

suite 3.08

Reference: 14.360I04v05

traffix & transport planners

level 3 46a macleay street

potts point nsw 2011 po box 1061 potts point nsw 1335 t: +61 2 8324 8700 f: +61 2 9380 4481

w: www.traffix.com.au

acn: 065132961 abn: 66065132961

director graham pindar

08 January 2015

Goodman Property Services (Aust) Pty Ltd Level 17, 60 Castlereagh Street Sydney NSW 2000

Attention: Guy Smith, Planning Manager

### Re: Port Botany Industrial Estate, McPherson Street, Botany: Section 75W Submission

Dear Guy,

We refer to the subject development, previously known as Stage 1 of the Orica Southlands development, and our previous traffic report (Ref: 06 076 CP/PA v6, dated October 2007) associated with the aforementioned Project Application. In this regard, we have undertaken site investigations, reviewed the amended plans and now provide the following advice.

This report accompanies a S75W application to vary the warehouse development on the site and seeks to explain and justify the modified traffic and parking provision.

This report includes the following sections:

- Project Background
- Description of Proposal
- Car Parking Assessment
- Traffic Generation & Impacts
- Proposed Site Access Arrangements
- Internal Design Aspects
- Conclusions

#### Project Background

On 16 April 2012, Project Approval was provided by the then Minister for Planning and Infrastructure for the Orica Southlands Remediation & Warehouse Development Project. As a part of that original submission, TRAFFIX prepared a Traffic Impact Assessment (TIA) report, entitled *Southlands Stages 1 and 2 Project Application Traffic Impact Assessment for an Industrial / Warehouse Development at McPherson Street, Banksmeadow*, dated October 2007. This project related to a Stage 1 building floor area of 47,000m<sup>2</sup> and 440 car parking spaces.

This approval was subsequently amended via a Section 75W on 14 August 2013, which includes a requirement (Condition 18 of the S75W) to provide:

"a) parking in accordance with the 06\_0191 Mod 1 for each individual Lot;"



In this regard, reference should be made to the reduced plans included in **Attachment 1** which relate to this  $06_{0191}$  Mod 1 submission. A total of 341 parking spaces were provided for Stage 1, with a total building area of 36,170m<sup>2</sup>.

The following assessment responds to these conditional requirements.

## **Description of Proposal**

A detailed description of the proposed modifications proposed as part of this S75W application is provided within the Environmental Assessment (EA) submission, prepared separately by Lamp Planning.

The relevant change in areas and car parking provision is summarised in **Table 1** below. Reference should also be made to the reduced plans provided in **Attachment 2**.

Scenario	Original Project Application (PPR)	Current Approval (Mod 1)	Proposed (this application)
Building Area (including ancillary office)	47,000m <sup>2</sup>	36,170m <sup>2</sup>	40,386m <sup>2</sup>
Parking Provision	440	341	302

#### Table 1: Summary of Changes

### **O** Car Parking Assessment

As discussed above, the development is nominally required to provide car parking in accordance with the previous Mod 1 approval. Considering the previous floor area of 36,170m<sup>2</sup> the previously proposed parking (341 spaces) provision equates to an approved parking rate of approximately 1 space per 106m<sup>2</sup>. Application of this approved rate results in a requirement for 381 parking spaces to be provided for the new floor area of 40,386m<sup>2</sup>.

However, it is noted that original parking provisions were a concession to the Botany Bay City Council controls at the time (which nominally required a total in excess of 600 parking spaces) having regard for the reduced parking provision recommended under the RMS *Guide to Traffic Generating Developments*. Application of the current Botany Council parking requirement (Section 3A of the Botany Council DCP 2013), were this to apply to the subject site, is summarised in **Table 2** for the areas now proposed.



Туре	Area	Council Parking Rates	Spaces Required <sup>3</sup>	Spaces Provided
WAREHOUSE 1	(17,516m) <sup>2</sup>		(111) <sup>1</sup>	
Warehouse	15,100m <sup>2</sup>	1 space per 300m <sup>2</sup>	50.3	127
Office	2,416m <sup>2</sup>	1 space per 40m <sup>2</sup>	60.4	
WAREHOUSE 2	(22,870m <sup>2</sup> )		(123) <sup>1</sup>	
Warehouse	20,740m <sup>2</sup>	1 space per 300m <sup>2</sup>	69.1	175
Office	2,130m <sup>2</sup>	1 space per 40m <sup>2</sup>	53.3	
		Totals <sup>1</sup>	234	302

Note: 1) Parking spaces rounded up in accordance with DCP

The RMS Guide permits car parking for ancillary office floor areas to be calculated at the lower warehouse rate, provided this area does not exceed 20% of the overall building floor area. On this basis, the subject development would require only 135 parking spaces under the RMS Guide rates.

Nevertheless, it is evident that the 302 car parking spaces proposed will exceed both RMS and Botany Council recommended parking provisions and is therefore considered acceptable.

#### **O** Traffic Generation & Impacts

Technical Direction (TDT 2013/04a), which supersedes the RMS *Guide to Traffic Generating Developments* traffic generation rates, recommends the following traffic generation rates for industrial estates, as summarised in **Table 3** below.

Туре	Area	Period	Traffic Generation Rate	Traffic Generation (veh/hr)
Warehouse	40,386m <sup>2</sup>	AM Peak	0.52 veh/ hr / 100m <sup>2</sup>	210
warenouse	40,30011	PM Peak	0.56 veh / hr / 100m <sup>2</sup>	226

#### Table 3: Development Traffic Generation (Stage 1 Only)

It can be seen from Table 3 that the development will generate up to 210 and 226 vehicles per hour during the morning and evening peak periods, respectively. The development is expected to generate in the order of 1,858 vehicles per day. Of this daily traffic, approximately 93 vehicles per day (5%) is expected to be associated with articulated vehicles over 12.5 metres in length.

