"GORE HILL BUSINESS PARK"

PLANNING PROPOSAL TO PERMIT OFFICE USE ON LOT 5

Assessment of Traffic and Parking Implications

August 2016

Reference 14077

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LIST OF ILLUSTRATIONS

1. INTRODUCTION

This report has been prepared to accompany a Planning Proposal to Willoughby City Council to amend the zoning for Lot 5 in the "Gore Hill Business Park" from IN2 Light Industrial to B7 Business Park to allow for 'office premises' use in the completed Fox Sports building on Lot 5.

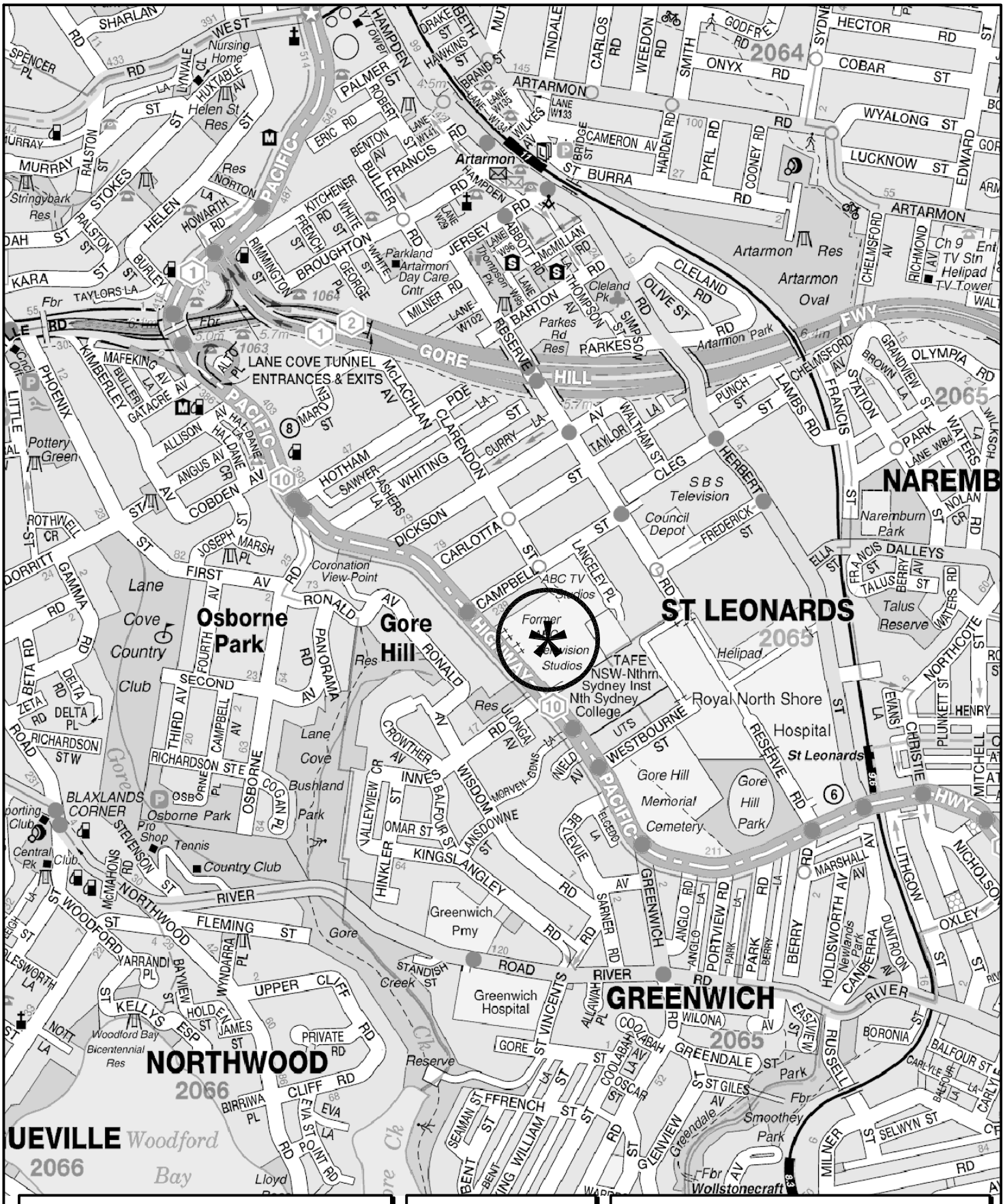
The Gore Hill Business Park (Figure 1) has evolved from consolidation of the former ABC Television Studios site with adjacent lands and is zoned IN2 Light Industrial under Willoughby LEP 2012 ("Office Premises" not permitted).

Past planning for development has been based on a mixed use technology business park including industrial uses, community/sporting facilities and ancillary uses. Two buildings have been completed and occupied while Austgrid have purchased Lot 2 for a depot development.

The development outcome for Lot 5 subject to the Planning Proposal is as follows:

Fox Studio/Offices	Total 14,466m^2 GFA	182 parking spaces
Currently Vacant	2,200m^2 GFA	21 parking spaces

The proposed change will only have minor implications for the Lot 5 building other than to permit "office premises in addition to the present approved uses, which include high technology industries, telecommunications facilities and restaurants or cafes. The purpose of this report is to provide an assessment of the potential traffic and parking implications of the Planning Proposal.


LANE COVE TUNNEL
ENTRANCES & EXITS
GORE HILL FWY
PACIFIC HWY
Artarmon
Gore Hill
Osborne Park
ST LEONARDS
GREENWICH
NORTHWOOD
NAREMB
Royal North Shore Hospital
TAFE NSW-Nthrn Sydney Inst Nth Sydney College
SBS Television
Council Depot
ABC TV Studios
Former Television Studios
Artarmon Oval
Artarmon Res
Parkland Artarmon Day Care Cntr
Greenwich Hospital
Gore Hill Memorial Cemetery
Gore Hill Park
Osborne Park
Lane Cove Country Club
Lane Cove Bushland Park
Coronation View-Point
Talus Reserve
Naremburn Park
Smoothey Park
Greenwich Pmy
Woodford Bay
Bicentennial Res
Helipad
Nursing Home
Helen St Res
Stringybark Res
Pottery Green
Central Pk
Osborne Park Pro Shop
Tennis
Country Club
Parkes Rd Res
Cleland Pk
Thompson Pk
Newlands Park
Creek
Reserve
Bay
Lloyd
Woodford
2064
2065
2066
1063
1064
1
2
6
8
10
11
M
LEGEND
LOCATION
FIG 1

2. PLANNING PROPOSAL

2.1 SITE, CONTEXT AND EXISTING CIRCUMSTANCES

The site (Figure 2) is Lot 5 (Building C) within the Gore Hill Business Park (DP270714), which has extensive frontages to Pacific Highway and Campbell Street at Artarmon. The Business Park is adjoined by a TAFE College to the south and industrial uses to the east and is divided into 6 lots as follows:

Lot 1	Community (i.e. road)	8,458 m^2
Lot 2		10,630 m^2
Lot 3		3,840 m^2
Lot 4		6,692 m^2
Lot 5		4,212 m^2
Lot 6		12,510 m^2

The access road system (Broadcast Way) has been constructed and the completed developments comprise:

Lot 4	Data Centre	7,562 m^2 GFA
Lot 5	Fox Studios Building	14,466 m^2 GFA

LEGEND

SITE

FIG 2

2.2 MASTER PLANNING

The Business Park has been subject to a number of consents and modifications and the current approved/envisaged development outcome is as follows:

Lot	Description	Non GFA	GFA
Lot 2	Showroom/Warehouse (DA Approved)		18,180 m^2
Lot 3	Data Centre (DA submitted)		5,656 m^2
Lot 4	Data Centre (Completed)		7,562 m^2
Lot 5	Fox Studios/Office (Completed)		14,466 m^2
Lot 6	8 Multi purpose courts	10424m²	
	Office		29,090m²
	Workshop/ car storage		6,340m²
	Showrooms		4,480m²
	Food Plaza		870m²
	Warehouse		4,740m²
	Parking	929m²	
	Total Lot 6 GFA (excl Sports)		45,520m²

Traffic modelling with the Council assessed traffic generation revealed Level of Service outcomes for completed development as follows:

	AM	**PM**	**WEMD**
Pacific/Campbell	C	B	B
Campbell/Broadcast	A	A	A

2.3 PLANNING PROPOSAL

The development outcome for Lot 5 (Building C) subject to a Planning Proposal is as follows:

Fox Studio/Offices	14,466m^2 GFA
Parking	182 spaces

There is a current vacancy of 2,200m^2 of office floorspace in the building for which there are 21 parking spaces attached while the other 12,266m^2 and 161 parking spaces are occupied.

Details of the envisaged development are provided in the context of the master-planning overleaf.

gore hill

lindsay bennelong developments

SITE MASTERPLAN

GORE HILL
PLANNING PROPOSAL REVISED

SYDNEY 7 YOUNG ST NEUTRAL BAY NSW 2089 T: +61 2 9909 3344
MELBOURNE LVL 2, 18 OLIVER LANE MELBOURNE VIC 3000 T: +61 3 9654 6344
BRISBANE 2/290 BOUNDARY ST SPRING HILL QLD 4004 T: +61 7 3831 9860

PROJ 3402-9
DWG SK 220D
03 MARCH 2015

LEFFLER SIMES ARCHITECTS

3. ROAD NETWORK AND TRAFFIC CIRCUMSTANCES

3.1 ROAD NETWORK

The road network serving the site (Figure 3) comprises:

- *Pacific Highway* – a State Road and arterial route providing the major north/south connection between Sydney and Hornsby

- *Gore Hill Freeway* – a major arterial route connecting between the harbour crossing and the Pacific Highway, Lane Cove Tunnel and M2 Motorway routes

- *River Road* – a 'collector' road which provides the major connection between Gladesville and Crows Nest

- *Campbell Street, Reserve Road and Herbert Street* – collector road routes linking to the Highway.

- Broadcast Way is a short community title access road with Public Right of Way connecting through Gore Hill Business Park between Campbell Street and Pacific Highway.

