WINTEN PROPERTY GROUP & AUSTRALAND HOLDINGS LIMITED

TRANSPORT ASPECTS OF PROPOSED COMMERCIAL DEVELOPMENT – 396 LANE COVE ROAD, MACQUARIE PARK

NOVEMBER 2011

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REF: 8209/4

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1. INTRODUCTION

- 1.1. Colston Budd Hunt & Kafes Pty Ltd has been retained by the Winten Property Group and Australand Holdings Limited to assess the transport aspects of the proposed commercial development at 396 Lane Cove Road, Macquarie Park. The site location is shown on Figure 1.
- 1.2. A Part 3A Concept Plan has been submitted to the Department of Planning and Infrastructure which was supported by an Environmental Assessment Report ⁽¹⁾ prepared by JBA Planning.
- 1.3. In response to the Concept Plan exhibition, transport, traffic and parking matters have been raised by the Department of Planning and Infrastructure, City of Ryde, SRDAC and NSW Transport. Copies of the correspondence from these four authorities are attached in Appendix A.
- 1.4. As the site is a major development within Macquarie Park, the City of Ryde requires the preparation of a PARAMICS model to assess the traffic effects of the proposed development. Parsons Brinckerhoff (PB) has been engaged to prepare the PARAMICS model. A copy of the PARAMICS modelling report is provided in Appendix B. The City of Ryde requested PARAMICS make use of the most up-to-date modelling available from Council. This has been purchased from Council and used in the modelling undertaken by PB.
- 1.5. This report assesses the transport aspects of the proposed development through the following chapters:
 - Chapter 2 Describing the existing situation; and

⁽¹⁾ "Macquarie Park Commerce Centre. Submitted to Department of Planning for exhibition. On Behalf of Winten Property Group and Australand Holdings Limited November 2010".

CHAPTER 1

Chapter 3 - Assessing the transport aspects of the proposed development.

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2. EXISTING TRANSPORT CONDITIONS

Site Location

- 2.1. The site is located on the south western corner of the intersection of Lane Cove Road and Waterloo Road as shown on Figure 1. The site also has frontage to Coolinga Street (to the west) and Giffnock Avenue (to the south). The site is currently occupied by a two storey light industrial buildings with parking for 153 cars. Existing access is provided to Waterloo Road, Coolinga Street and Giffnock Avenue.
- 2.2. The entry to Macquarie Park railway station is located adjacent to the site, on the corner of Waterloo Road and Lane Cove Road. Surrounding land use is a mix of commercial and light industrial development, typical of development within Macquarie Park.

Road Network

- 2.3. The road network in the vicinity of the site includes Lane Cove Road, Waterloo Road, Coolinga Street, Giffnock Avenue and Hyundai Place. Lane Cove Road is a major arterial road located to the east of the site. It is six lane divided road that forms part of Met Road 3 that connects the Pacific Highway to the north (at Gordon) with Princes Highway to the south (at Blakehurst). Major intersections are either traffic signal controlled or grade separated (Epping Road and the M2).
- 2.4. Waterloo Road is a major access road within Macquarie Park and runs in an east west direction past the subject site. It is generally a four lane divided road with

additional turning lanes at major intersections. The intersection of Waterloo Road and Lane Cove Road is traffic signal controlled.

- 2.5. Coolinga Street and Giffnock Avenue are local streets servicing the area of Macquarie Park located to the west of Lane Cove Road and between Waterloo Road and Epping Road. They provide one traffic lane in each direction with kerb side parking (clear of intersections). The intersection of Waterloo Road and Coolinga Street is a priority controlled T-intersection with Waterloo Road the major road. Turning movements to/from Waterloo Road are limited to left turns by the median in Waterloo Road. The intersection of Giffnock Avenue and Coolinga Street is a priority controlled T-intersection of Giffnock Avenue and Coolinga Street is a priority controlled T-intersection of Giffnock Avenue and major road.
- 2.6. Hyundai Place is located to the south of the site and is a one way street connecting Lane Cove Road with Giffnock Avenue. It has recently been constructed and forms part of Council's fine grain road network for the area. Entry from Lane Cove Road to Hyundai Place is left turn only.

Traffic Volumes

- 2.7. To assist in calibration of the PARAMICS model, additional traffic counts were undertaken during weekday morning and afternoon peak periods at the following intersections:-
 - □ Waterloo Road/Coolinga Street; and
 - Coolinga Street/Giffnock Avenue.
- 2.8. The existing (modelled) weekday morning and afternoon peak hour traffic flows for the intersections adjacent to the site are set out on Figures 2 and 3 and summarised in Table 2.1.

Table 2.1 : Existing (Modelled) Two Way Peak Hour Traffic Flows						
	Vehicles Per Hour (Two-Way)					
	Morning	Afternoon				
Location						
Lane Cove Road						
- north of Waterloo Road	5488	5274				
- south of Waterloo Road	5442	5332				
Waterloo Road						
- east of Lane Cove Road	997	1146				
- west of Lane Cove Road	1574	1728				
- west of Coolinga Street	1150	1954				
Giffnock Ave						
- east of Coolinga Street	619	271				
- west of Coolinga Street	896	320				
Coolinga Street						
- south of Waterloo Road	539	328				

- 2.9. The results in Table 2.1 reveal that:-
 - Lane Cove Road carried some 5,275 to 5,500 vehicles per hour (two-way) during the morning and afternoon peak period;
 - Waterloo Road carried some 1,000 to 1,950 vehicles per hour (two-way) during the morning and afternoon peak periods;
 - Giffnock Avenue carried some 300 to 900 vehicles per hour (two-way) during the morning and afternoon peak periods; and
 - Coolinga Street carried some 330 to 540 vehicles per hour (two-way) during the morning and afternoon peak periods.

- 2.10. A survey of existing vehicle movements to/from the site found that it generated some 64 to 85 vehicles per hour (two-way) during the weekday morning and afternoon peak hours respectively.
- 2.11. Traffic flows through, and the operation of a number of other intersections in the area, (as requested by the RTA) have been addressed in the PARAMICS modelling undertaken by PB. The intersections assessed include amongst others, Lane Cove Road/Epping Road, Lane Cove Road/Talavera Road, Lane Cove Road/M2 Motorway, Epping Road Lyon Park Road and Waterloo Road/Khartoum Road.