The original traffic report prepared as part of the original Project Application undertook traffic modelling and analysis on the basis of an adopted of  $47,000m^2$  associated with the Stage 1 site. An area of only  $40,386m^2$  is now proposed which represents a  $6,614m^2$  reduction in floor area from



the original Project Application and, as such, the impacts of the development will be less than previously assessed. In this regard, additional traffic modelling and intersection analysis is not required in support of this particular S75W application.

### Proposed Site Access Arrangements

Access to the site car parking areas is proposed via:

- 6.0m car park access to Coal Pier Road
- 6.0m existing driveway crossover to McPherson Street

Access the hardstand areas by commercial vehicles, including up to B-Doubles, is provided by way of the following:

- 12.0m combined access to Coal Pier Road, serving Warehouse A
- 15.25m combined access to Coal Pier Road, serving Warehouse B.
- 10.0m combined access to McPherson Street, serving both buildings.

All driveways will require access by emergency vehicles to provide access to all buildings. Use of the McPherson Street access by Warehouse B commercial vehicles is expected to limited to emergency egress only having regard for the security arrangements in place whereby all access and egress to Warehouse B is via Coal Pier Road.

It is also noted that the site excludes the area immediately adjacent to McPherson Street which is being retained by Orica for the purposes of a Groundwater Treatment Plan reservation. As such, formal Right of Carriageway (ROW) will be required for all driveways to McPherson Street.

Reference should be made to the swept paths included in **Attachment 3** which demonstrate access to the site by B-Doubles. McPherson Street and Coal Pier Road are both approved B-double routes.

### Internal Design Aspects

All car parking and loading areas have generally been designed in accordance with AS2890.1, AS2890.2 and AS2890.6 where applicable, with the following considered noteworthy:

- Car parking spaces are designed with a width of 2.5 metres, with a minimum aisle width of 6.6 metres.
- Accessible parking spaces are located adjacent to each building entry (5 in total) and include the 2.4 metre 'Shared Area' required under AS2890.6. This equates to approximately 1.6% of the overall parking provision which is considered acceptable.
- A turning area is provided at the eastern side of the northern car park for use by emergency vehicles.
- Turning bays within the Warehouse B car park will require a minimum 1.0m aisle extension is accordance with AS2890.1. This can readily be accommodated by reducing the space widths to 2.4 metres for the parking spaces to the west of the car park access.

Reference should also be made the swept paths and design comments included in Attachment 3.



#### Conclusions

In summary, the proposed S75W application is supportable from a traffic and parking perspective.

The traffic generation associated with the subject development is less than previously assessed for the subject site as part of the original Project Application. Therefore, the traffic generation associated with the site is more than accounted for in the traffic modelling and analysis undertaken previously which forms the basis of the previously identified package of traffic improvement measures.

A total of 302 parking spaces are now proposed which is considered an acceptable provision. Indeed, both the RMS Guide and Botany Council DCP require less on-site car parking to be provided.

The proposed access and internal design is generally in accordance with AS2890 and will operate safely and efficiently.

We trust the above is of assistance and please contact the undersigned should you have any queries or require any further information.

Yours faithfully,

traffix

Tim Lewis Senior Engineer

Attachments: 1) Previous Plans (Mod 1)

- 2) Proposed Plans
- 3) Swept Paths & Design Comments



# Attachment 1

Previous Concept Plan

traffic impact studies | expert witness | local govt. liaison | traffic calming | development advice | parking studies pedestrian studies | traffic control plans | traffic management studies | intersection design | transport studies

6





SOUTHLANDS AREA SCHEDULE		
Lot 1 DP 254392	0.28 Ha	
Lot 1 DP 528680	9.53 Ha	
Lot 1 DP 85542	6.13 Ha	
Lot 11 DP 109505	2.34 Ha	
TOTAL SITE AREA	18.28 Ha	
Springvale Drain	0.28 Ha	
Nant Street	0.35 Ha	

#### MASTERPLAN DEVELOPMENT AREA SCHEDULE

#### STAGE 1 - LOTS 1-6

Total Site Area	93,940 sqm
Dev. Site Area	93,940 sqm
Total Warehouse	32,170 sqm
Total Office	4,000 sqm
Total Floor Area	36,170 sqm
Awning	1,709 sqm
	· · ·
Awning Total Footprint (incl awni	· · ·
	· · ·
Total Footprint (incl awni Site Cover	ng) 35,879 sqm 38.2%
Total Footprint (incl awni	ng) 35,879 sqm
Total Footprint (incl awni Site Cover FSR	ng) 35,879 sqm 38.2% 38.5%
Total Footprint (incl awni Site Cover	ng) 35,879 sqm 38.2%