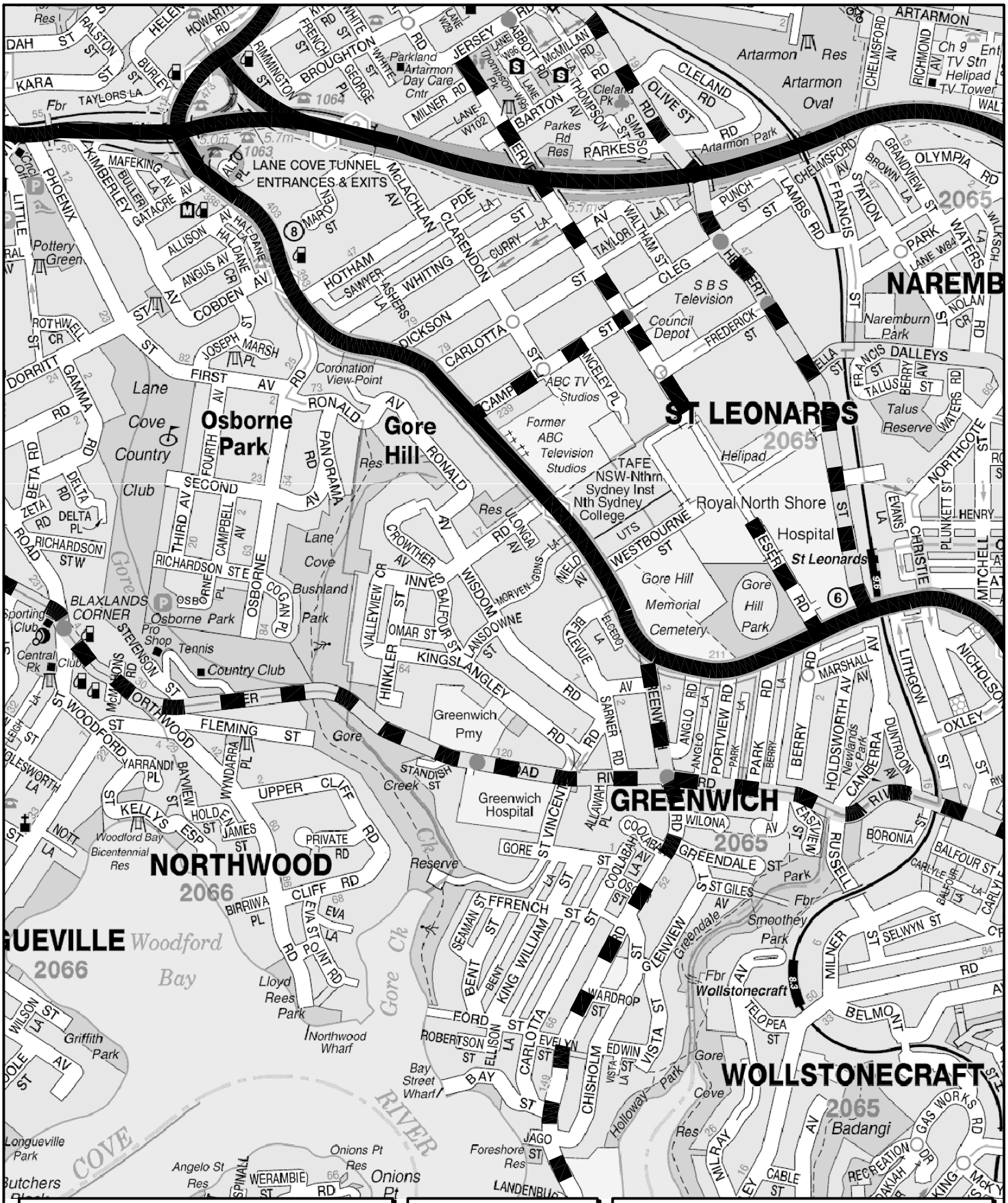
3.2 TRAFFIC CONTROLS

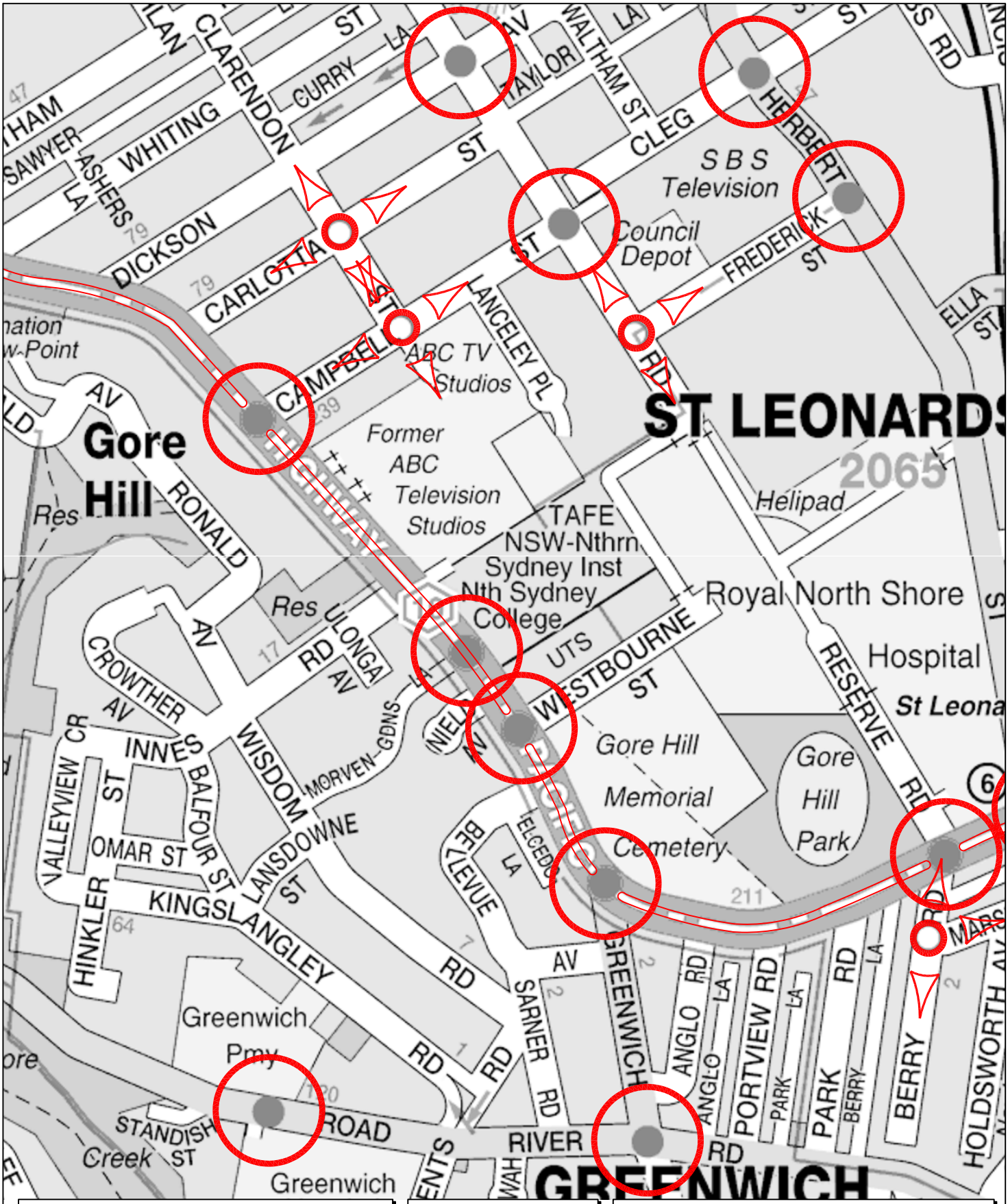
The traffic controls on the road system serving the area (Figure 4) comprise:

- the traffic signals at the Pacific Highway and Campbell Street intersection (see details on plan overleaf)

- the roundabout at the Campbell street/Clarendon Street intersection

- the traffic signals at the Campbell Street/Reserve Road intersection


LANE COVE TUNNEL
ENTRANCES & EXITS
Osborne Park
Gore Hill
ST LEONARDS
2065
NAREMB
GREENWICH
NORTHWOOD
2066
WOLLSTONECRAFT
2065
Badangi
Artarmon
Artarmon Oval
Artarmon Park
Royal North Shore Hospital
St Leonards
Greenwich Hospital
Greenwich Pmy
Gore Hill Memorial Cemetery
Gore Hill Park
Naremburn Park
Talus Reserve
Lane Cove Country Club
Lane Cove Bushland Park
Woodford Bay
Bay
Longueville Park
Griffith Park
Lloyd Rees Park
Northwood Wharf
Bay Street Wharf
Smoothey Park
Holloway Park
Gore Cove
Gore Ck Reserve
Standish Creek
Onions Pt
Foreshore Res
Angelo St Res
Woodford Bay Bicentennial Res
Coronation View-Point
Parkland Artarmon Day Care Cntr
Former ABC Television Studios
ABC TV Studios
SBS Television
Council Depot
TAFE NSW-Nthrn Sydney Inst Nth Sydney College
UTS
Helipad
Ch 9 TV Stn
Helipad
TV Tower
Pottery Green
Blaxlands Corner
Osborne Park Pro Shop
Tennis
Country Club
Central Pk
Sporting Club
Cleland Pk
Parkes Rd Res
Res
Fbr
Wollstonecraft
Longueville
Woodford Bay
Bay
COVE
RIVER
Gore Ck
Creek
Ck
Reserve
Park
Cove
Pt
Res
LEGEND
ARTERIAL
SUB-ARTERIAL
COLLECTOR
N
ROAD NETWORK
FIG 3



LEGEND

- TRAFFIC SIGNAL CONTROL
- ROUNDABOUT
- RESTRICTED TURNING MOVEMENT

N

TRAFFIC CONTROLS

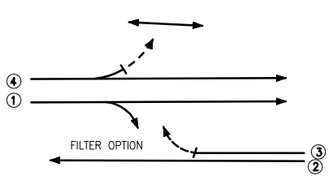
FIG 4

DRAWN BY CADD
DO NOT AMEND MANUALLY

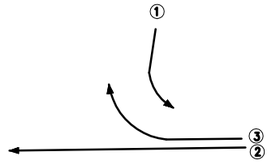
0010.254.VW.0585

DATE IN SERVICE : 03/05/71

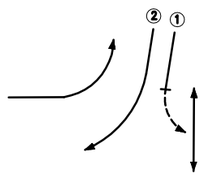
R T A



A PHASE
(Z– permits filter option)



B PHASE



C PHASE

MOVEMENT DIAGRAM

Sequence A – C – B

DETECTOR SPECIFICATION

Detector		Specifications		
A1	FN	A(L)	A(E1)	
	SG/PS	$\overline{A}$	A	
	DS	–	–	
A2	FN	A(PR)	A(E4)	
	SG/PS	$\overline{A}$	A	
	DS	–	–	
A–B1 Depart. & Approach	FN	A(L)		
	SG/PS	B		
	DS	–		
A–B1 Approach	FN	B(L)	A(E3)	B(E3)
	SG/PS	$\overline{A/B}$	A	B
	DS	–	$\overline{B(NEXT)}$	–
A–B2	FN	A(L)	A(E2)	B(E2)
	SG/PS	$\overline{A/B}$	A	B
	DS	–	$\overline{B(NEXT)}$	$\overline{A(NEXT)}$
B–C	FN	B(PR)	B(E1)	C(E1)
	SG/PS	$\overline{B.C}$	B	C
	DS	$\overline{c}$	$\overline{C(NEXT)}$	$\overline{B(NEXT)}$
C	FN	C(L)	C(E2)	
	SG/PS	$\overline{C}$	C	
	DS	–	–	
P1 PB	FN	A(PB)	C(L)	
	SG/PS	$\overline{P1(WALK)}$	$\overline{A.P1(WALK)}$	
	DS	–	$\overline{B.C}$	
P2 PB	FN	C(PB)	A(L)	
	SG/PS	$\overline{P2(WALK)}$	$\overline{C.P2(WALK)}$	
	DS	–	$\overline{A.B}$	