Intersection Operations

- 2.12. 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. SIDRA produces a number of measures of intersection operations. The most useful measure provided is average delay per vehicle expressed in seconds per vehicle.
- 2.13. Based on average delay per vehicle, SIDRA estimates 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				

- 2.14. 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 SIDRA analysis found that:-

- the intersection of Lane Cove Road and Waterloo Road operates at capacity in the weekday morning and afternoon peak periods;
- the intersection of Waterloo Road and Coolinga Street operates 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 intersection of Giffnock Avenue and Coolinga Street operates with average delays per vehicle of less than 25 seconds for both peak periods. This represents level of service B, a satisfactory level of intersection operation.
- 2.16. Assessment of other intersections (as required by the RTA) is included in the PARAMICS model. These include:
 - □ Lane Cove Road/Hyundai Drive;
 - □ Lane Cove Road/Epping Road;
 - Epping Road/Lyon Park Road;
 - Giffnock Avenue/Hyundai Place; and
 - Giffnock Avenue/Kittys Street.

Public Transport

- 2.17. The site is located adjacent to the Macquarie Park Railway Station (located on the south western corner of the intersection of Lane Cove Road and Epping Road). The station is located on the Epping to Chatswood rail link. Trains operate on the line at 15 minute intervals between 5.00am and 11.00pm daily.
- 2.18. Macquarie Park is serviced by a number of local and regional bus routes that connect the area with the City, Chatswood, Ryde, Epping and Parramatta. These

services generally operate along Lane Cove Road, Epping Road and Talavera Road. One service (the 197 Mona Vale to Macquarie Park service, via Gordon) operates along Waterloo Road past the site. A bus stop is located along the Waterloo Road frontage of the site. The RTA has recently provided bus priority lanes along Lane Cove Road to improve bus access within Macquarie Park.

2.19. In summary, the site is well serviced by public transport, with buses and trains providing public transport services to the site.

Pedestrians and Cyclists

- 2.20. Pedestrian access through Macquarie Park is provided by pedestrian paths along roads in the area. Pedestrian access across major roads is provided at traffic signal controlled intersections. West of Lane Cove Road, there is limited pedestrian access across Waterloo Road with no designated pedestrian facility between the traffic signals at Lane Cove Road and the traffic signals at the Macquarie shopping centre access. Pedestrians are required to make a staged crossing using the median in Waterloo Road.
- 2.21. Updated pedestrian counts were undertaken in the vicinity of the intersection of Waterloo Road and Coolinga Street in the weekday morning and afternoon peak periods. These found that:
 - some 10 to 15 pedestrians per hour (two way) walked along the northern side of Waterloo Road in the peak periods;
 - some 150 to 160 pedestrians per hour (two way) walked along the southern side of Waterloo Road (between the station/Lane Cove Road and Coolinga Street) in the peak periods. The majority of these pedestrians then used the footpath of the eastern side of Coolinga Street; and

- some 5 pedestrians per hour (two way) walked along the western side of Coolinga Street in the peak periods
- 2.22. There are few designated cycling facilities (such as separate on road bike lanes or shared paths) in the vicinity of the site. Two blocks of public bike lockers/rails are located on the northern side of Waterloo Road on either side of Lane Cove Road (provided as part of the Epping to Chatswood rail link).
- 2.23. Ryde Council has identified a number of measures to improve pedestrian and cyclist facilities within Macquarie Park. These measures are set out in LEP 2010 and the Ryde Bicycle Strategy and Masterplan. They include:
 - implementation of a new street network with smaller street blocks, with increased pedestrian and cycleway links to improve the pedestrian environment;
 - provision of end trip facilities for cyclists such as secure bike parking and change facilities (with showers);
 - Lane Cove Road as regional bike route with on or off road cycle lanes;
 - Waterloo Road as a local and regional bike route with on or off road cycle lanes; and
 - Giffnock Avenue and Coolinga Street as local bike routes with shared cycle lanes.

3. TRANSPORT ASPECTS OF PROPOSED DEVELOPMENT

The Proposed Development

- 3.1. The proposed development is for some 83,368m² of commercial/office development over four buildings on the site. Vehicular access is now proposed from Giffnock Avenue (car park and loading dock) and Coolinga Street (car park). Some 1,040 parking spaces are proposed in basement parking. An indented taxi bay is proposed on the Waterloo Road frontage of the site. Pedestrian and cyclist access will be provided from Lane Cove Road, Waterloo Road, Coolinga Street and Giffnock Avenue.
- 3.2. This chapter assesses the transport aspects of the proposed development through the following sections:
 - pedestrians and cyclists;
 - public transport;
 - parking provision;
 - access and internal layout;
 - □ servicing;
 - □ traffic effects;
 - transport matters raised by NSW Department of Planning and Infrastructure;
 - transport matters raised by City of Ryde;
 - □ transport maters raised by SRDAC (RTA);
 - transport matters raised by NSW Transport; and
 - **u** summary.

Pedestrians and Cyclists

- 3.3. Pedestrian and cyclist access will be provided from Lane Cove Road, Waterloo Road, Coolinga Street and Giffnock Avenue. The design of the proposed development caters for through site links to enhance pedestrian connectivity in the area. As part of the proposed development bicycle parking for some 538 bicycles will be provided with the majority located within the in the basement car park. Some short term bicycle parking will be provided at ground level within the various plazas. The 538 bicycle space will comprise 423 employee spaces (417 commercial/6 retail) and 115 visitor spaces (111 commercial/4 retail). Change rooms (including lockers and shower facilities) will be provided within the new buildings.
- 3.4. Overall the proposed development will improve pedestrian and cyclist connectivity in the area. The provision of on site bicycle facilities will provide opportunities for employees to travel to the site by bicycle and is considered appropriate.

Public Transport

- 3.5. As noted in Chapter 2, the site is well serviced by public transport with buses operating on Lane Cove Road, Waterloo Road and Epping Road in the vicinity of the site. The Macquarie Park Railway station is located adjacent to the site. These provide connections to the City, Chatswood, Ryde, Epping, Parramatta and the surrounding areas. The site is therefore well located to provide opportunities for employees with a choice of modes for travel to the site.
- 3.6. The provision of increased employment 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.
- 3.7. As part of the proposed development, an indented taxi bay is proposed on the Waterloo Road frontage of the site.
- 3.8. 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 employees and a travel access guide for visitors.
- 3.9. The principles of the travel plans, to be developed in consultation with Council,RTA and other stakeholders, will include the following:
 - encourage the use of public transport to travel to and from the site;
 - □ work with public transport providers to improve services;
 - encourage public transport by employees and visitors through the provision of information, maps and timetables;
 - provide appropriate pedestrian facilities which improve accessibility to the 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.
- 3.10. The travel plans will assist in delivering sustainable transport objectives by considering the means available for reducing dependence solely on cars for travel purposes, encouraging the use of public transport and supporting the efficient and viable operation of public transport services.
- 3.11. It is noted in the SRDAC letter of 14 March 2011 that the RTA is investigating a proposal to improve the bus network efficiency from Lane Cove Road across Waterloo Road by extending the length of the northbound bus only lane. These works have now been completed.