### STAGE 1 - LOTS 7 + 8

Total Site Area Developable Area 26,060 sqm 23,422 sqm

#### LEGEND

HS

AW Awning Hardstand



1:1000 @ A1 1:2000 @ A3 22 June 12

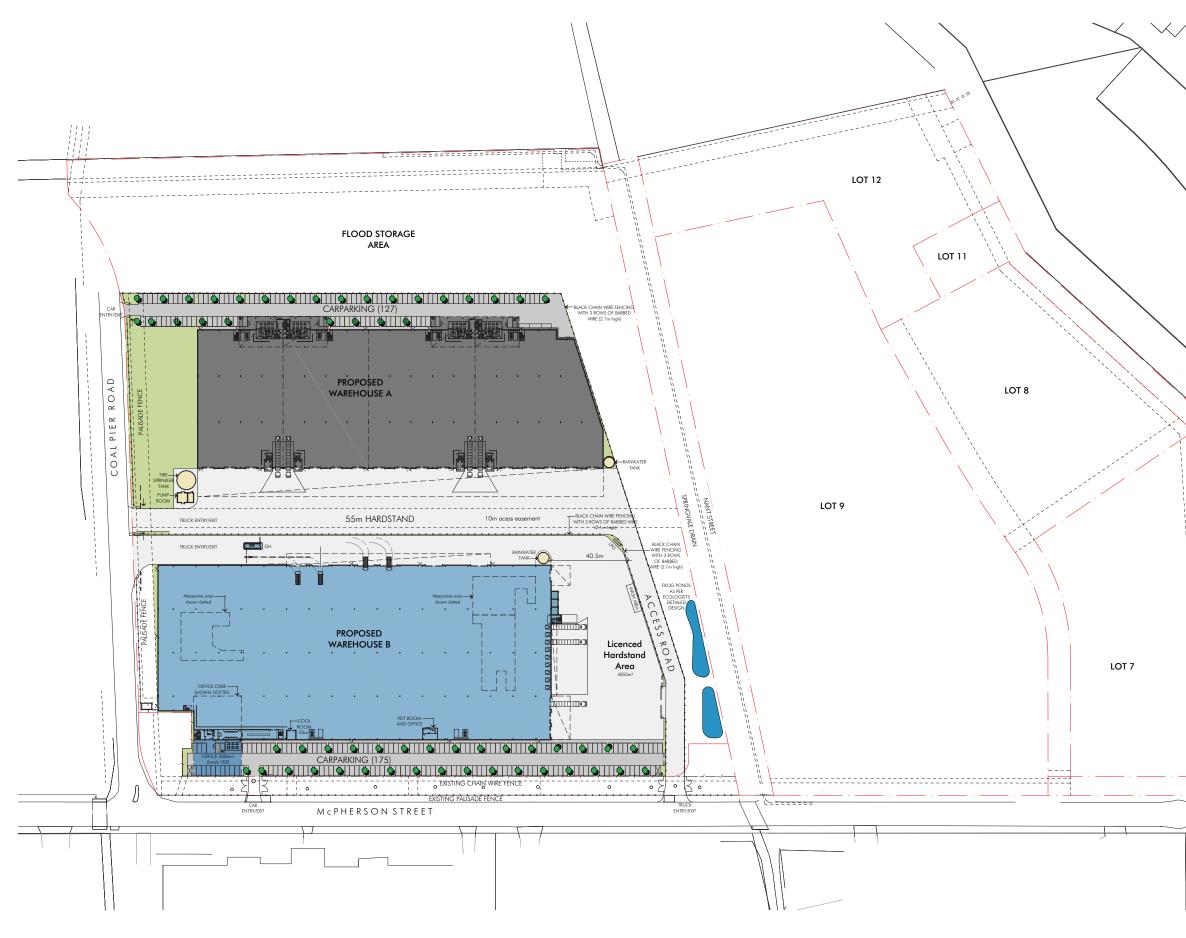
SRD DA006 (F)



# Attachment 2

Proposed Concept Plan

traffic impact studies | expert witness | local govt. liaison | traffic calming | development advice | parking studies pedestrian studies | traffic control plans | traffic management studies | intersection design | transport studies

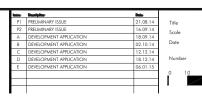


GOODMAN

L17, 60 Castlereagh Street, Sydney NSW 2000

oom:

PORT BOTANY INDUSTRIAL ESTATE McPherson Street Botony Sydney NSW





Warehouse A Units Area		
<b>Unit 1</b> Warehouse Office Mezzanine storage	3,300 sqm 350 sqm 214 sqm	
Unit 2 Warehouse Office Mezzanine storage Lobby (ground+level1)	3,300 sqm 350 sqm 214 sqm 80 sqm	
Unit 3 Warehouse Office Mezzanine storage	4,100 sqm 350 sqm 214 sqm	
Unit 4 Warehouse Office Mezzanine storage Lobby (ground+level1)	4,400 sqm 350 sqm 214 sqm 80 sqm	
Total Warehouse for Building A Total Office for Building A	15,100 2,416	
Carparking for Unit 1,2,3 & 4	127	
Warehouse B		

Warehouse Warehouse mezzanine level	18,920 sqm 1,820 sqm
Office Level 1	1,000 sqm
Office Level 2	1,000 sqm
Dock Office (over 2 levels)	58 sqm
WS, MHE, DG store	50 sqm
Gate House	22 sqm
Total Warehouse for Building B	20,740
Total Office for Building B	2,130
Hardstand	4,850 sqm
Carparking	175

# Site Area Schedule

Total Site Area	93,806 sqm
Less: Undevelopable	27,883 sqm
Total Developable Area	65,923 sqm
Total GFA for Building A	17,516 sqm
Total GFA for Building B	22,870 sqm
Total GFA	40,386 sqm
FSR	0.61 : 1
Carparking Provided	302

