

REFERRAL RESPONSE – TRAFFIC

FILE NO: Development Applications: 598/2022/1
ADDRESS: 17 Dover Road ROSE BAY 2029
PROPOSAL: Demolition of existing at-grade car park and encroaching structures and construction of: A mixed use building with frontage to Wilberforce Avenue incorporating a new multi-storey car park, ground floor retail premises and community centre and public amenities across multiple levels; Single storey ground floor retail building with frontage to Dover Road; and public domain and landscaping works.
FROM: Ms E Fang
TO: Mr V Aleidzans

I refer to the memo from the Planning Department dated 22 August 2023 requesting comments in relation to the above.

DOCUMENTATION

I refer to the following documents received for this report:

- Statement of Environment Effects, unreferenced, prepared by SJB Planning, dated December 2022;
- Statement of Compliance Access for People with a Disability, referenced 220084, prepared by Accessible Building Solutions, dated 7 April 2022;
- Waste Management Plan, Rev. A, unreferenced, prepared by AJ+C, dated 26 April 2022;
- Traffic Impact Assessment, referenced 201270, prepared by TTW, dated 6 December 2022.
- Submission to Application, unreferenced, prepared by TEF Consulting, dated 10 March 2023.
- Updated Swept Path Analysis for Waste Trucks, referenced Drawing No.SK 39, prepared by TTW, dated 14 August 2023;
- Updated Swept Path Analysis for Blind Aisle, Drawing No.SK 45, prepared by TTW, dated 14 August 2023;
- Amended Architectural Drawings, Rev 3, prepared by AJ+C, dated 15 August 2023.

ASSESSMENT

1.0 Parking Provision

General Parking

The parking provision for the proposed development has been assessed in accordance with Council's *DCP 2015 Chapter D6 Rose Bay Centre* and *Chapter E1 Parking and Access*:

Table 1: Car Parking Provision – Mixed Use

Non-residential Component	Quantity	DCP Minimum Requirement per 100m² GFA*	DCP Minimum Required Parking
Community Facility	909m ² (812+97)	2	12.7 (13)
Retail	316m ²	3.3	7.3 (7)
Total Required			20

***Note:** 0.7 parking multiplier for Rose Bay Local Centre E1 Zone

It is noted that Council has previously resolved, among other development objectives, to increase parking capacity of Wilberforce Avenue Car Park and Ian Street Car Park by a minimum of 100 car parking spaces. Currently the at-grade car park provides a total of 95 car parking spaces. The proposed provision of 229 car parking spaces, excluding the 29 spaces allocated to retail and community use, would create additional public parking by 105 parking spaces and therefore satisfy the minimum requirement.

Table 2: Bicycle and Motorbike Parking Provision

BICYCLE			
	Quantity	DCP Minimum Requirement	DCP Minimum Required Parking
Community Facility Employees	3 staff	1 per 10 staff	0.3 (0)
Community Facility Visitors	909m ²	2 + 1 per 200m ² of GFA	6.5 (7)
Shop Employees	316m ²	1 per 250m ²	1.3 (1)
Shop Customers	316m ²	2 + 1 per 100m ² over 100m ² GFA	4.2 (4)
Total required			12
MOTORBIKE			
	Quantity	DCP Minimum Requirement	DCP Minimum Required Parking
Car Spaces	229	1 per 10 car spaces	22.9 (23)
Total required			23

In response, the proposal includes 14 bicycle parking spaces and 22 motorcycle parking spaces, which would result in a marginal shortfall of one (1) space for motorbike parking. It however appears that the provision for an additional motorbike parking space can be readily made and will be conditioned.

It is also noted that two showers/change cubicles are provided to meet requirement for end-of-trip facilities, however a minimum of two (2) charging points should be provided for electric bicycles, as per E1.6.1 of Council's DCP.

