



Reference: 14.360I02v06

09 October 2014

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

**traffix**  
traffic & transport planners

suite 3.08  
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  
**director** graham pindar  
acn: 065132961  
abn: 66065132961

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
- Botany Road / Hill Street Intersection
- 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>.

Furthermore, the approval included the following requirement – at Condition 20.a.iii. of the S75W – to provide the following upgrade works:

*“- installation of signage on Botany Road (eastbound) to prevent trucks longer than 12.5 m turning left into Hill Street.”*

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**.

**Table 1: Summary of Changes**

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>	<b>43,360m<sup>2</sup></b>
Parking Provision	440	341	<b>286</b>

### **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 409 parking spaces to be provided for the new floor area of 43,360m<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.



**Table 2: Car Parking Requirements (Botany Council DCP 2013) – Proposed Areas**

Type	Area	Council Parking Rates	Spaces Required	Spaces Provided
Warehouse <sup>1</sup>	37,900m <sup>2</sup>	1 space per 300m <sup>2</sup>	126	286
Office <sup>2</sup>	3,400m <sup>2</sup>	1 space per 40m <sup>2</sup>	85	
Totals			211	286

Note: 1) Includes Mezzanine Storage areas of 2,000m<sup>2</sup>

2) Includes communal lobby floor areas of 200m<sup>2</sup>

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 145 parking spaces under the RMS Guide rates.

Nevertheless, it is evident that the 286 car parking spaces proposed will exceed both RMS and Botany Council recommended parking provisions and is therefore considered acceptable.

### **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.

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

Type	Area	Period	Traffic Generation Rate	Traffic Generation (veh/hr)
Warehouse	43,360m <sup>2</sup>	AM Peak	0.52 veh / hr / 100m <sup>2</sup>	225
		PM Peak	0.56 veh / hr / 100m <sup>2</sup>	243

It can be seen from Table 3 that the development will generate up to 225 and 243 vehicles per hour during the morning and evening peak periods, respectively.

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<sup>2</sup> associated with the Stage 1 site. An area of only 43,360m<sup>2</sup> is now proposed which represents a 3,640m<sup>2</sup> 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 communal hardstand area by commercial vehicles, including up to B-Doubles is provided by way of the following:

- 12.0m combined access to Coal Pier Road
- 10.0 metre combined access to McPherson Street

All driveways will require access by emergency vehicles to provide access to all buildings.

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.

To avoid B-doubles access without crossing the centreline of the road, a Management Plan will be implemented requiring all B-Doubles access the site via the Coal Pier Road entry. This will effectively result in the clockwise circulation pattern through the site which is beneficial to reduce the interaction between vehicles at the intersection of Coal Pier Road and McPherson Street.

## ➤ 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 (8 in total) and include the 2.4 metre 'Shared Area' required under AS2890.6. This equates to approximately 2.5% 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.
- The 55 metre hardstand maintains two-way truck travel, if required, whilst trucks occupy loading docks on opposite sides of the shared hardstand area. This is a generous width which permits scope for potential secure area within the hardstand should this be required by future tenants to satisfy Customs requirements.

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



### **📍 Botany Road / Hill Street Intersection – Removal of MP06\_0090 MOD1, Condition 20.a.iii**

It is recommended that the following condition be deleted from the approval instrument as part of this S75W application:

*Condition 20.a.iii. – installation of signage on Botany Road (eastbound) to prevent trucks longer than 12.5 m turning left into Hill Street.*

With reference to swept path plan TX.05 appended at Attachment 3 – which shows a 19 metre semi-trailer truck left-turning into Hill Street from Botany Road – it is clear that trucks larger than 12.5 metre trucks can safely and satisfactorily undertake this left-turn manoeuvre, recognising that Hill Street is one-way northbound.

Accordingly, due to the lack of a demonstrated safety or manoeuvring concern, it is recommended that Condition 20.a.iii be deleted and the current accessibility for trucks longer than 12.5 metres be maintained at this intersection.

### **📍 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 286 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. It is recommended that the Coal Pier Road be restricted to entry only, with all commercial vehicle egress via the McPherson Street access. This will result in a clockwise circulation pattern through the site and reduce potential conflicts between entering and exiting vehicles at site accesses and the intersection of Coal Pier Road / McPherson Street.

Due to the lack of a demonstrated safety or manoeuvring concern for trucks larger than 12.5 metres left-turning into Hill Street at the intersection with Botany Road, it is recommended that Condition 20.a.iii be deleted and the current accessibility for trucks longer than 12.5 metres be maintained at this intersection.



