ANNEXURE 8

Proposed Mixed-Use Development

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1112-1118 Barrenjoey Road, Palm Beach

TRAFFIC AND PARKING ASSESSMENT REPORT

5 February 2010 Ref 09124



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1. INTRODUCTION

This report has been prepared to accompany a Development Application to Pittwater Council for a mixed-use development proposal to be located at 1112-1118 Barrenjoey Road, Palm Beach (Figures 1 and 2).

The proposed development will involve the demolition of the existing buildings on the site to facilitate the construction of a new mixed-use development, with carparking to be provided in a single-level basement carparking area in accordance with Council's requirements.

The purpose of this report is to assess the traffic and parking implications of the development proposal and to that end this report:

- describes the site and provides details of the development proposal
- reviews the road network in the vicinity of the site
- estimates the traffic generation potential of the development proposal
- review the geometric design features of the proposed basement carparking facilities for compliance with the relevant codes and standards
- assesses the adequacy and suitability of the quantum of off-street carparking provided on the site.





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2. PROPOSED DEVELOPMENT

Site

The subject site is located on the eastern side of Barrenjoey Road, opposite the Palm Beach Wharf carparking area. The site has a street frontage approximately 36m in length to Barrenjoey Road and occupies an area of approximately 1,362m².

The subject site is currently occupied by a single weatherboard dwelling house which is located behind a small number of shops fronting Barrenjoey Road. These shops include a general store/takeaway shop, a beautician, a clothing store and a café. The cumulative floor area of the shops is approximately $362m^2$.

Off-street carparking is currently provided for 6 cars in an open carparking area located in the south-western corner of the site. Vehicular access to the carparking facilities is currently provided via an entry/exit driveway located towards the southern end of the Barrenjoey Road frontage.

Proposed Development

The proposed development will involve the demolition of the existing dwelling and shops on the site to facilitate the construction of a new mixed-use development.

The proposed retail component consists of a small kiosk, which is to be located on the ground floor level towards the street, and have a floor area of approximately $21m^2$. Six commercial suites are also proposed at ground floor level, fronting Barrenjoey Road, with a cumulative floor area of $326m^2$.

The proposed building is also to contain 5×3 -bedroom apartments which are to be located on the three levels above the commercial suites.

Off-street carparking is proposed for a total of 22 cars in a new single-level basement carparking area in accordance with Council's requirements. Vehicular access to the

carparking facilities is to be provided via a new entry/exit driveway located towards the northern end of the Barrenjoey Road frontage.

Plans of the proposed development have been prepared by *Lesiuk Architects Pty Ltd* and are reproduced in the following pages.





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3. TRAFFIC ASSESSMENT

Road Hierarchy

The road hierarchy allocated to the road network in the vicinity of the site by the Roads and Traffic Authority is illustrated on Figure 3.

Barrenjoey Road is classified by the RTA as a *State Road* and provides the key north-south road link in the far northern beaches area, linking Mona Vale to Palm Beach. It typically carries one traffic lane in each direction in the vicinity of the site, with kerbside parking permitted at selected locations only.

Whale Beach Road is a local, unclassified road which performs the function of a *collector route* along the eastern side of the peninsula. It typically carries one traffic lane in each direction in the vicinity of the site with kerbside parking also permitted at selected locations only.

Existing Traffic Controls

The existing traffic controls which apply to the road network in the vicinity of the site are illustrated on Figure 4. Key features of those traffic controls are:

- a 60 km/h SPEED LIMIT which applies to Barrenjoey Road
- a 40 km/h SPEED LIMIT which applies to Beach Road, Ocean Road and most other local roads in the area
- a PEDESTRIAN CROSSING in Barrenjoey Road just south of the subject site





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Projected Traffic Generation

An indication of the traffic generation potential of the development proposal is provided by reference to the Roads and Traffic Authority's publication *Guide to Traffic Generating Developments, Section 3 - Landuse Traffic Generation (October 2002).*

The RTA *Guidelines* are based on extensive surveys of a wide range of land uses and nominates the following traffic generation rates which are applicable to the development proposal:

Medium Density Residential Flat Buildings 0.5 - 0.65 peak hour vehicle trips / 3 or more bedroom dwelling

Commercial Premises

2.0 peak hour vehicle trips per 100m² GFA

The RTA *Guidelines* do not nominate a traffic generation rate for small, local shops, referring only to major regional shopping centres incorporating supermarkets and department stores. For the purposes of this assessment therefore, the traffic generation rate of 2.0 peak hour vehicle trips/100m² GFA nominated in the RTA *Guidelines* for commercial premises has been adopted in respect of the small kiosk component of the development proposal.