Accessible Parking

Pursuant to Table 3.5 of Building Code of Australia (BCA), requirements related to the proposed development for accessible parking are as follows:

Table 3: Accessible Parking Provision

Class	Quantity	BCA Requirement	BCA Required Parking
Class 6*	20 spaces	1 space for every 50 car parking spaces or part thereof	0.4 (0)
Class 7a*	209 spaces	1 space for every 100 car parking spaces or part thereof	2.1 (2)
Total required			2

*Note: Class 6 building is a shop or other building for the sale of goods by retail or the supply of services direct to the public.

*Note: Class 7a building is a car park.

It is understood that three (3) accessible parking spaces are provided, which is considered acceptable.

Small Car Parking

Small car parking spaces are permitted in public car parks but must constitute less than 5% of the overall number of parking spaces, as per E1.9.6 of Council's DCP. The proposed 229 parking spaces permit a maximum provision of 11.5 (12) small car parking spaces. Five (5) spaces are marked as small car parking with a dimension of 2.4m x 5.4m and 6.2m of aisle width.

Standard vehicle parking with a dimension of 2.6m x 5.4m and a minimum of 6.6m aisle width is considered acceptable for Class 3A parking facilities.

EV Charging

The proposed development must provide 22.9 (23) spaces to have 'Level 2' electric vehicle charging point installed, as per E1.11 of Council's DCP. The proposed provision of 39 spaces with EV charging point complies with the minimum requirement and is deemed satisfactory.

2.0 Traffic Generation

Traffic generation from the proposed development has been calculated in accordance with *RMS Guide to Traffic Generating Developments 2002*, and *RMS Guide to Traffic Generating Developments Updated traffic surveys TDT 2013/04a*.

Proposed Development – Net Increase

Retail – Specialty shops

- Weekday peak hour vehicle trips: $316\text{m}^2 \times 0.75 \times 10.7 \text{ per } 100\text{m}^2 \text{ GLFA} = 25.4 \text{ trips}$
- Daily vehicle trips: $316\text{m}^2 \times 0.75 \times 55.5 \text{ per } 100\text{m}^2 \text{ GLFA} = 131.5 \text{ trips}$

Community Facility

- Weekday peak hour vehicle trips: $909\text{m}^2 \times 3.9 \text{ per } 100\text{m}^2 \text{ GLFA} = 35.5 \text{ trips}$

It is noted that RMS Guide does not specify trip generation rate for community facilities. Traffic Report made reference to a similar land use in Thirroul dated 12 October 2021, assuming an

average peak hour trip generation rate for a community centre to be 3.9 trips per 100m² GFA. This is considered acceptable.

In addition, Traffic Report calculates future traffic volume for public car park components based on the existing trips, which is summarised below:

Table 4: Public Car Park Trip Generation

Existing Trips		Existing Parking Spaces	Trip Generation Rate (per space)	Additional Parking Spaces	Additional Trips
AM Inbound	167	95	1.76	105	185
AM Outbound	116		1.22		128
AM Peak	283		-		313
PM Inbound	123		1.29		136
PM Outbound	127		1.34		140
PM Peak	250		-		276

Total

- Weekday peak hour vehicle trips = 25.4 + 35.5 + 313 = 373.9 trips

Wilberforce Avenue is a two-way local road with one travel lane and one kerbside parking lane on each side. Council's most recent traffic count data reveals Wilberforce Avenue typically carries 2769 vehicle trips per day, which is approximately 277 vehicle trips per hour during peak levels and is consistent with the existing traffic volume captured in Traffic Report.

It is clear from Table 4 that future traffic significantly exceeds the recommended environmental capacity for a residential street, as per TRMS Guide sets out performance standards for residential streets, as shown in Table 5. Council's Traffic Engineers also note that the existing traffic volume has reached the recommended maximum capacity.

