

Traffic Engineer Referral Response

Application Number:	DA2025/0077
Proposed Development:	Demolition works and construction of shop top housing including strata subdivision
Date:	07/05/2025
Responsible Officer	
Land to be developed (Address):	Lot 1 DP 900061 , 28 Lawrence Street FRESHWATER NSW 2096 Lot 1 DP 100563 , 22 Lawrence Street FRESHWATER NSW 2096 Lot 1 DP 578401 , 20 Lawrence Street FRESHWATER NSW 2096 Lot 45 DP 974653 , 16 Lawrence Street FRESHWATER NSW 2096 Lot 1 DP 595422 , 10 Lawrence Street FRESHWATER NSW 2096

Officer comments

Proposal description: Demolition works and construction of shop top housing, including strata subdivision

The proposed development involves the demolition of the existing structures and the construction of a new mixed-use residential complex. This complex will feature 6 one-bedroom units, 15 two-bedroom units, and 9 three-bedroom units, along with several retail spaces. Access to the site will be provided through an existing single crossover on Dowling Street, which will lead directly to two levels of basement parking.

The traffic team has reviewed the following documents:

- Plans (Master Set) – issue for DA, Revision 04, designed by FUSE Architects, dated 28/11/2024,
- Traffic Impact Assessment report (Revision B: Final) prepared by Stantec dated 06 December 2024,
- Statement of Environmental Effects prepared by Ethos Urban dated 28 January 2025, and
- Pre-Lodgement Advice (PLM2024/0064) dated 08 August 2024.

Access

- Access to parking from Dowling Street is proposed and supported. The proposed driveway has been widened to allow inbound and outbound vehicles to pass each other simultaneously. The driveway is approximately 6.1 meters wide for the first 6 meters into the property, which facilitates ease of access. Swept path plots indicate that this design is appropriately sized to allow a B99 vehicle to pass a B85 vehicle entering or exiting the site, as required by AS2890, clause 3.2.2.
- Dowling Street is narrow, carries buses, and experiences high traffic volumes. The proposed vehicle access at the southern boundary of the site is supported, as it minimises

traffic impacts.

- 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 scraping and bottoming do not occur.
- A pedestrian sightline triangle of 2.0 metres by 2.5 metres should be plotted at the property boundary in accordance with AS2890.1:2004 for pedestrian visibility. It is noted that the pedestrian sightline triangle on the exit side of the driveway is not feasible due to the existing site constraints. To enhance safety for pedestrians along the Dowling Street frontage, we propose the installation of convex mirrors on both sides of the driveway, as well as a speed bump in the internal layout of the site. Additionally, we recommend considering the implementation of LED signage that alerts pedestrians when a vehicle is exiting the property. This option is expected to have minimal impact on the surrounding local amenities and would be activated by a beam system as vehicles approach the exit. The LED signage includes voice alerts for effective warnings and features an audio cut-off timer.

Loading/servicing

- According to the PLM referral comments, the Warringah DCP requires that sufficient space be allocated on the building or development site for the loading and unloading of vehicles. Currently, there is no provision for off-street loading, which is unacceptable for a development of this size. Considering the number of retail tenancies and the expected delivery and servicing needs, it is essential to provide off-street loading and servicing space that can accommodate at least a Medium Rigid Vehicle (MRV). It is not acceptable to depend on existing kerbside Loading Zones, and we cannot assume the long-term availability of the Lawrence Street Loading Zone.
- The current bus zone measures only 18.5 meters in length, which falls short of the 30 meters required by the relevant TfNSW guidelines. Council believes that establishing a compliant bus zone is a more suitable use of kerb space than a loading zone. Additionally, the proposed loading zone on Dowling Street is not favoured. Dowling Street is narrow, accommodates buses, and experiences relatively high traffic volumes during peak hours. There is an existing bus zone on the west side of Dowling Street, directly opposite the development. If a loading zone were to be placed opposite the bus zone, it could hinder two-way traffic flow if both zones are occupied simultaneously.
- Furthermore, since buses travel southbound along Dowling Street and occasionally pass each other, a loading zone outside the development could obstruct bus access.