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





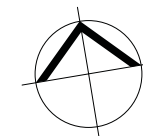
SOUTHLANDS AREA SCHEDULE	
Lot 1 DP 254392	0.28 Ha
Lot 1 DP 528680	9.53 Ha
Lot 1 DP 85542	6.13 Ha
Lot 11 DP 109505	2.34 Ha
<b>TOTAL SITE AREA</b>	<b>18.28 Ha</b>
Springvale Drain	0.28 Ha
Nant Street	0.35 Ha

**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
Total Footprint (incl awning)	35,879 sqm
Site Cover	38.2%
FSR	38.5%
Carparking	341 cars

STAGE 1 - LOTS 7 + 8	
Total Site Area	26,060 sqm
Developable Area	23,422 sqm

LEGEND	
AW	Awning
HS	Hardstand







# Attachment 2

---

## Proposed Concept Plan





Warehouse Units Area	
<b>Unit 1</b>	
Warehouse	3,300 sqm
Office	350 sqm
Mezzanine storage	210 sqm
<b>Unit 2</b>	
Warehouse	3,300 sqm
Office	350 sqm
Mezzanine storage	210 sqm
Lobby	50 sqm
<b>Unit 3</b>	
Warehouse	4,100 sqm
Office	350 sqm
Mezzanine storage	210 sqm
<b>Unit 4</b>	
Warehouse	4,400 sqm
Office	350 sqm
Mezzanine storage	210 sqm
Lobby	50 sqm
Carparking for Unit 1,2,3 & 4	132
<b>Unit 5</b>	
Warehouse	5,800 sqm
Office	500 sqm
Mezzanine storage	290 sqm
<b>Unit 6</b>	
Warehouse	6,000 sqm
Office	500 sqm
Mezzanine storage	290 sqm
Lobby	50 sqm
<b>Unit 7</b>	
Warehouse	6,000 sqm
Office	500 sqm
Mezzanine storage	290 sqm
<b>Unit 8</b>	
Warehouse	5,000 sqm
Office	500 sqm
Mezzanine storage	290 sqm
Lobby	50 sqm
Carparking for Unit 5,6,7 & 8	154

Site Area Schedule	
Total Site Area	93,806 sqm
Less: Undevelopable	27,883 sqm
<b>Total Developable Area</b>	<b>65,923 sqm</b>
Warehouse	37,900 sqm
Office	3,400 sqm
Mezzanine storage	2,000 sqm
Lobby	200 sqm
<b>Total Facility</b>	<b>43,500 sqm</b>
FSR	0.66 : 1
Carparking Provided	286

No.	Description	Date
P1	PRELIMINARY ISSUE	21.08.14
P2	PRELIMINARY ISSUE	18.09.14
A	DEVELOPMENT APPLICATION	18.09.14
B	DEVELOPMENT APPLICATION	29.09.14



# Attachment 3

---

## Swept Paths & Design Comments



This drawing has been prepared for information purposes only and is NOT TO BE USED FOR CONSTRUCTION.