POSTS

POST	TYPE	LENGTH	OFFSET	REMARKS
1	2	3.1	1.0	New
2	2	4.1	1.0	New
3	5L	–	1.0	Existing
4	2	4.1	1.0	Existing
5	2	4.1	1.0	Existing
6	2	4.1	1.0	Existing
7	6	–	1.0	New
8	5L	–	1.0	New

SIGNAL GROUP/PHASE CHART

SIGNAL GROUP	PHASES WHEN GREEN A	B	C	STANDARD TABLE	REMARKS
V1	X			1	
V2	X	X		4	Overlap from B ⟷ A only
V3		X		81	Timed red arrow protection for P1 pedestrians. Z– Filter Option. Push button on Post 1extends RA subject to timer.
V4			X	1	
V5			X	76	Timed red arrow protection for P1 pedestrians. Push button on Post 1 extends RA subject to timer.
V6		X	C	77	Timed red arrow protection for P2 pedestrians. Push button on Post 3 extends RA subject to timer.
P1	X			2	
P2			X	2	

NOTES:

1. This site is SCATS linked.
2. All push buttons are Audio tactile.
3. Special stop sign (R1–4) to be place on post 8.
4. Kerb ramps to be constructed at all marked foot crossings in accordance with M.D.R.173.B01.A.1.
5. Provision to be made in cabling for future ped crossing.
6. Roadworks in accordance with Northrop road construction drawings.
7. * No Left Turn 7am–10am M–F Vehicles up to 12.5m long excepted.
   ø No Left Turn 3pm–7pm M–F Vehicles up to 12.5m long excepted.
8. Power supply point to be confirmed by an accredited level 2/3 service provider.

A ORIGINAL ISSUE

PUBLIC UTILITY LEGEND	
HYDRANT	□
STOP VALVE	▲
GAS VALVE	#
SEWER MANHOLE	Ⓢ
TELECOM PIT	◪
ELECT LIGHT POLE	☼
POWER POLE	○
STAY POLE	⊘
TELEPHONE BOX	T
TELECOM PILLAR	◕

REFERENCE PLANS	
SYMBOLS/ABBS.	VD003–6
STD POSIT	VD001–5
SURVEYOR:Norton Survey Partners	
DATE : 5.11.08	

U.B.D.Ref Map 215 K3
I.S.G. CO-ORDS E: 315 775 N: 1 256 444
DESIGNED JS
CHECKED AM
AM SITE CHECKED
RW RECOMMENDED

DESIGN APPROVAL
APPROVED
ROSS NETTLE
POSITION DIRECTOR
DATE 27.3.10
DESIGN PREPARED BY
TRANSPORT AND TRAFFIC PLANNING ASSOCIATES

RTA ACCEPTANCE
RECOMMENDED
POSITION .....
DATE .....
ACCEPTED
POSITION .....
DATE .....

Roads and Traffic Authority,N.S.W

LANE COVE CITY COUNCIL AREA
TRAFFIC SIGNALS AT THE INTERSECTION OF
PACIFIC HIGHWAY (H.W.10) AND CAMPBELL ST
GORE HILL

DESIGN LAYOUT TCS No 585

EXISTING ☐ PROPOSED ☑
CADD FILE: VV0585_13A.dgn
SCALE 5 0 (1:200) 5 10
FILE 254 TS 133
SUPERSEDES SHEET/ISSUE 8E
ISSUE A
REGN. 0010.254.VV.0585
SHEET 13

- the 60 kmph speed restriction on the Highway and 50 kmph speed restriction on the local roads and 30kmph speed restriction on Broadcast Way
- the central median island along the Pacific Highway across the site frontage restricting access movements to left-turn IN/OUT
- the CLEARWAY restrictions along the Pacific Highway and the BUS ZONE provisions (both sides)

3.3 TRAFFIC CONDITIONS

Traffic surveys have recently been undertaken at the intersections/accesses for the site and the results of those surveys are provided in Figure 5.

The existing operational performance of this intersection has been assessed using SIDRA and the results are provided in Appendix D and summarised in the following:

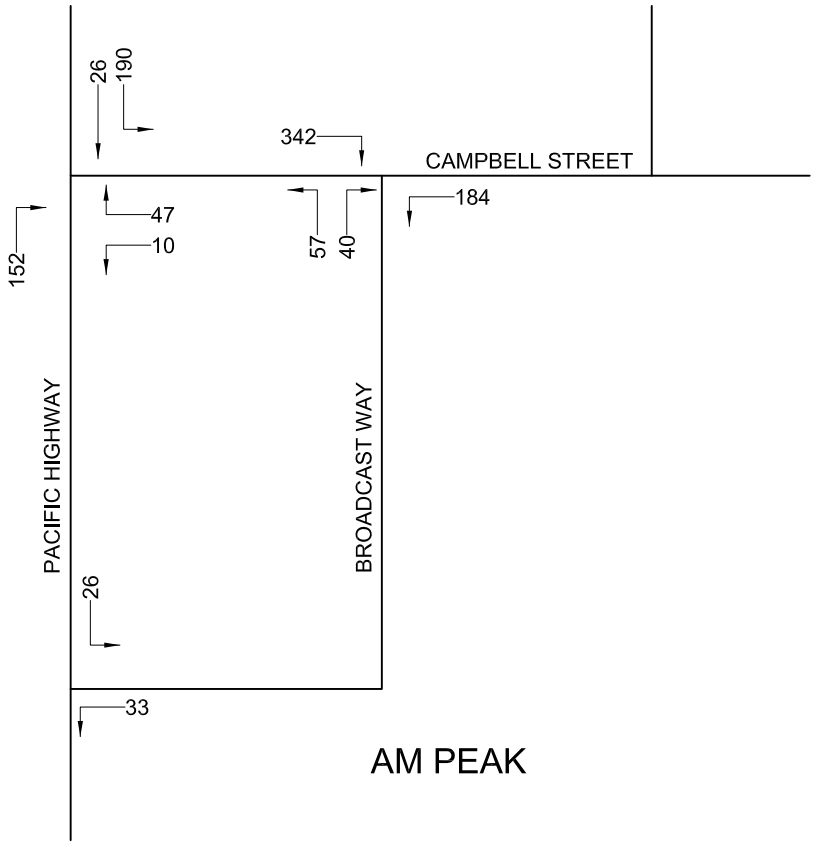
	AM	**PM**
Level of Service	A	A
Average Vehicle Delay	6 secs	11 secs