Parking rates/requirements:

- The land is zoned E1 Local Centre under the Warringah Local Environmental Plan 2011 (LEP).
- Warringah DCP applies to the subject site. When calculating required parking for development, car parking rates are to be rounded up to the nearest whole number. The parking requirements for the development comprising 30 units (6 x one-bedroom, 15 x two-bedroom and 9 x three & four-bedroom apartments) and 1291m² retail/commercial premises are 38 resident spaces, 6 visitor spaces, 72 retail/commercial users = 116 spaces. In response, 106 parking spaces have been proposed (38 residential parking spaces, 6 visitor parking spaces and 62 retail parking spaces). There is therefore a shortfall of 10 retail parking spaces.
- The retail parking shortfall spaces for the proposal are considered acceptable given that:

- o The retail parking rate specified in the Warringah DCP is significantly higher compared to the rates in other Northern Beaches Council DCPs. Therefore, it may be reasonable to consider relaxing these requirements. For instance, the Pittwater DCP mandates one parking space for every 30 square meters of GLFA, while the Manly DCP requires one parking space for every 40 square meters of GLFA for the retail component. If we apply these rates to the retail aspect of the development, the parking requirements would be 43 and 32 car spaces, respectively. This is much lower than the number of spaces required under the Warringah DCP.
- o The development currently provides 62 retail car spaces, which translates to a parking ratio of approximately one space for every 20 square meters of GLFA.
- o It is essential to take into account the characteristics of nearby uses since the development is part of the larger Freshwater Village precinct. It is unlikely that the development will generate a substantial number of new vehicle trips. Instead, it is more likely to encourage linked trips to nearby retail establishments, residents living above the development, or those who reside in close proximity to the site. Due to the reasons stated above, providing 62 retail parking spaces meets the retail car parking requirements.

- The plans show three (3) residential accessible parking spaces and two (2) retail accessible parking spaces, which is acceptable. The design of the accessible parking space should be in accordance with the Australian Standard AS2890.6:2022 Parking Facilities-Off Street Parking for People with Disability. Space should be provided with a clear width of 2.4m and located adjacent to a minimum shared area of 2.4m.
- Bollards are provided for the disabled shared area as shown in Figure 2.2 of the Australian Standard AS2890.6:2022 Parking Facilities-Off Street Parking for People with Disability.
- The design of the parking spaces appears to comply with the Australian Standard AS 2890.1:2004 for Off-Street Parking. However, the architectural plans do not provide dimensions for the widths and lengths of the parking spaces and the access driveway. Although swept path plots have been included to demonstrate that access to and from each space is feasible for a B85 vehicle, this must be confirmed with dimensioned plans. Dimensioned plans should be submitted for the parking area to ensure that all parking bays and the access driveway are appropriately sized.
- The traffic and parking report, along with the swept path analysis in Appendix B, illustrates the entry and exit movements, as well as the circulation patterns of B85 and B99 vehicles within the parking space modules. It shows that B99 vehicles can successfully access and exit the driveway in accordance with the requirements outlined in clause B2.2 of AS2890.
- The WDCP mandates that each residential unit must provide one (1) bicycle parking space, along with one visitor bicycle parking space for every twelve (12) dwellings. Additionally, the DCP stipulates the requirement for retail bicycle parking at a rate of one space per 200 m² of GFA with a high-medium security level for staff, and one space per 600 m² of GFA with a high-low security level for visitors. According to the plans, there will be a total of 30 secure bicycle parking spaces for residents on the upper ground floor. Furthermore, the facility will include 7 secure bicycle parking spaces for staff, 12 lockers, and 2 shower cubicles within the end-of-trip facilities area, as well as 6 visitor bicycle parking spaces on the upper ground floor. This provision meets the Council's DCP requirements and supports alternative modes of travel.
- The development proposes a total of 5 motorcycle parking spaces and therefore complies with Council's motorcycle parking requirements.

Traffic generation

- The proposal will generate minimal traffic (up to 10 additional vehicle movements) in the Saturday peak hours; therefore, it will not have any unacceptable implications in terms of road network capacity performance.
- The operation of the key intersections within the study area was assessed using SIDRA INTERSECTION software. Based on the sidra modelling outputs included in Appendix A of the report, the surrounding intersections would continue to operate satisfactorily with generally only minor increases to average delay and 95th percentile queue lengths. The LOS of each intersection would operate well with spare capacity.
- It is noted that the modelling has been completed for the intersections of Lawrence Street/ Dowling Street and Oliver Street/ Lawrence Street. These intersections are closely spaced intersections. For the development of this scale, it would normally be recommended that a network-wide process (Sirda Network Model) is developed and assessed. This would take into account the effects of pedestrian crossings. This determines the backward spread of congestion as queues on downstream lanes block upstream lanes (queue spillback), and applies a capacity constraint to oversaturated upstream lanes, thus limiting the flows entering downstream lanes. However, as TfNSW who are the roads authority for management of signalised intersections has not requested this and as the modelling has not identified intersections that will perform poorly post-development, it will not be required.

conclusion

The current plans and traffic report are unacceptable for the reasons outlined above.

The proposal is therefore unsupported.

Note: Should you have any concerns with the referral comments above, please discuss these with the Responsible Officer.

Recommended Traffic Engineer Conditions:

Nil.