2.8 Traffic Analysis

The following traffic analysis is drawn from the Arup 2007 report. The key intersections forming the access road system to the West Ryde precinct were surveyed during the peak periods for turning volumes by light and heavy vehicles. Thursday was chosen for the week day count due to late night shopping usually has some influence on traffic flow. Saturday midday was chosen as a typical busy period on weekend days.



Figure 10 Traffic Survey Locations

On Saturday it was reasonably busy with some traffic congestion mainly at the Chatham Road roundabouts. Due to the Victoria Road signals a queue would build up at times back into the Dickson Avenue roundabout. On the green phase it was noticed that not all the vehicles got through on the phase. On a couple of occasions it became blocked. This was also the case for the Betts Street roundabout. At this roundabout the queue appeared in the opposite direction northbound and only very briefly. There were quite a number of u-turns at the Dickson Avenue roundabout turning from northbound to southbound to access Graf Avenue as there is no right turn into the street and to return to Victoria Road due to the right turn ban from Station Street into Victoria Road. It was a little the same for Thursday along Chatham Road with queuing etc. There were a few u-turns at the Dickson Avenue roundabout.

The seven intersections surrounding the development site were analysed using the SIDRA intersection analysis program. A summary of this analysis is shown in Table 3.

Intersection	Scenario	Peak Hour	Level of Service	Degree of Saturation	Average Delay	95% Back Of Queue (m)
Victoria Road / West Parade	Saturday	midday	А	0.76	11.4	135
	Thursday	AM	в	1.183	17.7	154
		PM	В	1.02	17.8	202
Victoria Road / Chatham Road	Saturday	midday	В	1.04	16.7	162
	Thursday	AM	ш	1.12	66.7	1,187
		PM	В	1.04	22.3	487
Chatham Road / Dickson Avenue	Saturday	midday	A	0.53	10.3	29
	Thursday	AM	А	0.36	8.8	19
		PM	А	0.59	10.3	33
Chatham Road / Betts Street	Saturday	midday	А	0.55	10.6	43
	Thursday	AM	А	0.54	10.2	33
		PM	А	0.62	10.7	50
Anthony Road / West Parade	Saturday	midday	D	0.69	46.9	96
	Thursday	AM	С	0.67	37.0	67
		PM	D	0.63	43.3	115
Anthony Road / Betts Street	Saturday	midday	в	0.28	9.6	8
	Thursday	AM	А	0.24	8.5	1
		PM	В	0.26	9.3	7
Anthony Rd / Reserve Street*	Saturday	midday	В	0.19	2.2	6
	Thursday	AM	В	0.13	2.3	3
		PM	В	0.362	3.5	14

Table 3 Summary of Intersection Analysis (Existing Traffic Flow)

*Traffic volumes estimated from adjacent counts. Extract Arup West Ryde Urban Village Report, July 2008

2.9 Traffic Safety

There is not an RTA accident black spot in the area. However the high volumes of pedestrian activity around the railway station heighten accident exposures. The absence of a pedestrian crossing of West Parade on the north side of the Anthony Road intersection signals is contrary to current RTA practice and a pedestrian crossing as median pedestrian refuge outside the bookshop may be warranted. The next pedestrian crossing refuge point is at the Miriam Road roundabout to the north.

2.10 Public Transport

The site has excellent access to bus and rail public transport services as well as a taxi rank within the accepted 400m walk radius of a railway station and bus services. As such, the site is well suited to a high mode split to public transport. Bus services run to locations such

as Parramatta and Ryde. The railway station provides frequent services to Hornsby to the north and to the south to Strathfield and provides direct services to a central Sydney CBD and North Sydney.



Source: Sydney Buses website

Figure 11 Public Transport Services

3 Proposed Development

3.1 The Development

The project contains lots located at 63 to 77 West Parade adjacent to West Ryde railway station and the railway line. The development includes demolition of the existing dwellings and construction of approximately 63 social housing units, 24 affordable housing units, 55 private dwellings, 640m² of office space for Department of Housing and 400m² of retail space (refer to drawings to **Appendix A** drawings dated 22/06/2009, prepared by Caldis Cook Group). The Housing NSW Ryde client services team will be accommodated on the site office. The whole development will comprise of the following four towers.