	Ľ
1	
$\mathcal{V}$	

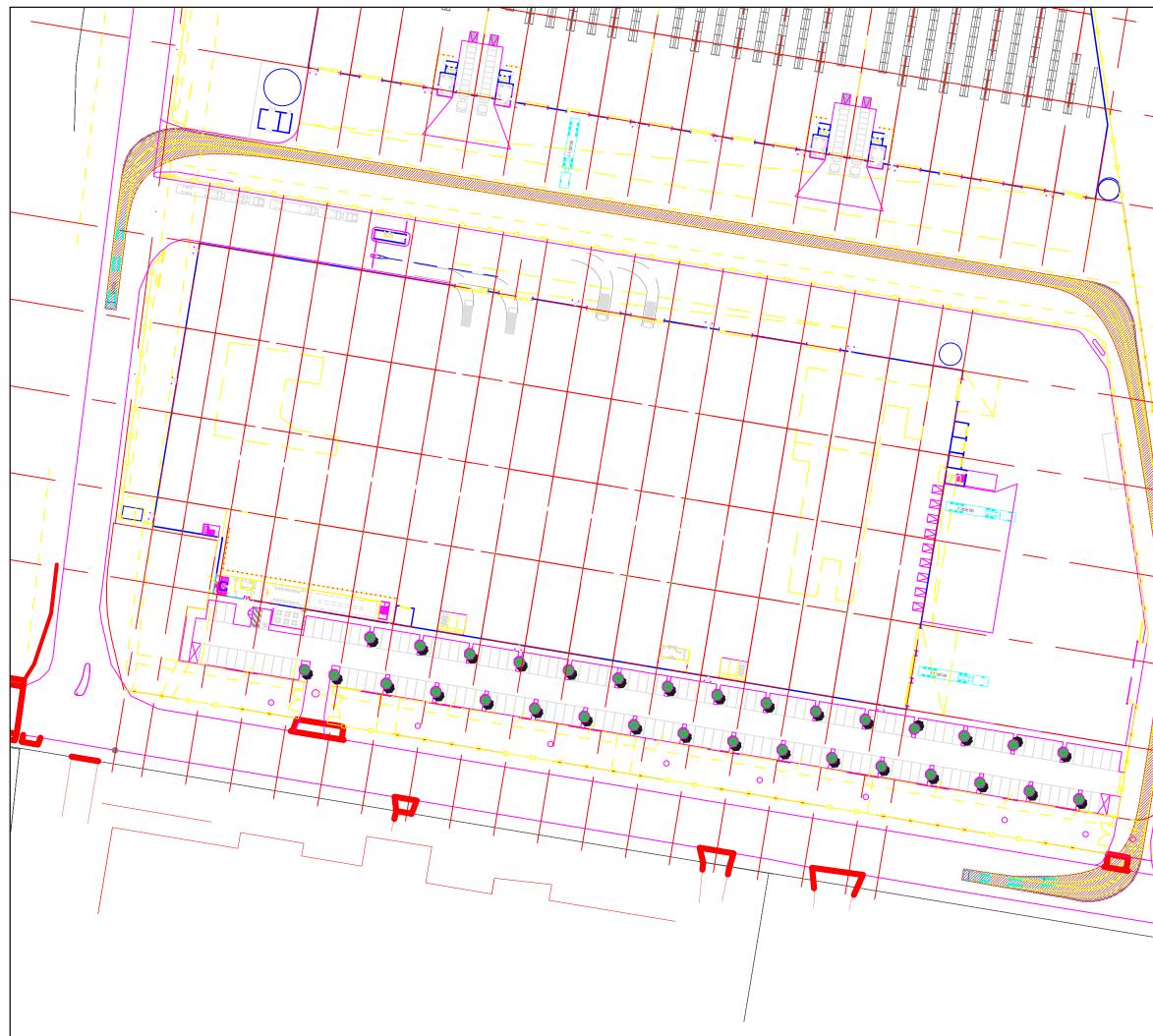


41 Foundail - Jondon - Nip yty Hel ABN 68 161 688 12 117 with Held year of on white Held W200 + 62 9461 6461 + 62 9469 747

