

FABCOT PTY LTD

SUPPLEMENTARY TRAFFIC
REPORT FOR PROPOSED RETAIL
DEVELOPMENT, NEWPORT

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I. INTRODUCTION

- I.1 Colston Budd Hunt and Kafes Pty Ltd has been commissioned by Fabcot Pty Ltd to prepare a supplementary report examining the traffic implications of a proposed retail development in Newport. The site location is shown in Figure I. Colston Budd Hunt and Kafes Pty Ltd prepared the traffic report that accompanied the original planning proposal (Traffic Report for Proposed Retail Development, October 2009).
- I.2 The supplementary report has been prepared to assess the traffic effects of revised plans of the proposed retail development and to address a number of traffic and parking matters raised in a report prepared for Council (Review of Traffic Related Documents for the Planning Proposal at 17 & 25-27 Foamcrest Avenue and 343 Barrenjoey Road in Newport, ML Traffic Engineers, February 2010).
- I.3 The site has frontage to Barrenjoey Road and Foamcrest Avenue in the Newport town centre. Part of the site is occupied by retail shops and commercial development of some 800m². The remainder of the site is a public car park.
- I.4 The changes to the previous scheme include:
- ❑ a smaller supermarket (from 3,450m² to 2,950m²);
 - ❑ increase in specialty retail (from 610m² to 1,365m²);
 - ❑ provision of basement car parking;
 - ❑ reconfiguration of the loading dock to allow trucks to enter and depart the site in a forward direction; and
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- ❑ reduction in parking provision from 287 spaces to 246 spaces.
- I.5 Vehicular access would be maintained from Foamcrest Avenue at the southern end of the site.
- I.6 The traffic implications of the revised development are assessed through the following chapters:
 - ❑ Chapter 2 - describing the existing conditions; and
 - ❑ Chapter 3 - assessing the traffic implications of the revised development.

2. EXISTING CONDITIONS

Site Location and Road Network

- 2.1 The site is located at 343 – 345 Barrenjoey Road in the Newport town centre. Part of the site is occupied by retail shops and commercial development of some 800m². The remainder of the site is a public car park which provides some 80 spaces. The car park has vehicular access from Foamcrest Avenue via two driveways. The site location is shown in Figure 1.
- 2.2 Surrounding land use includes commercial and retail development in the Newport town centre, as well as some medium and higher density residential development.
- 2.3 The road network in the vicinity of the site includes Barrenjoey Road, Seaview Avenue, Foamcrest Avenue and Robertson Road. Though the town centre, Barrenjoey Road provides two traffic lanes plus one parking lane in each direction, clear of intersections, with a central median. There is a signalised pedestrian crossing north of Robertson Road. There are bus stops on both sides of the road adjacent to the site.
- 2.4 Seaview Avenue intersects Barrenjoey Road at a signalised intersection south of the site. It provides for one traffic lane and one parking lane in each direction, clear of intersections. There are weekday morning no parking restrictions on the eastern side of Barrenjoey Road, on the approach to Barrenjoey Road. Seaview Avenue provides access to residential development, and some commercial development near Barrenjoey Road. Bardo Road intersects Seaview Avenue close to its intersection with Barrenjoey Road.
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- 2.5 Foamcrest Avenue provides one traffic lane and one parking lane in each direction, clear of intersections. It provides access to the site, other commercial development, and residential development. The intersection of Foamcrest Avenue with Seaview Avenue is controlled by a small painted roundabout.
- 2.6 Robertson Road runs west from Barrenjoey Road, north of the site. It is one way from Barrenjoey Road to Foamcrest Avenue and two-way west of Foamcrest Avenue. It provides one westbound traffic lane from Barrenjoey Road to Foamcrest Avenue, with angle parking on the southern side and access to commercial development. West of Foamcrest Avenue it provides for one traffic lane and one parking lane in each direction and access to residential development. The intersection of Robertson Road with Foamcrest Avenue is controlled by a roundabout.
- 2.7 Coles Parade is located to the north of the site and runs west from Barrenjoey Road. It is one way from Barrenjoey Road to Foamcrest Avenue and two-way west of Foamcrest Avenue. It provides one westbound traffic lane from Barrenjoey Road to Foamcrest Avenue, with kerb side parking on the southern side. The intersection of Coles Parade with Foamcrest Avenue is priority controlled with Foamcrest Avenue the major road.