**Source Arup for Council*

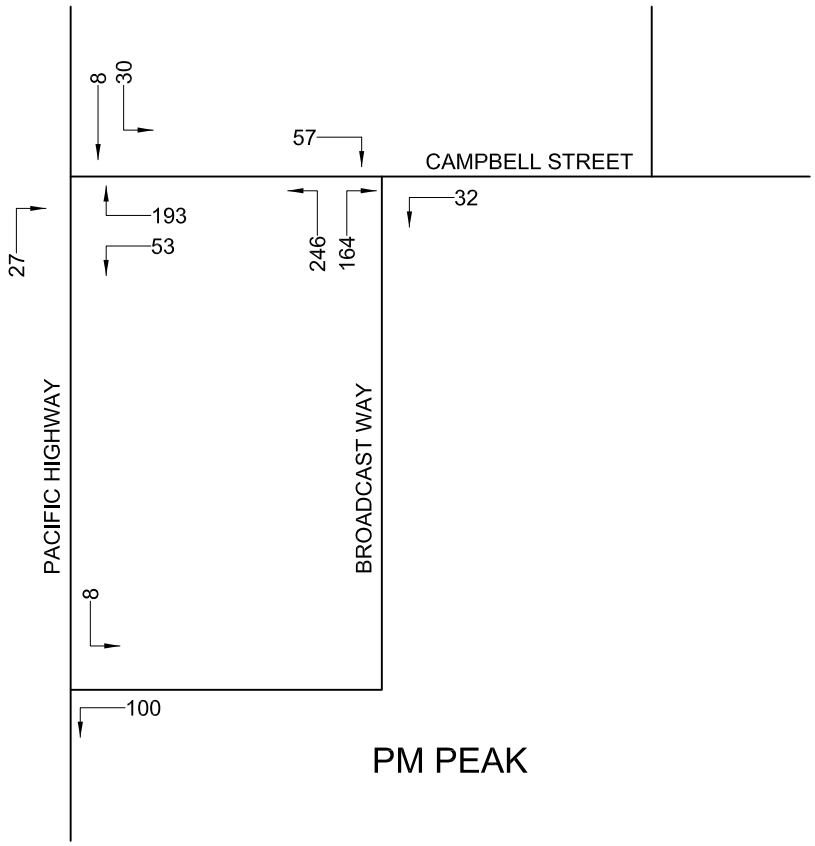
These results indicate that the intersection operates satisfactorily during the peak periods having regard for the criteria for interpreting SIDRA results which is reproduced overleaf.

3.4 PARKING CONDITIONS

There is a high level of demand for on-street parking on the road network in the vicinity of the site due to the large worker/visitor population of the major hospital precinct, the student/teacher population of the TAFE college and the inadequate on-site parking in many of the industrial premises. A recent survey was undertaken to establish the generalised extent of the on-street parking accumulation in the middle



AM PEAK



PM PEAK

LEGEND

EXISTING PEAK TRAFFIC FLOWS

FIG 5

Criteria for Interpreting Results of SIDRA Analysis

1. Level of Service (LOS)

LOS	Traffic Signals and Roundabouts	Give Way and Stop Signs
'A'	Good	Good
'B'	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
'C'	Satisfactory	Satisfactory but accident study required
'D'	Operating near capacity	Near capacity and Accident Study required
'E'	At capacity; at signals incidents will cause excessive delays. Roundabouts require other control mode	At capacity and requires other control mode
'F'	Unsatisfactory and requires additional capacity	Unsatisfactory and requires other control mode

2. Average Vehicle Delay (AVD)

The AVD provides a measure of the operational performance of an intersection as indicated on the table below which relates AVD to LOS. The AVD's listed in the table should be taken as a guide only as longer delays could be tolerated in some locations (ie inner city conditions) and on some roads (ie minor side street intersecting with a major arterial route).

Level of Service	Average Delay per Vehicle (secs/veh)	Traffic Signals, Roundabouts	Give Way and Stop Signs
A	Less than 14	Good operation	Good operation
B	15 to 28	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
C	29 to 42	Satisfactory	Satisfactory but accident study required
D	43 to 56	Operating near capacity	Near capacity and accident study required
E	57 to 70	At capacity; at signals incidents will cause excessive delays. Roundabouts require other control mode	At capacity and requires other control mode

3. Degree of Saturation (DS)

The DS is another measure of the operational performance of individual intersections.

For intersections controlled by **traffic signals**2 both queue length and delay increase rapidly as DS approaches 1, and it is usual to attempt to keep DS to less than 0.9. Values of DS in the order of 0.7 generally represent satisfactory intersection operation. When DS exceeds 0.9 queues can be anticipated.

For intersections controlled by a **roundabout or GIVE WAY or STOP signs**, satisfactory intersection operation is indicated by a DS of 0.8 or less.

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[1] *the values of DS for intersections under traffic signal control are only valid for cycle length of 120 secs*

of the weekday. The results of that survey are provided overleaf confirming the high levels of occupancy.

3.5 PUBLIC TRANSPORT SERVICES

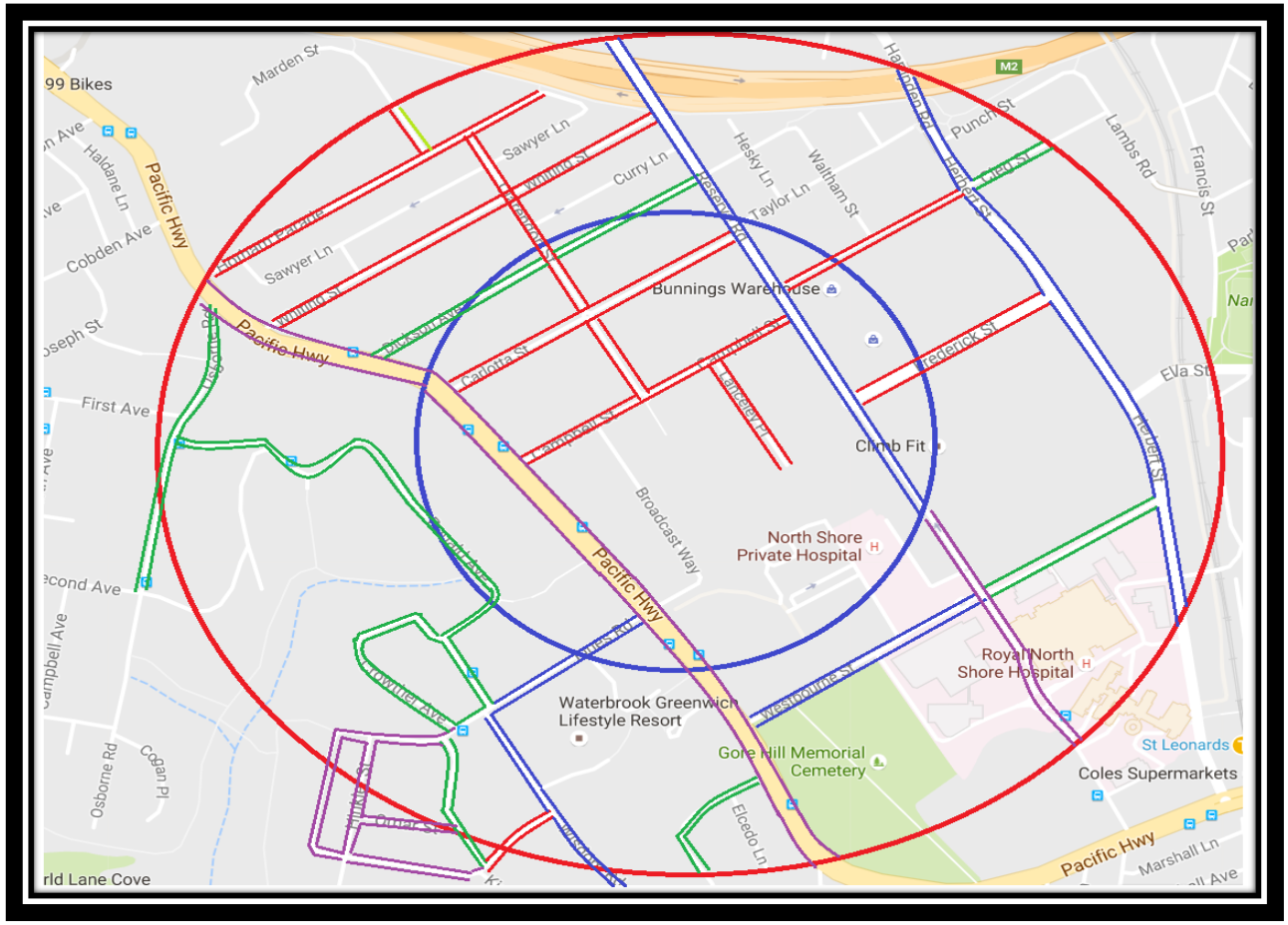
The development site is ideally located in relation to public transport services which include numerous high frequency bus services operated by State Transit and Hills Bus along the Pacific Highway including services which provide access to retail/commercial centres of Lane Cove, Chatswood, Macquarie Centre, North Sydney and Sydney CBD. Inward and outward bus stops for these services located on both sides of the Highway in close proximity to the site.

