
 - An assessment to be carried out of the physical constraints of the Right of Carriageway to determine the maximum size of vehicle that may access the site via the Right of Carriageway during construction.
 - Unless owner/strata/community associations consent is obtained, vehicles are not to exceed 24 tonnes or 7.5 metres in length (an assessment must be undertaken that the surface is capable of supporting up to 24 tonnes, otherwise the weight limit should be reduced in the CTMP). If consent is obtained, a copy must be included in the CTMP.
 - No construction vehicles, materials or plant are to be located or parked in the private road/driveway, community title road or right of way.
 - How any disruption to other users of the private road/driveway, community title road or right of way will be minimised and all users kept informed of likely disruption where the access will be closed or blocked for any given time.
 - If trees are located within or overhang the access route, a tree protection plan prepared by an Arborist with minimum AQF Level 5 in arboriculture demonstrating how any trees within the Right of Carriageway will be protected from damage by construction vehicles. Should any tree protection measures be required on private land in accordance with AS4970-2009 Protection of trees on development sites, owner's consent must be obtained.
 - A Dilapidation report, including photographic surveys, of the private road/driveway/right of way must be included prior to any works commencing on the site. The report must detail the physical condition of the private road/driveway/right of way, and any other adjacent private property assets (including trees) or adjacent public property that may be adversely affected by vehicles servicing the development site to undertake works or activity during site works.
 - A requirement for Post-Construction Dilapidation Reports, including photos of any damage evident at the time of inspection, to be submitted after the completion of works and prior to the Occupation certificate. The report must:
 - Compare the post-construction report with the pre-construction report,
 - Clearly identify any recent damage or change to the private road/driveway/right of way and whether or not it is likely to be the result of the development works,

- Should any damage have occurred, identify remediation actions taken.
 - Be submitted to Council with the Occupation Certificate.
- 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 any 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 public 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.

A copy of the approved CTMP must be kept on-site at all times while work is being carried out.

The development is to be undertaken in accordance with the Construction Traffic Management Plan approved by Northern Beaches Council Traffic Team.

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

Loading and Service Vehicle Access

Truck access will only be permitted using the designated two-way driveway located at the southern end of the site operating under a traffic signal system. A sign post is required at the vehicular entry point indicating the location of the loading dock. Minimum dimensions for loading and service areas are to comply with AS2890.2:2002 with regards to length, width and vertical clearance. All trucks must enter and exit the site in a forward direction, with only one reverse manoeuvre permitted to access the loading dock.

Plans showing compliance with the distances and the swept path diagrams are to be submitted to the Principal Certifier prior to the issue of a Construction Certificate.

Architectural Plans and Engineering Drawings are to be updated showing the location of the Traffic Signal System and any associated infrastructure.

Reason: To ensure compliance with Australian Standards and that the Traffic Signal System is integrated within the construction works.

Vehicle Access & Parking

All internal driveways, vehicle turning areas, garages and vehicle parking space/ loading bay dimensions must be designed and constructed to comply with the relevant section of AS 2890 (Off-street Parking standards).

All internal driveways and vehicle access ramps must have ramp grades and transitions complying with AS 2890.1. To ensure the gradient requirements and height clearances are satisfied, a driveway profile must be prepared for all internal ramps showing ramp lengths, grades, surface RL's and overhead clearances, taken from the crest of the ramp to the base. The driveway profile must be taken along the steepest grade of travel or sections having significant changes in grades, where scraping or height restrictions could potentially occur and is to demonstrate compliance with AS 2890 for the respective type of vehicle.

Plans prepared by a suitably qualified Engineer shall be submitted 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.

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 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 Principal Certifier 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.

CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK

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

Loading Dock Management Plan

A Loading Dock Management Plan shall be prepared by the applicant and submitted to and approved by the Principal Certifier prior to the issue of any Occupation Certificate.

The Plan will need to demonstrate how the loading dock will be managed and how safe servicing arrangements including waste collection will be undertaken. The management plan shall include a requirement for truck access to only be permitted using the designated two-way driveway located at the southern end of the site operating under a traffic signal system.

Reason: to ensure the loading dock is managed appropriately and that tenants are aware of the conditions of use.

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 Certifier 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 Certifier prior to the issue of any Occupation Certificate.

Reason: To ensure compliance with Australian Standards.

Traffic Signal System for access to loading facilities

The applicant is to provide a traffic signal system to manage truck access along the internal road between the entry driveway and the loading dock area, designed to warn drivers about to enter the driveway of any conflicting vehicle approaching.

The signal system must;

- be clearly visible from the driveway entrance and loading dock areas,
- is to clearly indicate to an approaching driver, by way of red light or wording, that an opposing vehicle has entered the driveway,

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 Certifier that the system has been installed and operating as designed, in accordance with the requirements of this condition, prior to the issue of an Occupation Certificate for the development.

Reason: To ensure that heavy vehicles are not required to reverse from the site and to avoid queuing along the driveways.

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.