Parking Provision

3.12. For the subject site, Ryde LEP 2010 sets out a maximum provision of one parking space per 80m² GFA. This rate has been adopted to constrain parking and encourage travel by means other than car. The rate reflects the sites proximity to the railway station. By way of comparison RTA Guidelines suggest provision of one space per 40m² GFA for office/commercial development where parking is not constrained. This rate is twice the provision suggested in LEP 2010. Thus the proposed parking provision is not excessive and is considered appropriate given the sites location adjacent to the railway station.

- 3.13. Applying the LEP 2010 rate, the proposed development could provide a maximum of 1,042 spaces. The proposed provision is in accordance with this maximum parking provision. It represents a constrained parking provision, in order to encourage access by means other than private car.
- 3.14. Motorcycle and disabled parking will be provided in accordance with the Council requirements.

Access and Internal Layout

- 3.15. Vehicular access is now proposed from Giffnock Avenue (car park and loading dock) and Coolinga Street (car park). The access driveways will be designed to comply with AS28890.1-2004 and AS2890.2-2002. Access to the basement car parks will be controlled by boom gates to keep out unauthorised users. Queuing at the entries (prior to the boom gates) has been assessed using the PARAMICS model to ensure that queuing does extend back onto the street.
- 3.16. 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. The Coolinga Street driveway will provide access to the upper parking level with an internal connection to the lower levels. The Giffnock Avenue driveway will connect to the middle level with connections to the upper and lower levels.
- 3.17. The connection of the driveways to separate levels of the car park will improve traffic flow to/from and within the car park by not loading all traffic onto one access point. This is an appropriate treatment for a car park of this nature and disperses the traffic onto the surrounding road network.
- 3.18. Visitor parking will be located within the secure parking area. Access will be via intercom with visitors directed to designated visitor parking areas.

3.19. Overall the design of the proposed car park and access arrangements are considered appropriate.

Servicing

- 3.20. The loading docks are located on the southern part of the site with a separate access off Giffnock Avenue. The loading docks provide nine services bays which can accommodate two large rigid trucks, three medium rigid trucks and four small rigid trucks. The docks have been designed to accommodate all turning movements on site and for trucks to enter and depart the site in a forward direction.
- 3.21. The loading docks will be designed to comply with the requirements of AS2890.2-2002 with respect to height clearances, ramp grades, service bay dimensions etc. Additional courier bays are provided within the basement car park areas and are accessed via the car park driveways.
- 3.22. Overall the design of the proposed service arrangements is considered appropriate.

Traffic Effects

- 3.23. Traffic generated by the proposed development will have its largest effects during the weekday morning and afternoon peak periods when it combines with commuter traffic.
- 3.24. Estimates of traffic generated by the proposed development have been based on parking provision with the generation rate per space based on the surveys of the existing development on the site. The existing use of the site generated 64

vehicles per hour (two way) in the morning peak hour and 85 vehicles per hour (two way) in the weekday afternoon peak hour. With 153 spaces this represents generation rates of 0.42 and 0.55 trips per space in the weekday morning and afternoon peak hours. The use of surveyed traffic generation rates per space (rather than standard RTA traffic generation rates) is considered appropriate for the following reasons:

- RTA rates are based on unconstrained parking provision and hence would be too high; and
- The surveyed rates reflect the sites location and good access to public transport (adjacent the rail station and bus services within Macquarie Park).
- 3.25. Applying these rates to the proposed development (1,042 spaces) results in a traffic generation of some 440 vehicles per hour (two way) in the weekday morning peak hour and some 570 vehicles per hour (two way) in the weekday afternoon peak hour. When existing traffic generation from the site is deducted, the net increase in traffic is some 380 vehicles per hour (two way) in the weekday morning peak hour and some 485 vehicles per hour (two way) in the weekday afternoon peak hour.
- 3.26. The traffic effects of the proposed development have been assessed using the PARAMICS model prepared by PB. The results are provided in the modelling report in Appendix B. PB has undertaken the traffic modelling in accordance with City of Ryde's (CoR) traffic impact guidelines, which outline the preferred use of their Paramics Model to assess new developments in Macquarie Park. As required by the CoR guidelines, PB first identified the in-scope intersections to determine the modelling study area. The models were then calibrated and validated for the in-scope study intersections for both the AM and PM peak models.

- 3.27. The models were then updated to include the proposed infrastructure associated with the proposed development. The models were then run with the proposed development traffic in place. Two with development scenarios were considered, with and without the proposed G-turn treatment suggested by the RTA *a*t the intersection of Lane Cove Road and Waterloo Road. The modelling showed that:
 - the proposed access arrangements would be able to cater for traffic generated by the proposed development;
 - the proposed development would result in only minor increases in intersection delays and generally no change in level of service (LOS); and
 - the model global statistics indicated that the proposed development will have a minor impact to the network as whole.
- 3.28. The modelling of the proposed G-turn is discussed later in this report.
- 3.29. As part of the proposed development a roundabout is proposed at the intersection of Giffnock Avenue and Coolinga Street to improve safety at the intersection and better control turning movements. Access to the Coolinga Street driveway to the proposed development is suggested to be limited to left turns in and out with a median in Coolinga Street due to its proximity to the intersection with Waterloo Road and traffic flow along Coolinga Street. Provision of a roundabout at the intersection of Coolinga Street and Giffnock Avenue would allow for uturns at the intersection and allow vehicles exiting the site via the Coolinga Street driveway to readily access Waterloo Road.
- 3.30. The proposed roundabout at the intersection of Coolinga Street and Giffnock Avenue would result in benefits to other road users by managing traffic at intersection better (the existing controls are non-standard with traffic approaching from the stem of T-intersection having priority) and making it easier for traffic to from Giffnock Avenue. This would also be of increased benefit under the G-turn

option when traffic flows westbound along Giffnock Avenue would increase significantly.

- 3.31. The additional traffic has been assigned to the road network using the PARAMICS model. The resulting flows are shown on Figures 2 and 3 and summarised in Table 3.1.
- 3.32. The changes in Table 3.1 include redistribution of existing trips within the road network. This is due to development traffic resulting in other trips choosing to use alternative routes within the road network as determined by the PARAMICS model.

