AA CROWN HOLDINGS PTY LTD

TRAFFIC REPORT FOR PROPOSED S75W MODIFICATIONS TO APPROVED WOLLONGONG PRIVATE HOSPITAL, 360-364 CROWN STREET, WOLLONGONG

JUNE 2013

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: 8876/2

TABLE OF CONTENTS

1. INTRODUCTION

1.1. Colston Budd Hunt & Kafes Pty Ltd has been retained by the AA Crown Holdings Pty Ltd to prepare a report on traffic aspects of the proposed S75W modifications to the approved private hospital at 360-364 Crown Street Wollongong. The site location is shown on Figure 1.

1.2. In April 2011, the Planning Assessment Commission of NSW (PAC) approved the construction of a private hospital at 360-364 Crown Street, Wollongong. The approved private hospital comprised the following elements:

- private hospital (154 beds);
- associated medical centre (some 5,150m^2 GFA comprising general purpose medical centre, specialist consulting rooms, diagnostic and clinical facilities and a day surgery);
- commercial space (some 840m^2 GFA);
- parking for 321 cars within three levels of basement car parking; and
- access from Crown Street (via a new traffic signal controlled intersection) and Urunga Parade (service access and car park entry)

1.3. The S75W modifications include the following changes:

- reduction in the number of beds in the private hospital (from 154 to 149 beds);
- smaller medical centre (from 5,150m^2 to 5,080m^2 GFA);
- smaller commercial space (from 840m^2 to 130m^2) with the commercial/retail space being ancillary retail (café, florist, pharmacy etc.) located on the ground floor;

- parking for 317 cars (three levels of basement parking (312 spaces) and five spaces located within the porte corchere on ground level);
- deletion of the car park entry from Urunga Parade; and
- reconfiguration of the Crown Street access that allows for vehicles that have dropped off visitors/patients to directly access the basement car park (the approved traffic signal controlled access on Crown Street is retained).

1.4. With respect to traffic, the main changes are the deletion of the car park entry off Urunga Parade, change in parking provision and reconfiguration of the Crown Street access.

1.5. The traffic implications of the proposed Section 75W modifications are assessed in Chapter 2.

2. REVIEW OF TRAFFIC IMPLICATIONS

2.1. Our review of the traffic effects of the Section 75W (S75W) modifications to the approved private hospital are set out through the following sections:

- site location and description;
- proposed development;
- public transport;
- pedestrians and cyclists;
- parking;
- access and internal layout;
- traffic effects; and
- summary.

Site Location

2.2. The site is located on the northern side of Crown Street, (between Staff Street and New Dapto Road) and on the western edge of Wollongong CBD. The site has frontage to Crown Street and Urunga Parade. The site location is shown on Figure 1. Surrounding land use comprises Wollongong Hospital and other medical related development to the north and east of the site. To the west of the site is residential development. To the south of the site (on the opposite side of Crown Street) is commercial and residential development.

Proposed Development

2.3. The S75W modifications are for a private hospital (149 beds) with associated medical centre (some 5,080m^2 GFA comprising general purpose medical centre, specialist consulting rooms, diagnostic and clinical facilities and a day surgery) and

ancillary commercial/retail space (some 130m^2 GFA). Parking for 317 cars will be provided within three levels of basement car parking (312 spaces) and five spaces located on ground level. Access will be provided from Crown Street (via the approved traffic signal controlled intersection) and Urunga Parade (service access only).

Public Transport

2.4. Public transport services are provided by bus services operating along Crown Street past the site. Premier Illawarra Buses operates 11 bus services along Crown Street past the site. These are the 23, 24, 30, 31, 32, 33, 34, 35, 36, 37 and 57. These routes provide connections between Wollongong CBD (and Wollongong Hospital) and surrounding areas. The buses generally operate hourly from morning to evening, Monday to Friday with less frequent services on weekends. Bus stops are located on both sides of Crown Street in the vicinity of the site.

2.5. In addition to the regular route services the Gong Shuttle service operates along Crown Street and New Dapto Road to the east of the site. This is a seven day a week service operating at 10 minute intervals in peak periods and 20 minute intervals during the off peak. The shuttle service connects various parts of the CBD.

2.6. Wollongong Rail Station is located some 800 metres to the east of the site. It is located on the southern line that connects Kiama with Sydney.

2.7. In summary buses provide public transport services to the site. These bus services provide connections to from the surrounding areas to Wollongong CBD and railway station.