The site is also served by the Gore Hill Shuttle Bus Service and this bus runs from 6:50am to 6:50pm at 10minute intervals in peak periods and 30minute intervals during shoulder periods. The bus service is free and operates between St Leonards Station and the two bus stops on Broadcast Way.

The comprehensive nature of bus services are indicated in the route maps reproduced in Appendix A.

St Leonards Railway Station is located some 800 metres to the south-east and can be accessed by easy walking through the Royal North Shore Hospital precinct or by the shuttle bus or the bus services along the Highway.

LOCATION	GORE HILL	**DATE**	Tuesday, August 23, 2016
SURVEY TIME PERIOD	1100 - 1300	**WEATHER**	FINE



	100% FULL
	90% FULL
	80% FULL
	40% - 70 %

N

Traffic Information Specialist

4. TRAFFIC

The peak traffic generation of the two existing buildings in the Business Park (Lots 4 & 5) as recorded in the recent surveys (Appendix B) are as follows:

	AM		PM	
	IN	**OUT**	**IN**	**OUT**
Fox Studios	49	8	10	49
Data Centre	4	2	10	7

The recorded generation for the Fox Studios Building with 12,266m^2 and 161 parking spaces occupied equates to 0.49 vtph per 100m^2 or 0.37 vtph per parking space.

The traffic generation criteria for "office" use contained in the RMS Technical Direction TDT 2014-4b is as follows:

AM Peak	1.6 vtph per 100m^2 GFA
PM Peak	1.2 vtph per 100m^2 GFA

However scrutiny of the Analysis Report which underlies this criteria reveals that this is in fact the "site peak traffic generation" and not the "road network peak traffic generation" which are as follows:

AM	**PM**
1.19 vtph/100m^2	0.82 vtph/100m^2

The RMS data is for "unconstrained" parking provision where as comprehensive surveys undertaken by TTPA of the traffic generation of "constrained parking provision" office buildings in Chatswood, North Sydney and Parramatta indicated a generation rate of 0.32 vtph per space.

The site does not benefit from the high level of transport accessibility of the regional centres surveyed and the generation of the 2,200m^2 of office space may be

somewhat more than that of Fox Studios. The recent Arup assessment adopted an arrival/departure rate of staff in 1 hour of 50% and if that is applied to the 21 parking spaces currently unused (i.e. instead of 0.37) then the outcome would be some 11 vtph.

It is quite apparent that the additional movements of 11 vtph spread over inwards/outwards movements on the 2 access points will not have any perceptible traffic impact. This is particularly the case when TTPA and ARUP assessments for the proposed rezoning of Lots 5 and 6 together have shown a satisfactory traffic outcome.

5. PARKING

The total parking provision for Lot 5 is 182 spaces for the 14,466m^2 which equates to 1 space per 79.5m^2 which complies with Councils objective for constrained parking provision. Whilst this circumstance could result in an exacerbation and spread of on-street parking, the fact is that the available on-street parking located within seasonable walking distance of the site is already saturated (see section 3.4).

It is apparent that the available parking provision will be appropriate to the Planning Proposal.

6. ACCESS, INTERNAL CIRCULATION AND SERVICING

ACCESS

The existing vehicle accesses are on Broadcast Way with design details which accord with AS2890.1 and 2 requirements.

INTERNAL CIRCULATION

The design of the car park area accords with the requirements of AS2890.1 & 6.

SERVICING

The design of the arrangements for service vehicles accord with AS2890.2 requirements.