Table 3.1 : Existing (Modelled) Plus Development Two Way Peak Hour Traffic Flows						
	Vehicles Per Hour (Two-Way)					
Leasting	Mor	Morning		noon		
Location						
	Existing	With Dev	Existing	With Dev		
Lane Cove Road						
- north of Waterloo Road	5488	5679	5274	5157		
- south of Waterloo Road	5442	5530	5332	5262		
Waterloo Road						
- east of Lane Cove Road	997	1005	1146	1051		
- west of Lane Cove Road	1574	1658	1728	1760		
- west of Coolinga Street	1150	1211	1954	2215		
Giffnock Ave						
- east of Coolinga Street	619	798	271	532		
- west of Coolinga Street	896	1015	320	547		
Coolinga Street						
- south of Waterloo Road	539	732	328	616		

- 3.33. Examination of Table 3.1 reveals that:
 - traffic flows on Lane Cove Road would increase by some 100 to 200 vehicles per hour (two-way) in the morning peak period. In the afternoon peak period traffic flows would decrease by some 100 vehicles per hour (two way);

- traffic flows on Waterloo Road would increase by up to 250 vehicles per hour (two-way) in the peak periods;
- traffic flows on Giffnock Avenue would increase by some 200 to 300 vehicles per hour (two-way) in the peak periods; and
- traffic flows on Coolinga Street would increase by some 230 vehicles per hour (two-way) in the peak periods.
- 3.34. The intersections analysed in Chapter 2 were re-analysed, with development traffic in place, using SIDRA. The analysis found that:
 - the intersection of Lane Cove Road and Waterloo Road would continue to operate at capacity in the weekday morning and afternoon peak periods. In the weekday morning and afternoon peak hours the average intersection delays and maximum queue be similar;
 - the intersection of Waterloo Road and Coolinga Street would operate with average delays per vehicle of less than 25 seconds for both peak periods. This represents level of service B, a satisfactory level of intersection operation; and
 - the intersection of Giffnock Avenue and Coolinga Street (under roundabout control) 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.
- 3.35. In summary the SIDRA analysis has found that there would be essentially no change in the operation of these intersections as result of the proposed development. Analysis of other intersections as requested by the authorities is provided in the PARAMICS report.

- 3.36. The RTA has suggested that as part of the proposed development an assessment of a G-turn treatment at the intersection of Waterloo Road and Lane Cove Road be considered. The G-Turn proposal involves banning the right turn from Lane Cove Road (south) into Waterloo Road east, reconfiguration of the Waterloo Road west approach and provision of traffic signals at the intersection of Waterloo Road and Coolinga Street to allow for right turns out of Coolinga Street. The traffic signals at Waterloo Road and Coolinga Street have also allowed for right turns into Coolinga Street.
- 3.37. This option was modelled using the PARAMICS model. The overall results of the assessment are set out in the attached PB report. In summary the modelling found that the G-turn results in some improvement of the operation of the Lane Cove Road/Waterloo Road intersection (particularly in the morning peak hour) with a reduction in overall average delays. However, it could result in significant rerouting and congestion in other parts of the network as shown in the PARAMICS modelling.
- 3.38. As requested by the RTA, SIDRA modelling was also undertaken to assess the impacts of the G-turn (and traffic signals at the intersection of Coolinga Street and Giffnock Avenue). The results are set out below.
 - the intersection of Lane Cove Road and Waterloo Road (with the G-turn treatment) would operate at capacity in the weekday morning peak hour with minimal change in average intersection delays. In the weekday afternoon peak hour the intersection would operate with average delays per vehicle of less than 55 seconds for both peak periods. This represents level of service D, satisfactory but near capacity;

- the intersection of Waterloo Road and Coolinga Street (under traffic signal control) would operate with average delays per vehicle of less than 15 seconds in the weekday morning peak hour. This represents level of service A/B, a good level of intersection operation. In the weekday afternoon peak hour the intersection would operate with average delays per vehicle of less than 40 seconds. This represents level of service C, a satisfactory level of intersection operation; and
- the intersection of Giffnock Avenue and Coolinga Street (under roundabout control) 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.
- 3.39. A summary of the SIDRA analysis of the intersection of Lane Cove Road and Waterloo Road is provided in Table 3.2 below.

Table 3.2	Summary of SIDRA Analysis for intersection of Lane Cove Road/Waterloo Road						
Option	Average (secor	Delay nds)	Level of Ser	vice (LOS)	95% back of queue on Lane Cove Road (metres)		
	AM	PM	AM	PM	AM	PM	
Existing	79	52	F	D	681	407	
Existing + Dev	78	55	F	D	744	442	
Existing + Dev + G -turn	73	51	F	D	767	476	

3.40. Overall the traffic assessment (SIDRA analysis and PARAMICS) has found that the provision of the G-Turn treatment results in some minor improvements (reduced average delays) to the operation of the surrounding road network. On this basis it would be unreasonable for the proposed development to fund the full cost of the G-Turn treatment given its minimal impact on the operation of the road network.

Discussions with the RTA have indicated that the RTA is not seeking for the proposed development to fund the works. Rather as the proposed development has minimal impact on the operation of the road network, it may be appropriate for the proposed development to make a contribution to future road network improvements consistent with its impact on the road network.

3.41. It is noted that the provision of traffic signals at the intersection Coolinga Street and Waterloo Road would improve pedestrian access across Waterloo Road. As noted in Chapter 2, there is no pedestrian crossing facility on Waterloo Road between the traffic signals at Lane Cove Road and the Macquarie shopping centre access. However, it is noted that the proposed development does not require additional pedestrian access across Waterloo Road. Rather the provision of traffic signals with pedestrian facilities at this location would generally improve pedestrian access in the area.

Transport Matters Raised By City of Ryde

- 3.42. The City of Ryde correspondence is attached in Appendix A. With regards to traffic matters, the City of Ryde requested PARAMICS make use of the most up-to-date modelling available from Council. This has been purchased from Council and used in the modelling undertaken by PB. The PARAMICS model has been prepared in accordance with Council requirements and subsequent advice from Council's external modelling consultant.
- 3.43. Council has also requested SIDRA analysis of intersections adjacent to the site. This has been undertaken and the results discussed in the traffic effects section of Chapter 3 of this report.

Transport Matters Raised by SRDAC

- 3.44. The SRDAC correspondence (dated 14 March 2011) is attached in Appendix A. With regards to traffic matters, SRDAC also requested PARAMICS modelling using up-to-date information from Council. SRDAC also requested that PARAMICS test a G turn from Lane Cove Road.
- 3.45. The calibration of the PARAMICS modelling undertaken by PB has been discussed with RTA and Council. The G turn has been tested and the results of the PARAMICS modelling are discussed in the traffic section of Chapter 3 of this report.