Traffic Conditions

- 2.8 In order to gauge traffic conditions, updated counts were undertaken during Thursday afternoon and Saturday lunchtime peak periods in February 2010. These are busy periods on the road network when traffic from the proposed development will combine with other retail and commuter traffic. The counts were undertaken at the following intersections:
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- ❑ Barrenjoey Road/Seaview Avenue;
- ❑ Barrenjoey Road/Robertson Road;
- ❑ Foamcrest Avenue/Seaview Avenue;
- ❑ Foamcrest Avenue/Robertson Road;
- ❑ Foamcrest Avenue/Coles car park;
- ❑ Foamcrest Avenue/Coles Parade; and
- ❑ Foamcrest Avenue/public car park access driveways.

2.9 The results of the surveys are shown in Figures 2 and 3, and summarised in Table 2.1.

Table 2.1 : Existing Peak Hour Two-Way Flows Plus Development Traffic		
Location	Peak Hour Flow (Vehicles/Hour Two-Way)	
	Thursday Afternoon	Saturday Midday
Barrenjoey Road		
- North of Robertson Road	2300	1915
- North of Seaview Avenue	2260	1995
- South of Seaview Avenue	3085	2585
Seaview Avenue		
- West of Barrenjoey Road	1025	765
- West of Foamcrest Avenue	575	395
Foamcrest Avenue		
- North of Coles Parade	150	105
- North of Robertson Road	295	245
- North of Seaview Avenue	210	205
Robertson Road		
- West of Barrenjoey Road	115	100
- West of Foamcrest Avenue	145	170
Coles Parade		
- East of Foamcrest Avenue	175	135
- West of Foamcrest Avenue	70	40

2.10 Examination of Table 2.1 reveals that:

- ❑ Barrenjoey Road carried flows of some 1,900 to 3,100 vehicles per hour two-way during the Thursday afternoon and Saturday peak hours;
 - ❑ Seaview Avenue carried flows of some 400 to 1,000 vehicles per hour two-way;
 - ❑ Foamcrest Avenue carried traffic flows in the range 100 to 300 vehicles per hour two-way;
 - ❑ Robertson Road and Coles Parade carried traffic flows in the range 40 to 170 vehicles per hour two-way
- 2.11 The existing public car park on the site generated some 120 and 95 vehicles per hour two-way during the surveyed peak hours on the Thursday and Saturday respectively. The Coles car park generated some 95 vehicles per hour two-way during the surveyed peak hours on the Thursday and Saturday.

Intersection Operations

- 2.12 The capacity of the road network is largely determined by the capacity of its intersections to cater for peak traffic flows. The intersections shown in Figures 2 and 3 have been analysed using the SIDRA program.
- 2.13 SIDRA provides a number of performance measures. The most useful measure provided is average delay per vehicle expressed in seconds per vehicle. Based on average delay per vehicle, SIDRA estimates the following levels of service (LOS):
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- For traffic signals, the average delay per vehicle in seconds is calculated as delay/(all vehicles), for roundabouts the average delay per vehicle in seconds is selected for the movement with the highest average delay per vehicle, equivalent to the following LOS:

0 to 14	=	"A"	Good
15 to 28	=	"B"	Good with minimal delays and spare capacity
29 to 42	=	"C"	Satisfactory with spare capacity
43 to 56	=	"D"	Satisfactory but operating near capacity
57 to 70	=	"E"	At capacity and incidents will cause excessive delays. Roundabouts require other control mode.
>70	=	"F"	Unsatisfactory and requires additional capacity

- For give way and stop signs, the average delay per vehicle in seconds is selected from the movement with the highest average delay per vehicle, equivalent to following LOS:

0 to 14	=	"A"	Good
15 to 28	=	"B"	Acceptable delays and spare capacity
29 to 42	=	"C"	Satisfactory but accident study required
43 to 56	=	"D"	Near capacity and accident study required
57 to 70	=	"E"	At capacity and requires other control mode
>70	=	"F"	Unsatisfactory and requires other control mode

2.14 It should be noted that for roundabouts, give way and stop signs, in some circumstances, simply examining the highest individual average delay can be misleading. The size of the movement with the highest average delay per vehicle should also be taken into account. Thus, for example, an intersection where all

movements are operating at a level of service A, except one which is at level of service E, may not necessarily define the intersection level of service as E if that movement is very small. That is, longer delays to a small number of vehicles may not justify upgrading an intersection unless a safety issue was also involved.

