



Traffic Impact Assessment

638 Pittwater Road, Brookvale NSW 2100

April 2024



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Type of Assessment: Traffic Impact Assessment

Site Location: 638 Pittwater Road, Brookvale NSW 2100

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1. Introduction

APEX Engineers were engaged by Tony Chirillo to provide a traffic impact assessment as a part of the modification application for the approved mixed-use development located at 638 Pittwater Road, Brookvale NSW 2100.

This report has been structured into the following sections:

- **Section 2** Describes the existing transport conditions in the locality and provides a comparison of the approved development and the proposed modifications;
- **Section 3** Assesses the relevant statutory parking provision requirements applicable for the subject modifications;
- **Section 4** Provides a review of any changes to the approved layout of the on-site car park that form this modification;
- **Section 5** Provides an estimate of the traffic impact anticipated to be generated by the proposed modifications compared with the approved development; and
- **Section 6** Provides the summary and conclusions of the study.

2. Background and Existing Conditions

2.1 Site Description and Local Road Network

The subject site is located at 638 Pittwater Road in Brookvale, in the local government area of Northern Beaches Council. The subject site is zoned as Business Development (B5) and is bound by 3 roads; Pittwater Road to the west, Orchard Road to the south and Charlton Lane to the east. At the site frontage, Pittwater Road includes two traffic lanes and a bus lane in each direction (with a posted speed limit of 60 km/hr) and is a part of the A8 arterial route linking Mona Vale to North Sydney. Both Orchard Road (with a posted speed limit of 50 km/hr) and Charlton



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Lane are local roads. Orchard Road includes left in/left out access from/to Pittwater Road.

Figure 1 Highlights the site location from an aerial perspective.

Figure 2 Illustrates Pittwater Road and Orchard Road as seen at the site frontage.



Figure 1: Location of the subject site



Figure 2: Pittwater Road and Orchard Road at the site frontage

2.2 Details of the Proposed Development

Table 1 provides a comparison of the land uses as approved versus as proposed in this modification application. In summary, the current modifications relate to the addition of 20 residential units into the approved development.

Table 1: Comparison of approved development versus current modification

Aspect	Approved Number	This Modification	Net Change
Residential units	40 residential units (26 x 1 bed units + 10 x 2 bed units + 4 x 3 bed units).	60 residential units (39 x 1 bed units + 15 x 2 bed units + 6 x 3 bed units).	+20 residential units (13 x 1 bed units + 5 x 2 bed units + 2 x 3 bed units).
Retail / Commercial units	3 Retail units (1,030 sqm GFA) + 8 Commercial units (794 sqm).	3 Retail units (1,030 sqm GFA) + 8 Commercial units (794 sqm).	No change
Car spaces	157 car spaces with access off Charlton Lane (35 car spaces in basement level 1 + 58 car spaces in basement level 2 + 64 car spaces in basement level 3).	152 car spaces with access off Charlton Lane (28 car spaces in basement level 1 + 59 car spaces in basement level 2 + 65 car spaces in basement level 3).	No change
Motorcycle spaces	8 spaces (4 spaces in basement level 2 + 4 spaces in basement level 3).	8 spaces (4 spaces in basement level 2 + 4 spaces in basement level 3).	No change
Bicycle spaces	54 spaces (12 spaces in basement level 1 + 2 spaces in basement level 2 + 40 spaces in basement level 3).	54 spaces (12 spaces in basement level 1 + 2 spaces in basement level 2 + 40 spaces in basement level 3).	No change
Service vehicle bays	2 service vehicle bays (within ground level) with access off Orchard Road.	2 service vehicle bays (within ground level) with access off Orchard Road.	No change

2.3 Public Transport Services

The local area was assessed for available public transport services that were both easily accessible from the subject site and provide viable alternative options to private trips. This assessment identified that the site lies within comfortable walking distance to an abundance of bus routes (within 400m distance, 5-minute walk), as listed below;