- 11 storey Tower A 55 residential dwellings, ground level retail and basement parking
- 4 storey Tower B 24 residential dwellings, ground level retail and basement parking
- 7 storey Tower C 35 residential dwellings, ground level office and basement parking
- 4 storey Tower D 28 residential dwellings, ground level retail and basement parking

In total two combined (in and out) driveways are proposed with the development, one being on the southern end and the other being on the northern end of the development (approximately 40m south of Miriam Road intersection).

Regarding the combined driveway for the residential and commercial component, the only potential alternative to this is that the 17 bays for the office component of the development may feel that they want a separate secure area of car parking. If so, this can either be provided within the car park from a common driveway using swipe cards and key card, or can be provided off a second driveway separate to the residential driveway. The frontage is long enough to accommodate both these options and will reduce the number of driveways quite significantly from the current eight driveways that exist.

The site frontage is reasonably level and the sight distances of the driveways and comparisons with stopping will need to provide sufficient views along the road and across the footpath, but this should not be a major design challenge.

3.1.1 Projected number of employees/users/patrons

The anticipated number of staff and visitors on site and the associated car parking requirement is approximately:

- There will be 30-40 office staff DOH Ryde Client Services Team in 640m² GLA office floorspace. Social Housing tenants from the Ryde Gladesville area will visit the office to access HNSW services.
- There may be 3 5 staff for the retail component of the development. There may be some outside visitors to the retail shops, although it is anticipated that the retail component of the development will mainly serve the residential and commercial component of the development

3.1.2 Hours and days of operation

The office will be open 5 days a week generally between 8.00am and 6.00pm. The retail shops may operate till late at night.

3.1.3 Selection of appropriate design vehicles for determining access and circulation requirements

The design vehicle for the building is the Australian Standards B99 (99th percentile vehicle represented by Ford Transit Van medium wheelbase van) to public basement parking and private parking above ground.

The design vehicle to service waste via the basement using a private contractor is also likely to be the B99 vehicle due to headroom limitations.

3.1.4 Analysis of projected queuing at entrances

Sufficient staff resident and visitor parking and traffic management elements are provided on site in the basement car park to avoid queuing at the entrance. There will be entry control gates and no expected delay to vehicles entering the site.

3.1.5 Provision for access to, and by public transport

An opportunity for provision of a staff shuttle bus is not necessary due to the proximity of bus, rail and taxis.

3.1.6 Parking layout

All parking spaces and circulation aisles must comply with AS 2890.1 – 2004 off street car parking.

3.1.7 Parking for Service / courier vehicles

Service vehicle access is envisaged to be relatively minor and perhaps associated with the change of tenancies within the development. In this case it would seem appropriate not to provide a loading dock for the development. However if the loading dock is chosen to be developed for vans and full garbage removal then this can be managed with a small rigid truck and 8.8 m long trucks. It will be a design issue as to whether removal vans pass inside or serve from the kerbside.

3.1.8 Bicycle Parking

Secure bicycle parking will be provided as per Council requirements.

3.2 Parking Policy

3.2.1 Council code and local parking policies and plans

City of Ryde Council Parking Policies: The City of Ryde Development Control Plan 2006 outlines Parking requirements relating to specific land uses, and objectives of:

- Recognising the varying degrees of availability of public transport within Ryde, the aim of the car parking provisions of this Part is to provide a comprehensive guide for the provision of parking for new development in order to:
- Ensure adequate traffic safety and management
- Ensure an adequate environmental quality of parking areas (both safety and amenity) and
- Provide parking areas that are convenient and sufficient for the use of employees and visitors generated by new developments

Landuca	Darking Deguirements				
Land use	Parking Requirements				
Residential					
(i) Boarding Houses	1 space/2 bedrooms and 1 space/manager/1 spacer/2				
	employees				
(ii) Dwelling housing and residential flat buildings	2 spaces/dwelling				
(iii) Residential flats – for properties within 400m or Victoria Road, Epping Road or a Railway Station:					
One bedroom dwelling	1 space/dwelling				
Two bedroom dwelling	1.2 spaces/dwelling				
Three bedroom dwelling	1.6 spaces/dwelling				
Visitors	1 space/4 dwellings				
(iv) Urban Housing	As per part 3.6 of this Plan				
Dual Occupancy	1 space/dwelling				
Business					
(ix) Offices	1 space/ 30 m ²				

Table 4 Council Parking Policy