2.8. The provision of increased population (staff, visitors and patients) in the area will strengthen demand for existing public transport services. It is consistent with planning principles of:

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

2.9. It is government policy and good transport planning practice to co-locate complementary land uses. By co-locating complementary developments there is a reduction in travel between them and the ability to share facilities. The provision of the private hospital near to the existing hospital is a good example of co-location as patients and staff can share facilities without the need to travel long distances between them. Therefore the location of the proposed development is in accordance with government policy.

2.10. To encourage travel modes other than private vehicle, it is proposed to adopt a travel demand management approach, through a work place travel plan to meet the specific needs of staff, patients and visitors. The specific requirements and needs of staff, patients and visitors, including number of employees, hours of work, shift times, etc., will be incorporated in the work place travel plan to support the objectives of encouraging the use of public transport. The plan would include the following elements:

- encourage the use of public transport to travel to and from the hospital;
- work with public transport providers to improve services;
- encourage public transport by employees through the provision of information, maps and timetables;
- provide appropriate pedestrian facilities which improve accessibility to the adjacent hospital, surrounding uses and public transport services;
- raise awareness of health benefits of walking (including maps showing safe walking routes);
- encourage cycling by providing safe and secure bicycle parking, including the provision of lockers and change facilities;
- provide appropriate on-site parking provision.

2.11. Condition E4 of the planning approval requires that prior to occupation, a sustainable travel plan be prepared (incorporating the work place travel plan) in consultation with Wollongong City Council and Transport NSW. The sustainable travel plan is to be implemented to encourage the use of non-car transport modes by students, employees and visitors to the site.

2.12. The proposed drop off/pick area located on Crown Street provides an area for taxis to drop off and collect visitors, patients and/or staff.

Pedestrians and Cyclists

2.13. Pedestrian and cyclist access will be provided from Crown Street. The main pedestrian access fronts Crown Street, located just to the east of the approved traffic signals with a secondary pedestrian access located opposite the drop off zone within the porte corchere. We understand that is not practical or desirable (for security reasons) to provide additional pedestrian entrances. The approved traffic signals on Crown Street improve pedestrian access to bus services by providing a safe and convenient path across Crown Street. In summary there are adequate existing pedestrian links between the subject site and adjacent public hospital/rail station via existing footpaths and the approved traffic signals.

2.14. Bicycle parking and facilities will be provided in accordance with the requirements of DCP 2009. This could be included as a condition of approval.

Parking

Parking Provision

2.15. Wollongong City Council DCP 2009 sets out the following parking requirements for hospitals, medical centres and commercial development within the CBD:

- Hospitals - 1 space per medical practitioner plus 1 space per 2 employees plus 1 space per 2 beds;
- Medical centres – 4 spaces per consulting room plus 1 space per 3 employees; and
- Commercial - 1 space per 50 m^2 GFA.

2.16. As per the approved private hospital, application of the medical centre rate in DCP 2009 is considered inappropriate for the proposed development as it is a

large medical centre with consulting rooms, diagnostic and clinical facilities and a day surgery. For the approved private hospital, a rate of 2.6 spaces per 100m^2 GFA was used to determine parking requirements for the medical centre component (based on surveys of large medical centres that comprised general practitioners, specialists, day surgery and radiology/pathology services). Application of this rate (with the proposed medical centre having some 5,080m^2 GFA) results in a requirement of some 132 parking spaces.

2.17. For the hospital component the number of staff is unknown, and hence it is not possible to use the DCP 2009 rate. However, RMS Guidelines suggest the following formula for estimating parking requirements for private hospitals:

Peak Parking Accumulation (PPA) = -26.52 +1.18B (where B is number of beds).

2.18. Application of this formula results in a peak parking accumulation of 149 spaces for the hospital.

2.19. For the commercial/retail component (some 130m^2 GFA) some 3 spaces would be required under DCP 2009. Thus the total parking requirement would be some 284 spaces.

2.20. The proposed provision of some 317 spaces satisfies this requirement. It is noted that parking requirements may be slightly lower for the following reasons:

- The site is located close to existing public transport services (buses along Crown Street and within 800 metres of the rail station);
- The site provides a number of complementary facilities and hence there is likely to be some linked trips that would reduce parking demand; and
- Implementation of a travel plan to encourage travel to the site by means other the private car and hence reduce parking demand.