- 2.15 The analysis found that the signal controlled intersection of Barrenjoey Road with Seaview Avenue is operating with average delays of less than 20 seconds per vehicle during the Thursday afternoon and Saturday lunchtime peak periods. This represents level of service B, a good level of service.
- 2.16 The roundabout controlled intersections of Foamcrest Avenue with Robertson Road and Seaview Avenue are operating with average delays of less than 15 seconds per vehicle during peak periods. This represents level of service A/B, a good level of service.
- 2.17 The intersection of Foamcrest Avenue with Coles Parade is operating with average delays of less than 15 seconds per vehicle during peak periods. This represents level of service A/B, a good level of service

Public Transport

- 2.18 Local bus services are provided by Sydney Buses. As previously discussed, there are bus stops on Barrenjoey Road adjacent to the site. Buses also use Seaview Avenue, south of the site.
- 2.19 Route 187 operates along Barrenjoey Road and Seaview Avenue and connects Newport with Mona Vale, Narrabeen, Collaroy, Dee Why, Warringah Mall, Spit Junction, Neutral Bay, North Sydney, Milsons Point and the city.
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- 2.20 It provides a weekday peak period service (city bound in the morning and outbound in the afternoon). It also operates as a limited stop (L87) and express (E87) service.
- 2.21 Routes 188 and 190 operate along Barrenjoey Road and connect Avalon, Newport, Mona Vale, Narrabeen, Collaroy, Dee Why, Warringah Mall, Spit Junction, Neutral Bay and the city. It provides a limited service in each direction, seven days per week. Routes L88 and L90 provide limited stop services along the same route.
- 2.22 Routes 189 and E89 operate along Barrenjoey Road and connect North Avalon, Avalon, Newport, Mona Vale, Narrabeen, Collaroy, Dee Why, Neutral Bay Junction and the city. They provide weekday peak period services (city bound in the morning and outbound in the afternoon).
- 2.23 The site therefore has good access to regular bus services.

3. IMPLICATIONS OF PROPOSED DEVELOPMENT

3.1 The revised planning proposal would provide for a new Woolworths supermarket of some 2,950m² and specialty shops of some 1,365m². Vehicular access would be provided from Foamcrest Avenue, to a parking area for 246 parking spaces. This chapter assesses the implications of the proposed development through the following sections:

- ❑ public transport;
- ❑ parking provision;
- ❑ access, servicing and internal layout;
- ❑ traffic generation and effects;
- ❑ response to traffic matters; and
- ❑ summary.

Public Transport

3.2 The proposed development is located in the Newport town centre close to existing bus services. These services provide links to surrounding areas. The proposed development will increase employment and retail densities close to public transport services, strengthening the demand for these services.

3.3 Pedestrian access to the site will be provided from Barrenjoey Road and Foamcrest Avenue. A through site pedestrian link will be provided between Barrenjoey Road and Foamcrest Avenue. The proposed development is therefore consistent with government policy and the planning principles of:

- (a) improving accessibility to employment and services by walking, cycling, and public transport;
- (b) improving the choice of transport and reducing dependence solely on cars for travel purposes;
- (c) moderating growth in the demand for travel and the distances travelled, especially by car; and
- (d) supporting the efficient and viable operation of public transport services.

Parking Provision

- 3.4 Part B6 of the Pittwater 21 Development Control Plan indicates that for shopping centres parking should be based on RTA Guidelines or surveys of similar developments. The RTA's "Guide to Traffic Generating Developments" sets out a formulae for calculating the parking requirements as follows:

Peak Parking Demand = $24A(S) + 40A(F) + 42A(SM) + 45A(SS) + 9A(OM)$
(per 1,000m²), where

A(S): Slow Trade gross leasable floor area (gross leasable floor area in square metres) – includes major department stores such as David Jones and Myer, furniture, electrical and whitegoods stores.

A(F): Faster trade GLFA – includes discount department stores such as K-Mart and Target, together with larger specialist stores such as Fosseys.

A(SM): Supermarket GLFA – includes stores such as Franklins and large fruit markets.

A(SS): Specialty shops and secondary retail GLFA – includes specialty shops and take-away stores such as McDonalds. These stores are grouped since they tend not to be primary attractors to the centre.

A(OM): Offices, medical GLFA – includes medical centres and general business offices.

3.5 Based on the above, with a 2,950m² supermarket and 1,365m² specialty shops, the development would require 185 spaces.

