Traffic Engineer Referral Response

Application Number:	DA2022/1869
Proposed Development:	Alterations and additions to Belrose Super Centre including six (6) new tenancies for use as specialised retail premises and reconfiguration of the existing car park
Date:	04/05/2023
Responsible Officer	
Land to be developed (Address):	Lot 1 DP 1104786 , 4 - 6 Niangala Close BELROSE NSW 2085

Officer comments

Additional comments - 4/5/23

The additional information provided by the applicant's traffic engineer is noted and the additional material has addressed the concerns raised in the original referral comments regarding Traffic generation, vehicular access and loading. The applicant's comments regarding pedestrian access are noted however the development generates pedestrian movements across Niangala Close and facilities to cater for these movements are required. While it is agreed that a marked pedestrian crossing is inappropriate in this location a pedestrian refuge with pram ramps located to the north of the main access driveway of the development and adjacent to the existing underutilised Taxi Pick up zone would be ideal to both slow traffic and allow pedestrians to stage their crossing. This will be conditioned

Original referral - 1/3/23

The proposed development is for additional large format retail, improved dining precinct and enhancement of level 2 rooftop to the existing Bulky Goods Retail development known as Belrose Super Centre. The improvements will increase the floor area of the Super Centre from 34810 m2 to 36470m2 an increase of 1660m2. Vehicular ingress and egress arrangements for the centre will remain unchanged.

Parking

The Warringah DCP suggests that large format (bulky goods) retail outlets should determine their parking requirements by comparison with similar developments.

As the existing Super Centre has been operated in this location for several years at a similar scale, its own operations have been used for this analysis. It is currently served by some 1,040 carparking spaces. The proposed amendments will reduce the available parking on the site to a total of 974 parking spaces i.e 66 less spaces than existing. The applicant’s traffic consultant has undertaken parking surveys on Saturday 20 August 2022 (Saturday being the busiest trading day of the week) which identified a peak parking demand on the site of 455 spaces occupied at 2:00pm. For comparison, a survey undertaken on Saturday 30 October 2021 found a peak parking demand of 635 spaces occupied i.e one space per 54.8m2 . Both surveys suggest that the existing parking provision of 1040

spaces is well in excess of what is needed to cater for demands generated by the existing tenancies on the site. Using the peak parking occupancy rate (one space per 54.8m2 of floor area) from the two parking surveys the expanded floor area of 36,470m2 would generate a peak parking requirement of some 666 spaces.

As noted in the applicants traffic report, the RMS guide to traffic generating developments suggests that retail centres are busiest in December with traffic flow surveys indicating up to 30% busier than in October. It is noted that parking surveys conducted to support DA2014/139 for this site found a peak parking occupancy of 740 spaces on Friday 27/12/2013 (1 space per 43.2m2) This would suggest that a peak December parking demand of some 844 spaces may be required to support the proposed floor area of 36470m. This is still less than the 974 spaces that will be available on site. The RMS guide to traffic generating developments also notes "If the proposed development is an extension of an existing retail development, additional parking demand could be less than proportional to the increase in floor area"

Given the above, the proposed parking supply of 974 spaces is considered acceptable.

A condition of consent will be added to require that the existing electronic parking availability system be adjusted to suit the new parking arrangements and updated to provide real time parking availability information to provide advice and guidance to motorists with regard to available parking.

Traffic Generation

The predicted traffic generation numbers have been reviewed and while the quantum of traffic generated by the proposed expansion is not disputed the distribution of the traffic is questioned. It is unclear why a such a high proportion of the traffic generated by the expansion has been allocated to the rooftop parking area given that volumes using the basement carpark access are almost double that for the rooftop access under existing conditions.

It is also noted that although traffic counts have been undertaken at the access driveway into the basement carpark no SIDRA analysis of the operation of this junction has been undertaken. The capacity of the right turn bay into the Niangala Close basement carpark entrance needs to be reviewed. At present the bay is capable of accommodating a queue of 5 vehicles and under peak conditions such as in the December peak trading period this turning bay is full/near full. There is concern that it may queue out blocking northbound flows to other sites such as Bunnings. Further traffic generation data analysis in light of the above is required including submission of the SIDRA outputs for all modelled intersections for Council's review.