no. revision note by. date

architect  
Nettleton Tribe

client  
Goodman

scale

project  
Port Botany Industrial Estate  
McPherson Street, Botany

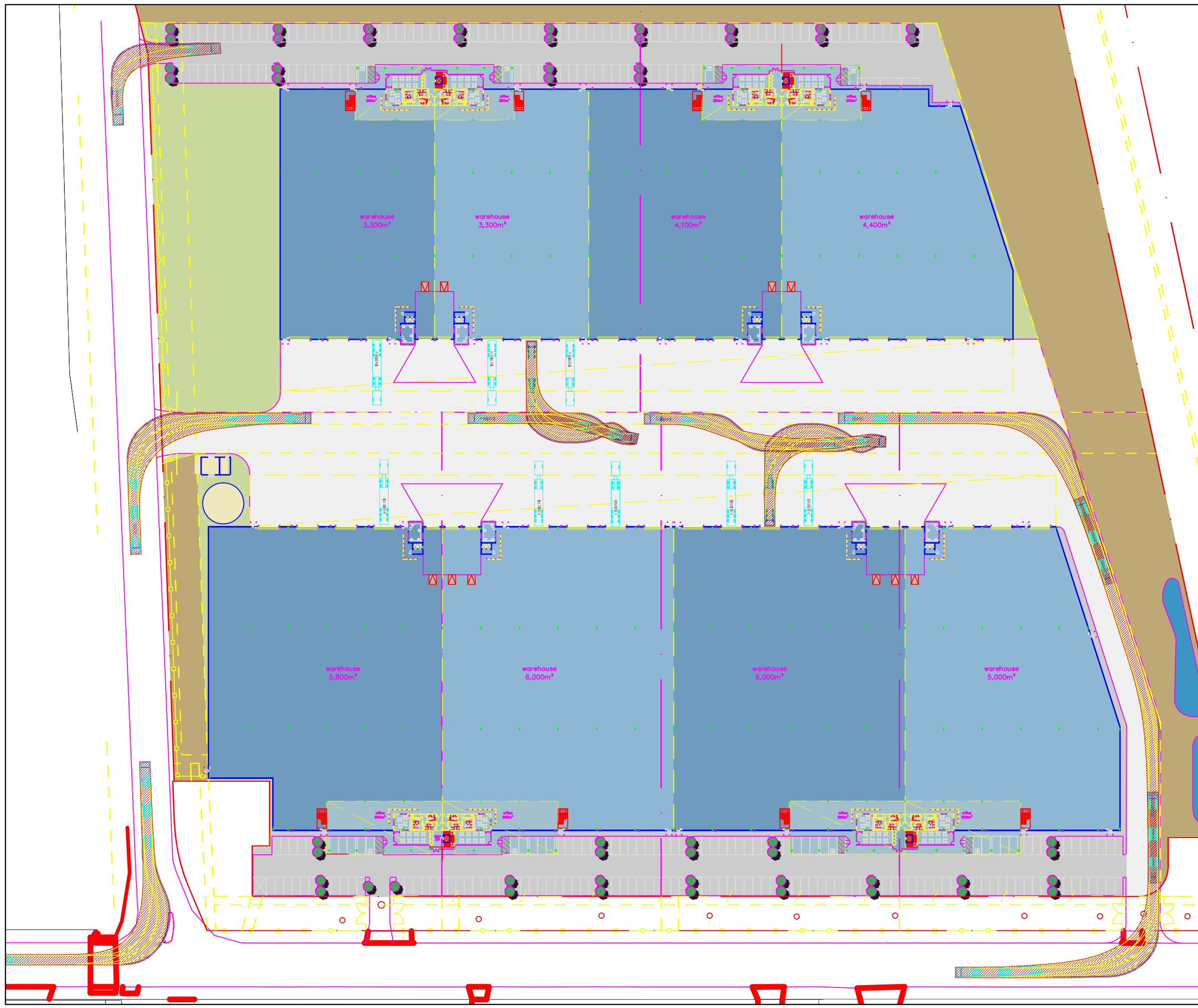
drawing prepared by  
**TRAFFIX**  
traffic and transport planners  
suite 3.08 46a macleay street  
potts point NSW 2011  
PO Box 1061 potts point nsw 1035  
t: +61 2 8324 8700  
f: +61 2 9380 4481  
e: info@traffix.com.au



drawing title  
Swept Paths  
Overview

drawn: TL checked: - date: 1-Oct-14

14.360 S75W TX.01 -  
project no. drawing phase. drawing no. rev

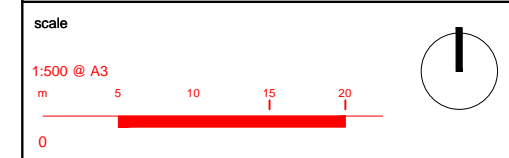


This drawing has been prepared for information purposes only and is NOT TO BE USED FOR CONSTRUCTION.