3.6 There is an agreement with Council to provide an additional 56 public spaces, making a total of 241 spaces. The proposed provision of 246 spaces therefore satisfies this requirement, and is considered to be appropriate.

3.7 The DCP indicates three per cent of spaces should be provided for disabled use. On this basis, eight spaces should be disabled spaces. It is proposed to provide eight disabled parking spaces in accordance with the DCP.

3.8 The DCP indicates that for developments greater than 200m², bicycle parking should be provided at a rate of one bicycle rack per 1,000m², with a minimum provision of four spaces per rack. On this basis, 16 bicycle spaces would be required. It is proposed to provide bicycle parking in accordance with the DCP.

3.9 The DCP also indicates that for developments greater than 200m² motor cycle parking should be provided at a rate of one space per 100 car spaces. On this

basis, three motor cycle spaces should be provided. Three motor cycle spaces are proposed to be provided in accordance with the DCP.

Access, Servicing and Internal Layout

- 3.10 Vehicular access is proposed to be provided from Foamcrest Avenue in three locations. The proposed southern driveway would provide access to and from the car park with access to the supermarket loading dock provided midway along the Foamcrest Avenue frontage. The northern driveway would provide access to the specialty loading dock.
- 3.11 The driveways will be provided to accommodate the swept paths of cars and service vehicles in accordance with the Australian Standard for Parking Facilities (Part 1: Off-street car parking and Part 2: Off-street commercial vehicle facilities), AS 2890.2:2004 and AS 2890.2 – 2002. The entry and exit lanes to the parking area will be separated by a median.
- 3.12 Three levels of parking are proposed: level 1 (upper level) would provide 80 parking spaces, level 2 (mezzanine level) would provide 79 spaces and level 3 (basement level) would provide 87 spaces. Ramps would connect the parking levels internally. The ramps will provide maximum grades of 1:8.
- 3.13 Pedestrian access between the retail level and the car park will be provided via travelators, ramps, lifts and stairs. Pedestrian access to the development will also be provided from Barrenjoey Road (directly) as well as from Foamcrest Avenue. As previously discussed, a through site pedestrian link will be provided between Barrenjoey Road and Foamcrest Avenue.
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- 3.14 Within the parking levels, circulation aisles will be a mix of one and two-way aisles. Parking spaces will be a minimum of 2.6 metres wide by 5.4 metres long, with 6.6 metre wide circulation aisles. Spaces and aisles with adjacent obstructions will be 0.3 metres wider. Disabled spaces will be 3.2 metres wide and located close to lifts. Columns will be set back 750 mm from the front of spaces. Height clearance will be at least 2.2 metres, with 2.5 metres above disabled spaces and 2.3 metres between disabled spaces and the car park entry/exit. These dimensions are considered appropriate, being in accordance with AS 2890.1:2004.
- 3.15 The supermarket loading dock will be provided midway along the Foamcrest Avenue frontage of the site. The supermarket will be serviced by a range of vehicle sizes up to 12.5 metre large rigid trucks. The design of the loading dock provides for large rigid trucks to enter and depart the site in forward direction. Service vehicles currently use Foamcrest Avenue to service other retail developments in Newport. The dock will provide for two trucks (including garbage collection).
- 3.16 A separate specialty dock is provided at the northern part of the site. The specialty shops will be serviced by a range of vehicle sizes up to 6.4 metre small rigid trucks. The design of the loading dock provides for small rigid trucks to reverse into the loading dock from Foamcrest Avenue and exit in a forward direction.
- 3.17 The loading docks will accommodate service vehicle swept paths in accordance with AS 2890.2 – 2002, as shown in Figures 4 to 6.
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Traffic Generation and Effects

- 3.18 Traffic generated by the proposed development will have its greatest effects during weekday afternoon and Saturday lunchtime peak periods when it combines with commuter and retail traffic. The RTA's "Guide to Traffic Generating Developments" sets out formulae for calculating the generation of retail developments on Thursdays and Saturdays as follows:

$$PVT(T) = 20A(S) + 51A(F) + 155A(SM) + 46A(SS) + 22(OM)$$

(Vehicle trips per 1,000m² on Thursdays), and

$$PVT(S) = 38A(S) + 13A(F) + 147A(SM) + 107A(SS)$$

(Vehicle trips per 1,000m² on Saturdays), where

A(S): Slow Trade gross leasable floor area (gross leasable floor area in square metres) – includes major department stores such as David Jones and Myer, furniture, electrical and whitegoods stores.