Application of the above traffic generation rates to the residential, commercial and retail components of the development proposal yields a traffic generation potential of approximately 10 vehicle trips per hour during commuter peak periods as set out below:

Projected Future Traffic Generation

Residential apartments (5x3-bedrooms):	3.2 peak hour vehicle trips
Commercial Suites (326m ²):	6.5 peak hour vehicle trips
Kiosk (21m ²):	0.4 peak hour vehicle trips
TOTAL TRAFFIC GENERATION POTENTIAL:	10.1 peak hour vehicle trips

That projected future level of traffic activity should however, be offset or *discounted* by the volume of traffic which could reasonably be expected to be generated by the existing uses of the site, in order to determine the *nett increase (or decrease)* in traffic flows expected to occur as a consequence of the development proposal.

Application of the "commercial" traffic generation rate nominated in the RTA *Guidelines* to the existing local shops on the site as well as the dwelling house (0.85 peak hour vehicle trips) yields a traffic generation potential of approximately 5.5 peak hour vehicle trips.

Accordingly, it is likely that the proposed development will result in an *increase* in the traffic generation potential the site of approximately 5 vph as set out below:

Projected Nett Increase in Peak Hour Traffic Activity as a consequence of the development proposal				
Existing Traffic Flows:	5.5 vehicle trips			
NETT INCREASE IN TRAFFIC FLOWS:	4.6 vehicle trips			

That projected increase in traffic activity as a consequence of the development proposal is *statistically insignificant* and will clearly not have any unacceptable traffic implications in terms of road network capacity.

4. PARKING IMPLICATIONS

Existing Kerbside Parking Restrictions

The existing kerbside parking restrictions which apply to the road network in the vicinity of the site are illustrated on Figure 5 and comprise:

- NO STOPPING / NO PARKING restrictions in Barrenjoey Road north of Palm Beach Road
- 1 HOUR PARKING along both sides of Barrenjoey Road in the vicinity of the site including along half of the site frontage
- TICKETED PARKING in the both of the Palm Beach Wharf carparking areas
- BUZ ZONES located at regular intervals along both sides of Barrenjoey Road.

Off-Street Parking Provisions

The off-street parking requirements applicable to the development proposal are specified in Pittwater Council's 21 Development Control Plan – Section B6.6 – Off-Street Vehicle Parking Requirements document in the following terms:

Residential Development (Multi-Unit Housing)

2 or more Bedroom Apartments:2 spaces per dwellingVisitors:1 space per 3 dwellings

Commercial Premises 2.5 spaces per 100m² of GLA

Retail 1 space per 30m² of GLA

Application of the above parking requirements to the various components of the development proposal yields an off-street parking requirement of 21 parking spaces as set out below:

OFF-STREET PARKING REQUIREMENTS		
Residential (5x2-bedrooms):	10.0 spaces	
Visitor Parking:	1.7 spaces	
Commercial Suite (326m ²):	8.1 spaces	
Kiosk (21m ²):	0.7 spaces	
TOTAL PARKING REQUIRED:	20.5 spaces	

Those parking requirements are satisfied by the proposed provision of 22 off-street carparking spaces as part of the development proposal.

The geometric design layout of the proposed vehicular access and carparking arrangements have been designed to comply with the relevant aspects of the Standards Australia publication *Parking Facilities Part 1: Off-Street Carparking AS2890.1 - 2004* in terms of ramp grades and widths, aisle widths, parking bay dimensions and overhead clearances.

In the circumstances, it is reasonable to conclude that the proposed development will not have any unacceptable parking implications.

Conclusion

The foregoing assessment has found that:

- the projected increase in traffic activity of 5 peak hour vehicle trips is *statistically insignificant*, and will clearly not have any unacceptable traffic implications in terms of road network capacity
- the off-street parking provisions incorporated in the development proposal satisfy Council's Parking Code requirements, and
- the geometric design layout of the proposed vehicular access and carparking arrangements complies with AS2890.1 2004.

Accordingly, it is clear that the proposed development will not have any unacceptable traffic or parking implications, and is therefore recommended for approval.