Transport Matters Raised by NSW Transport

- 3.46. The NSW Transport correspondence is attached in Appendix A. NSW Transport requested information relating to bicycle parking and associated facilities. These facilities are discussed in the pedestrian and cyclists section of Chapter 3 of this report.
- 3.47. NSW Transport also requested information on Travel Demand Management, and a Travel Access Guide. These aspects are discussed in the public transport section of Chapter 3 of this report.
- 3.48. NSW Transport also requested information on the likely mode of travel by means other than car. The proposed development is estimated to have a population of some 3,330 people (based on a density of 1 FTE worker per 25m² GFA). The proposed development provides some 1,042 spaces and hence the proportion of people travelling by car would be some 31%. The balance (some 69%) would travel by bus, train, cycle or walk.

Transport Matters Raised by Department of Planning and Infrastructure

- 3.49. The Department of Planning and Infrastructure correspondence is attached in Appendix A. Department of Planning and Infrastructure requested that the transport matters raised by the RTA and Council are addressed. This has been undertaken as follows:
 - PARAMICS modelling has been undertaken using the latest (2010) base model and been prepared in accordance with Council Guidelines;
 - The intersections of Lane Cove Road with Epping Road and Waterloo Road have been assessed using PARAMICS and SIDRA;
 - The other intersections identified by the RTA have been assessed in PARAMICS model;
 - The G-turn option for the Lane Cove Road/Waterloo Road intersection has been assessed using PARAMICS and SIDRA; and
 - Meetings and ongoing discussions have been held with RTA and Council officers regarding the transport assessment of the proposed development; and
 - The extension of the northbound bus only lane on Lane Cove Road at Waterloo Road (as identified by the RTA) has now been completed.
- 3.50. The Department requested that the impact of the proposed development be assessed for the signalised intersections of Lane Cove Road/Waterloo Road and Lane Cove Road/Epping Road and any proposed mitigation measures at these intersections.
- 3.51. The Paramics modelling included the impact on these two intersections. These two intersections currently operate close to capacity during the afternoon peak period. With development traffic, delays at the intersections will marginally increase, with the intersections operating at similar levels of service to today. No mitigation measures are therefore proposed as a result of development traffic.

3.52. Information relating to bicycle parking and associated facilities. These facilities are discussed in the pedestrian and cyclists section of Chapter 3 of this report

<u>Summary</u>

- 3.53. In summary, the main points relating to the transport aspects of the proposed development are:-
 - (i) the site is well located to existing public transport services to enable employees and visitors to have a choice of mode travel to the site;
 - (ii) the proposed development will strengthen demand for existing public transport services;
 - (iii) the proposed constrained parking provision complies with LEP 2010, which will encourage travel by means other than car;
 - (iv) the proposed development will enhance pedestrian and cyclists connectivity in the area through the provision of through site links
 - access, parking layout and servicing arrangements are appropriate and will be designed to comply with relevant Australian Standards;
 - (vi) the traffic effects of the proposed development have been assessed by PARAMICS modelling using up-to-date information purchased from the City of Ryde Council and applying the required methodology (including also for the potential G-Turn scenario);

- (vii) a roundabout is proposed at the intersection of Coolinga Street and Giffnock Avenue. The proposed roundabout would result in benefits to road users other than from the proposed development;
- (viii) the surrounding road network will be able to cater for traffic generated by the proposed development;
- (ix) the traffic assessment (SIDRA analysis and PARAMICS) has found that the provision of the G-Turn treatment results in some minor localised improvements to the operation of the surrounding road network. These improvements are greatest in the weekday morning peak period. The G-Turn does however have the potential to redirect traffic within the wider network and contribute to congestion elsewhere;
- (x) it would be unreasonable for the proposed development to fund the full cost of the G-Turn treatment given its minimal impact on the operation of the road network;
- (xi) as the proposed development has minimal impact on the operation of the road network (in terms of impacts on the operation of the surrounding intersections), it may be appropriate for the proposed development to make a contribution to future road network improvements consistent with its impact on the road network;
- (xii) the provision of traffic signals at the intersection Coolinga Street and Waterloo Road (as part of the G-turn) would improve pedestrian access across Waterloo Road; and

(xiii) the transport matters raised by the City of Ryde, SRDAC, NSW Transport Department of Planning and Infrastructure, have been addressed in this report.



Location Plan



LEGEND 100 - AM Peak Hour Traffic Flows (+10) - PM Peak Hour Traffic Flows

Existing (Modelled) weekday morning and afternoon peak hour traffic flows

30 September 2011



(+10) - PM Peak Hour Traffic Flows

Existing + Development (Modelled) weekday morning and afternoon peak hour traffic flows

Figure 3

APPENDIX A

CORRESPONDENCE FROM AUTHORITIES

Ξ



Our ref.: MP09_0209

Mr Oliver Klein JBA Planning Level 7, 77 Berry Street NORTH SYDNEY NSW 2060

Dear Mr Klein,

Subject: Concept Plan Application for a Commercial Building at 396 Lane Cove Road, 32-46 Waterloo Road and 1 Giffnock Avenue, Macquarie Park (MP09_0209)

I refer to your Environmental Assessment (EA) for the proposed redevelopment of the above site. As you are aware, the Department has exhibited the application and a copy of all submissions received have been forwarded for consideration. In this regard, in accordance with Section 75H of the *Environmental Planning and Assessment Act 1979*, you are required to respond to the issues raised in these submissions.

In addition, the Department has reviewed the submissions and considered the proposal as detailed in the EA. The Department has identified a number of issues with the proposal principally relating to the traffic assessment, parking provision, public domain/urban design. These issues are outlined in **Schedule 1**. The Department will also require additional information to complete our assessment as outlined in **Schedule 2**.

It is considered that a Preferred Project Report (PPR) should be prepared identifying how you have addressed issues raised by the submissions and the Department. The PPR must also demonstrate measures to minimise any environmental impacts of the proposal. A revised Statement of Commitments is also to be provided incorporating any amendments following your response to the submissions and should be submitted as a separate document.

The Department is available to meet on site to discuss the issues raised in the public submissions and this letter. In this regard, please contact Andrew Smith, Team Leader, Metropolitan & Regional Projects South on (02) 9228 6369 or email <u>andrew.smith@planning.nsw.gov.au</u>

Yours sincerely

25 3/2011

Michael Woodland Director Metropolitan & Regional Projects South

SCHEDULE 1 – DEPARTMENT OF PLANNING KEY ISSUES

1. Transport Assessment

The RTA and Ryde Council have raised concerns regarding the traffic modelling and analysis. The submitted Transport and Accessibility Report (TAR) has been based on the Ryde Council's 2007 Base Paramics model. This model has been superseded and replaced by the 2010 Base Paramics model. As such, the TAR should be updated accordingly and re-submitted for further consideration.