A(F): Faster trade GLFA – includes discount department stores such as K-Mart and Target, together with larger specialist stores such as Fosseys.

A(SM): Supermarket GLFA – includes stores such as Franklins and large fruit markets.

A(SS): Specialty shops and secondary retail GLFA – includes specialty shops and take-away stores such as McDonalds. These stores are grouped since they tend not to be primary attractors to the centre.

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- A(OM): Offices, medical GLFA – includes medical centres and general business offices.
- 3.19 The proposed retail development would form part of the overall retail development in the Newport town centre.
- 3.20 The proposed development provides the following areas:
- A(SM) = some 2,950m²; and
 - A(SS) = some 1,365m².
- 3.21 On this basis, the proposed development would generate some 515 and 580 vehicles per hour two-way during the weekday afternoon and Saturday peak hours respectively. Based on the RTA formulae, the existing development would have a traffic generation of some 35 and 85 vehicles per hour two-way on the Thursday and Saturday respectively. The increase in traffic generation would therefore be some 480 and 495 vehicles per hour two-way during weekday afternoon and Saturday peak periods respectively. These generations include service vehicles generated by the development.
- 3.22 The RTA guidelines suggests that some 25 per cent of visits are likely to be passing trade, i.e. customers who would have driven past the development regardless of their visit to the development. 25 per cent of the additional development traffic (some 60 vehicles per hour, two way) has been assumed to be passing trade. Two thirds passing trade (some 40 vehicles per hour, two way) has been taken off through movements on Barrenjoey Road. The remaining one third (some 20 vehicles per hour, two way) has been taken off through movements on Foamcrest Avenue.
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- 3.23 The additional traffic has been assigned to the road network. Existing traffic flows plus the additional traffic from the proposed development are shown in Figures 2 and 3, and summarised in Table 3.1.

Table 3.1 : Existing plus Dev Peak Hour Two-Way Flows Plus Development Traffic				
Location	Peak Hour Flow (Vehicles/Hour Two-Way)			
	Thursday Afternoon		Saturday Midday	
	Existing	+ Dev	Existing	+ Dev
Barrenjoey Road				
- North of Robertson Road	2300	+15	1915	+15
- North of Seaview Avenue	2260	+45	1995	+45
- South of Seaview Avenue	3085	+115	2585	+115
Seaview Avenue				
- West of Barrenjoey Road	1025	+165	765	+165
- West of Foamcrest Avenue	575	+0	395	+0
Foamcrest Avenue				
- North of Coles Parade	150	+130	105	+130
- North of Robertson Road	295	+130	245	+130
- North of Seaview Avenue	210	+165	205	+165
Robertson Road				
- West of Barrenjoey Road	115	+25	100	+25
- West of Foamcrest Avenue	145	+135	170	+135
Coles Parade				
- East of Foamcrest Avenue	175	+0	135	+0
- West of Foamcrest Avenue	70	+0	40	+0

- 3.24 Traffic increases on Foamcrest Avenue, from where access to the development is proposed, would be some 130 to 165 vehicles per hour two-way during Thursday afternoon and Saturday peak hours. Increases on Seaview Avenue, Robertson Road and Barrenjoey Road would be some 25 to 165 vehicles per hour two-way.
- 3.25 The intersections previously analysed in Chapter 2 have been reanalysed using SIDRA for the additional development traffic flows shown in Figures 2 and 3. The analysis found that the intersection of Barrenjoey Road with Seaview Avenue

would operate with average delays of less than 25 seconds per vehicle during peak periods. This represents level of service B, a good level of service.

- 3.26 The intersections of Foamcrest Avenue with Robertson Road and Seaview Avenue would continue to operate with average delays of less than 15 seconds per vehicle during peak periods. This represents level of service A/B, a good level of service.
- 3.27 The proposed car park access driveway on Foamcrest Avenue would operate with average delays for all movements of less than 15 seconds per vehicle during peak periods. This represents level of service A/B, a good level of service.
- 3.28 Therefore, the road network will be able to cater for the additional traffic from the proposed development.

Response to Traffic Matters

- 3.29 Council commissioned ML Traffic Engineers to review the traffic effects of the planning proposal on the subject site (Review of Traffic Related Documents for the Planning Proposal at 17 & 25-27 Foamcrest Avenue and 343 Barrenjoey Road in Newport, ML Traffic Engineers, February 2010). In its review ML has raised a number of traffic and parking matters. These and our responses are set out below.