no. revision note by. date

architect  
Nettleton Tribe

client  
Goodman



project  
Port Botany Industrial Estate  
McPherson Street, Botany

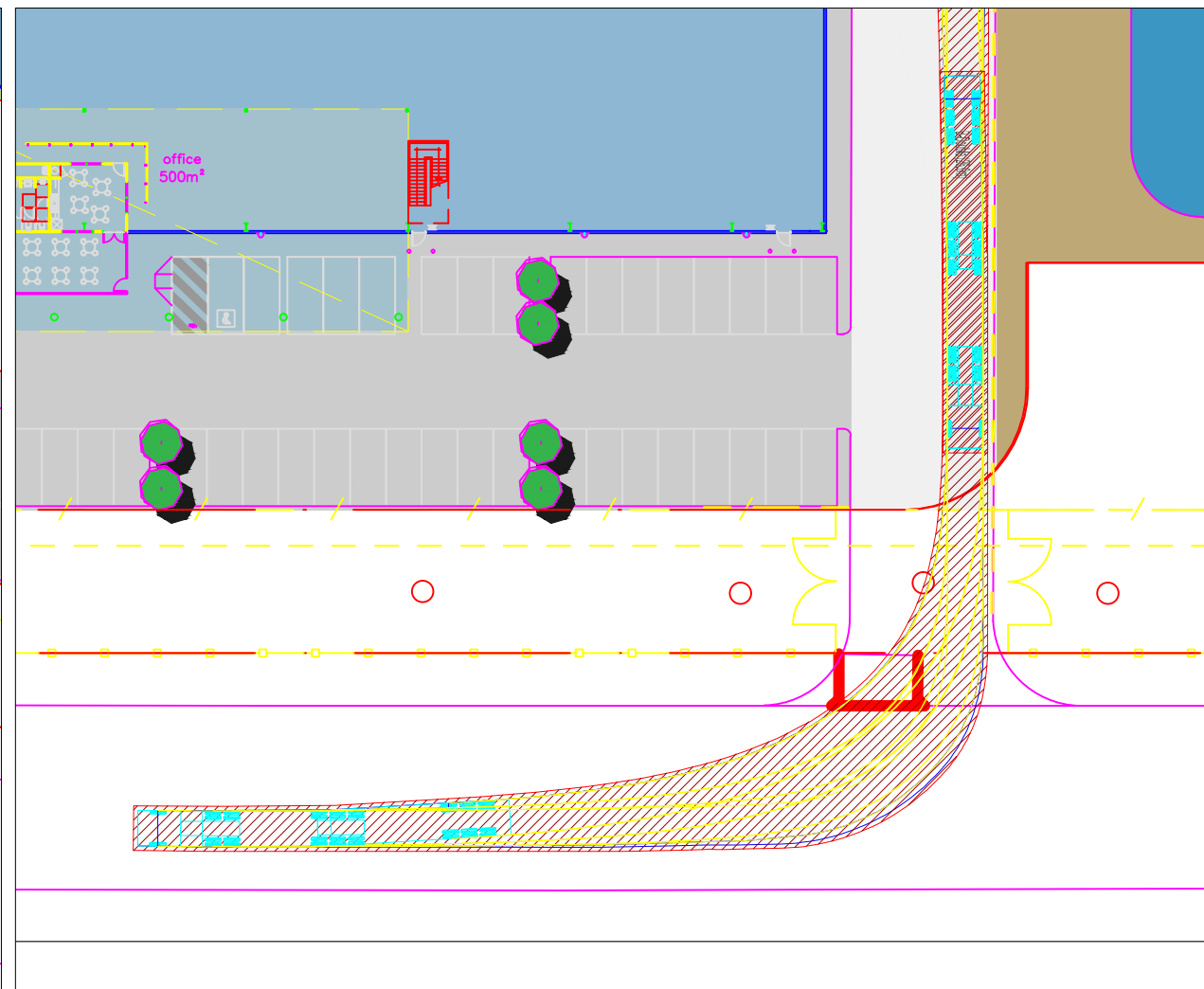