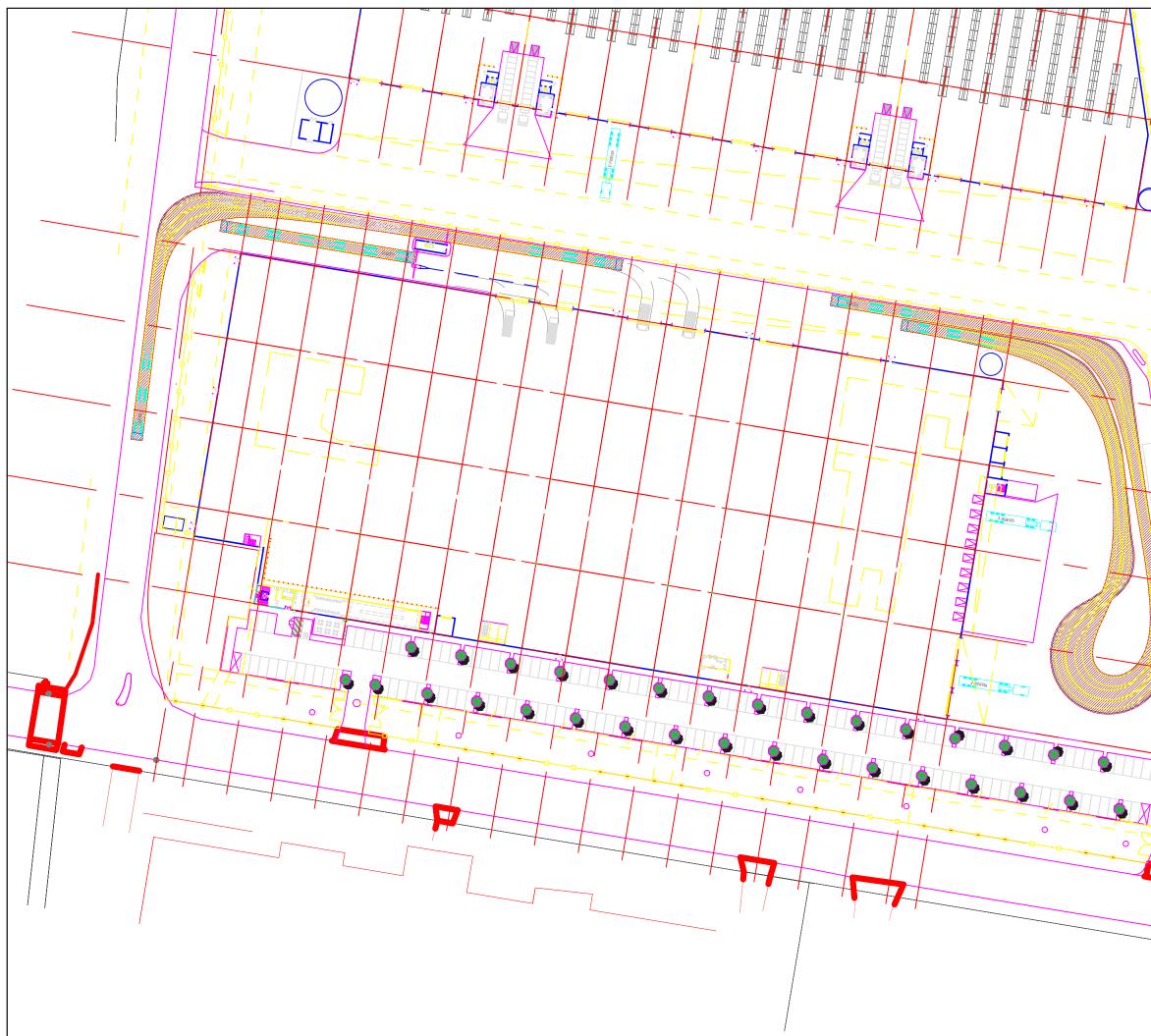


# Attachment 3

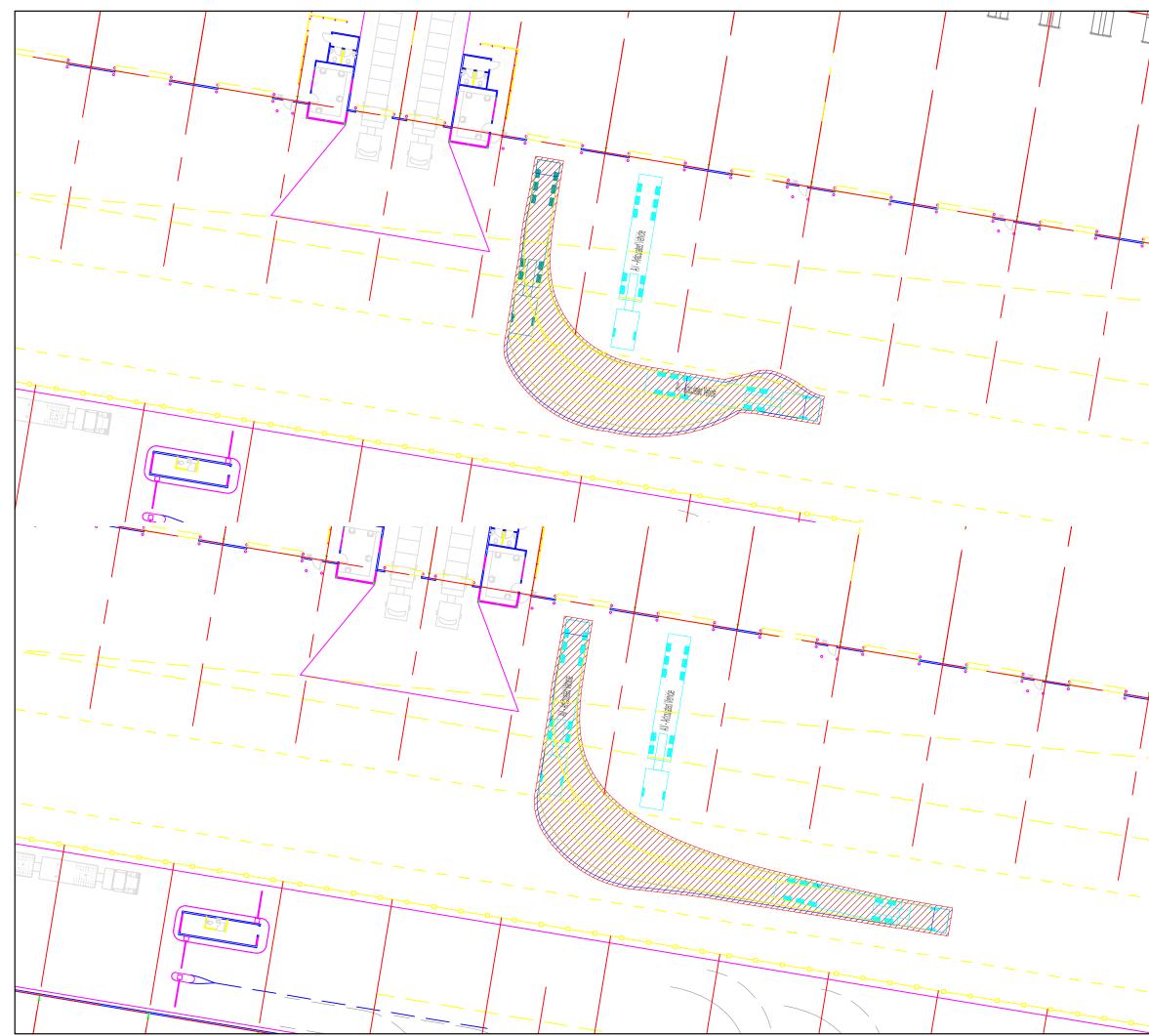
Swept Paths & Design Comments



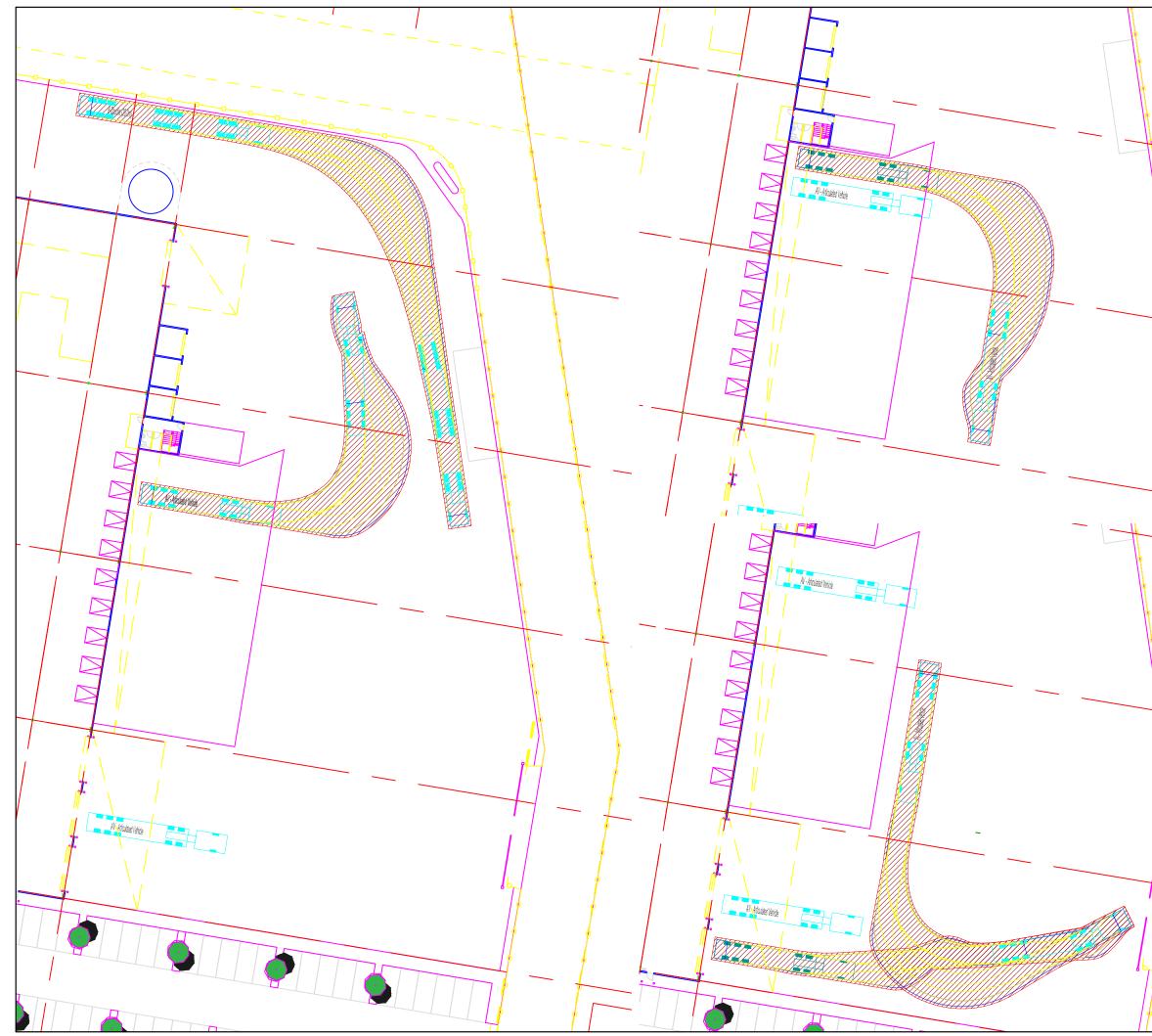
	notes This drawing is prepared for information purposes only. It is
	not to be used for construction.
1	
	no. revision note by. date
۹ ا	
	architect
	Nettletontribe
	client Goodman Property Services (Aust) Ltd
	Goodman Property Services (Aust) Ltd Level 17, 60 Castlereagh Street SYDNEY NSW 2000
	scale
	1:1000 @ A3
	0m 10 20 30 40
• (  ·	
	project Orica Southlands Remediation and
	Warehouse Development
	drawing prepared by
	TRAFFIX
マラゴニコ	traffic and transport planners
	suite 3.08 46a macleay street potts point NSW 2011 PO Box 1061 potts point nsw 1335
	t: +61 2 8324 8700 f: +61 2 9380 4481
	e: info@traffix.com.au traffix
	traffic & transport planners drawing title
	Swept Paths - Warehouse A B Double Circulation
	drawn: TL checked: - date: 08 Jan 15