Furthermore, modelling should address:

- the impact of the development on the signalised intersections of Lane Cove Road/Waterloo Road and Lane Cove Road/Epping Road and any proposed mitigation measures to relieve the pressure at these intersections;
- providing more comprehensive traffic modelling, including aaSIDRA modelling on the surrounding intersections as recommended by the RTA; and,
- consideration of a G-turn scenario around the intersection of Lane Cove Road/Waterloo Road should also be modelled and consideration given to the associated traffic/pedestrian upgrade requirements.

In relation to the matters raised above, the Proponent shall provide evidence to the Department of consultation with the Council and RTA in relation to the relevant traffic assessment matters.

Consideration should be given to the RTA's proposal to lengthen the existing section of the northbound bus - only lane on approach to Waterloo Road and ensure that the location of the proposed building envelopes and ground plane design cater for this strategic concept.

The Proponent should also provide clarification and appropriate details of contributions towards local infrastructure upgrades consistent with the potential traffic and pedestrian flows generated by the proposal in the context of the GFA proposed above current and draft LEP controls.

2. On-site parking provision

The on-site car parking provision on site is considered excessive given the accessibility to rail and bus services. To minimise traffic generation in the Macquarie Park corridor and to encourage use of public transport, the car parking provision should be reduced to a more appropriate level given the site's close proximity to public transport services, and a justification for the revised car parking provision should be provided in the context of the broader locality.

3. Public Domain/Urban Design

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- Options for providing a greater variety and diversity of the treatment and design of the open space areas around the site and at the interface with the public domain shall be provided and should reflect the intended primary use of the subject area.
- Options for varying the footprint and separation of Buildings B, C and D to generate a more diversely designed streetscape, particularly at the corner of Waterloo Road and Coolinga Street, should be provided. In respect to Buildings B and C, clarification is required regarding the proposed connection between these buildings and the potential impact upon the use and circulation patterns at ground level, and the streetscape of Coolinga Street.

SCHEDULE 2 – ADDITIONAL INFORMATION REQUIRED/ COMMENTS

In addition to any revised architectural plans and supporting documentation, including analysis and assessments addressing the matters raised in **Schedule 1**, the following information is also required:

- Clarification that appropriate wind, acoustic and air quality testing will be undertaken with regard to the proposed helipad to be located on Building A.
- Clarification of the relevant Greenstar rating to be met by the proposal.
- Provision of a deep soil zone of at least 1.5 metres in width along the southern boundary to the south of Building A to ensure maintenance of a landscaped setting with the adjacent site (Hyundai).

RTA Ref: RDC 10M553 v2 SYD10/00243 Contact: Angela Malloch T 8849 2041 DoP Ref: MP09_0209



SYDNEY REGIONAL DEVELOPMENT ADVISORY COMMITTEE

Director Metropolitan Projects Department of Planning GPO Box 39 SYDNEY NSW 2000

Attention: Shivesh Singh

EXHIBITION OF ENVIRONMENTAL ASSESSMENT AND CONCEPT PLAN FOR RETAIL AND COMMERCIAL DEVELOPMENT AT 396 LANE COVE ROAD, 32-46 WATERLOO ROAD AND I GIFFNOCK AVENUE, MACQUARIE PARK

Dear Sir/Madam

Reference is made to your correspondence dated 1 December 2010 concerning the abovementioned Major Project which was referred to the Roads and Traffic Authority (RTA) for comment in accordance with Clause 104 of State Environmental Planning Policy (Infrastructure) 2007. I wish to advise that the Sydney Regional Development Advisory Committee (SRDAC) considered the traffic impact of this application at its meeting on 16 December 2010.

The RTA does not support the proposed development for the following reasons:

1. The RTA is currently investigating a proposal to further improve bus network efficiency from Lane Cove Road across Waterloo Road. The attached plan is a strategic concept of the proposed works to lengthen the existing section of Northbound bus only lane on approach to Waterloo Road. This is to reduce the effect of left turning vehicles being interrupted by buses travelling in Bus Only lane.

Therefore any proposed buildings or structures should be located clear of the land currently under investigation.

- The traffic report uses Ryde Council 2007 Base Paramics Model which is outdated and no longer accurate. Ryde Council's updated 2010 Base Paramics model should have been used. Further an individual analysis (aaSIDRA) should have been undertaken of the intersections impacted by this development.
- 3. The traffic report needs to provide more detail on the calibration process of the Paramics model.

Roads and Traffic Authority ABN 64 480 55 255	1			
27-31 Argyle Street, Parramatta NSVV 2150	PO Box 973 Parramatta CBD NSW 2124 DX 28555 Parramatta	,	T 131 782	www.rta.nsw.gov.au

- 4. The Paramics modelling results show a minimal increase in delays on the signalised intersection of Lane Cove Road (average 4 seconds) and Lane Cove Road/Epping Road intersection (average 7 seconds) these figures are not supported considering the development will generate at least an additional 675 vehicles in the peak hour. This intersection currently operates at a level of service F, this large scale development has potential to cause gridlock.
- 5. The applicant is required to use Ryde Council's 2010 Base Paramics model and update it accordingly for the RTA to review. The traffic report is required to be amended and shall include aaSIDRA modelling on the surrounding impacted intersections.

The RTA requires the applicant to model a G-turn scenario around the intersection of Lane Cove Road/Waterloo Road, this has the potential to reduce delay and improve traffic efficiency. A G-turn area treatment will require the following upgrades to be executed concurrently:

- Removal of the dual right turn on Lane Cove Road into Waterloo Road on the southern approach to Lane Cove Road,
- All vehicles wishing to head east onto Waterloo Road from Lane Cove Road will be re-directed onto Giffnock Avenue and Coolinga Street,
- Changes to the intersection of Giffnock Avenue and Coolinga Street are required to give priority to the new flow arrangement (G-turn). This will require the removal of some parking on Giffnock Avenue to improve sight distance, traffic flow and accessibility.
- Traffic control signals are required at the intersection of Coolinga Street and Waterloo Road to facilitate all movements at this intersection.
- Pedestrian crossings at the intersection of Coolinga Street and Waterloo Road are required on the western and southern side of the intersection.
- Installation of a triple right turn from Waterloo Road into Lane Cove Road (South). This change
 will require adjustments to the signal stop lines on Lane Cove Road southern approach.
- The lane configuration for the western approach to the intersection of Waterloo Road and Lane Cove Road shall be:
 - Lane I shared left turn and through lane
 - Lane 2 shared through and right turn lane
 - Lane 3 exclusive right
 - Lane 4 exclusive right
- For the abovementioned configuration the shared left turn and through lane will require changes to the pedestrian island on the north western corner of the intersection, and changes to the angle of the northern pedestrian crossing.
- 6. The traffic report states that the proposed traffic generation rates for the development would be lower due to the site's close proximity to good public transport. The RTA would support a reduction in parking on-site.
- 7. All works associated with the proposed development shall be at no cost to the RTA.