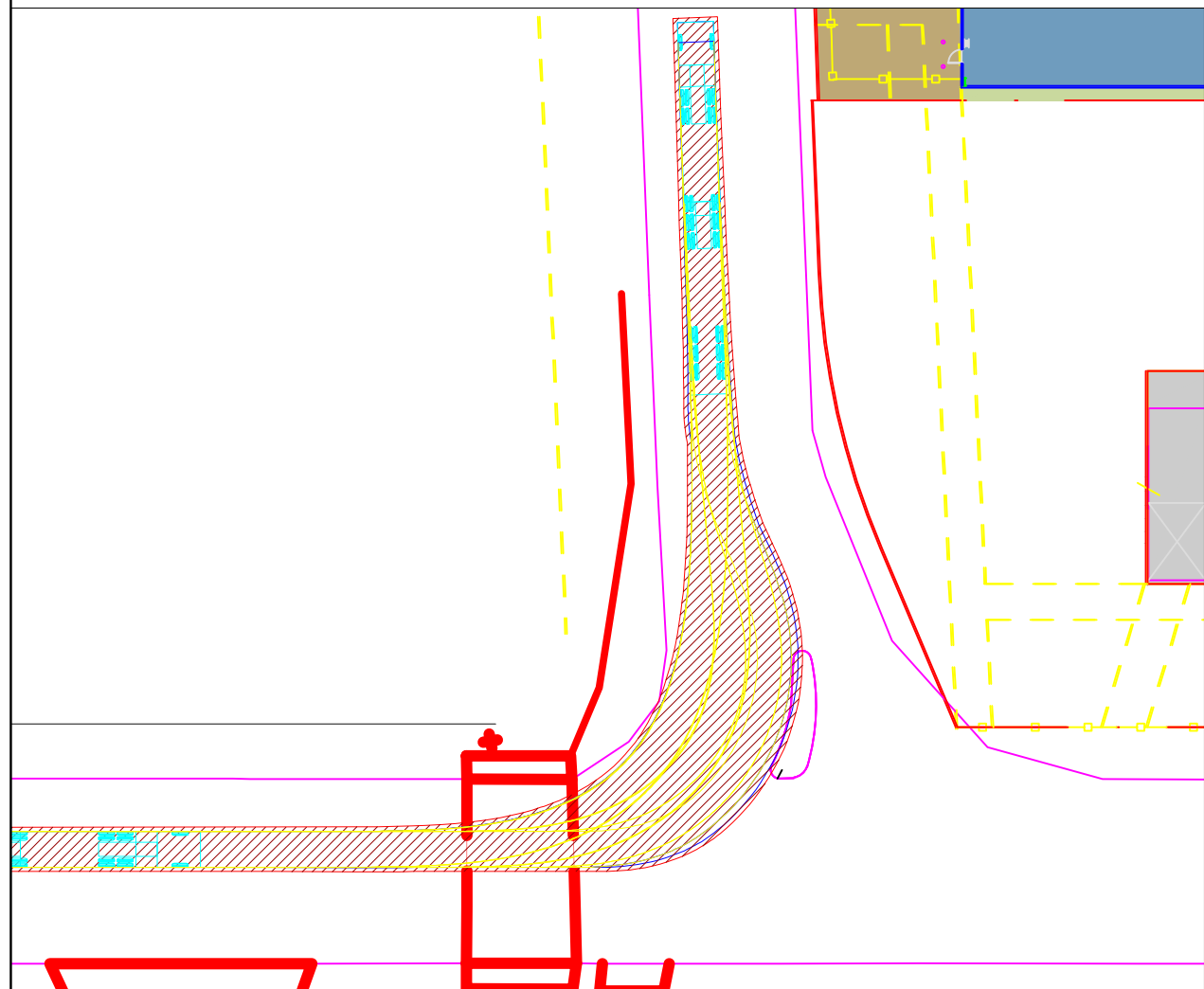
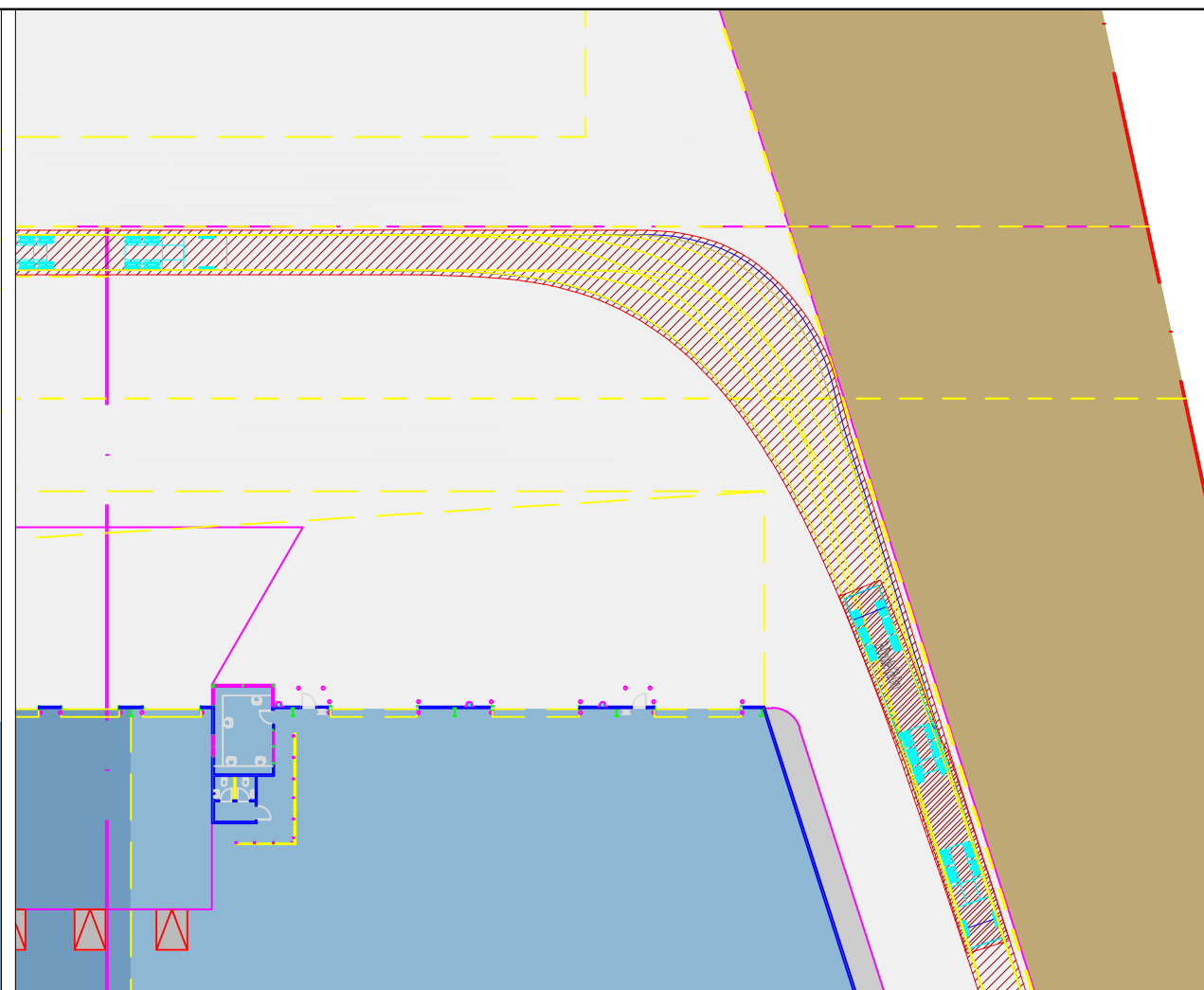
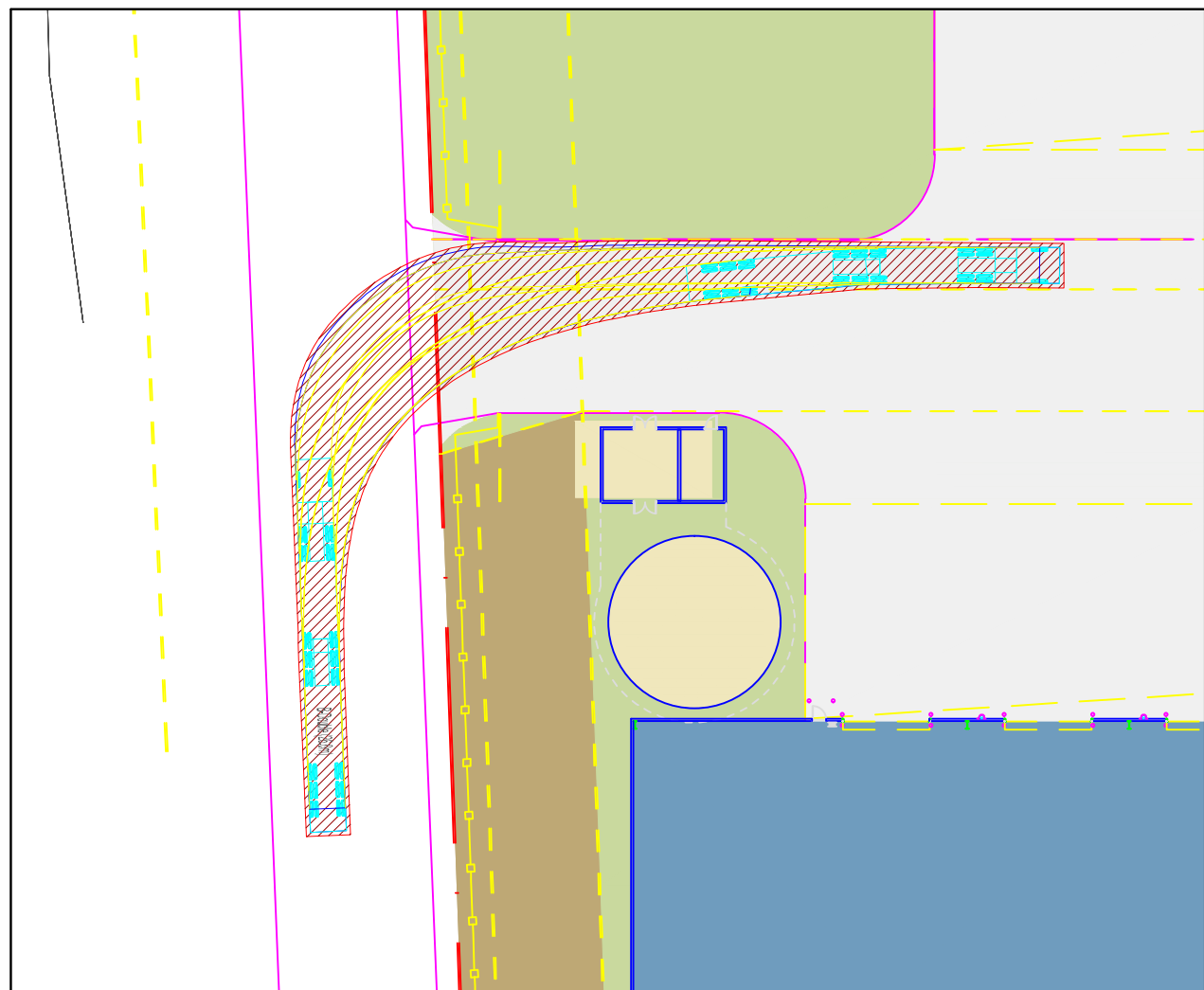
drawing prepared by  
**TRAFFIX**  
traffic and transport planners  
suite 3.08 46a macleay street  
potts point NSW 2011  
PO Box 1061 potts point nsw 1035  
t: +61 2 8324 8700  
f: +61 2 9380 4481  
e: info@traffix.com.au