2.21. Motorcycle, bicycle and disabled parking will be provided in accordance with the requirements of DCP 2009.

Car Park Management

2.22. The proposed car park comprises 317 car parking spaces over 3 basement levels (including the small car park at the Crown Street level). Access is proposed from Crown Street (via a new traffic signal controlled intersection). The car park will be designed to comply with the requirements of AS2890.1-2004 with respect to parking bay dimensions, aisle widths ramp grades and parking controls. The car park will be a controlled car park with boom gates controlling access to and from the car park.

2.23. The proposed basement car park will provide parking for staff, patients and visitors. A fee will be charged to park in the car park with a fee structure similar to the nearby Wollongong hospital car park. Some concessions may be given to staff members working at night or patients of the clinics. These measures will be finalised with stakeholders once the hospital is operational and tenants are known.

2.24. The small car park at the Crown Street level provides five parking spaces (four of which are disabled spaces). Access to this car park is provided via the proposed traffic signal controlled access off Crown Street. This area also includes a set down/pick up bay for taxis and a mini bus.

2.25. Within the car park, spaces will be designated for either staff or visitor/patient parking. Parking on the upper level (basement 1) will generally be allocated for visitor/patient parking providing some 93 spaces. The two lower parking levels (basement 2 and basement 3) will generally be allocated to staff parking. Stacked (tandem) parking on basement level 3 (9 spaces) will be allocated to staff with

each pair of spaces allocated to the one tenancy so that access to and from these spaces can be easily managed. The mix of staff and visitor/patient parking will be finalised once the tenants of the proposed development are known.

2.26. Signage and line marking will direct vehicles around the car park to the appropriate parking areas. It is suggested that the car park management be regularly reviewed to determine whether the allocation of parking spaces needs to be changed (to meet demand) and/or the fee structure adjusted.

Access and Internal Layout

2.27. Access is proposed from Crown Street (via the approved traffic signal controlled intersection) and Urunga Parade (service access only). Access from Crown Street would provide access to the basement car park and to the set down and pick up area. This area includes a small number of short term parking spaces, provides for taxi set down/pick up and ambulance set down/pick up. The modified proposal allows for vehicles that have dropped off a patient/visitor to directly access the basement car park. This is an improvement over the approved development where vehicles accessing the basement car park after dropping off needed to exit the site and travel around the block and access the car park via Urunga Parade.

2.28. The parking layouts on all levels are set out in a simple and clear manner. Parking spaces, aisles, ramps etc. will be designed in accordance with AS2890.1-2004.

2.29. The loading docks are located on the north eastern part of the site with access from Urunga Parade. There is space for three trucks to park in the dock area (One large rigid truck and two smaller trucks). Occasional deliveries of oxygen would be by a 12.5 metre long rigid truck. This truck would pull up within the site, parallel to Urunga Parade. The number of deliveries of oxygen would be

infrequent and hence not affect the operation of the loading dock. Trucks would enter and depart the site in a forward direction.

Traffic Effects

2.30. As part of the assessment of traffic impacts of the approved private hospital development, AA Crown Holdings Pty Ltd commissioned Parsons Brinkerhoff to prepare a PARAMICS model for the area. The purpose of the PARAMICS model was to assess the traffic effects of the proposed development on the adjacent road network (in particular the operation of the intersections along Crown Street from Margenton Road to Darling Street). The PARAMICS model assessed the following traffic conditions:

- existing 2010 weekday morning and afternoon peak periods;
- existing plus development weekday morning and afternoon peak periods;
- 2020 weekday morning and afternoon midday peak periods; and
- 2020 plus development weekday morning and afternoon peak periods.

2.31. The PARAMICS model found the following:

- the existing situation was calibrated satisfactorily;
- the modelling found that when development traffic is added to existing traffic flows and traffic signals are provided at the intersection of the Crown Street and Staff Street (with access from the proposed development), the surrounding road network will operate satisfactorily in the weekday morning and afternoon midday peak periods; and
- for the 2020 weekday morning and afternoon peak periods (with and without development), the surrounding road network will operate satisfactorily.

2.32. In summary, the PARAMICS modelling found that intersections along the Crown Street (from Margenton Road to Darling Street) would continue to operate satisfactorily following the installation of traffic signals at the intersection of Crown Street and Staff Street (with access to the proposed development as the fourth leg of the intersection) in the weekday morning and afternoon peak periods (existing and in 10 years).

2.33. The main changes with respect to traffic of the S75W modifications are:

- Deletion of the Urunga Parade car park entry (this will result in a reassignment of traffic from Urunga Parade to the Crown Street); and
- A reduced traffic generation (as the modified development is smaller than the approved development).