	14.360 S75W TX.01 - project no. drawing phase. drawing no. rev
	and any phases and any interest in the



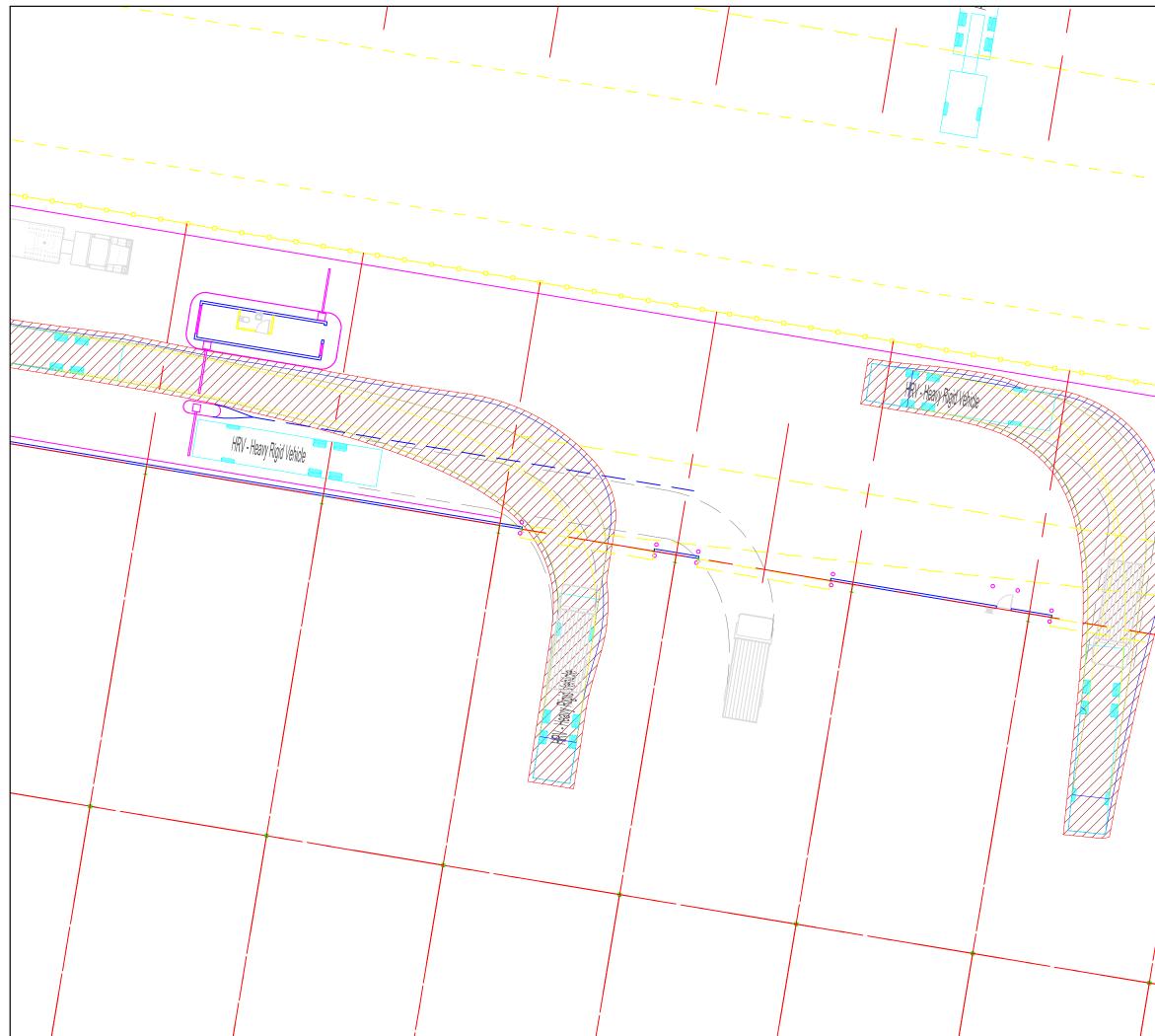
+	notes This drawing is prepared for information purposes only. It is not to be used for construction.
/	
<u> </u>	
8	
	no. revision note by. date
- 1	
	architect
	Nettletontribe
	client Goodman Property Services (Aust) Ltd
	Goodman Property Services (Aust) Ltd Lavel 17, 60 Castlereagh Street SYDNEY NSW 2000
	scale 1:1000 @ A3
	0m 10 20 30 40 project
	Orica Southlands Remediation and Warehouse Development
	drawing prepared by TRAFFIX traffic and transport planners
	suite 3.08.46a macleay street potts point NSW 2011 PO Box 1061 potts point nsw 1335
	t: +61 2 8324 8700 f: +61 2 9380 4481 e: info@traffix.com.au traffix traffic & transport planners
	drawing title Swept Paths - Warehouse B B Double Circulation
_	drawn: TL checked: - date: 17 Dec 14
	14.360 S75W TX.02 - project no. rev