Should you require any further clarification in relation to this matter, please call the contact officer named at the top of this letter.

Yours faithfully

Chris Goudanas Chairman, Sydney Regional Development Advisory Committee

14 March 2011

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ABN 81 621 292 610 Civic Centre 1 Devlin Street Ryde Locked Bag 2069 North Ryde NSW 1670 DX 8403 Ryde cityofryde@ryde.nsw.gov.au TTY (02) 9952 8470 Facsimile (02) 9952 8070 Telephone (02) 9952 8222

Mr Michael Woodland Director, Metropolitan Projects NSW Department of Planning GPO Box 39 SYDNEY NSW 2001

11 January 2011

MIN2010/1

Dear Mr Woodland

COUNCIL SUBMISSION in response to public exhibition of Proposed Commercial Development at No. 396 LANE COVE ROAD (Nos 32-46 WATERLOO ROAD) & No. 1 GIFFNOCK AVENUE, MACQUARIE PARK (MP 10_0209)

Attention: Andrew Smith / Shivesh Singh

Please find attached Council's final submission for the above application.

Yours sincerely

Dominic Johnson Group Manager Environment and Planning

Department of Planning Received 1.4 JAN 2011 Scanning Room

COUNCIL SUBMISSION in response to public exhibition of Proposed Commercial Development at No. 396 LANE COVE ROAD (Nos 32-46 WATERLOO ROAD) & No. 1 GIFFNOCK AVENUE, MACQUARIE PARK (MP 10_0209)

Summary of Issues

The major issues of concern to Council may be summarised as:

- Inadequate community consultation and inappropriate timing of public exhibition
- Issues associated with probity in the Part 3A process
- Urban Design issues
- Traffic issues

Inadequate community consultation and inappropriate timing of public exhibition

The proposed development is located in a commercial precinct. It occupies a very important site within Macquarie Park corridor being immediately located next to the new Macquarie Park Railway Station. The Department has chosen to place the proposal on public exhibition in the lead up to the Christmas. New Year break. The truncated and ill-timed exhibition period means that it has not been possible to fully engage Council In an assessment of the project nor to present the proposal to other bodies set up to promote development in Macquarie Park. As a result, examination of the project and what it may have to offer Macquarie Park has been severely diminished. Coupled with the coincident exhibition of the nearby Allengrove Major Project Application.

It is noted that Council raised this issue in response to the issuing of the DGRS for the project on the day before Good Friday. In its letter dated 21 April 2010, Council made the following request.

Further, Council asks that the Department consider sending future requests for information relating to Part 3A projects away from significant holiday periods including Christmas – New Year and Easter. The Department will no doubt appreciate that these are times when all organisations are short staffed (particularly when coupled with school holidays) making a response within the "14 day request period" unreasonable and impractical. It is noted that the current request dated 1 April 2010 was received by Council 7 days after the notional commencement of the 14 day request period.

If is disappointing that the request has been unheeded. The manner and timing of the public exhibition clearly fails the test of the Department's own Guidelines for Major Project Community Consultation (October 2007). It is considered neither "adequate" nor "appropriate". It has certainly <u>not</u> avoided notifying...during holiday periods (page 4 of the Guidelines).

Issues associated with probity in the Part 3A process

Associated with the above issue, the Department needs to be mindful of the findings of the ICAC report into the exercise of discretion under Part 3A of the *Environmental Planning* and Assessment Act 1979 and the State Environmental Planning Policy (Major Development) 2005, coincidently released in December 2010 The Commission notes that the Part 3A system is characterised by a lack of published, objective criteria and contains elements that are discretionary, particularly with regard to land uses that would otherwise be prohibited or exceed existing development standards. It observes that notwithstanding safeguards in process the existence of this wide discretion to approve projects that are contrary to local plans can create a community perception of a lack of appropriate boundaries and provide difficulty for observers in knowing what might or might not be a reasonable decision in particular circumstances (Chapter 2, page 9). Where a project involves significant departures from adopted planning controls, it is particularly important to ensure that the process of assessment and consideration is open and transparent. For these reasons, the Department should consider extending the exhibition period for this project.

Urban Design issues

Council's City Urban Planner has reviewed the 29 architectural drawings from PA-02-001 to PA-06-04 against the Macquarie Park planning controls.

Overview:

- 1. The proposed project is outside the Ryde Local Environmental Plan 2010.
- Development Control plan 2010 part 4.5 Macquarle Park corridor requires that new buildings to have a minimum 4 *Greenstar* Office rating. It is not clear what the proposed *Greenstar* rating of this building will be.

The following comments aim to explain why this is the case but also include suggestions on how the urban design aspects of the project may be improved.

- 1. Location and building form
 - The proposed building is located on the prominent corner of Waterloo and Lane Cove Roads: If is adjacent to the Macquarie Park railway station.
 - The building form is consistent with the Macquarie Park DCP and the as yet unrealised "Amendment 1" of RLEP 2010. It has the potential to provide a dramatic corner in the streetscape. Height and massing are appropriate to its immediate context and the wider Macquarie Park area in relation to the DCP but does not comply with the existing LEP.
 - The smaller buildings have a very similar building form, footprint and separation along Waterloo Road. Whilst this is generally consistent with the DCP there is an opportunity to create a more dynamic group of buildings by varying the footprint and separation. This could also assist in providing different character to the landscape areas between the buildings.
- 2. Building articulation:

Building anticulation refers to the three dimensional modulation and modelling of a building façade (such as the interplay of light and shadow). Articulation should assist in providing visual interest, human scale and a hierarchy of texture and detail to a façade. It is distinct from the building massing and form (which has been recognised above). An urban design review of the development suggests that the articulation of the façade needs to be further developed. This includes:

- Better definition of the top and middle of the building.
- Stronger definition of the corner of Waterloo and Lane Cove Road.

Stronger articulation of the elevations. The elevations do not show sufficient articulation of the facades. There is some attempt to break up the facade of the smaller buildings on Waterloo Road but this is not continued through to Coolinga Street.