- Bus route 132: Warringah Mall to Manly via North Balgowlah
- Bus route 135: North Head to Warringah Mall via Manly
- Bus route 139: Warringah Mall to Manly via South Curl Curl
- Bus route 145: Warringah Mall to Seaforth
- Bus route 146: Wheeler Heights to Manly
- Bus route 151: Mona Vale to City QVB
- Bus route 158: Cromer to Manly
- Bus route 159: Dee Why to Manly
- Bus route 168: North Balgowlah to Milsons Point
- Bus route 169: Manly to City Wynyard via Narrabeena
- Bus route 178: Cromer Heights to City Wynyard
- Bus route 179: Stockland Green Hills to North Rothbury via Maitland
- Bus route 180: Collaroy Plateau to City Wynyard
- Bus route 185: Mona Vale to Warringah Mall via Warriewood
- Bus route 188: Mona Vale to City Wynyard
- Bus route 199: Palm Beach to Manly
- Bus route 280: Warringah Mall to Chatswood
- Bus route B1: Mona Vale to City Wynyard (B-Line)
- Bus route E54: Mona Vale to Milsons Point (Express Service)
- Bus route E68: Brookvale to City Wynyard via North Balgowlah (Express Service)
- Bus route E75: Brookvale to City Wynyard (Express Service)

- Bus route E76: Dee Why to City Wynyard via North Curl Curl (Express Service)
- Bus route E77: Dee Why to City Wynyard via Wingala (Express Service)
- Bus route E78: Cromer Heights to City Wynyard (Express Service)
- Bus route E79: Wheeler Heights to City Wynyard (Express Service)
- Bus route E80: Collaroy Plateau to City Wynyard (Express Service)
- Bus route E83: PrePay Only - North Narrabeen to City Wynyard (Express Service)
- Bus route E85: Mona Vale to City Wynyard via Warriewood (Express Service)
- Bus route L90: Palm Beach to City Wynyard (Limited Stops)

As per the above, there is a substantial number of bus services that can be accessed within the close vicinity (within a 5-minute walking distance) of the subject site.

These routes operate with various frequencies, from low to high, and provide coverage to much of the Sydney region including major destinations such as Sydney City, Manly and Warringah Mall. **Figure 3** below provides the public transport map for the subject site area, outlining the coverage of the above-listed bus services.

In light of the above, it was concluded that the site has excellent accessibility via public transport. Prospective tenants and patrons/staff will be able to carry out most trips through these options, thus greatly reducing the propensity to drive.