	notes This drawing is prepared for information purposes only. It is not to be used for construction.
/	
	no. revision note by. date
	architect
	Nettletontribe
	client Goodman Property Services (Aust) Ltd Lavel 17, 60 Castlereagh Street SYDNEY NSW 2000
	scale 1:400 @ A3
•	Om 4 8 12 16 project Orica Southlands Remediation and
	Warehouse Development drawing prepared by
	TRAFFIX traffic and transport planners suite 3.08 46a macleay street potts point NSW 2011 PO Box 1061 potts point nsw 1335
	t: +61 2 8324 8700 f: +61 2 9380 4481 e: info@traffix.com.au traffix traffic & transport planners
	Swept Paths - Warehouse A Loading Dock 19m Semi-trailer Entry & Exit drawn: TL checked: - date: 08 Jan 15
	14.360 S75W TX.03 -
p	project no. drawing phase. drawing no. rev



n n	notes This drawing is prepared for information purposes only. It is not to be used for construction.
	no. revision note by, date
	architect Nettletontribe
	client Goodman Property Services (Aust) Ltd Level 17, 60 Castlereagh Street SYDNEY NSW 2000
	scale
	Orica Southlands Remediation and Warehouse Development drawing prepared by TRAFFIX traffic and transport planners
	suite 3.08.46a macleay street potts point NSW 2011 PO Box 1061 potts point nsw 1335 t: +61 2 8324 8700 f: +61 2 8304 481 e: info@traffix.com.au traffic & transport planners drawing title Swept Paths - Warehouse B
	19m Semi-trailer Entry and Exit drawn: TL checked: - date: 08 Jan 15 14.360 S75W TX.04 -
ľ	project no. drawing phase. drawing no. rev