2.34. The traffic effects of the Section 75W modifications are set out below in the following sections.

Road Network

2.35. The road network in the vicinity of the site includes Crown Street (Princes Highway), Staff Street, New Dapto Road, Urunga Parade and Dudley Street. Crown Street forms part of the Princes Highway and is located along the southern boundary of the site. It provides an east west link from the F6 Freeway to Wollongong CBD. In the vicinity of the site, Crown Street provides a four lane undivided carriageway with clearway conditions at peak times. The RMS has advised that pedestrian access across Crown Street in the vicinity of the site is an issue as the nearest controlled crossing point is at the New Dapto Road intersection.

2.36. Staff Street is located south of the site and provides access to the commercial/residential precinct located on the southern side of Crown Street. It provides one traffic lane with kerb side parking provided clear of intersections. Staff Street connects to Crown Street at a priority controlled T-intersection (with Crown Street the major road) with all turning movements permitted.

2.37. New Dapto Road is located east of the site. It generally provides one traffic lane in each direction with an additional lane on the approach to Crown Street and a central median opposite the intersection with Urunga Parade. The intersection of New Dapto Road is a traffic signal controlled T-intersection. At its northern end New Dapto Road connects to Mercury Street and Loftus Street at a single lane roundabout.

2.38. Urunga Parade is located along the northern boundary of the site. It provides one traffic lane in each direction with kerb side parking clear of intersections. Urunga Parade connects to New Dapto Road at a priority controlled T-intersection (with New Dapto Road the major road) with only left turns permitted due to the median on New Dapto Road.

2.39. Dudley Street is located north of the site and provides one traffic lane in each direction with kerb side parking clear of intersections. Dudley Street connects to Urunga Parade at a priority controlled T-intersection (with Urunga Parade the major road) with all turning movements permitted.

Traffic Volumes

2.40. In order to establish existing traffic conditions, counts were undertaken during weekday morning and afternoon peak periods at the following intersections:

- Crown Street/Staff Street;

- Crown Street/New Dapto Road (traffic signals);
- New Dapto Road/Urunga Parade;
- New Dapto Road/Mercury Street/Loftus Street (roundabout); and
- Urunga Parade/Dudley Street.

2.41. The approved private hospital development was estimated to generate some 170 and 365 vehicles per hour (two way) in the weekday morning and afternoon peak hour hours respectively.

2.42. Existing plus approved private hospital development traffic are set out on Figures 2 and 3 and summarised in Table 2.1.

Table 2.1 : Existing + Approved Development Two Way Peak Hour Traffic Flows

	Vehicles Per Hour (Two-Way)	
Location	**Morning**	**Afternoon**
Crown Street		
- east of New Dapto Road	1380	1445
- east of Staff Street	2055	2140
- west of Staff Street	2185	2375
New Dapto Road		
- north of Crown Street	1030	1055
- north of Urunga Parade	1050	1175.
- north of Loftus Street	485	405
Urunga Parade		
- west of New Dapto Road	120	190
- west of Dudley Street	110	140
Staff Street		
- south of Crown Street	145	185
Dudley Street		
- north of Urunga Parade	100	100

2.43. The results in Table 2.1 reveal that:

- Crown Street would carry some 1,380 to 2,375 vehicles per hour (two-way) during the morning and afternoon peak period. Traffic flows were higher west of New Dapto Road;

- New Dapto Road would carry some 405 to 1,175 vehicles per hour (two-way) during the morning and afternoon peak periods. Traffic flows in both periods were highest south of Loftus Street;

- Urunga Parade would carry some 110 to 190 vehicles per hour (two-way) during the morning and afternoon peak periods;

- Staff Street carried would carry some 145 to 185 vehicles per hour (two-way) during the morning and afternoon peak periods; and

- Dudley Street would carry some 100 vehicles per hour (two-way) during the peak periods.

Intersection Operations

2.44. The capacity of the road network is generally determined by the ability of its intersections to cater for peak period traffic flows. The surveyed intersections have been analysed using SIDRA with traffic from the approved private hospital in place. SIDRA produces a number of measures of intersection operations. The most useful measure provided is average delay per vehicle expressed in seconds per vehicle.

2.45. Based on average delay per vehicle, SIDRA estimate the following levels of service (LOS):-

- 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

2.46. 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.