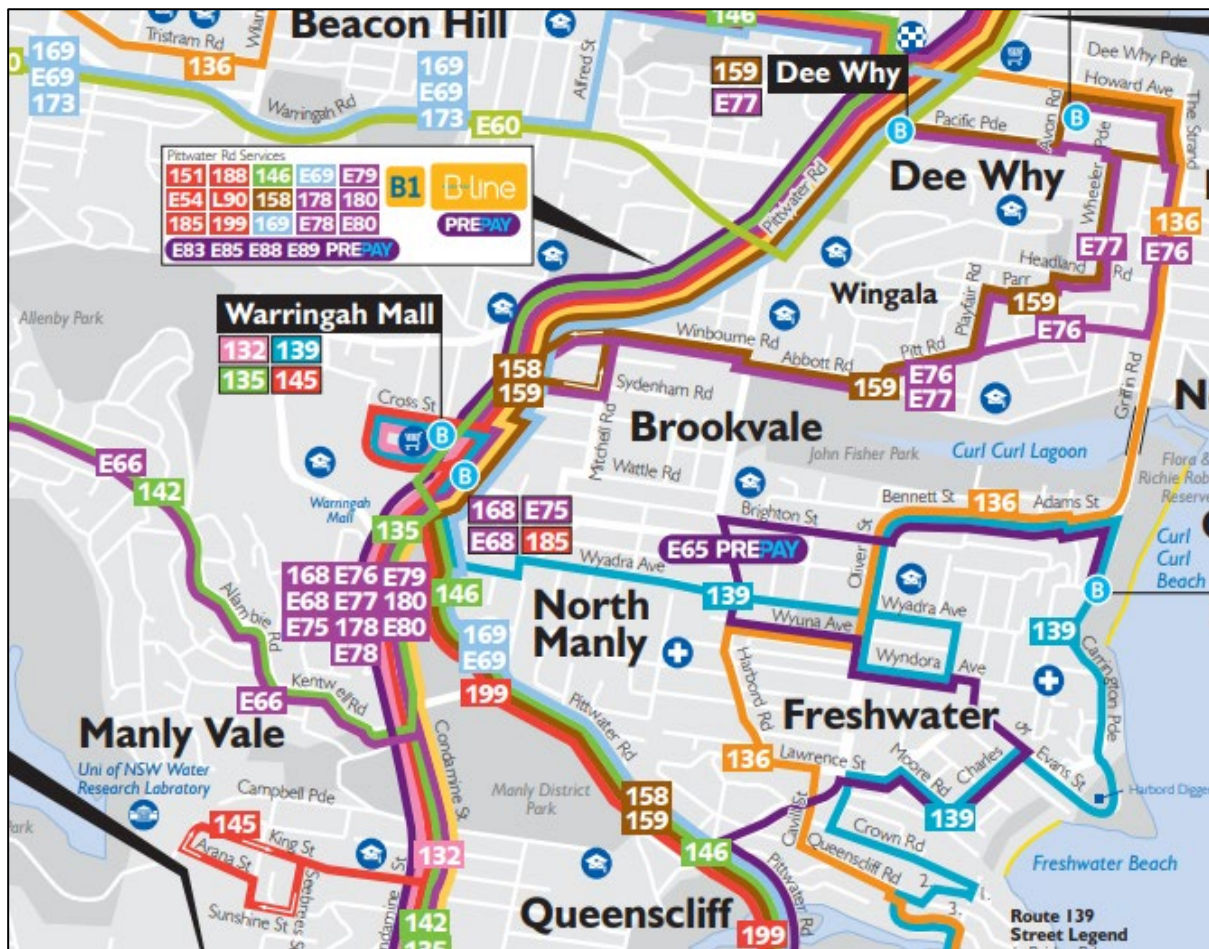


Figure 3: Public transport map for the site vicinity

2.3 Active Transport Infrastructure

The locality was assessed for infrastructure that encourages modes of active travel for locals. It was identified that the local road network supports pedestrian footpaths for convenient pedestrian travel. The intersection of Pittwater Road with Sydenham Road (located approx. 80m to the north of the site) includes signalised pedestrian crossings across both Pittwater Road with Sydenham Road, so that bus stops along either side of these roads can be accessed by pedestrians.

Furthermore, a number of cycling routes (useful unmarked) were noted around the locality, providing access to much of the local area. Given the number of nearby shops, supermarkets, and other facilities, it was concluded that residents and staff of



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the development will regularly utilise modes of active transport to travel within the locality.

Figure 4 illustrates the cycling network surrounding the subject site.



Figure 4: Cycling network within the site locality

3. Parking Provision Review


3.1 Approved Car Parking Provisions

The latest modification approval for this development (under Mod2020/0598, dated: 24/02/2021) states the requirements in relation to car parking as shown in **Figure 5**.

B. Modify Condition 82 to read as follows:

82. Allocation of Spaces
 152 car parking spaces shall be provided, made accessible, and maintained, at all times (unless they

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must be removed to comply with the condition requiring vehicle access to No. 640 Pittwater Road). The spaces shall be allocated as follows:

- 87 - Residential (Including spaces for persons with a disability)
- 9 - Residential - Visitors (Including spaces for persons with a disability)
- 56 - Commercial/retail including customer parking (Including spaces for persons with a disability)

Car-parking provided shall be used solely in conjunction with the uses contained within the development. Each car parking space allocated to a particular unit / tenancy shall be line marked and numbered or signposted to indicate the unit / tenancy to which it is allocated.

Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the Occupation Certificate.
 Reason: To ensure that adequate parking facilities to service the development are provided on site.

C. Modify Condition 85 to read as follows:

85. Surplus Parking Spaces
 The 53 surplus car parking spaces must not be allocated to any of the proposed apartments or retail tenancies.

They may be used for visitor/customer parking prior to any redevelopment of the site but must be available to be reallocated when an application for the redevelopment of the site is lodged (i.e. any application to add additional apartments).

Reason: To ensure the site is suitably developed in the future and adequate car parking is provided.

Figure 5: Car parking allocation under the latest approval for the site

Based on **Figure 5**, it is evident that under the latest approval for the development, there are some 53 surplus car parking spaces.

3.2 Car Parking Requirement for the Current Application

The current modification application relates to the provision of an additional 20 residential units (13 x 1 bed units + 5 x 2 bed units + 2 x 3 bed units) within the site.

The statutory car parking provision requirements for the proposed modification development were determined in accordance with the Warringah Council Development Control Plan (DCP 2011). This policy document stipulates the following car parking rates in relation to Multi-dwelling housing, Residential flat buildings, Serviced apartments (including holiday flats), Shop-top housing (residential component);

- 1 space per 1 bedroom dwelling.
- 1.2 spaces per 2 bedroom dwelling.
- 1.5 spaces per 3 bedroom dwelling.
- 1 visitor space per 5 units or part of dwellings.

Table 2 outlines the statutory car parking requirements for the current modification application.