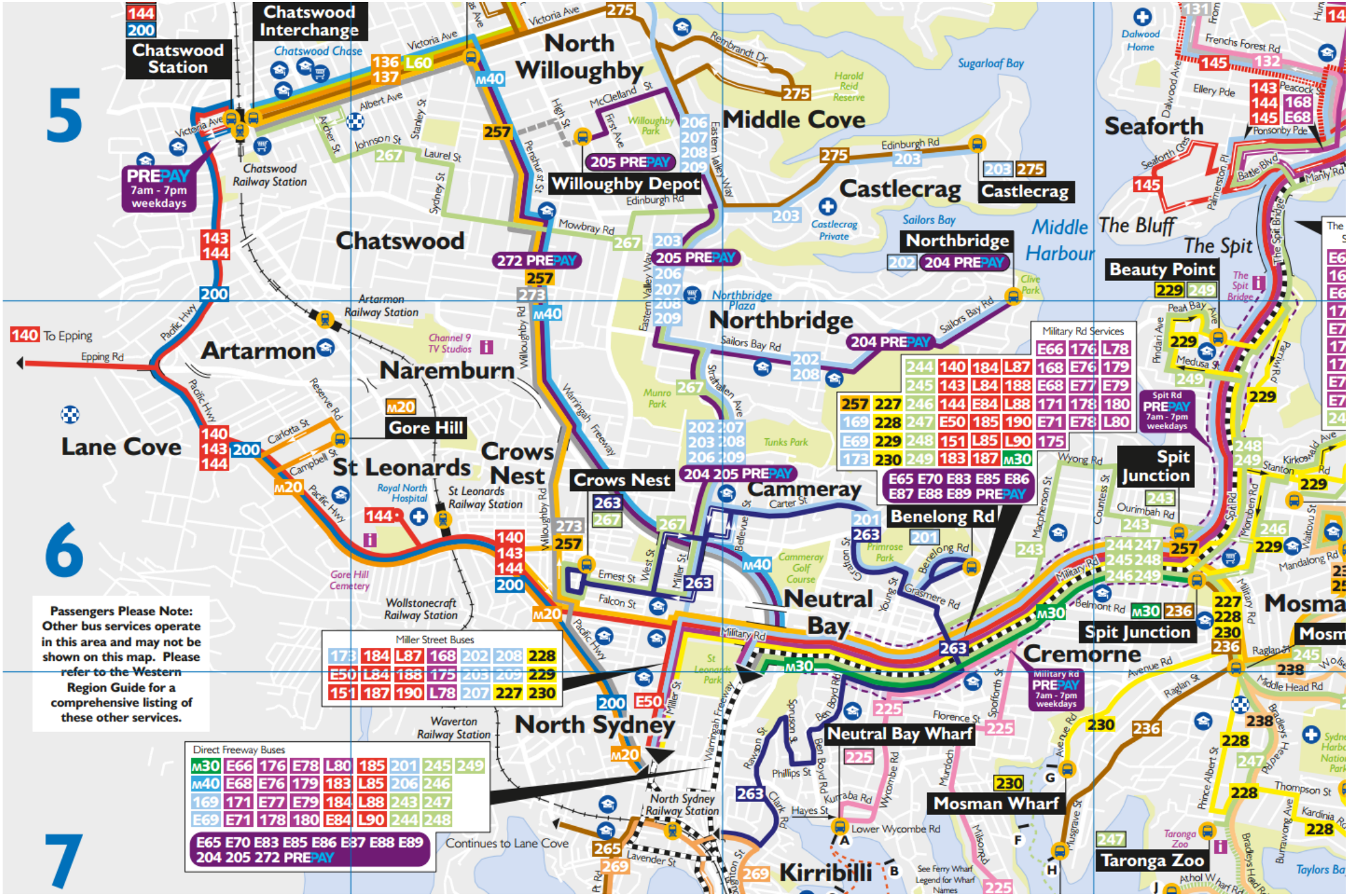
7. CONCLUSION

This assessment has considered the potential traffic and parking implications of a Planning Proposal to permit “office premises” use within the B7 Business Park zone for development on Lot 5 in the Gore Hill Business Park.

The assessment has demonstrated that the development use/s will not result in any unsatisfactory traffic implications, the proposed parking provision will be adequate for the use and the design of the vehicle access, parking, servicing and circulation areas complies with the relevant standards.

APPENDIX A

TRANSPORT SERVICES


5
6
7
Chatswood Interchange
Chatswood Station
Chatswood Chase
Victoria Ave
136 L60
137
Albert Ave
Archer St
Stanley St
Johnson St
267
Laurel St
Sydney St
Chatswood Railway Station
PREPAY 7am - 7pm weekdays
143
144
200
Chatswood
Pacific Hwy
140 To Epping
Epping Rd
Artarmon
Artarmon Railway Station
Channel 9 TV Studios
Naremburn
Reserve Rd
Carlotta St
Campbell St
M20
Gore Hill
Lane Cove
140
143
144
200
St Leonards
Royal North Hospital
St Leonards Railway Station
Crows Nest
Gore Hill Cemetery
Wollstonecraft Railway Station
Waverton Railway Station
North Sydney
North Sydney Railway Station
Continues to Lane Cove
Passengers Please Note: Other bus services operate in this area and may not be shown on this map. Please refer to the Western Region Guide for a comprehensive listing of these other services.
Miller Street Buses
173 184 L87 168 202 208 228
E50 L84 188 175 203 209 229
151 187 190 L78 207 227 230
Direct Freeway Buses
M30 E66 176 E78 L80 185 201 245 249
M40 E68 E76 179 183 L85 206 246
169 171 E77 E79 184 L88 243 247
E69 E71 178 180 E84 L90 244 248
E65 E70 E83 E85 E86 E87 E88 E89
204 205 272 PREPAY
North Willoughby
Victoria Ave
275
Rembrandt Dr
Harold Reid Reserve
Sugarloaf Bay
Middle Cove
McClelland St
First Ave
Willoughby Park
High St
Pershing St
257
205 PREPAY
Willoughby Depot
Edinburgh Rd
206
207
208
209
Eastern Valley Way
Castlecrag
Castlecrag Private
Sailors Bay
Middle Harbour
Northbridge
202 204 PREPAY
Clive Park
Northbridge Plaza
Mowbray Rd
267
272 PREPAY
273
Willoughby Rd
Warringah Freeway
Sailors Bay Rd
Strathallen Ave
Munro Park
Tunks Park
202 207
203 208
206 209
204 205 PREPAY
Cammeray
Carter St
Crows Nest
263
Ernest St
West St
Miller St
Falcon St
Bellevue St
Cammeray Golf Course
Primrose Park
Benelong Rd
Grasmere Rd
Young St
Griffiths St
Military Rd
Neutral Bay
Cremorne
Neutral Bay Wharf
Mosman Wharf
Lower Wycombe Rd
Hayes St
Clark Rd
Kurraba Rd
Wycombe Rd
Ben Boyd Rd
Raycon St
Spruson St
Phillips St
Murdoch
Florence St
Sporforth St
Avenue Rd
Military Rd PREPAY 7am - 7pm weekdays
Kirribilli
See Ferry Wharf Legend for Wharf Names
Lavender St
Brighton St
Military Road Services
E66 176 L78
168 E76 179
E68 E77 E79
171 178 180
E71 E78 L80
244 140 184 L87
245 143 L84 188
257 227 246 144 E84 L88
169 228 247 E50 185 190
E69 229 248 151 L85 L90 175
173 230 249 183 187 M30
E65 E70 E83 E85 E86
E87 E88 E89 PREPAY
Spit Rd PREPAY 7am - 7pm weekdays
Spit Junction
Ourimbah Rd
Wyong Rd
Macpherson St
Countess St
Belmont Rd
M30 236
227 228 230 236
Spit Junction
Mosman
Raglan St
Middle Head Rd
Avenue Rd
238
Seaforth
Dalwood Home
Frenchs Forest Rd
145
132
143 Peacock
144 168
145 E68
Ellery Pde
Ponsonby Pde
Seaforth Oval
Palmerston Pl
Battle Blvd
Manly Rd
The Bluff
The Spit
Beauty Point
229 249
The Spit Bridge
Pearl Bay Ave
Pindari Ave
Medusa St
Penkivil St
Kirkoswald Ave
Stanton Rd
Waitavu St
Mandalong Rd
Taronga Zoo
Thompson St
Kardinia Rd
Bradleys Head Rd
Burrawong Ave
Prince Albert St
Taylors Bay
Athol Wharf Rd

gore hill .com.au

FREE SHUTTLE BUS SERVICE

gore hill .com.au

The Gore Hill Technology Precinct FREE shuttle bus service travels to and from St Leonards Station.

The NEW service will commence on Monday December 3, 2012.

The bus will depart every 10 minutes during peak periods -
6.50 – 10.00am
12.00 – 2.30pm
4.30 – 6.50pm

Shoulder period - every 30 minutes

Shuttle bus service operates on business days only.