2.47. The SIDRA analysis found that (with approved private hospital traffic added to existing traffic flows):-

- all traffic signal controlled intersections along Crown Street between Margenton Road to Darling Street (including the approved traffic signals at Staff Street) would operate at satisfactory or better levels of service (LOS C or better) in the weekday morning and afternoon peak periods;

- the roundabout at the intersection of New Dapto Road, Loftus Street and Mercury Street would operate with average delays per vehicle of less than 20 seconds for both peak periods. This represents level of service B, a satisfactory level of intersection operation; and

- the intersections of Urunga Parade with New Dapto Road and Dudley Street would operate with average delays per vehicle of less than 15 seconds for both peak periods. This represents level of service A/B, a good level of intersection operation.

Traffic Generation

2.48. Traffic generated by the proposed S75W development will have its largest effects during the weekday morning and afternoon peak periods when it combines with commuter traffic.

2.49. As per the approved development, estimates of traffic generated by the proposed development have been based on RMS Guidelines (for the private hospital and retail/commercial components) and surveys of other large medical centres that

provide a range of similar services (for the medical centre component). The RMS Guide to Traffic Generating Developments suggests that traffic generation estimates should be based on similar sites.

2.50. For the private hospital component RMS Guidelines suggest the following generation rates:

Morning Vehicle Trips, 8am -9am = -12.41 + 0.57B where B is number of beds;
Afternoon Vehicle Trips, 5pm -6pm = -11.96 + 0.69B where B is number of beds;
Peak Vehicle Trips, 3pm -4pm = -22.07 + 1.04B where B is number of beds;

2.51. For the retail/commercial component RMS Guidelines suggest a generation rate of 2 trips per 100m^2 GFA in the morning and afternoon peak periods (based on the small retail/commercial component being ancillary and any traffic generated would be associated with staff).

2.52. Surveys of traffic generation at a number of large medical centres have been reviewed. These included general practitioners, specialists, day surgery and radiology/pathology services, similar to that proposed at the Wollongong Private Hospital. The surveys found the centres generated 1 trip per 70m^2 GFA in the morning peak period and 1 trip per 25m^2 GFA in the afternoon peak period.

2.53. Using the above rates, estimates of the traffic generation for the proposed S75W development are set out in Table 2.2 below.

2.54. Table 2.2 reveals that the proposed S75W development would generate some 147 vehicles per hour (two way) in the weekday morning peak period and some 338 vehicles per hour (two way) in the weekday afternoon peak period. This some 21 and 25 vehicles per hour (two way) less than the approved development in the weekday morning and afternoon peak periods respectively.

Table 2.2 Summary of Traffic Generation					
Component	Size	Rate		Traffic Generation (vehicle/hour)	
		AM	PM	AM	PM
Hospital	149 beds	-12.41+0.57B	-22.07+1.04B	72	133
Medical Centre	5,080m^2	1/70m^2	1/25m^2	73	203
Commercial	130m^2	2/100m^2	2/100m^2	2	2
Total				147	338

2.55. The additional traffic has been assigned to the road network with an 80%in/20%out split in the morning peak period and a 40%in/60%out split in the afternoon peak period and taking into account the deletion of the entry to the car park from Urunga Parade. The resulting flows are shown on Figures 2 and 3 and summarised in Table 3.3.

Table 3.3 : Base* Plus Development Two Way Peak Hour Traffic Flows				
	Vehicles Per Hour (Two-Way)			
Location	**Morning**		**Afternoon**	
	Base*	+ S75W	Base*	+ S75W
Crown Street				
- east of New Dapto Road	1380	+0	1445	+0
- east of Staff Street	2055	-5	2140	-10
- west of Staff Street	2185	+20	2375	+35
New Dapto Road				
- north of Crown Street	1030	-5	1055	-10
- north of Urunga Parade	1050	+0	1175.	+0
- north of Loftus Street	485	+0	405	+0
Urunga Parade				
- west of New Dapto Road	120	-5	190	-10
- west of Dudley Street	110	-15	140	-20
Staff Street				
- south of Crown Street	145	+0	185	+10
Dudley Street				
- north of Urunga Parade	100	-25	100	-30

*Base = existing + approved private hospital traffic.

2.56. Examination of Table 3.3 reveals that as result of the S75W modifications there would be minor changes in two way traffic flows on the surrounding streets. Traffic flows on Crown Street (east of the site access), New Dapto Road and Staff Street would change by some 5 to 10 vehicles per hour (two way). West of the site access, the increase in traffic flows on Crown Street would be some 20 to 35 vehicles per hour (two way). As a result of the deletion of the Urunga Parade car park entry, traffic flows on Urunga Parade and Dudley Street would decrease by some 5 to 30 vehicles per hour (two way).