Table 2: Statutory parking requirement for the current modification

Component	Dwelling type	Number proposed	Statutory parking rate	Parking spaces required
Residential	1 Bedroom	13	1 space per 1 bedroom dwelling	13
	2 Bedroom	5	1.2 spaces per 2 bedroom dwelling	6
	3 Bedroom	2	1.5 spaces per 3 bedroom dwelling	3
Residential visitors	All residential dwellings considered	20	1 visitor space per 5 units or part of dwellings	4
Total car spaces				26

As per the information presented in the table above, the proposed modification development includes a statutory car parking provision requirement of 26 additional car parking spaces.

The subject development currently includes 53 surplus car parking spaces. As such, the required additional 26 car parking spaces under the current application can be accommodated within this surplus parking inventory. Upon allocating the 26 car spaces out of the 53 surplus car spaces for the proposed modification, there will be 27 surplus car parking spaces within the development.

3.2 Bicycle Parking Provisions

The Warringah Council Development Control Plan (DCP 2011) stipulates the following bicycle parking provision rates;

- For residential dwellings – provide 1 bicycle space per dwelling + 1 visitor bicycle space per 12 dwellings.

As per the above bicycle parking rate, the current modification proposal involving 20 additional residential units should provide;

- 20 bicycle parking spaces for the residents (a total of 20 additional residential dwellings); and
- 2 bicycle spaces for the visitors to the residential component (20 residential dwellings x 1 visitor space per 12 dwellings).

Accordingly, the proposed development should provide an additional 22 bicycle spaces to accommodate the additional demand generated by the proposed modification.

This requirement to provide 22 additional bicycle spaces as a part of the current proposal should be imposed on the development as a suitably worded consent condition. The basement level car park includes ample area to accommodate these required additional bicycle spaces.

4. Car Parking Design Review

The current modification application does not seek any changes to the approved layout of the on-site car park.

5. Traffic Impact Assessment

A traffic impact assessment was undertaken to determine in potential impacts caused by the proposed modification development on the local road network. According to the *Guide to Traffic Generating Developments (RMS, TDT 2013/04)*;

- A **high-density residential building** will generate, approximately;
 - 0.19 trips per unit in the AM peak;
 - 0.15 trips per unit in the PM peak; and
 - 1.52 trips per unit, daily.

Applying the above rates to the proposed additional 20 residential units into the approved scheme leads to the additional trip generation levels as identified in **Table 3**.

Table 3: Additional traffic generation potential

Period	Residential Component	Trip Rate	Total Trips
AM Peak	20 units	0.19 trips per unit	4 AM peak trips
PM Peak		0.15 trips per unit	3 PM peak trips
Daily		1.52 trips per unit	31 daily trips

As per the above table, the additional traffic generation potential of the proposed modification component of the development is very minor, with only 3-4 vehicular trips during each AM or PM peak hour period. These levels of additional vehicle trips are unlikely to have any material impact on the operations of the local transport network.

6. Conclusions

APEX Engineers were engaged by Tony Chirillo to provide a traffic impact assessment as a part of the modification application for the approved mixed-use development located at 638 Pittwater Road, Brookvale NSW 2100.

Based on this assessment, the following can be concluded:

- The subject site is well serviced by a number of bus routes that operate along Pittwater Road, which can be accessed from bus stops located within 400m radius of the subject site (within 5-minute walking distance).
- The current modification application seeks to provide an additional 20 residential units (13 x 1 bed units + 5 x 2 bed units + 2 x 3 bed units), into the already approved development.
- Based on the Warringah Council Development Control Plan (DCP 2011), the current modification application includes a statutory car parking provision requirement of 26 additional car parking spaces (20 for residents + 6 for visitors).
- The subject development currently includes 53 surplus car parking spaces. As such, the required additional 26 car parking spaces under the current application can be accommodated within this surplus parking inventory. Upon allocating the 26 car spaces out of the 53 surplus car spaces for the proposed modification, there will be 27 surplus car parking spaces within the development.
- The proposed development should also provide an additional 22 bicycle spaces to accommodate the additional demand generated by the proposed modification.
- This requirement to provide 22 additional bicycle spaces as a part of the current proposal should be imposed on the development as a suitably worded

consent condition. The basement level car park includes ample area to accommodate these required additional bicycle spaces.

- The current application does not seek any changes to the approved on-site car parking layout.
- The additional traffic generation potential of the proposed modification component of the development is very minor, with only 3-4 vehicular trips during each AM or PM peak hour period. These levels of additional vehicle trips are unlikely to have any material impact on the operations of the local transport network.