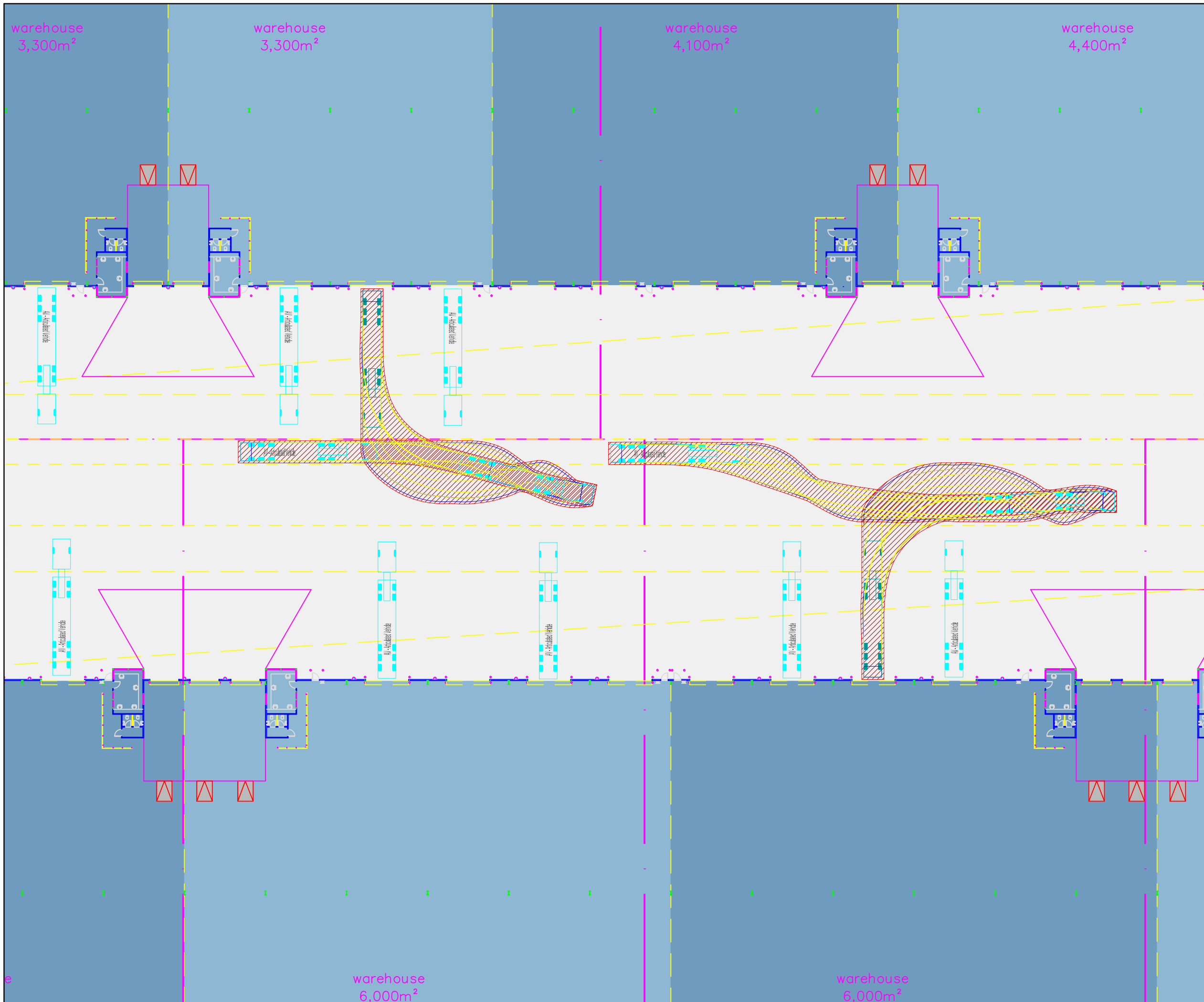


drawing title  
Swept Paths  
26m B-Double Circulation

drawn: TL checked: - date: 1-Oct-14

14.360 S75W TX.02 -  
project no. drawing phase. drawing no. rev





This drawing has been prepared for information purposes only and is NOT TO BE USED FOR CONSTRUCTION.