Table 5: Environmental capacity performance standards on residential streets

Road class	Road type	Maximum Speed (km/hr)	Maximum peak hour volume (veh/hr)
Local	Access way	25	100
	Street	40	200 environmental goal
			300 maximum
Collector	Street	50	300 environmental goal
			500 maximum

It is however acknowledged that currently Wilberforce Avenue provides vehicular access that allows two-way traffic, where vehicles frequently enter and leave the site. Future one-way loop are expected to prohibit such rat-run and the actual traffic should be lower than calculated above.

It is also noted that SIDRA analysis has been undertaken to simulate future traffic performance at nearby intersections, roundabout and car park entries. Modelling results reveal that the signalised intersections of New South Head Road and Newcastle Street will experience a decreased level of service from Level B to Level C. It is also noted that the average delay will be increased at the intersection of New South Head Road and Dover Road, however level of

service remains unchanged and the queuing length will be consistent with the existing condition which does not exceed beyond the site exit or Ian Street.

The above results demonstrate that there will not be significant change to traffic performance in this area. Council's Traffic Engineers also note that site inspections have been previously undertaken, where it showed that congestions normally occur on weekday morning periods. In response, Council's Local Traffic Committee resolved to install timed 'NO STOPPING' restrictions on both Dover Road and Newcastle Street to improve access and mitigate congestion. In addition, New South Head Road as a State Road, along with the signalised intersections, are under care and control of TfNSW, noting TfNSW does not raise objection to the proposed traffic implications.

Based on the above, it is envisaged that traffic impact generated by the proposed development is acceptable and will not create significant change to traffic conditions on the surrounding road network.

3.0 Access, Loading Bay & Pedestrian Facilities

It is understood that a new pedestrian priority link will be created between Wilberforce Avenue and Dover Road, which provides entry via Wilberforce and exit off Dover to allow one-way traffic circulation. Council's Traffic Engineers concur with the traffic report that one-way traffic flow reduces conflicts between ingress and egress movements and prohibits rat-runs. Changing Dover Road access from entry only to exit only prevents vehicles from queuing on Dover to enter the car park and therefore improves traffic flow near the existing roundabout. SIDRA simulation results show either vehicles waiting to enter or leave the car park will have minor impacts on the frontage road. The proposed traffic flow is considered acceptable.

The swept path diagrams demonstrate successful movements for service vehicles to and from the designated parking space and is deemed satisfactory.

It should be noted that a continuous pedestrian path should be provided at each car park level to guide pedestrians from parking space to the lift. Signage and pavement marking should be installed to clearly demonstrate the pedestrian path.

It should also be noted that the increased traffic volume accessing the site via Wilberforce Avenue poses safety concerns for pedestrians past the site, noting this is a high pedestrian activity area and in particular a pedestrian priority link is proposed to connect Wilberforce Avenue and Dover Road which is anticipated to further increase pedestrian volume. As such, the proposal should incorporate raised pedestrian crossings in Wilberforce Avenue and in Dover Road, to reduce vehicle speed accessing the site and improve pedestrian safety in this area. The applicant is to liaise with Council's Traffic and Transport Team on the design and installation of the raised pedestrian crossings.

RECOMMENDATION

Should the development be approved, it is recommended that the following conditions be included as part of the DA consent:

A. General Conditions

A.5 Approved Plans & Supporting documents

Reference	Description	Author/Drawn	Date(s)
201270	Traffic Impact Assessment	TTW	6 December 2022
Drawing No.SK 39	Updated Swept Path Analysis for Waste Trucks	TTW	14 August 2023
Drawing No.SK 45	Updated Swept Path Analysis for Blind Aisle	TTW	14 August 2023

C. Conditions which must be satisfied prior to the issue of any construction certificate

C.13 Road and Public Domain Works

A separate application under Section 138 of the *Roads Act* 1993 is to be made to, and be approved by Council for infrastructure works prior to the issuing of any Construction Certificate. The following infrastructure works must be carried out at the applicant's expense:

1. Road and Footpath Works

- a) The removal of the any redundant pram ramps and the area reinstated with kerb and gutter.
- b) **Other conditions imposed by Council's Development Engineers.**