2.57. The minor change in traffic flows on Crown Street (one vehicle every two to twelve minutes) would not result in any change to the level of service/operation of the signalised intersections assessed in the PARAMICS model.

2.58. In summary the traffic effects of the S75W modifications would be similar to the approved development. That is, the surrounding road network would accommodate traffic from the proposed S75W development with intersections operating at a satisfactory or better level of service in the peak periods (including the approved traffic signals at the intersection of Crown Street with Staff Street).

Summary

2.59. In summary, the main points relating to the S75W modifications are:

(i) the proposed development will strengthen demand for existing public transport services;

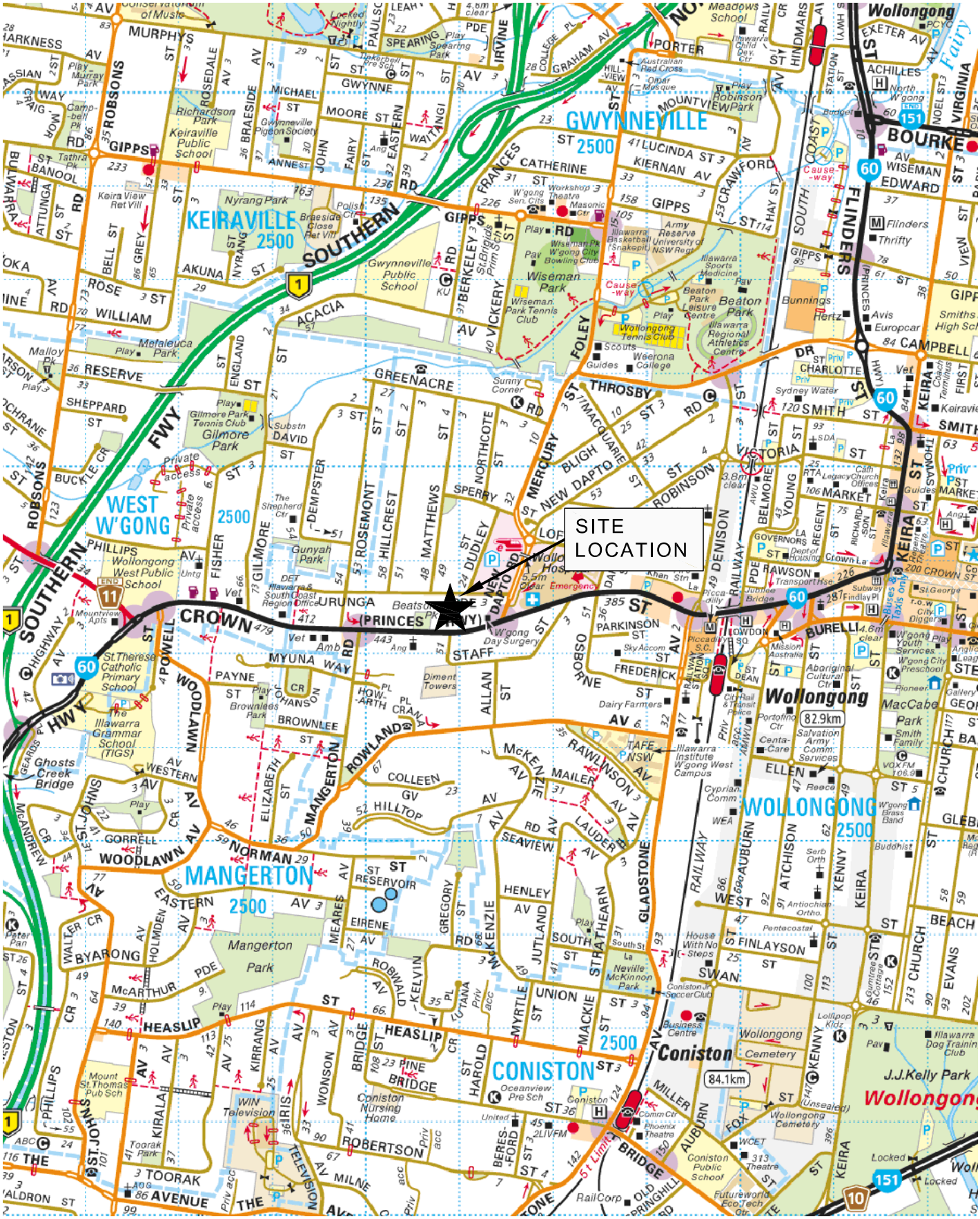
(ii) the proposed development is consistent with the state government policy of co-locating complementary developments;

(iii) the proposed parking provision is considered appropriate;

(iv) access arrangements and parking layout are appropriate; and

(v) the traffic effects of the S75W modifications would be similar to the approved development; and

(vi) the surrounding road network can cater for the traffic generated by the proposed S75W development.