no.	revision note	by.	date

architect  
Nettleton Tribe

client  
Goodman

scale  
1:500 @ A3

project  
Port Botany Industrial Estate  
McPherson Street, Botany

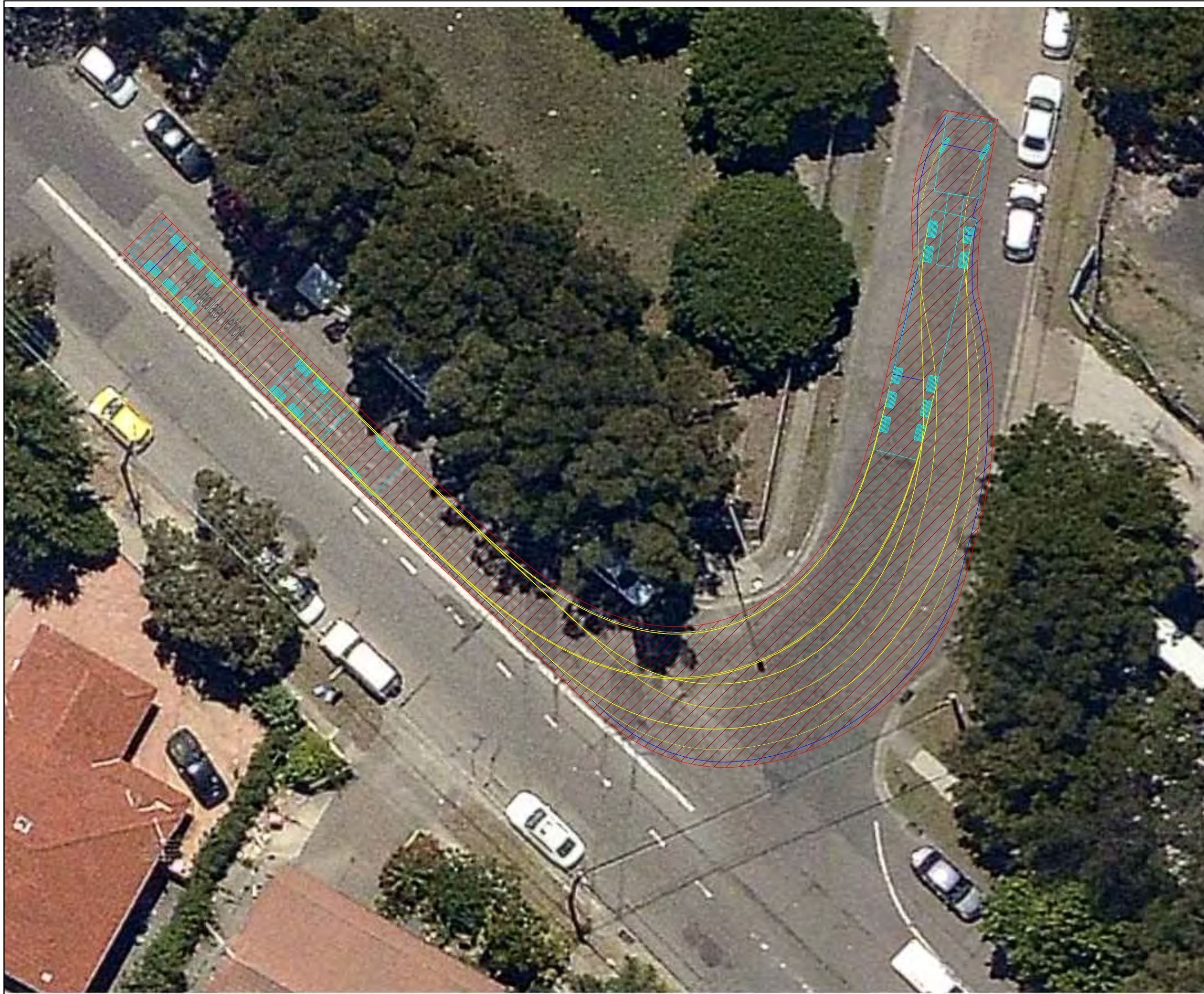
drawing prepared by  
**TRAFFIX**  
traffic and transport planners  
suite 3.08 46a macleay street  
potts point NSW 2011  
PO Box 1061 potts point nsw 1035  
t: +61 2 8324 8700  
f: +61 2 9380 4481  
e: info@traffix.com.au

traffix  
traffic & transport planners

drawing title  
Swept Paths  
Loading Bay Access  
19m Articulated Trucks

drawn: TL	checked: -	date: 1-Oct-14
-----------	------------	----------------

14.360	S75W	TX.03	-
project no.	drawing phase.	drawing no.	rev



This drawing has been prepared for information purposes only and is NOT TO BE USED FOR CONSTRUCTION.

no.	revision note	by.	date
-----	---------------	-----	------

architect  
**Nettleton Tribe**

client  
**Goodman**



project  
**Port Botany Industrial Estate  
 McPherson Street, Botany**

drawing prepared by  
**TRAFFIX**  
 traffic and transport planners  
 suite 3.08 46a macleay street  
 potts point NSW 2011  
 PO Box 1061 potts point nsw 1035  
 t: +61 2 8324 8700  
 f: +61 2 9380 4481  
 e: info@traffix.com.au

**traffix**  
 traffic & transport planners

drawing title  
**Swept Paths  
 Left turn from Botany Road onto Hills Street  
 19m Articulated Truck**

drawn: <b>VD</b>	checked: <b>-</b>	date: <b>1-Oct-14</b>
------------------	-------------------	-----------------------

<b>14.360</b>	<b>S75W</b>	<b>TX.05</b>	<b>-</b>
project no.	drawing phase.	drawing no.	rev