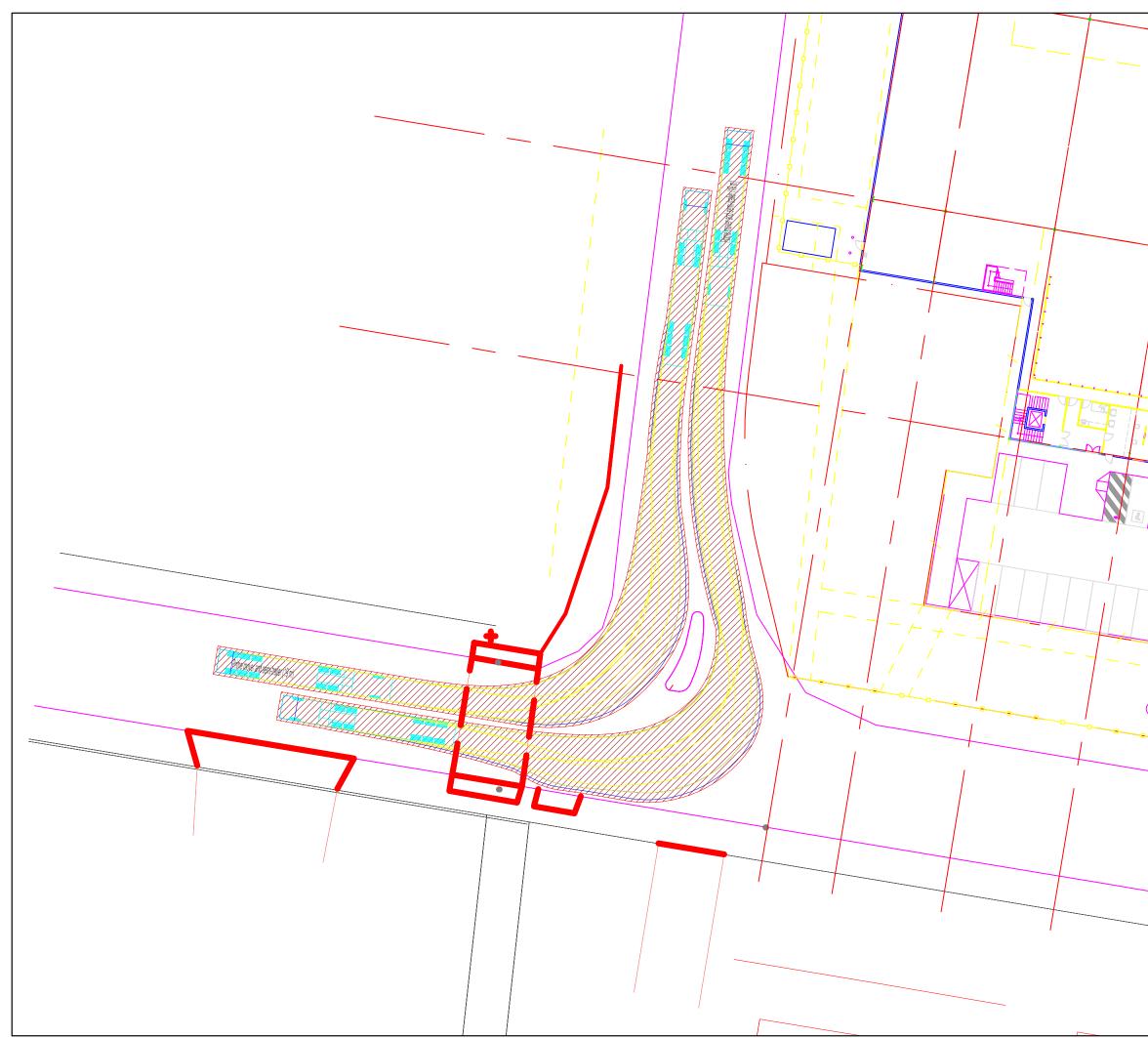
	notes This drawing is prepa not to be used for con		purposes only. It is	6
	no. revision note		by.	date
0-0-0-0-				
	architect			
7 - + -	Nettletontribe			
1-+-				
	client Goodman Property Serv Level 17, 60 Castlereagh Street SYDNEY NSW 2000	ices (Aust) Ltd		
	scale			<u>+</u>
	1:250 @ A3 0m 2 4 I I I	6 8 I I		
j	project			
	Orica Southlands Warehouse Deve	Remediation a lopment	nd	
	drawing prepared by			
	traffic and transport plar suite 3.08 46a macleay stru- potts point NSW 2011			
	PO Box 1061 potts point t: +61 2 8324 8700 f: +61 2 9380 4481	nsw 1335		
	e: info@traffix.com.au drawing title	traffic	traffix & transport plann	ers
	Swept Paths - W 26m B-Double Ex	kit	rocc	
	12.5m HRV Build drawn: TL	checked: -		an 15
	14.360	S75W		-
	project no.	drawing phase.	drawing no.	rev



	notes
	This drawing is prepared for information purposes only. It is
	not to be used for construction.
	no. revision note by. date
N GUUM	
	architect
	Nettletontribe
	client
	Goodman Property Services (Aust) Ltd
	Goodman Property Services (Aust) Ltd Level 17: 90 Castlereagh Street SYDNEY NSW 2000
	scale
1	1:400 @ A3 0m 4 8 12 16
	0m 4 8 12 16
-+-	project
	Orica Southlands Remediation and Warehouse Development
	drawing prepared by
	TRAFFIX
	traffic and transport planners
	suite 3.08 46a macleay street potts point NSW 2011
	PO Box 1061 potts point nsw 1335
	t: +61 2 8324 8700 f: +61 2 9380 4481
	e: info@traffix.com.au
	traffic & transport planners
K	drawing title Swept Paths - Warehouse B
$1 \sim -$	Swept Paths - Warehouse B 26m B-Double Access & Egress
	drawn: TL checked: - date: 08 Jan 15
	drawn: TL checked: - date: 08 Jan 15
	14.360 S75W TX.06 -
	project no. drawing phase. drawing no. rev



notes This drawing is prepared for information purposes only. It is not to be used for construction.
no. revision note by. date
architect Nettletontribe
Goodman Property Services (Aust) Ltd Ltd Ure 17, 60 castered Street SYDNEY NSW 2000 scale 1:400 @ A3 0m 4 8 12 15 project Orica Southlands Remediation and
Warehouse Development drawing prepared by TRAFFIX traffic and transport planners suite 3.08 46a macleay street potts point NSW 2011 PO Box 1061 potts point nsw 1335 t: 4:12 8324 9700 f: 4:51 2 9380 4481 e: info@traffix.com.au traffix traffic & transport planners drawing title
Swept Paths         Coal Pier Road & McPherson Street         26m B-Double Access & Egress         drawn:       TL         checked:       -         date:       08 Jan 15



$ \sim $	notes
	This drawing is prepared for information purposes only. It is not to be used for construction.
	no. revision note by. date
Laaaaaaaa	
- <u> </u>	
, assassas	
	architect Nettletontribe
Í.	
	client
	Goodman Property Services (Aust) Ltd Level 17, 60 Castlerreagh Street SYDNEY NSW 2000
	Level 17, 60 Castlereagn Street SYDNEY NSW 2000
/	scale
$\sim$ $>$	1:400 @ A3
	0m 4 8 12 16
	project
	Orica Southlands Remediation and Warehouse Development
1	drawing prepared by
	TRAFFIX traffic and transport planners
	suite 3.08 46a macleay street potts point NSW 2011
	PO Box 1061 potts point nsw 1335
	t: +61 2 8324 8700 f: +61 2 9380 4481
	e: info@traffix.com.au traffix
	traffic & transport planners drawing title
	Swept Paths
'	Coal Pier Road & McPherson Street 19m Semi-trailer Access & Egress
	drawn: TL checked: - date: 08 Jan 15
	14.360 S75W TX.08 -
	project no. drawing phase. drawing no. rev