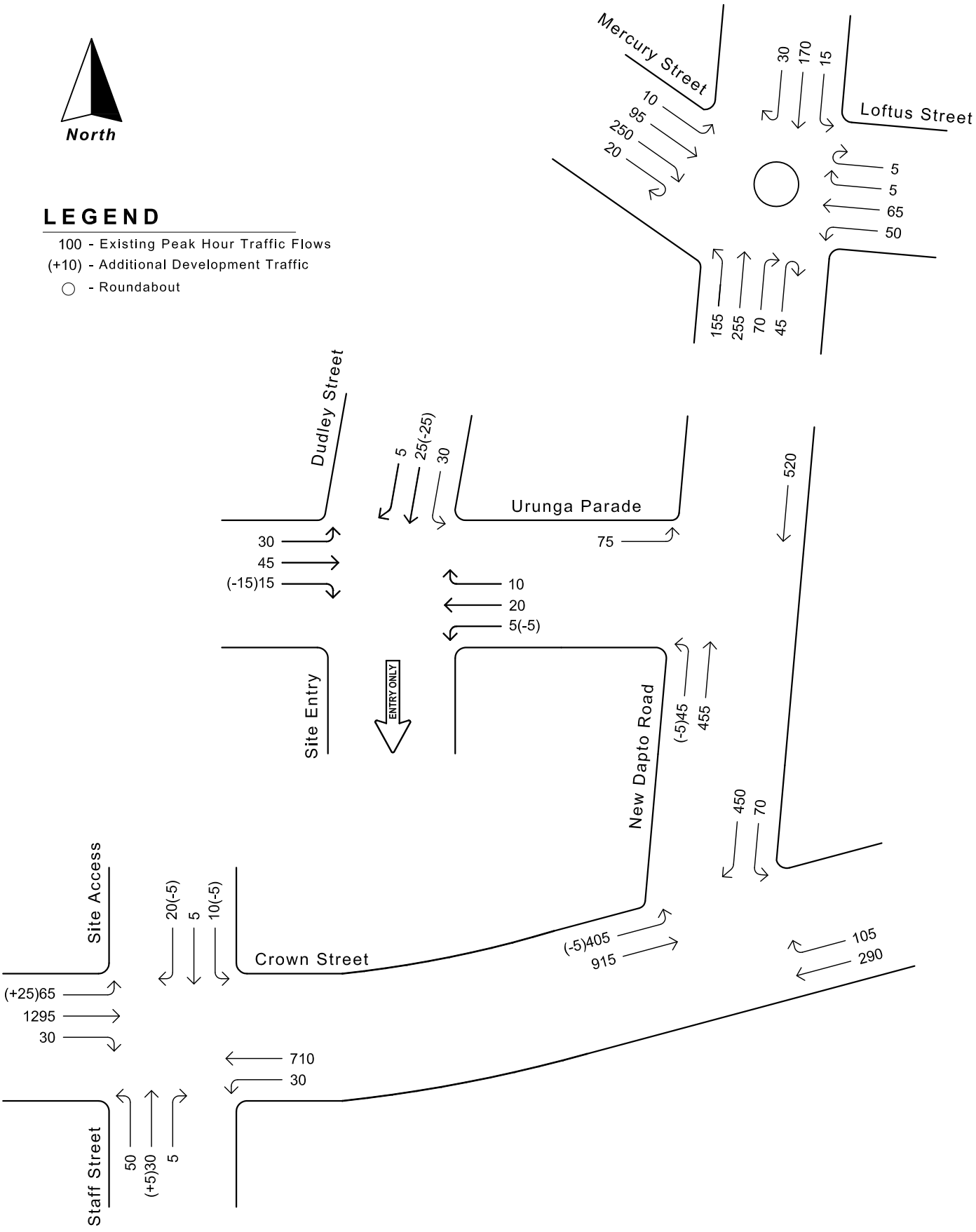


Location Plan

Colston Budd Hunt & Kafes Pty Ltd

DRAWN BY CBHK Pty Ltd_hs Ref: 8876 07 June 2013

Figure 1

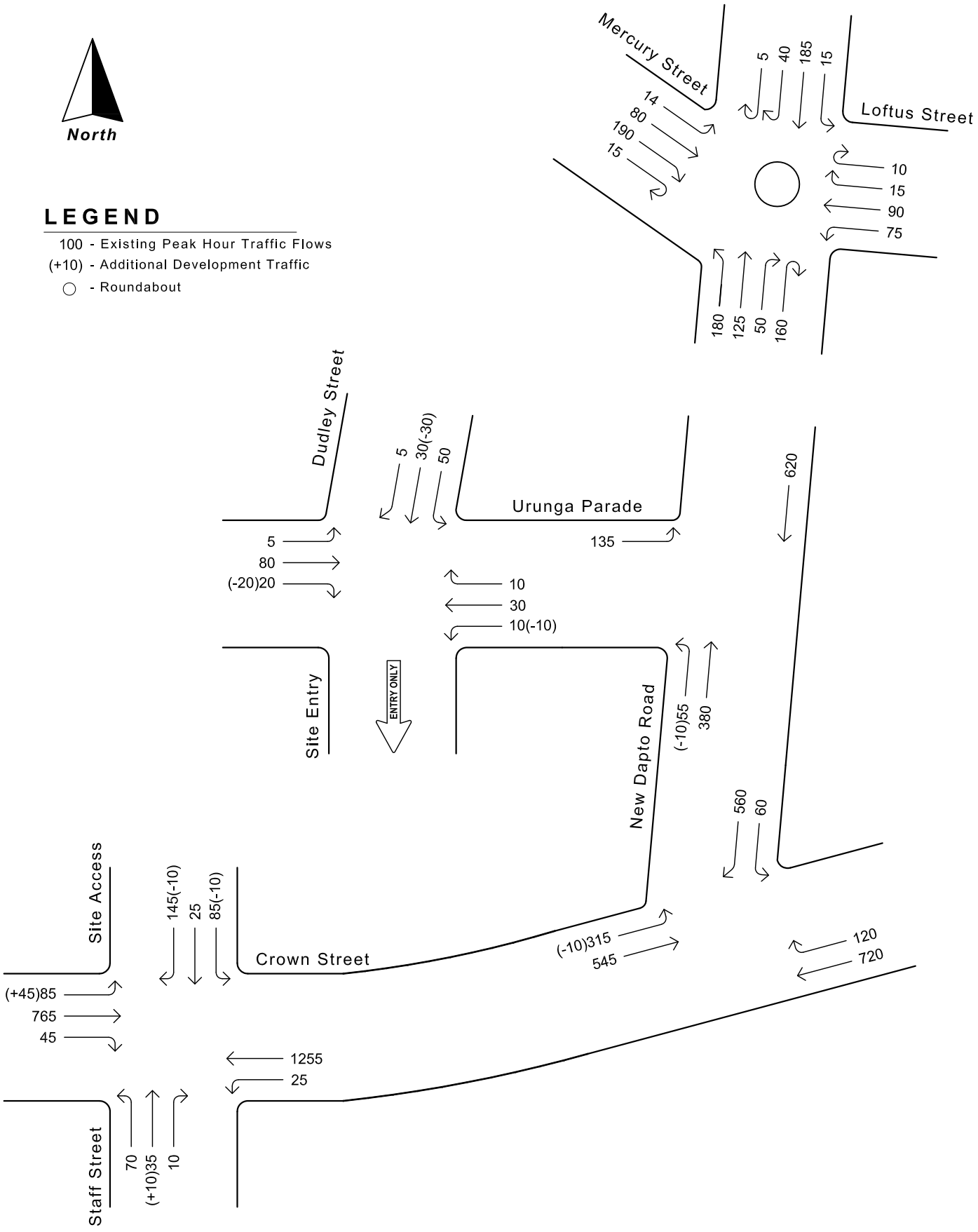


Base weekday morning peak hour traffic flows plus S75W traffic

Colston Budd Hunt & Kafes Pty Ltd

DRAWN BY CBHK Pty Ltd_hs Ref: 8876 07 June 2013

Figure 2



Base weekday afternoon peak hour traffic flows plus S75W traffic

Colston Budd Hunt & Kafes Pty Ltd

DRAWN BY CBHK Pty Ltd_hs Ref: 8876 07 June 2013

Figure 3