3. Building - Street interface:

- Pedestrian activity at this comer site will grow as the precinct develops. The proposal encourages pedestrian activity and provides pedestrian links through the site.
- The area around the station forecourt needs be contained to define the streetscape and separating it from the large landscape area. (alternatively see below)
- The colonnade (or an awning) should extend between buildings to provide protected pedestrian access.
- Each of the landscape areas should have its own character which should be reflected in their physical size. For example widening the area closest to Lane Cove Road could help this area function as a semi public plaza and extension of the station forecourt/ civic frontage. Another example, the next area could narrow and be an active retail 'street' encouraging the pedestrians to Giffnock Avenue.
- The DCP calls for active street fronts in the precinct. The proposal is largely compliant however it should further consider
 - 1. Having active uses on all building corners
 - 2. Placing the building lobbles away from corners.
 - 3. Activating the internal 'streets' between buildings.

Traffic Issues

Council's Senior Traffic Engineer has reviewed the traffic reports submitted with the application and has raises significant concerns regarding the veracity of the data and outcomes. These concerns are detailed below.

Incorrect and outdated data used

The applicant's traffic consultant (ARUP) has not used the most up-to-date version of the Macquarie Park Base Paramics Model which has been updated progressively during 2010 to reflect significant transport management changes within the existing road network that influences the operation of Macquarie Park from a transport management perspective. Without the use of appropriate calibration techniques (which are not documented in the written part of the report, in any form) for the localised area as detailed in Council's *Traffic Impact Assess process for Macquarie Park Corridor Development Applications*, the modelling outcomes generated will not be a reasonable representation of likely traffic demands in the area. It is understood that the NSW Roads and Traffic Authority shares this concern.

Council recommends that the Department of Planning direct the applicant to undertake the following actions/processes, so that the impacts of the proposed development on the existing road network and determined to a moderate / high degree of certainty, given the scale of the development:

 The applicant purchase the most up-to-date modelling information from Council which can be sent out almost immediately subject to the payment of appropriate fees being paid in full through Council's Customer Service Team (this has already been discussed with the applicant's consultant who is very much aware of the appropriate process and fees as this has been discussed with them at length in the early part of 2010). The base line information used for modelling purposes was <u>NOT</u> sourced from the City of Ryde and therefore the accuracy of the outcomes derived from this base line modelling information cannot be guaranteed); and

- The applicant follows the detailed methodology (in FULL) prescribed in the supporting documents (Reference Document No.1 and No.2) which can be downloaded from the City of Ryde website.
- The applicant (at the time of submission) of the updated report to DoP (including modelling information – files etc), jointly submit the documentation to Council to expedite a parallel review process to ensure that appropriate responses can be provided.

Note: The above process is predicated that the applicant's traffic consultant purchasing the appropriate traffic modelling information.

Other traffic matters

No details are provided in the Traffic report on current intersection performance (LoS, Delays, Queue Length etc.) and the relative change due to the new development superimposed. This must be undertaken to allow ease of review, utilising aaSIDRA which is industry standard. It is understood that the RTA concurs on this point.

Council is surprised that for such a scale of development there is no mention of infrastructure improvements, especially at adjoining intersections where the impacts of the development from a traffic generation perspective (cumulative additional traffic generation impact of 800vph) are likely to be the worst.



Mr Michael Woodland Director Metropolitan Projects Planning NSW GPO Box 39 SYDNEY NSW 2001

Attention: Shivesh Singh

Dear Mr Woodland,

EXHIBITION OF ENVIRONMENTAL ASSESMENT FOR COMMERCIAL DEVELOPMENT AT 396 LANE COVE ROAD AND 1 GIFFNOCK AVENUE – MACQUARIE PARK (MP10_0209)

I refer to your letter dated 1 December 2010 seeking advice on the Environmental Assessment report regarding the above mentioned project. Transport NSW (TNSW) appreciates the opportunity to provide comment on this application and apologises for the delay in responding.

TNSW has reviewed the Environmental Assessment report and supporting Transport and Accessibility Impact Report and has identified the following positive aspects associated with the proposal:

- Provision for employment immediately adjacent to mass transit and strategic bus corridors in the Macquarie Park Specialised Centre;
- Provision of publicly accessible through site links for pedestrians;
- Bicycle parking for staff provided in a secure and convenient location;
- Provision of covered footpaths for pedestrians on Waterloo Road; and
- Use of ground floor retail to activate the pedestrian domain.

However, in order to support the proposal, TNSW requests resolution of a number of further matters.

Bicycle parking and end of trip facilities TNSW notes the provision of 538 bicycle spaces as well as end of trip facilities for

> 18 Lee Street Chippendale NSW 2008 PO Box K659 Haymarket NSW 1240 T 8202 2200 F 8202 2209 www.transport.nsw.gov.au ABN 11 370 995 518

cyclists and pedestrians. The proponent should identify the quantum and location of visitor bicycle parking which should be located at grade and close to major entrances in well lit locations subject to passive surveillance. Further, the proponent should justify the quantum of showers, changing rooms and lockers particularly given the significant number of bicycle parking spaces available. The Department's Planning Guidelines for Walking and Cycling (2004) and the NSW Bike Plan (2010) provide relevant context and specifications.

Sustainable Transport Measures

Section 4.6 of the Transport and Accessibility Study identifies a number of positive initiatives to assist in achieving Macquarie Park mode share targets, as identified in the Macquarie Park Concept Plan. However, this section does not contain commitments to any specific measures. Travel Demand Management (TDM) measures are integral to achieving the identified non-car mode share of 40% as specified in Condition B2(1) of the Concept Plan approval (MP06_0016). TNSW requests that the Traffic and Accessibility Study specifically identify a suite of TDM measures that will be implemented prior to issuing the construction certificate. Specifically TNSW recommends the TDM Plan:

- Identify the quantum of car sharing spaces; and
- Include a Travel Access Guide (TAG) for visitors to the site. Information on how to prepare a TAG is available at <u>www.rta.nsw.gov.au</u>.

TNSW is supportive of the proponent's commitment to providing shelter for pedestrians along Waterloo Road. TNSW requests that similar shelter be required along the Lane Cove Road frontage of the proposed building A to further improve the pedestrian environment in the immediate vicinity of Macquarie Park Station.

TNSW is also concerned that only a WTP is included in the draft statement of commitments. TNSW requests that the above matters be addressed in the final Statement of commitments or conditions of consent should the application be approved.

I trust that these comments are of assistance. Should you wish to discuss this matter further, please contact Ben Colmer on 9268 2259 or email: ben.colmer@transport.nsw.gov.au.

Yours sincerely

wyartineau tuko 24.12.10

William Gastineau-Hills A/Senior Manager Centre for Transport Planning

DG10/09616

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APPENDIX B

PARAMICS MODELLING REPORT

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