2. Pedestrian Facility Upgrade Works

The developer must liaise with Council's Traffic and Transport Team, and accordingly develop, fund and install pedestrian facilities near the site, in accordance with Council's Draft Active Transport Plan, to reduce vehicle speed and improve pedestrian safety in the vicinity, to the satisfaction of the Council's Engineering Services Department, including:

- a) Removal of the existing at-grade pedestrian crossing and associated signage and line markings at the intersection of Wilberforce Avenue and Newcastle Street, Rose Bay and installation of a raised pedestrian crossing in Wilberforce Avenue, Rose Bay, in line with the pedestrian entry in front of the community centre;
- b) Removal of the existing concrete median island and associated signage and line markings in Dover Road, south of Ian Street, Rose Bay, and installation of a raised pedestrian crossing at this location;
- c) Upgrade of the existing roundabout servicing Dover Road and Ian Street, Rose Bay, if required, to accommodate the new raised pedestrian crossing.

Note: To ensure that this work is completed to Council's satisfaction, this consent by separate condition, may impose one or more Infrastructure Works Bonds.

Note: *Road* has the same meaning as in the *Roads Act* 1993.

Note: The intent of this condition is that the design of the road, footpaths, driveway crossings and public stormwater drainage works must be detailed and approved prior to the issue of any Construction Certificate. Changes in levels may arise from the detailed design of buildings, road, footpath, driveway crossing grades and stormwater. Changes required under *Roads Act* 1993 approvals may necessitate design and levels changes under this consent. This may in turn require the Applicant to seek to amend this consent.

Note: See *section K. Advising*s of this consent titled *Roads Act Application*.

Standard Condition: C13 (Autotext CC13)

C.45 Parking Facilities

The *Construction Certificate* plans and specifications required by clause 139 of the Regulation, must include detailed plans and specifications for all bicycle, car and

commercial vehicle parking in compliance with AS2890.3:2015 *Parking Facilities - Bicycle Parking Facilities*, AS/NZS 2890.1:2004 : *Parking Facilities - Off-Street Car Parking* and AS 2890.2:2018 - *Off-Street Parking: Commercial Vehicle Facilities* respectively.

The plans must satisfy the following requirement(s):

- a) Sight distance requirements must comply with Clause 3.2.4 and Figure 3.3 of AS2890.1:2004;
- b) A 2m x 2.5m driveway sightline splay be provided, clear of obstruction, along both sides of the access driveway wholly within the property boundary;
- c) A continuous pedestrian path be provided at each car park level to guide pedestrians from parking space to the lift. Pavement marking should be installed to clearly demonstrate the pedestrian path;
- d) A minimum of two (2) charging points be provided for electric bicycles, as per E1.6.1 of Council's DCP;
- e) **Other conditions imposed by Development Engineer.**

Access levels and grades must comply with access levels and grade required by Council under the *Roads Act 1993*.

The Certifying Authority has no discretion to reduce or increase the number or area of car parking or commercial parking spaces required to be provided and maintained by this consent.

Standard Condition: C45 (Autotext: CC45)

D. Conditions which must be satisfied prior to the commencement of any development work

D.9 Construction Management Plan

D.10 Works (Construction) Zone – Approval & Implementation

E. Conditions which must be satisfied during any development work

E.3 Compliance with Construction Management Plan

I. Conditions which must be satisfied during the ongoing use of the development

I.21 Provision of Off-Street Parking

The owner and occupier, in compliance with AS/NZS 2890.1:2004: *Parking Facilities - Off-Street Car Parking*, must maintain unimpeded public access to off-street parking as follows:

Use	Number of spaces	
Car Parking	Retail	11
	Community centre	18
	Other	200
	Total	229
Bicycle Parking	14	
Motorbike Parking	23	

This condition has been imposed to ensure adequate on-site parking is maintained.

Standard Condition: I21