DUCRU PTY LTD

REVIEW OF TRAFFIC ASPECTS PRIOR TO PREPARATION OF PLANNING PROPOSAL FOR 14-20 ORION ROAD, LANE COVE WEST

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COLSTON BUDD HUNT & KAFES PTY LTD ACN 002 334 296 Level 18 Tower A Zenith Centre 821 Pacific Highway CHATSWOOD NSW 2067

 Telephone:
 (02)
 9411 2411

 Facsimile:
 (02)
 9411 2422

 Email:
 cbhk@cbhk.com.au

REF: 9838/2

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I. INTRODUCTION

- 1.1 Colston Budd Hunt and Kafes Pty Ltd has been commissioned by Ducru Pty Ltd to review the traffic aspects of the potential mixed use development at 14-20 Orion Road, Lane Cove West, prior to preparation of a planning proposal. The site is located on the northern side Orion Road, east of Sirius Road, as shown in Figure I.
- 1.2 18-20 Orion Road is occupied by a commercial building of some 10,400m² GFA. It has vehicular access from Orion Road. 14-16 Orion Road has consent for a commercial building of some 15,844m². This development has not been constructed.
- A potential development provides for a mixed use development of some 2,500m² commercial uses plus some 450 to 500 residential apartments.
- 1.4 The traffic implications of the potential development are reviewed in the following chapter.

2. TRAFFIC REVIEW

- 2.1 The traffic aspects of the potential development are reviewed through the following sections:
 - site location and road network;
 - approved development;
 - potential development;
 - traffic generation; and
 - □ summary.

Site Location and Road Network

- 2.2 The site is north-west of Orion Road at Lane Cove West, in the Lane Cove West industrial area, as shown in Figure 1. 18-20 Orion Road is occupied by a commercial building of some 10,400m² GFA which includes a child care centre. It has vehicular access from Orion Road. 14-16 Orion Road is currently vacant.
- 2.3 Surrounding land use is largely industrial and employment uses in the Lane Cove West industrial area. There are residential areas to the north and west, across the Lane Cove River. There are also residential areas east of the industrial area.
- 2.4 The industrial area is accessed from Epping Road via a signalized intersection at Sam Johnson Way. All turning movements are permitted at the intersection. There is a turn bay in Epping Road for right turns into Sam Johnson Way.

- 2.5 Sam Johnson Way provides for one traffic lane in each direction, clear of intersections. It combines with Orion Road and the southern part of Sirius Road to provide the principal access road within the estate. It has a 60 kilometre per hour speed limit and bus stops are provided on both sides of the road. There is a bicycle route along Orion Road and Sam Johnson Way. There is a right turn bay in Orion Road for turns into 18-20 Orion Road.
- 2.6 Epping Road provides an east-west traffic route through the area. At Sam Johnson Way it provides two traffic lanes plus a bus lane in each direction. There are right and left turn lanes at the Sam Johnson Way intersection. There are bus stops on both sides of the road adjacent to Sam Johnson Way and a pedestrian and cycle path on the southern side of the road. There is a pedestrian bridge across Epping Road at the intersection.

Approved Development

- 2.7 As previously discussed, 14-16 Orion Road has consent for a commercial building of some 15,844m². This development has not been constructed.
- 2.8 We prepared a report¹ in support of the approved development. That report assessed a traffic generation of 310 vehicles per hour two-way during weekday morning and afternoon peak periods.

¹ Transport Report for Proposed Commercial Development, 16 Orion Road, Lane Cove West, February 2009.

Potential Development

2.9 A potential development would provide for a mixed use development of some 2,500m² commercial uses plus some 450 to 500 residential apartments. The commercial uses would include offices, a childcare centre and convenience retail such as a café.

Traffic Generation

- 2.10 Traffic generated by the potential mixed use development will have its greatest effects during morning and afternoon peak periods when it combines with commuter traffic. RMS surveys of the traffic generation of residential apartments indicate that high density residential flat buildings close to public transport generate some 0.29 vehicles per hour per apartment (two-way) during weekday peak hours.
- 2.11 The RMS traffic generation rates for commercial development are 1.6 and 1.2 vehicles per hour two-way during weekday morning and afternoon peak periods respectively. Child care centres generate some 0.7 to 0.8 vehicles per hour per place at peak times.
- 2.12 Based on the proposed development comprising 500 residential apartments and the commercial area comprising a 90 place child care centre and some 1,800m² office and café uses, the traffic generation of the potential development would therefore be some 250 vehicles per hour two-way at peak times. This compares to the existing and approved developments on the site which would have a combined traffic generation of some 450 and 350 vehicles per hour two-way during weekday morning and afternoon peak hours respectively.

- 2.13 The potential development would therefore have a lesser traffic generation than the existing and approved uses on the site.
- 2.14 Traffic generation of the development would also have lesser effects on the operation of the intersection of Sam Johnson Way with Epping Road, compared to industrial development, because of the lower traffic generation, and because the majority of traffic would be travelling in the counter-peak direction during weekday morning and afternoon peak hours. Therefore traffic increases in the peak direction would be significantly lower, compared to commercial development on the site.

<u>Summary</u>

- 2.15 In summary, the main points relating to our review of the traffic aspects of the potential mixed use development are as follows:
 - i) the site is occupied by and has approval for commercial uses of some $26,250m^2$;
 - ii) the potential development would provide some 2,500m² non-residential uses plus some 500 residential apartments;
 - iii) the potential development would have a lesser traffic generation than the existing and approved uses on the site; and
 - iv) traffic generation of the potential development would have lesser effects on the operation of the intersection of Sam Johnson Way with Epping Road, compared to commercial development.



Location Plan

Figure 1