Vehicular Access

The vehicle ingress/egress points from the centre remains unchanged.

No dimensioned plans or swept path analysis have been provided to confirm that the design of the parking area is compliant with the requirements of AS 2890.1 (Off-street car parking). These details should be provided for review.

Loading

The new retail tenancies will be served by the existing loading dock on level 1 and a new loading bay adjacent to the level 2 extensions to cater for medium rigid trucks up to 8.8 metres in length. No details for the new loading dock have been provided however the applicant's traffic consultant advises that the new Loading Bay will be designed in accordance with the requirements of the Australian Standard for Parking Facilities (commercial vehicles) AS2890.2. No swept path plots or dimensioned plans have been provided and these should be provided to demonstrate that access to and from the local road network by a medium rigid truck to the new Loading Dock in a forwards direction is achievable.

Pedestrian Access Improvements

The applicant's traffic consultant has highlighted the need for the development to be accessible by walking cycling and public transport. There is an absence of any facilities to assist pedestrians to cross Niangala Close and Council officers have received many requests from pedestrians requesting provision of crossing facilities to ensure the safety of and assist pedestrians crossing to/from the Super Centre and other premises in Niangala Close, Belrose. Given the intensification of use of the Super Centre this demand will only increase. The developer will therefore be requested to provide designs for Council staff review and Traffic Committee approval for pedestrian crossing and amenity improvements on Niangala Close, between the Narabang Way roundabout and the roundabout at the access point to Bunnings. The approved works will then need to be constructed at the applicant's cost prior to occupation. It is envisaged that a pedestrian refuge at/near the Narabang Way roundabout and another immediately north of the driveway ingress into Belrose Super Centre will be required potentially with localised road widening to cater for two way truck movements.

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

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 on site parking. 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 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
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.

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.

Submission of Engineering Plans for pedestrian refuge
The applicant is to provide Civil Engineering plans for the design of:

A pedestrian refuge and associated traffic and parking restriction signage changes on Niangala Close located north of the main driveway serving the development

The design is to be generally in accordance with the Transport for NSW technical Direction TDT2011/01a 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 Certifier 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.

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 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

Signage and Linemarking – External
A plan demonstrating the proposed signage and line marking within Council's Public Domain shall be prepared by a suitably qualified person, submitted to and approved by the Local Traffic Committee and implemented to Council's Traffic Engineers satisfaction prior to the issue of an Occupation Certificate.

The signage and linemarking plan is to include:

- all signs and lines associated with the pedestrian refuge On Niangala Close
- signs to provide advice to traffic approaching and queuing in the right turn bay to the Niangala Close basement carpark that there is an access to the Rooftop carpark further to the north

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 consistent parking amenity.

Construction of Pedestrian refuge

A Pedestrian refuge and associated signage are to be installed as per any traffic committee approved plans to the north of the Niangala Close basement carpark driveway. All works shall be installed at applicant's cost.

Reason: To ensure provision is made for safe pedestrian crossing of Niangala Close to and from the premises.

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

Vehicle Parking
The car parking area shown on the approved drawings must be used for vehicle parking only. Loading and unloading of vehicles and delivery of goods to the land must be carried out within the site. Any loading or unloading of materials of potential environmental damage must be appropriately bunded with adequate spill response equipment in place to ensure nil runoff from the site.

Reason: To ensure the safety and amenity of the general public using public streets, and to ensure the protection of the environment from spillage of materials.

Landscaping adjoining vehicular access
The applicant must ensure that the planting or signage chosen for any land immediately adjacent to the driveways and adjacent to any driveway intersections must not exceed a height of 1m

Reason: To maintain unobstructed sight distance for motorists.

Electronic Parking Guidance System
The existing electronic parking availability system must be adjusted to account for the new parking spaces and updated to provide real time parking availability information providing advice and guidance to motorists in terms of the location of available parking. The parking guidance system to be maintained throughout the life of the development

Reason: to provide assistance to motorists searching for parking