VEOLIA

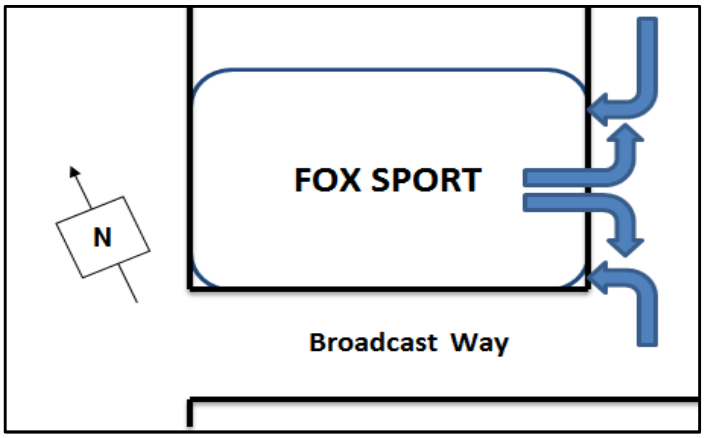
Gore Hill bus service is operated by Veolia

December 2012

APPENDIX B

TRAFFIC SURVEY RESULTS

Location	Campbell Street, Artamon	
Client	TTPA	
Job No/Name	15025	
Day/Date	27/04/2015	Monday
Weather Condition	Fine	Sunny
Classification	Unclassified	

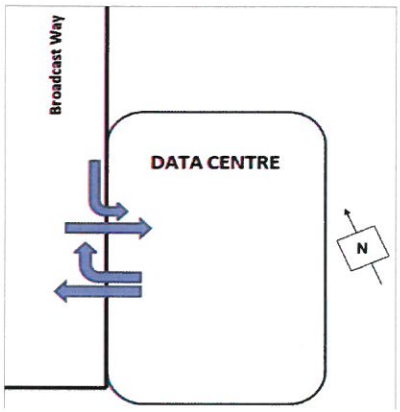


ENTRANCE AND EXITS TO FOX SPORT(WEST)

All Vehicles Time Per 15 Mins	NORTH *Broadcast Way*			EAST *None*			SOUTH *Broadcast Way*			WEST *Fox Studio*			
	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 - 7:15			5				0			1		0	**6**
7:15 - 7:30			7				0			0		1	**8**
7:30 - 7:45			9				0			2		1	**12**
7:45 - 8:00			12				1			0		0	**13**
8:00 - 8:15			11				1			0		1	**13**
8:15 - 8:30			12				3			4		0	**19**
8:30 - 8:45			11				0			0		0	**11**
8:45 - 9:00			12				0			0		0	**12**
Period End	**0**	**0**	**79**	**0**	**0**	**0**	**5**	**0**	**0**	**7**	**0**	**3**	**94**
16:00 - 16:15			2				0			4		0	**6**
16:15 - 16:30			2				0			2		1	**5**
16:30 - 16:45			1				0			3		2	**6**
16:45 - 17:00			**3**				**0**			**3**		**2**	**8**
17:00 - 17:15			3				1			11		5	**20**
17:15 - 17:30			1				1			8		5	**15**
17:30 - 17:45			2				1			6		5	**14**
17:45 - 18:00			1				0			5		4	**10**
Period End	**0**	**0**	**15**	**0**	**0**	**0**	**3**	**0**	**0**	**42**	**0**	**24**	**84**

All Vehicles Time Per 1 Hour	NORTH			EAST			SOUTH			WEST			
	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 - 8:00	0	0	33	0	0	0	1	0	0	3	0	2	**39**
7:15 - 8:15	0	0	39	0	0	0	2	0	0	2	0	3	**46**
7:30 - 8:30	0	0	44	0	0	0	5	0	0	6	0	2	**57**
7:45 - 8:45	0	0	46	0	0	0	5	0	0	4	0	1	**56**
8:00 - 9:00	0	0	46	0	0	0	4	0	0	4	0	1	**55**
Period End	**0**	**0**	**208**	**0**	**0**	**0**	**17**	**0**	**0**	**19**	**0**	**9**	**253**
16:00 - 17:00	0	0	8	0	0	0	0	0	0	12	0	5	**25**
16:15 - 17:15	0	0	9	0	0	0	1	0	0	19	0	10	**39**
16:30 - 17:30	0	0	8	0	0	0	2	0	0	25	0	14	**49**
16:45 - 17:45	0	0	9	0	0	0	3	0	0	28	0	17	**57**
17:00 - 18:00	0	0	7	0	0	0	3	0	0	30	0	19	**59**
Period End	**0**	**0**	**41**	**0**	**0**	**0**	**9**	**0**	**0**	**114**	**0**	**65**	**229**

Location	Campbell Street, Artamon	
Client	TTPA	
Job No/Name	15025	
Day/Date	27/04/2015	Monday
Weather Condition	Fine	Sunny
Classification	Unclassified	



ENTRANCE AND EXITS TO DATA CENTRE (EAST)

All Vehicles Time Per 15 Mins	NORTH Broadcast Way			EAST Data Centre			SOUTH None			WEST Broadcast Way			
	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 - 7:15	1				0	0					1		2
7:15 - 7:30	0				0	0					0		0
7:30 - 7:45	0				0	0					0		0
7:45 - 8:00	0				0	0					2		2
8:00 - 8:15	1				0	1					0		2
8:15 - 8:30	0				0	0					0		0
8:30 - 8:45	1				0	1					0		2
8:45 - 9:00	0				1	0					1		2
Period End	**3**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**4**	**0**	**10**
16:00 - 16:15	0				1	1					1		3
16:15 - 16:30	0				0	0					0		0
16:30 - 16:45	0				1	0					0		1
16:45 - 17:00	**0**				**0**	**0**					**0**		0
17:00 - 17:15	0				0	1					0		1
17:15 - 17:30	0				2	1					0		3
17:30 - 17:45	0				1	0					0		1
17:45 - 18:00	0				0	1					0		1
Period End	**0**	**0**	**0**	**0**	**5**	**4**	**0**	**0**	**0**	**0**	**1**	**0**	**10**

All Vehicles Time Per 1 Hour	NORTH			EAST			SOUTH			WEST			
	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 - 8:00	1	0	0	0	0	0	0	0	0	0	3	0	4
7:15 - 8:15	1	0	0	0	0	1	0	0	0	0	2	0	4
7:30 - 8:30	1	0	0	0	0	1	0	0	0	0	2	0	4
7:45 - 8:45	2	0	0	0	0	2	0	0	0	0	2	0	6
8:00 - 9:00	2	0	0	0	1	2	0	0	0	0	1	0	6
Period End	**7**	**0**	**0**	**0**	**1**	**6**	**0**	**0**	**0**	**0**	**10**	**0**	**24**
16:00 - 17:00	4	0	0	0	3	4	0	0	0	0	6	0	17
16:15 - 17:15	3	0	0	0	3	3	0	0	0	0	6	0	15
16:30 - 17:30	3	0	0	0	3	3	0	0	0	0	5	0	14
16:45 - 17:45	0	0	0	0	2	1	0	0	0	0	1	0	4
17:00 - 18:00	0	0	0	0	1	1	0	0	0	0	0	0	2
Period End	**10**	**0**	**0**	**0**	**12**	**12**	**0**	**0**	**0**	**0**	**18**	**0**	**52**