A Parking Survey Needs to be Undertaken

- 3.30 The proposed development provides parking in accordance with 21 DCP and RTA Guidelines, and replaces the existing Council car park of 56 spaces. The
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parking provision is considered appropriate to cater for demands and therefore the parking surveys suggested by ML Traffic Engineers are not required.

Clarification of Traffic Counts

3.31 The traffic counts were undertaken at the following times:

- 3.30pm to 6.30pm Thursday 11 February 2010; and
- 10.00am to 2.00pm Saturday 13 February 2010.

Traffic Assessment of Foamcrest Avenue between Seaview Avenue and Robertson Road

3.32 The ML review has suggested that queuing at one intersection could affect the operation of other intersections along Foamcrest Avenue and that micro simulation modeling may be required.

3.33 We note that the revised traffic assessment has found that all intersections along Foamcrest Avenue (between Seaview Avenue and Robertson Road) would operate at level of service A (with development traffic in place) in the Thursday afternoon and Saturday midday peak periods. The SIDRA analysis found that the 95th percent back of queue on Foamcrest Avenue at the intersections would be one or two vehicles (up to 15 metres).

3.34 The distance between the intersections of Foamcrest Avenue/Seaview Avenue and Foamcrest Avenue/Robertson Road is some 150 metres, with the site access approximately half way between the intersections. Thus with at least 70 metres between each intersection and the SIDRA modeling showing that the 95th percent back of queue is up to 15 metres, the operation of one intersection will not affect

other intersections and hence additional micro simulation modeling is not required.

Loading Dock Operation

- 3.35 Woolworths supermarkets are serviced by a range of trucks from 12.5 metre rigid trucks to 19 metre articulated trucks. The size of the truck servicing the site is often determined by the size of the dock at the store. The loading dock at the proposed Newport supermarket has been designed to accommodate a 12.5 metre long rigid truck. This is the largest truck that would service the site and could be included as a condition of consent. Swept paths of a 12.5 metre rigid truck accessing the dock are attached to this report.

Traffic Generation

- 3.36 As set out in Sections 3.18 to 3.22 of this report, RTA Guidelines (with appropriate allowance for passing trade) have been used to estimate the traffic generation of the proposed development.

Trip Distribution

- 3.37 The additional trips generated by the proposed development have been based on existing traffic patterns in the area. The following distribution has been used:
- ❑ 40% to/from the north along Foamcrest Avenue/Barrenjoey Road;
 - ❑ 30% to/from the south along Barrenjoey Road; and
 - ❑ 30% to/from the west along Robertson Road.

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- 3.38 This distribution of trips is similar to that associated with the recently opened Coles development located at the northern end of Newport Village.

Intersection Assessment

- 3.39 SIDRA movement summaries are attached to this report. Electronic copies of the SIDRA files are available for review.

Road Safety

- 3.40 As noted in Table 3.1, traffic flows in Foamcrest Avenue would increase by some 130 to 165 vehicles per hour (two way), instead of the some 500 vehicles per hour suggested in the ML review. With development traffic added, traffic flows on Foamcrest Avenue would be less than 500 vehicles per hour (two way) in the peak periods. 500 vehicles per hour (two way) is the environmental capacity for collector roads as defined by the RTA.
- 3.41 Foamcrest Avenue functions as a collector road as it collects traffic from the surrounding area and delivers it to Newport Village shopping centre.
- 3.42 While there would be an increase in traffic in Foamcrest Avenue as a result of the proposed development, there would be not be a significant affect on road safety as:
- ❑ traffic flows would be below the environmental capacity of a collector road as defined by the RTA; and
 - ❑ intersections along Foamcrest Avenue would continue to operate at a good level of service with minimal delays and queuing.
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Summary

3.43 In summary, the main points relating to the traffic implications of the revised planning proposal are as follows:

- i) the revised planning proposal would provide for a 2,950m² supermarket and 1,365m² specialty shops;
- ii) the proposal would strengthen demand for existing public transport services in the area;
- iii) the proposed parking provision complies with the requirements of Pittwater 21 DCP and RTA Guidelines;
- iv) access, internal circulation and layout are considered appropriate;
- v) the road network will be able to cater for the additional traffic from the proposed development;
- vi) while there would be an increase in traffic in Foamcrest Avenue as a result of the proposed development, there would be not a significant affect on road safety; and
- vii) the matters raised by the ML traffic review have been addressed.